

CGG VERITAS  
Form 20-F  
April 20, 2012  
Table of Contents

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 20-F**

.. **REGISTRATION STATEMENT PURSUANT TO SECTION 12(B) OR (G) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**OR**

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the Fiscal Year Ended December 31, 2011**

**OR**

.. **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**OR**

.. **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

**Date of Event Requiring this Shell Company Report**

**Commission File Number 001-14622**

# Compagnie Générale de Géophysique-Veritas

*(Exact name of registrant as specified in its charter)*

**CGGVeritas**

*(Translation of registrant's name into English)*

**Republic of France**

*(Jurisdiction of incorporation or organization)*

**Tour Maine Montparnasse**

**33, avenue du Maine**

**75015 Paris France**

*(Address of principal executive offices)*

**Stephane-Paul Frydman**

**Chief Financial Officer**

**CGGVeritas**

**Tour Maine Montparnasse**

**33, avenue du Maine**

**75015 Paris France**

**tel: +33 (0) 16467 4500**

**fax: +33 (0) 16447 3429**

*(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)*

**Securities registered or to be registered pursuant to Section 12(b) of the Act.**

<b>Title of each class</b>	<b>Name of each exchange on which registered</b>
<b>American Depositary Shares representing</b>	<b>New York Stock Exchange</b>
<b>Ordinary Shares, nominal value 0.40 per share</b>	
<b>Securities registered or to be registered pursuant to Section 12(g) of the Act.</b>	
<b>None</b>	
<b>(Title of class)</b>	

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.**

## Edgar Filing: CGG VERITAS - Form 20-F

**7 3/4% senior notes due 2017**

**9 1/2% senior notes due 2016**

**6 1/2% senior notes due 2021**

**(Title of class)**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

**151,861,932 Ordinary Shares, nominal value 0.40 per share**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes  No

Note checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those sections.

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).\*\* Yes  No

\*\* This requirement is not currently applicable to the registrant.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing: U.S. GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow: Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

---

**Table of Contents**

**PRESENTATION OF INFORMATION**

Unless the context otherwise requires, CGGVeritas refers to Compagnie Générale de Géophysique-Veritas, and we, us, our and Group refers to Compagnie Générale de Géophysique-Veritas and its subsidiaries.

In this annual report, references to United States or U.S. are to the United States of America, references to U.S. dollars, \$ or U.S.\$ are to United States dollars, references to France are to the Republic of France, references to Norway are to the Kingdom of Norway, references to NOK are to Norwegian kroner and references to euro or are to the single currency introduced at the start of the third stage of European Economic and Monetary Union pursuant to the Treaty establishing the European Union.

As our shares are listed on the New York Stock Exchange (in the form of American Depositary Shares), we are required to file an annual report on Form 20-F with the SEC. Our annual report includes our annual financial statements prepared in accordance with International Financial Reporting Standards ( IFRS ) and its interpretations as issued by the International Accounting Standards Board (IASB). These consolidated financial statements were also prepared in accordance with IFRS as adopted by the European Union at December 31, 2011.

Unless otherwise indicated, statements in this annual report relating to market share, ranking and data are derived from management estimates based, in part, on independent industry publications, reports by market research firms or other published independent sources. Any discrepancies in any table between totals and the sums of the amounts listed in such table are due to rounding.

**FORWARD-LOOKING STATEMENTS**

This annual report includes forward-looking statements within the meaning of the federal securities laws, which involve risks and uncertainties, including, without limitation, certain statements made in the sections entitled Information on the Company and Operating and Financial Review and Prospects . You can identify forward-looking statements because they contain words such as believes , expects , may , should , seeks , approximately , intends , plans , estimates , or anticipates or similar expressions that relate to our strategy, plans or intentions. These forward-looking statements are subject to risks and uncertainties that may change at any time, and, therefore, our actual results may differ materially from those that we expected. We have based these forward-looking statements on our current views and assumptions about future events. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and, of course, it is impossible for us to anticipate all factors that could affect our actual results. All forward-looking statements are based upon information available to us on the date of this annual report.

Important factors that could cause actual results to differ materially from our expectations ( cautionary statements ) are disclosed under Item 3: Key Information Risk Factors and elsewhere in this annual report, including, without limitation, in conjunction with the forward-looking statements included in this annual report. Some of the factors that we believe could affect our actual results include:

the impact of the current economic and credit environment, including on our customers and suppliers;

the social, political and economic risks of our global operations;

our ability to integrate successfully the businesses or assets we acquire;

any write-downs of goodwill on our balance sheet;

our ability to sell our seismic data library;

exposure to foreign exchange rate risk;



**Table of Contents**

our ability to finance our operations on acceptable terms;

the impact of fluctuations in fuel costs on our marine acquisition business;

the timely development and acceptance of our new products and services;

difficulties and costs in protecting intellectual property rights and exposure to infringement claims by others;

ongoing operational risks and our ability to have adequate insurance against such risks;

the level of capital expenditures by the oil and gas industry and changes in demand for seismic products and services;

our clients' ability to unilaterally terminate certain contracts in our backlog;

the effects of competition;

difficulties in adapting our fleet to changes in the seismic market;

the seasonal nature of our revenues;

the costs of compliance with governmental regulation, including environmental, health and safety laws;

our substantial indebtedness and the restrictive covenants in our debt agreements;

our ability to access the debt and equity markets during the periods covered by the forward-looking statements, which will depend on general market conditions and on our credit ratings for our debt obligations;

exposure to interest rate risk; and

our success at managing the foregoing risks.

We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. We caution you that the foregoing list of important factors may not contain all of the material factors that are important to you. In addition, in light of these risks, uncertainties and assumptions, the forward-looking events discussed in this annual report might not occur. When considering forward-looking statements, you should keep in mind the risk factors and other cautionary statements included in this annual report, including those described in Item 3: Key Information Risk Factors of this annual report.



**Table of Contents****TABLE OF CONTENTS**

	<b>Page</b>
<b><u>PART I</u></b>	
Item 1:	<u>IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS</u> 5
Item 2:	<u>OFFER STATISTICS AND EXPECTED TIMETABLE</u> 5
Item 3:	<u>KEY INFORMATION</u> 5
Item 4:	<u>INFORMATION ON THE COMPANY</u> 19
Item 4A:	<u>UNRESOLVED STAFF COMMENTS</u> 42
Item 5:	<u>OPERATING AND FINANCIAL REVIEW AND PROSPECTS</u> 42
Item 6:	<u>DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES</u> 67
Item 7:	<u>MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS</u> 93
Item 8:	<u>FINANCIAL INFORMATION</u> 96
Item 9:	<u>THE OFFER AND LISTING</u> 96
Item 10:	<u>ADDITIONAL INFORMATION</u> 99
Item 11:	<u>QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK</u> 119
Item 12:	<u>DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES</u> 121
<b><u>PART II</u></b>	
Item 13:	<u>DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES</u> 123
Item 14:	<u>MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITYHOLDERS AND USE OF PROCEEDS</u> 123
Item 15:	<u>CONTROL AND PROCEDURES</u> 123
Item 16A:	<u>AUDIT COMMITTEE FINANCIAL EXPERT</u> 125
Item 16B:	<u>CODE OF ETHICS</u> 125
Item 16C:	<u>PRINCIPAL ACCOUNTANT FEES AND SERVICES</u> 125
Item 16D:	<u>EXEMPTIONS FROM THE LISTING STANDARDS OF AUDIT COMMITTEES</u> 126
Item 16E:	<u>PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS</u> 126
Item 16F:	<u>CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT</u> 126
Item 16G:	<u>CORPORATE GOVERNANCE</u> 126
<b><u>PART III</u></b>	
Item 17:	<u>FINANCIAL STATEMENTS</u> 127
Item 18:	<u>FINANCIAL STATEMENTS</u> 127
Item 19:	<u>EXHIBITS</u> 127



**Table of Contents****PART I****Item 1: IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

**Item 2: OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**Item 3: KEY INFORMATION****Selected Financial Data**

The selected financial data included below should be read in conjunction with, and are qualified in their entirety by reference to, our consolidated financial statements and Item 5: Operating and Financial Review and Prospects included elsewhere in this annual report. The selected financial data for each of the years in the five-year period ended December 31, 2011 have been derived from our audited consolidated financial statements prepared in accordance with IFRS.

	At December 31,				
	2011	2010	2009	2008	2007
	(In millions of euros except per share data and ratios)				
<b>Statement of operations data:</b>					
Operating revenues	2,267.7	2,186.1	2,233.2	2,602.5	2,374.1
Other revenues from ordinary activities	2.3	3.3	7.5	1.7	1.2
Cost of operations	(1,887.3)	(1,746.3)	(1,710.5)	(1,722.5)	(1,622.3)
Gross profit	382.7	443.1	530.2	881.7	753.0
Research and development expenses, net	(54.9)	(57.0)	(62.1)	(43.8)	(51.3)
Marketing and selling expenses	(59.3)	(61.7)	(60.6)	(59.5)	(55.6)
General and administrative expenses	(145.1)	(168.4)	(182.7)	(196.6)	(175.4)
Other revenues (expenses)	24.5	(88.8)	(167.8)	(36.4)	18.4
Impairment of goodwill			(217.6)	(4.8)	
Operating income	147.9	67.2	(160.6)	540.6	489.1
Cost of financial debt, net	(124.4)	(105.5)	(105.2)	(83.8)	(109.1)
Other financial income (loss)	0.6	8.5	(11.2)	(11.5)	(5.2)
Income taxes	(45.0)	(13.5)	9.8	(108.3)	(129.4)
Equity in income of affiliates	11.7	(0.7)	8.3	3.0	4.2
Net income (loss)	(9.2)	(44.0)	(258.9)	340.0	249.6
Attributable to non-controlling interests	9.8	10.6	5.4	7.2	4.1
Attributable to owners of CGGVeritas	(19.0)	(54.6)	(264.3)	332.8	245.5
Net income (loss) per share:					
Basic <sup>(1)</sup>	(0.13)	(0.36)	(1.75)	2.41	1.82
Diluted <sup>(2)</sup>	(0.13)	(0.36)	(1.75)	2.39	1.80
<b>Balance sheet data:</b>					
Cash and cash equivalents	410.7	335.9	480.3	516.9	254.3
Working capital <sup>(3)</sup>	377.9	508.2	393.5	458.0	367.1
Property, plant & equipment, net	913.9	781.7	677.7	822.4	660.0
Multi-client surveys	407.5	451.2	469.1	535.6	435.4
Goodwill	2,077.6	2,012.0	1,868.1	2,055.1	1,928.0
Total assets	5,555.9	5,324.4	4,921.2	5,634.2	4,647.0

Edgar Filing: CGG VERITAS - Form 20-F

Gross financial debt <sup>(4)</sup>	1,501.0	1,485.6	1,399.0	1,546.0	1,361.0
Equity attributable to owners of CGGVeritas	2,938.9	2,812.1	2,661.3	2,960.1	2,401.6

**Table of Contents**

	At December 31,				
	2011	2010	2009	2008	2007
	(In millions of euros except per share data and ratios)				
<b>Other financial historical data and other ratios:</b>					
EBITDAS <sup>(5)</sup>	607.3	596.2	658.9	1,058.4	997.3
Capital expenditures (property, plant & equipment) <sup>(6)</sup>	260.7	210.4	170.1	155.4	230.5
Capital expenditures for multi-client surveys	163.3	219.3	229.3	343.4	371.4
Net financial debt <sup>(7)</sup>	1,090.3	1,149.7	918.7	1,029.1	1,106.7
Gross financial debt <sup>(4)</sup> /EBITDAS <sup>(5)</sup>	2.5x	2.5x	2.1x	1.5x	1.3x
Net financial debt <sup>(7)</sup> /EBITDAS <sup>(5)</sup>	1.8x	1.9x	1.4x	1.0x	1.1x
EBITDAS <sup>(5)</sup> /Cost of financial debt, net	4.9x	5.7x	6.3x	12.6x	9.1x

<sup>(1)</sup> Basic per share amounts have been calculated on the basis of 151,771,940, 151,342,529, 150,864,476 and 137,910,388 weighted average outstanding shares in 2011, 2010, 2009 and 2008, respectively. Basic per share amounts in 2007 have been restated in order to reflect our five for one stock split effective as of June 3, 2008 with the equivalent of 134,567,140 weighted average outstanding shares.

<sup>(2)</sup> Diluted per share amounts have been calculated on the basis of 151,771,940, 151,342,529, 150,864,476 and 139,064,883 weighted average outstanding shares in 2011, 2010, 2009 and 2008, respectively. Diluted per share amounts in 2007 have been restated in order to reflect our five for one stock split effective as of June 3, 2008 with the equivalent of 136,078,995 weighted average outstanding shares.

<sup>(3)</sup> Working capital is defined as net trade accounts and notes receivable, net inventories and work-in-progress, tax assets, other current assets and assets held for sale less trade accounts and notes payable, accrued payroll costs, income tax payable, advance billings to customers, deferred income, current provisions and other current liabilities.

<sup>(4)</sup> Gross financial debt is defined as financial debt, including current maturities and bank overdrafts.

<sup>(5)</sup> EBITDAS is defined as earnings before interest, tax, depreciation, amortization and share-based compensation cost. Share-based compensation includes both stock options and shares issued under our share allocation plans. EBITDAS is presented as additional information because we understand that it is one measure used by certain investors to determine our operating cash flow and historical ability to meet debt service and capital expenditure requirements. However, other companies may present EBITDAS and similar measures differently than we do. EBITDAS is not a measure of financial performance under IFRS and should not be considered as an alternative to cash flow from operating activities or as a measure of liquidity or an alternative to net income as indicators of our operating performance or any other measures of performance derived in accordance with IFRS. See Item 5: Operating and Financial Review and Prospects Liquidity and Capital Resources EBITDAS for a reconciliation of EBITDAS to net cash provided by operating activities.

<sup>(6)</sup> Capital expenditures is defined as purchases of property, plant and equipment plus variation of suppliers of fixed assets.

<sup>(7)</sup> Net financial debt is defined as gross financial debt less cash and cash equivalents. Net financial debt is presented as additional information because we understand that certain investors believe that netting cash against debt provides a clearer picture of the financial liability exposure. However, other companies may present net financial debt differently than we do. Net financial debt is not a measure of financial performance under IFRS and should not be considered as an alternative to any other measures of performance derived in accordance with IFRS. See Item 5: Operating and Financial Review and Prospects Liquidity and Capital Resources Financial Debt for a reconciliation of net financial debt to certain financing items on our balance sheet.

**Exchange Rates**

The following table shows, for the periods indicated, information concerning the exchange rate between the U.S. dollar and the euro. This information is provided solely for your information, and we do not represent that euros could be converted into U.S. dollars at these rates or at any other rate. These rates are not the rates used by us in the preparation of our consolidated financial statements.

**Table of Contents**

The data provided in the following table is expressed in U.S. dollars per euro and is based on noon buying rates published by the Federal Reserve Bank of New York for the euro. On April 6, 2012, the most recent practicable day prior to the date of this annual report, the exchange rate as published by the Federal Reserve Bank of New York was 1.00 = U.S.\$1.3089.

	<b>Period-End Rate<sup>(1)</sup></b>	<b>Average Rate<sup>(2)</sup></b>	<b>High</b>	<b>Low</b>
<b>Recent Monthly Data</b>				
April 2012 (through April 6, 2012)	1.3089	1.3188	1.3370	1.3064
March 2012	1.3334	1.3208	1.3336	1.3025
February 2012	1.3459	1.3284	1.3463	1.3087
January 2012	1.3053	1.2910	1.3192	1.2682
December 2011	1.2939	1.3154	1.3487	1.2926
November 2011	1.3453	1.3557	1.3803	1.3244
October 2011	1.3947	1.3732	1.4172	1.3281
<b>Annual Data (Year Ended December 31,)</b>				
2011	1.2973	1.3939	1.4875	1.2926
2010	1.3269	1.3261	1.4536	1.1959
2009	1.4332	1.3935	1.5100	1.2547
2008	1.3919	1.4695	1.6010	1.2446
2007	1.4603	1.3705	1.4862	1.2904

<sup>(1)</sup> The period-end rate is the noon buying rate on the last business day of the applicable period.

<sup>(2)</sup> The average rate for each monthly period was calculated by taking the simple average of the daily noon buying rates, as published by the Federal Reserve Bank of New York. The average rate for each annual period was calculated by taking the simple average of the noon buying rates on the last business day of each month during the relevant period.

**Capitalization and Indebtedness**

Not applicable.

**Reasons for the Offer and Use of Proceeds**

Not applicable.

**Risk Factors**

Our business, financial condition, results of operations and cash flows and thus the value of an investment in our Company, could suffer material adverse affects due to the following risks. We have described the specific risks that we consider material to our business but there may be additional risks that we are unaware of or that we currently consider immaterial which could impair our business operations.

**Risks related to our business**

*Current economic uncertainty and the volatility of oil and natural gas prices could have a significant adverse effect on us.*

Global market and economic conditions are uncertain and volatile. In the past, economic contractions and uncertainty have weakened demand and lowered prices for oil and natural gas, resulting in a reduction in the levels of exploration for hydrocarbons and demand for our products and services. It is difficult to predict how long the current economic conditions will persist, whether they will deteriorate further, and which of our

---

**Table of Contents**

products and services will be adversely affected. We may have impairment losses as events or changes in circumstances occur that reduce the fair value of an asset below its book value. These conditions could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Uncertainty about the global economy has had and is likely to continue to have a significant adverse impact on commercial performance and financial condition of many companies, which may affect some of our customers and suppliers. The current economic climate may lead customers to cancel or delay orders or leave suppliers unable to provide goods and services as agreed. Our government clients may face budget deficits that prohibit them from funding proposed and existing projects or that cause them to exercise their right to terminate our contracts with little or no prior notice. If our suppliers, vendors, subcontractors or other counterparties are unable to perform their obligations to us or our customers, we may be required to provide additional services or make alternate arrangements on less favorable terms with other parties to ensure adequate performance and delivery of service to our customers. These circumstances could also lead to disputes and litigation with our partners or customers, which could have a material adverse impact on our reputation, business, financial condition and results of operations.

Turmoil in the credit markets, such as has been experienced in recent periods, could also adversely affect us and our customers. Limited access to external funding has in the past caused some customers to reduce their capital spending to levels supported by their internal cash flow. Some companies have found their access to liquidity constrained or subject to more onerous terms. In this context, our customers may not be able to borrow money on reasonable terms or at all, which could have a negative impact on their demand for our products, and impair their ability to pay us for our products and services on a timely basis, or at all.

In addition, the potential impact on the liquidity of major financial institutions may limit our ability to fund our business strategy through borrowings under either existing or new debt facilities in the public or private markets and on terms we believe to be reasonable. Persistent volatility in the financial markets could have a material adverse effect on our ability to refinance all or a portion of our indebtedness and to otherwise fund our operational requirements. We cannot be certain that additional funds will be available if needed to make future investments in certain projects, take advantage of acquisitions or other opportunities or respond to competitive pressures. If additional funds are not available, or are not available on terms satisfactory to us, there could be a material adverse impact on our business and financial performance.

Furthermore, our cash balances and short-term investments are maintained in accounts held at major banks and financial institutions located primarily in Europe and North America. Deposits are in amounts that exceed available insurance. Although none of the financial institutions in which we hold our cash and investments have gone into bankruptcy, been forced into receivership, or have been seized by their governments, there is a risk that this may occur in the future. If this were to occur, we would be at risk of not being able to access our cash which may result in a temporary liquidity crisis that could impede our ability to fund operations.

***We are subject to risks related to our international operations.***

With operations worldwide, including in emerging markets, our business and results of operations are subject to various risks inherent in international operations. These risks include:

Instability of foreign economies and governments, which can cause investment in capital projects by our potential clients to be withdrawn or delayed, reducing or eliminating the viability of some markets for our services;

Risks of war, uprisings, riots, terrorism, and civil disturbance, which can make it unsafe to continue operations, adversely affect budgets and schedules and expose us to losses;

Risk of piracy, which may result in the delay or termination of customer contracts in affected areas;

Seizure, expropriation, nationalization or detention of assets, renegotiation or nullification of existing contracts;

---

**Table of Contents**

Foreign exchange restrictions, import/export quotas, sanctions and other laws and policies affecting taxation, trade and investment; and

Availability of suitable personnel and equipment, which can be affected by government policies, that limit the importation of qualified crew members or specialized equipment in areas where local resources are insufficient.

We are exposed to these risks in all of our international operations to some degree, particularly in emerging markets where the political and legal environment is less stable. We are subject to the risk of material adverse developments with respect to our international operations and any insurance coverage we have may not be adequate to compensate us for any losses arising from such risks.

Revenue generating activities in certain foreign countries may require prior United States government approval in the form of an export license and may otherwise be subject to tariffs and import/export restrictions. These laws can change over time and may result in limitations on our ability to compete globally. In addition, non-U.S. persons employed by our separately incorporated non-U.S. entities may conduct business in some foreign jurisdictions that are subject to U.S. trade embargoes and sanctions by the U.S. Office of Foreign Assets Control, including Cuba, Iran, Sudan and Syria, which have been designated by the U.S. government as state sponsors of terrorism. We have typically generated revenue in some of these countries through the performance of marine surveys, the provision of data processing and reservoir consulting services and the sale of software licenses and software maintenance. We have current and ongoing relationships with customers in these countries. We have procedures in place to conduct these operations in compliance with applicable U.S. laws. However, failure to comply with U.S. laws on equipment and services exports could result in material fines and penalties, damage to our reputation and negatively affect the market price of our securities. We have provided information during 2011 to the U.S. Department of Commerce's Bureau of Industry and Security (BIS) concerning shipments to our vessels operating in or near Cuba that may not have complied fully with our internal policies and possibly violated applicable export controls and sanctions laws. See Item 4: Information on the Company Legal Proceedings Requests for information made by the U.S. Department of Commerce's Bureau of Industry and Security. In addition, our presence in these countries could reduce demand for our securities among certain investors.

Certain of our clients and certain tax, social security or customs authorities may request that we or certain of our subsidiaries post performance bonds or guarantees issued by banks or insurance companies, including in the form of stand-by letters of credit, in order to guarantee our legal or contractual obligations. We cannot assure you that we will be able to provide these bonds or guarantees in the amounts or durations required or for the benefit of the necessary parties. Our failure to comply with these requests could reduce our capacity to conduct business or perform our contracts. In addition, if we do provide these bonds or guarantees, our clients or the relevant authorities may call them under circumstances that we believe to be improper, and we may not be able to challenge such actions effectively in local courts.

We and certain of our subsidiaries and affiliated entities also conduct business in countries where there is government corruption. We are committed to doing business in accordance with all applicable laws and our codes of ethics, but there is a risk that we, our subsidiaries or affiliated entities or their respective officers, directors, employees or agents may act in violation of our codes and applicable laws, including the Foreign Corrupt Practices Act of 1977. Any such violations could result in substantial civil and criminal penalties and might materially adversely affect our business and results of operations or financial condition.

***We are subject to certain risks related to acquisitions.***

In the past we have grown by acquisitions, some of which, such as the merger with Veritas in 2007 or the acquisition of Wavefield in 2008, were quite significant. Such transactions, whether completed, pending or likely to be completed in the future, present various financial and management-related risks that can be material, such

---

**Table of Contents**

as integration of the acquired businesses in a cost-effective manner; implementation of a combined business strategy; diversion of management's attention; outstanding or unforeseen legal, regulatory, contractual, labor or other issues arising from the acquisitions; additional capital expenditure requirements; retention of customers; combination of different company and management cultures; operations in new geographic markets; the need for more extensive management coordination; and retention, hiring and training of key personnel. Should any of these risks associated with acquisitions materialize, they could have a material adverse effect on our business, financial condition and results of operations.

***We may need to write down goodwill from our balance sheet.***

We have been involved in a number of business combinations in the past, leading to the recognition of large amounts of goodwill on our balance sheet. Goodwill on our balance sheet totaled 2,077.6 million as of December 31, 2011. Goodwill is allocated to cash generating units (CGUs) as described in note 11 to our consolidated financial statements for the year ended December 31, 2011. The recoverable amount of a CGU is estimated at each balance sheet date and is generally determined on the basis of a group-wide estimate of future cash flows expected from the CGU in question. The estimate takes into account, in particular, the removal from service of certain assets used in our business (such as decommissioning or coldstacking vessels) or any significant underperformance in cash generation relative to previously-expected results, which may arise, for example, from the underperformance of certain assets, a deterioration in industry conditions or a decline in the economic environment. At each balance sheet date, if we expect that a CGU's recoverable amount will fall below the amount of goodwill recorded on the balance sheet, we may write down that goodwill in part or in whole. Such a write-down would not in itself have an impact on cash flow, but could have a substantial negative impact on our operating income and net income, and as a result, on our shareholders' equity and net debt/equity ratio.

***We invest significant amounts of money in acquiring and processing seismic data for multi-client surveys and for our data library without knowing precisely how much of the data we will be able to sell or when and at what price we will be able to sell the data.***

We invest significant amounts of money in acquiring and processing seismic data that we own. By making such investments, we are exposed to the following risks:

We may not fully recover the costs of acquiring and processing the data through future sales. The amounts of these data sales are uncertain and depend on a variety of factors, many of which are beyond our control. In addition, the timing of these sales is unpredictable, and sales can vary greatly from period to period. Each of our individual surveys has a limited book life based on its location, so a particular survey may be subject to significant amortization even though sales of licenses associated with that survey are weak or non-existent, thus reducing our net income.

Technological or regulatory changes or other developments could also materially adversely affect the value of the data. For example, regulatory changes such as limitations on drilling could affect the ability of our customers to develop exploration programs, either generally or in a specific location where we have acquired seismic data and technological changes could make existing data obsolete.

The value of our multi-client data could be significantly adversely affected if any material adverse change occurs in the general prospects for oil and gas exploration, development and production activities in the areas where we acquire multi-client data or more generally.

Any reduction in the economic value of such data will require us to write down its recorded value, which could have a material adverse effect on our results of operations.

***Our results of operations may be significantly affected by currency fluctuations.***

We derive a substantial portion of our revenues from international sales, subjecting us to risks relating to fluctuations in currency exchange rates. Our revenues and expenses are mainly denominated in U.S. dollars and

---

## **Table of Contents**

euros, and to a significantly lesser extent, in Canadian dollars, Brazilian reais, Australian dollars, Norwegian kroner and British pounds. Historically, a significant portion of our revenues that were invoiced in euros related to contracts that were effectively priced in U.S. dollars, as the U.S. dollar often serves as the reference currency when bidding for contracts to provide geophysical services.

Fluctuations in the exchange rate of the euro against such other currencies, particularly the U.S. dollar, have had in the past and will have in the future a significant effect upon our results of operations, which are reported in euros. For financial reporting purposes, depreciation of the U.S. dollar against the euro will negatively affect our reported results of operations since U.S. dollar-denominated earnings that are converted to euros are stated at a decreased value. Moreover, and in addition to the impact of the conversion of the U.S. dollar at a decreased value, since we participate in competitive bids for data acquisition contracts that are denominated in U.S. dollars, the depreciation of the U.S. dollar against the euro harms our competitive position against companies whose costs and expenses are denominated to a greater extent in U.S. dollars. While we attempt to reduce the risks associated with such exchange rate fluctuations through our hedging policy, we cannot assure you that we will maintain our profitability level or that fluctuations in the values of the currencies in which we operate will not materially adversely affect our future results of operations. As of the date of this annual report, we estimate our annual fixed expenses in euros to approximately 400 million and as a result, an unfavorable variation of U.S.\$0.1 in the average yearly exchange rate between the U.S. dollar and the euro would reduce our operating income and our shareholders' equity by approximately U.S.\$40 million. As of December 31, 2011 we and our subsidiaries whose functional currency is the euro had U.S.\$-denominated assets and liabilities of U.S.\$1,559.5 million and U.S.\$1,483.8 million, respectively. Our net balance sheet exchange rate exposure was thus U.S.\$75.7 million before hedging and U.S.\$13.6 million after taking into account hedging arrangements of U.S.\$62.2 million. As a result of our compliance with IAS 12 (Income Taxes), our results of operation are also exposed to the effect of exchange rate variations on our deferred tax amounts when the functional currency for an entity that owns an asset is not the same as the currency used for taxation purposes.

***Our working capital needs are difficult to forecast and may vary significantly, which could result in additional financing requirements that we may not be able to meet on satisfactory terms, or at all.***

It is difficult for us to predict with certainty our working capital needs. This difficulty is due primarily to working capital requirements related to the marine seismic acquisition business and related to the development and introduction of new lines of geophysical equipment products. For example, under specific circumstances, we may have to extend the length of payment terms we grant to customers or may increase our inventories substantially. We may therefore be subject to significant and rapid increases in our working capital needs that we may have difficulty financing on satisfactory terms, or at all, due notably to limitations in our debt agreements or market conditions.

***Our results of operations may be affected by fluctuations in fuel costs.***

Our marine acquisition business, with a fleet of 19 seismic vessels, incurs significant fuel costs, which were approximately U.S.\$184 million in 2011. Fuel costs can vary significantly depending on the supply location, local regulations and the price of crude oil at a given time. Only a portion of this variation can be contractually charged to or negotiated with the client. We therefore estimate that an increase by 20% of the average annual price of crude oil increases our fuel costs by approximately U.S.\$25 million on our operating income.

***Technological changes and new products and services are frequently introduced in the market, and our technology could be rendered obsolete by these introductions, or we may not be able to develop and produce new and enhanced products on a cost-effective and timely basis.***

Technology changes rapidly in the seismic industry, and new and enhanced products are frequently introduced in the market for our products and services, particularly in our equipment manufacturing and data processing and geosciences sectors. Our success depends to a significant extent upon our ability to develop and



---

**Table of Contents**

produce new and enhanced products and services on a cost-effective and timely basis in accordance with industry demands. While we commit substantial resources to research and development, we may encounter resource constraints or technical or other difficulties that could delay the introduction of new and enhanced products and services in the future. In addition, the continuing development of new products risks making our older products obsolete. New and enhanced products and services, if introduced, may not gain market acceptance and may be materially adversely affected by technological changes or product or service introductions by one of our competitors.

***We depend on proprietary technology and are exposed to risks associated with the misappropriation or infringement of that technology.***

Our ability to maintain or increase prices for our products and services depends in part on our ability to differentiate the value delivered by our products and services from those delivered by our competitors. Our proprietary technology plays an important role in this differentiation. We rely on a combination of patents, trademarks and trade secret laws to establish and protect our proprietary technology. Patents last up to 20 years, depending on the date of filing and the protection accorded by each country. We also enter into confidentiality and license agreements with our employees, customers and potential customers which limit access to and distribution of our technology. However, actions that we take to protect our proprietary rights may not be adequate to deter the misappropriation or independent third-party development of our technology. In addition, we may have lawsuits filed against us claiming that certain of our products, services, and technologies infringe the intellectual property rights of others. For example, we have been engaged since 2006 in litigation in the United States brought by our competitor ION Geophysical, which asserts patent violations in respect of digital sensor (DSU) technology used in some of Sercel's seismic data acquisition products manufactured in the past in the United States. See Item 4: Information on the Company Legal Proceedings ION litigation. Although we do not believe that any current litigation involving our intellectual property rights or the intellectual rights of others will have a material impact on us, such litigation may take place in the future. In addition, the laws of certain foreign countries do not protect proprietary rights to the same extent as either the laws of France or the laws of the United States, which may limit our ability to pursue third parties that misappropriate our proprietary technology.

***The nature of our business subjects us to significant ongoing operating risks for which we may not have adequate insurance or for which we may not be able to procure adequate insurance on acceptable terms, if at all.***

We are exposed to significant ongoing operating risks:

Our seismic data acquisition activities, particularly in deepwater marine areas, are often conducted under harsh weather and other hazardous operating conditions, including the detonation of dynamite. These operations are subject to the risk of downtime or reduced productivity, as well as to the risks of loss to property and injury to personnel resulting from fires, accidental explosions, mechanical failures, spills, collisions, stranding, ice floes, high seas and natural disasters. In addition to losses caused by human errors and accidents, we may also be subject to losses resulting from, among other things, war, terrorist activities, piracy, political instability, business interruption, strikes and weather events;

Our extensive range of seismic products and services expose us to litigation and legal proceedings including those related to product liability, personal injury and contract liability; and

We produce and sell highly complex products and we cannot assure you that our extensive product development, manufacturing controls and testing will be adequate and sufficient to detect all defects, errors, failures, and quality issues that could affect our customers and result in claims against us or result in order cancellations or delays in market acceptance.

We have put in place insurance coverage against operating hazards, including product liability claims and personal injury claims, damage, destruction or business interruption related to our equipment, data processing

---

**Table of Contents**

centers, manufacturing centers and other facilities to the extent deemed prudent by our management and in amounts we consider appropriate in accordance with industry practice. Whenever possible, we obtain agreements from customers that limit our liability.

However, we cannot assure you that the nature and amount of insurance will be sufficient to fully indemnify us against liabilities arising from pending and future claims or that our insurance coverage will be adequate in all circumstances or against all hazards, and that we will be able to maintain adequate insurance coverage in the future at commercially reasonable rates or on acceptable terms.

***Disruptions to our supply chain may adversely affect our ability to deliver our products and services to our customers.***

Our supply chain is a complex network of internal and external organizations responsible for the supply, manufacture and logistics supporting our products and services around the world. We are vulnerable to disruptions in this supply chain from changes in government regulations, tax and currency changes, strikes, boycotts and other disruptive events as well as from unavailability of critical resources. These disruptions may have an adverse impact on our ability to deliver products and services to our customers.

***Our possible failure to attract and retain qualified employees may materially adversely affect our future business and operations.***

Our future results of operations will depend in part upon our ability to retain our existing highly skilled and qualified employees and to attract new employees. A number of our employees are highly skilled scientists and technicians. We compete with other seismic products and services companies and, to a lesser extent, companies in the oil industry for skilled geophysical and seismic personnel, particularly in times when demand for seismic services is relatively high. A limited number of such skilled personnel is available, and demand from other companies may limit our ability to fill our human resources needs. If we are unable to hire, train and retain a sufficient number of qualified employees, this could impair our ability to compete in the geophysical services industry and to develop and protect our know-how. Our success also depends to a significant extent upon the abilities and efforts of members of our senior management, the loss of whom could materially adversely affect our business and results of operations.

***We have had losses in the past and there is no assurance of our profitability for the future.***

We have experienced losses in the past. In 2007 and 2008, our net profit attributable to shareholders amounted to 245.5 million and 332.8 million, respectively. In 2009, 2010 and 2011, we recorded a net loss attributable to shareholders of 264.3 million, 54.6 million and 19.0 million, respectively. There is therefore no assurance as to our profitability for the future.

***Our auditors, like other independent registered public accounting firms operating in France, are not permitted to be subject to inspection by the Public Company Accounting Oversight Board.***

Our auditors, like other independent registered public accounting firms operating in France, are not permitted to be subject to inspection by the Public Company Accounting Oversight Board, and as such, investors may be deprived of the benefits of such inspection.

Our independent registered public accounting firms that issue the audit reports included in our annual reports filed with the SEC, as auditors of companies that are traded publicly in the United States and firms registered with the Public Company Accounting Oversight Board, or PCAOB, are required by the laws of the United States to undergo regular inspections by the PCAOB to assess their compliance with SEC rules and PCAOB professional standards. Because our auditors are registered public accounting firms in France, a jurisdiction where the PCAOB is not currently permitted under French law to conduct inspections pending a mutual agreement between the PCAOB and the French authorities, our auditors, like other independent registered public accounting firms in France, are currently not inspected by the PCAOB.

---

## **Table of Contents**

Inspections of audit firms that the PCAOB has conducted where allowed have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. The lack of PCAOB inspections in France prevent the PCAOB from regularly evaluating our auditors' audits and quality control procedures. As a result, the inability of the PCAOB to conduct inspections of auditors in France may deprive investors of the benefits of PCAOB inspections.

### **Risks related to our industry**

*The volume of our business depends on the level of capital expenditures by the oil and gas industry, and reductions in such expenditures may have a material adverse effect on our business.*

Demand for our products and services has historically been dependent upon the level of capital expenditures by oil and gas companies for exploration, production and development activities. These expenditures are significantly influenced by hydrocarbons prices and by expectations regarding future hydrocarbons prices. Oil and gas prices may fluctuate based on relatively minor changes in the supply of and demand for oil and gas, expectations regarding future supply of and demand for hydrocarbons and certain other factors beyond our control. Lower or volatile oil and gas prices tend to limit the demand for seismic services and products.

Factors affecting the prices of hydrocarbons (and, consequently, demand for our products and services) include:

Demand for hydrocarbons;

Worldwide political, military and economic conditions, including political developments in the Middle East, economic growth levels, the availability of financing and the ability of OPEC to set and maintain production levels and prices for oil;

Laws or regulations restricting the use of fossil fuels or taxing such fuels and governmental policies regarding atmospheric emissions and use of alternative energy;

Levels of oil and gas production;

The rate of decline of existing and new oil and gas reserves;

Oil and gas inventory levels and market supply delays;

The price and availability of alternative fuels;

Policies of governments regarding the exploration for and production and development of oil and gas reserves in their territories; and

Global weather conditions, with warmer temperatures decreasing demand for products such as heating oil and extreme weather events potentially disrupting oil and gas exploration or production operations.

Increases in oil and natural gas prices may not increase demand for our services or otherwise have a positive effect on our financial condition or results of operations. Forecasted trends in oil and gas exploration and development activities may not continue and demand for our products may not reflect the level of activity in the industry. For example, at the end of 2009, there were indications that oil and gas companies would increase their exploration expenses, leading to a rebound in demand. Most seismic companies then accelerated the launch of new capacities or released vessels that had been removed from operation to anticipate the beginning of a new growth cycle. But the Deepwater Horizon platform disaster in

## Edgar Filing: CGG VERITAS - Form 20-F

April 2010 severely reduced the demand for seismic studies in the Gulf of Mexico. Demand in marine seismic capacity grew elsewhere as expected, but not enough to offset the reduction in the number of vessels operating in the Gulf of Mexico. Consequently, a sustained imbalance between supply and demand continued through 2010 and 2011 and prices remained flat.

***Our backlog includes contracts that can be unilaterally terminated at the client's option.***

In accordance with industry practice, contracts for the provision of seismic services typically can be canceled at the sole discretion of the client without payment of significant cancellation costs to the service

---

**Table of Contents**

provider. As a result, even if contracts are recorded in backlog, there can be no assurance that such contracts will be wholly executed by us and generate actual revenue, or even that the total costs already incurred by us in connection with the contract would be covered in full pursuant to any cancellation clause.

*We are subject to intense competition in the markets where we carry out our operations, which could limit our ability to maintain or increase our market share or maintain our prices at profitable levels.*

Most of our contracts are obtained through a competitive bidding process, which is standard for the seismic services industry in which we operate. Competitive factors in recent years have included price, crew availability, technological expertise and reputation for quality, safety and dependability. While no single company competes with us in all of our segments, we are subject to intense competition in each of our segments. We compete with large, international companies as well as smaller, local companies. In addition, we compete with major service providers and government-sponsored enterprises and affiliates. Some of our competitors operate more data acquisition crews than we do and have greater financial and other resources. These and other competitors may be better positioned to withstand and adjust more quickly to volatile market conditions, such as fluctuations in oil and gas prices and production levels, as well as changes in government regulations. In addition, if geophysical service competitors increase their capacity (or do not reduce capacity if demand decreases), the excess supply in the seismic services market could apply downward pressure on prices. The negative effects of the competitive environment in which we operate could have a material adverse effect on our results of operations.

*We have taken significant measures to adapt our fleet to changes in the seismic market, and we may take additional temporary measures in the future that could impose exceptional charges.*

In order to adjust to reduced demand in the seismic market and to reposition our fleet toward the high-end of that market (more than 10 streamers), we decided in 2009 to reduce our fleet capacity to 19 vessels by decommissioning nine medium-capacity 2D and 3D vessels. This decommissioning program was fully completed as of September 30, 2010. In 2010, we began implementing a propulsion and streamer upgrade plan in respect of four vessels (*Viking Vanquish*, *Oceanic Phoenix* (formerly named *Geowave Master*), *Oceanic Endeavour* (formerly named *Geowave Endeavour*) and *Geowave Champion*). All of these upgrades have been completed except for the *Geowave Champion*, which is currently dry docked and is scheduled to be released from the yard at the beginning of the second quarter of 2012. The vessel upgrade plan reduced our vessel availability rate by approximately five points over 2011 and we estimate it will reduce the vessel availability rate by approximately two points in 2012. In an effort to reposition the 3D fleet toward high capacity vessels, we intend to terminate our charter contract for the eight streamer *Geowave Commander* vessel prior to its scheduled expiration in 2013. Conditions in the seismic market could lead us to further adjust our marine acquisition capacity on a temporary basis, for example by cold stacking some of our vessels, which could trigger additional exceptional charges.

*We have high levels of fixed costs that are incurred regardless of our level of business activity.*

We have high fixed costs and data acquisition activities that require substantial capital expenditures. As a result, downtime or low productivity due to reduced demand, weather interruptions, equipment failures, permit delays or other circumstances that affect our ability to generate revenue could result in significant operating losses.

*The revenues we derive from land and marine seismic data acquisition vary significantly during the year.*

Our land and marine seismic data acquisition revenues are partially seasonal in nature. The marine data acquisition business is, by its nature, exposed to unproductive interim periods due to necessary repairs or transit time from one operational zone to another during which revenue is not recognized. Other factors that cause variations from quarter to quarter include the effects of weather conditions in a given operating area, the internal budgeting process of some important clients for their exploration expenses, and the time needed to mobilize production means or obtain the administrative authorizations necessary to commence data acquisition contracts.

---

## **Table of Contents**

### ***Our business is subject to governmental regulation, which may adversely affect our future operations.***

Our operations are subject to a variety of international, federal, provincial, state, foreign and local laws and regulations, including environmental, health and safety and labor laws. We invest financial and managerial resources to maintain compliance with these laws and related permit requirements. Our failure to do so could result in fines or penalties, enforcement actions, claims for personal injury or property damages, or obligations to investigate and/or remediate contamination. Failure to obtain the required permits on a timely basis may also prevent us from operating in some cases, resulting in crew downtime and operating losses. Moreover, if applicable laws and regulations, including environmental, health and safety requirements, or the interpretation or enforcement thereof, become more stringent in the future, we could incur capital or operating costs beyond those currently anticipated. The adoption of laws and regulations that directly or indirectly curtail exploration by oil and gas companies could also materially adversely affect our operations by reducing the demand for our geophysical products and services.

We may be affected by new environmental laws or regulations intended to limit or reduce emissions of gases, such as carbon dioxide and methane, which may be contributing to climate change, and these laws or regulations may affect our operations or, more generally, the production and demand for fossil fuels such as oil and gas. The European Union has already established greenhouse gas regulations, and many other countries, including the United States, may do so in the future. This could impose additional direct or indirect costs on us as our suppliers incur additional compliance costs that get passed on to us or as our customers reduce their demand for our products or services.

In the United States, new regulations governing oil and gas exploration and development were put in place following the Deepwater Horizon platform disaster in the Gulf of Mexico. These new regulations may have a significant financial impact on oil and gas companies that wish to carry out exploration and development projects in deep water Gulf of Mexico. Our client mix could be altered with the disappearance of small and medium sized players, which could decrease our sales of multi-client data. In December 2011, the United States government organized the first lease of blocks since April 2010 and has announced a second lease sale of blocks for June 2012.

### **Risks related to our indebtedness**

#### ***Our substantial debt could adversely affect our financial health and prevent us from fulfilling our obligations.***

We have a significant amount of debt. As of December 31, 2011, our net financial debt (which we define as gross financial debt less cash and cash equivalents), total assets and shareholders' equity were 1,090 million (U.S.\$1,410 million), 5,556 million (U.S.\$7,189 million) and 2,939 million (U.S.\$3,802 million), respectively. We cannot assure you that we will be able to generate sufficient cash to service our debt or sufficient earnings to cover fixed charges in future years.

Our substantial debt could have important consequences. In particular, it could:

increase our vulnerability to general adverse economic and industry conditions;

require us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund capital expenditures and other general corporate purposes;

limit our flexibility in planning for, or reacting to, changes in our businesses and the industries in which we operate;

place us at a competitive disadvantage compared to competitors that have less debt; and

limit, along with the financial and other restrictive covenants of our indebtedness, among other things, our ability to borrow additional funds.



---

**Table of Contents**

*Our debt agreements contain restrictive covenants that may limit our ability to respond to changes in market conditions or pursue business opportunities.*

The indentures governing our senior notes (9<sup>1</sup>/<sub>2</sub>% Senior Notes due 2016, 7<sup>3</sup>/<sub>4</sub>% Senior Notes due 2017 and 6<sup>1</sup>/<sub>2</sub>% Senior Notes due 2021) and the agreements governing our U.S. and French senior revolving facilities contain restrictive covenants that limit our ability and the ability of certain of our subsidiaries to, among other things:

incur or guarantee additional indebtedness or issue preferred shares;

pay dividends or make other distributions;

purchase equity interests or reimburse subordinated debt prior to its maturity;

create or incur certain liens;

enter into transactions with affiliates;

issue or sell capital stock of subsidiaries;

engage in sale-and-leaseback transactions; and

sell assets or merge or consolidate with another company.

Complying with the restrictions contained in some of these covenants requires us to meet certain ratios and tests, relating notably, to interest coverage and net indebtedness. The requirement that we comply with these provisions may materially adversely affect our ability to react to changes in market conditions, take advantage of business opportunities we believe to be desirable, obtain future financing, fund needed capital expenditures, or withstand a continuing or future downturn in our business.

Our French revolving facility, as amended on December 15, 2011, requires that we meet the following ratios and tests:

a maximum ratio of total net debt to EBITDA of 2.50:1 at the end of each quarter for the 12-month testing period ending December 31, 2012; and 2.25:1 at the end of each quarter for the 12-month testing period ending December 31, 2013;

a minimum ratio of EBITDA to total interest costs of 3.50:1 at the end of each quarter for the 12-month testing period ending December 31, 2012; and 4.00:1 at the end of each quarter for the 12-month testing period ending December 31, 2013, and

the aggregate amount of our net capital expenditures in any fiscal year may not exceed the greater of U.S.\$600 million and 50% of EBITDA for such fiscal year.

Our U.S. revolving facility, as amended on December 15, 2011, requires that we meet the following ratios, which are tested quarterly:



a maximum ratio of total net debt to EBITDA of 2.50:1; and

a minimum ratio of EBITDA to total interest costs of 3.00:1.

***If we are unable to comply with the restrictions and covenants in the indentures governing our senior notes, the agreements governing our U.S. and French senior revolving facilities and other current and future debt agreements, there could be a default under the terms of these indentures and agreements, which could result in an acceleration of repayment.***

If we are unable to comply with the restrictions and covenants in the indentures governing our senior notes or in other current or future debt agreements, including those governing our U.S. and French senior revolving facilities, there could be a default under the terms of these indentures and agreements. Our ability to comply with

## **Table of Contents**

these restrictions and covenants, including meeting financial ratios and tests, may be affected by events beyond our control. As a result, we cannot assure you that we will be able to comply with these restrictions and covenants or meet such financial ratios and tests. In the event of a default under these agreements, lenders could terminate their commitments to lend or accelerate the loans or bonds and declare all amounts outstanding due and payable. Borrowings under other debt instruments that contain cross-acceleration or cross-default provisions may also be accelerated and become due and payable. If any of these events occur, our assets might not be sufficient to repay in full all of our outstanding indebtedness and we may be unable to find alternative financing. Even if we could obtain alternative financing, it might not be on terms that are favorable or acceptable to us.

### ***We and our subsidiaries may incur substantially more debt.***

We and our subsidiaries may incur substantial additional debt (including secured debt) in the future. The terms of the indentures governing our senior notes and the agreements governing our U.S. and French senior revolving facilities and our other existing senior indebtedness limit, but do not prohibit, us and our subsidiaries from doing so. As of December 31, 2011, the US and French revolving credit facilities were undrawn, and we had long-term confirmed and undrawn credit lines amounting to 216 million (U.S.\$279 million).

If new debt is added to our current debt levels, the related risks for us could intensify.

### ***To service our indebtedness and make capital expenditures, we require a significant amount of cash, and our ability to generate cash will depend on many factors beyond our control.***

Our ability to make payments on and to refinance our indebtedness, and to fund planned capital expenditures, depends in part on our ability to generate cash in the future. This ability is, to a certain extent, subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

We cannot assure you that we will generate sufficient cash flow from operations to realize operating improvements on schedule or that future cash from operations and borrowings will be available to us in an amount sufficient to enable us to service and repay our indebtedness or to fund our other liquidity needs. If we are unable to satisfy our debt obligations, we may have to undertake alternative financing plans, such as refinancing or restructuring our indebtedness, selling assets, reducing or delaying capital investments or seeking to raise additional capital. We cannot assure you that any refinancing or debt restructuring would be possible, that any assets could be sold or that, if sold, the timing of the sales and the amount of proceeds realized from those sales would be favorable to us or that additional financing could be obtained on acceptable terms. Disruptions in the capital and credit markets, as have been experienced since 2008, could adversely affect our ability to meet our liquidity needs or to refinance our indebtedness, including our ability to draw on our existing credit facilities or enter into new credit facilities. Banks that are party to our existing credit facilities may not be able to meet their funding commitments to us if they experience shortages of capital and liquidity or if they experience excessive volumes of borrowing requests from us and other borrowers within a short period of time.

### ***Increases in interest rates could adversely affect our results of operations.***

A majority of our debt consists of fixed-rate bonds, along with some fixed-rate finance leases and fixed-rate medium-term bank credit facilities with variable maturities. This debt is not exposed to interest rate fluctuations. However, drawings under our credit facilities incur interest at variable rates that are reset at each interest period (generally between one and 12 months). As a result, our interest expenses on this debt vary in line with movements in short-term interest rates.

**Table of Contents**

The following table shows our variable interest rate exposure by maturity as of December 31, 2011:

December 31, 2011	Overnight to 1 Year	1 to 5 Years <i>(In millions of euros)</i>	More than 5 Years
Financial liabilities <sup>(1)</sup>	27	30	
Financial assets <sup>(2)</sup>	286		
Net position before hedging <sup>(3)</sup>	259	(30)	
Off-balance sheet position			
Net position after hedging <sup>(3)</sup>	259	(30)	

<sup>(1)</sup> Excluding bank overdrafts and accrued interest but including employee profit-sharing

<sup>(2)</sup> Invested cash and equivalents

<sup>(3)</sup> Net assets/(liabilities)

As of December 31, 2011, our variable-rate assets (net of liabilities) maturing in less than one year totaled 259 million.

**Item 4: INFORMATION ON THE COMPANY****Introduction**

We are a global participant in the geophysical seismic industry, as both a manufacturer of geophysical equipment and a provider of a wide range of seismic services in data acquisition and processing both onshore and offshore, principally to clients in the oil and gas exploration and production industry. In accordance with our internal reporting system, operations are organized into two segments, which we use to manage and measure our performance: Services and Equipment.

Our geophysical Equipment segment operates through our subsidiary Sercel, the market leader in the development and production of seismic acquisition systems and specialized equipment in the land and marine seismic markets.

Our geophysical Services segment is composed of the following divisions:

land contract: seismic data acquisition for land, transition zones and shallow water undertaken by us on behalf of a specific client;

marine contract: seismic data acquisition offshore undertaken by us on behalf of a specific client;

multi-client land and marine: seismic data acquisition undertaken by us and licensed to a number of clients on a non-exclusive basis;

processing, imaging and reservoir: processing, imaging and interpretation of geophysical data, data management and reservoir studies for clients.

We have more than 100 years of combined operating experience (through CGG and Veritas) and a recognized track record of technological leadership in the science of geophysics. We believe we are well placed to capitalize on the growing importance of seismic technology to enhance the exploration and production performance of our broad base of clients, which includes independent, international and national oil companies.

For the year ended December 31, 2011, Services accounted for 72% and Equipment accounted for 28% of our consolidated operating revenues. 22% of our consolidated operating revenues were from North America, 20% from Latin America, 36% from Europe, Africa, Middle East, and

22% from Asia Pacific.

---

## **Table of Contents**

Compagnie Générale de Géophysique-Veritas is the parent company of the CGGVeritas Group. We are a *société anonyme* incorporated under the laws of the Republic of France and operating under the French Commercial Code. Our registered office is at Tour Maine Montparnasse, 33, avenue du Maine, 75015 Paris, France. Our telephone number is (33) 1 64 47 45 00.

### **Our Strategy**

We intend to continue to strengthen our competitive position in the global geophysical services and equipment markets by capitalizing on growth opportunities resulting from both the application of new technologies in every sector of the oil and gas business from exploration to production and reservoir management and from our worldwide presence.

To achieve this objective, we have adopted the following strategies:

#### ***Actively respond to the current market conditions.***

The volatile and adverse global market and economic conditions commencing in late 2008 and the decreased level of capital expenditures by oil and gas companies adversely affected demand for seismic products and services in 2009. Demand started to recover in 2010 as exploration expenses of oil and gas companies began to increase again. In response to current market conditions, we are rigorously reducing costs across the organization in line with our market outlook. We adjusted our fleet capacity by decommissioning and removing vessels from our fleet in 2009 and 2010 and by postponing to 2010 and 2011 new builds ordered in 2007. In addition, to meet current and future market demand, in particular for increased streamers per vessels, we upgraded one vessel in 2010 and two vessels in 2011. A fourth vessel is currently being upgraded and is scheduled to return to operations in the second quarter of 2012. See Services Marine Business Marine Seismic Acquisition Fleet . In addition, in 2011 we took a disciplined approach to capital spending in order to focus on our priority of free cash flow generation. We stabilized capital spending on our multi-client library in 2010 and 2011 and plan to increase our multi-client spending in 2012 as we return to the Gulf of Mexico. We are also maintaining strong research and development spending levels and further increasing our focus on leadership in advanced technology.

#### ***Focus on growth areas for geophysical services.***

We believe that our proprietary equipment and software provide us with a competitive advantage in specific growth markets, such as data acquisition in transition zones and difficult terrain, where recent technological advances have made seismic acquisition more feasible. We intend to focus on developing our technological capabilities in emerging markets for geophysical services, such as reservoir appraisal and production monitoring. We also believe that we have unique experience and expertise in complex land seismic acquisition projects in both desert and arctic regions. Furthermore, we believe our geographic footprint will allow us to respond to the growing demand for seismic imaging and reservoir solutions.

We also intend to maintain our position in the marine and land seismic market for multi-client data by developing our multi-client data library. We believe that a strong position in this market segment enhances our global competitive position and may provide opportunities for continuing future sales. In developing our multi-client data library, we carefully select survey opportunities in order to maximize our return on investment. We also intend to apply the latest advances in depth imaging technology to a selected part of our existing library.

Given the growing importance of geophysics in reservoir characterization, we intend to further develop the synergies between our leading network of 43 data processing centers and reservoir services through continuous innovation to allow for increased integration of data processing into reservoir studies, which will provide enhanced reservoir knowledge and allow for improved exploitation. This approach places us in a better position to meet the requirements of our clients with an extensive range of integrated services. With the increasing use of

---

## **Table of Contents**

wide-azimuth and high resolution surveys and the growing demand for advanced imaging capabilities, we also intend to increase our processing capability in developing disciplines, such as reservoir description and monitoring, including wide-azimuth, multi-component and 4D studies. We also plan to continue promoting and developing our dedicated processing centers within our clients' offices and developing our regional centers. We plan as well to develop reservoir interpretative solutions, notably through the Hampson-Russell software that has delivered innovative interpretative solutions since 1987. Hampson-Russell software makes sophisticated technology accessible to the working geophysicist. It has an installed base of more than 1,400 licenses at over 500 petroleum and service companies worldwide.

We also intend to set up additional targeted partnerships through joint-ventures (JVs) in order to address specific market segments or to gain a privileged access to high potential local geographical markets. During the last two years, we established a JV with Gardline in the marine market segment in May 2010 and a JV with Petrovietnam Technical Services Corporation (PTSC) for the Vietnamese offshore market in March 2012 (announced in December 2010), and we announced a JV with PT Elnusa Tbk (Elnusa) for the Indonesian offshore market in February 2011.

### ***Develop technological synergies for products and capitalize on new generation equipment.***

We believe Sercel is the leading manufacturer of land, marine and subsea geophysical equipment. We plan to continue developing synergies among the technologies available to Sercel and to capitalize fully on our position as a market leader. Through our research and development, we seek to improve existing products and maintain an active new product development program in all segments of the geophysical equipment market (land, marine and ocean-bottom).

### ***Develop and utilize innovative technology.***

The significant technological developments in seismic services over the last decade have produced a marked change in the sector. The development of 4D and wide-azimuth techniques (providing time lapse views and enhanced illumination of the reservoir as well as improved image resolution) now allows operators to better locate and monitor reservoir performance. This possibility broadens the use of seismic techniques from pure exploration (early cycle) into a tool for reservoir development, management and production (late cycle). Importantly, these techniques require more vessel time than traditional data acquisition. For example, three to six times more vessel time is required to shoot wide-azimuth data than is required for traditional 3D.

Three octaves of signal are generally considered necessary for adequate seismic resolution; therefore, in order to achieve sufficient bandwidth in areas where high frequencies are limited, it is necessary to extend the low frequencies. When less attenuated, low frequencies allow for clearer images much deeper into the earth, whereas high frequencies enhance the image resolution at a level never attained before. Conventional marine streamer acquisition lacks sufficient signal-to-noise ratios in the 2-7 Hz bandwidth due to streamer depth, streamer tow noise, source array configuration, source depth and source bubble. BroadSeis, a variable-depth streamer broadband solution, improves considerably the quality of data acquired by streamers by widening the range of recorded frequencies. BroadSeis relies on the combination of three differentiation factors developed by us: (i) the Sercel solid streamer, the most quiet in the market; (ii) an original acquisition set-up based on a specific positioning of streamers at variable depth in water; and (iii) innovative processing algorithms that are adapted to this specific acquisition configuration. Patent applications have been filed for the different components to ensure we maintain exclusive rights over this technique. BroadSeis was launched in 2010. Since its introduction, approximately 30 acquisitions have been carried out, most of them in association with customers, which we believe indicates a real interest for this new technology. The commercialization phase of BroadSeis is enabling CGGVeritas to quickly expand the use of this process, which will be a key differentiation factor for our marine acquisition from 2012.

## **Table of Contents**

We believe that growth in demand for geophysical services will continue to be driven in part by the development of new technologies. The industry is increasingly demanding clearer seismic imaging and better visibility, particularly underneath salt layers. We expect multi-azimuth, wide azimuth, multi-component (3C/4C) surveys and time-lapse (4D) surveys to become increasingly important for new production-related applications, particularly in the marine sector, and expect specialized recording equipment for difficult terrain to become more important in land seismic data acquisition, particularly in transition zones, shallow water and arctic areas. We believe that to remain competitive, geophysical services companies will need to combine advanced data acquisition technology with consistently improving processing capacity in order to reduce further delivery times for seismic services.

Our strategy is to continue our high level of investment in research and development to reinforce our technological leadership. We also intend to take advantage of our full range of integrated services to enhance our position as a market leader in:

land and transition zone seismic data acquisition systems and know-how;

innovative marine and seabed acquisition systems and services;

seismic data processing and reservoir services; and

manufacturing of land, marine and subsea data acquisition equipment.

### ***Emphasize client service.***

We believe it is important to operate in close proximity to our clients to develop a better understanding of their individual needs and to add measurable value to their business processes. We respond to these needs by creating new products or product enhancements that improve the quality of data and reduce the data delivery time to clients. We believe that our regional multi-client and dedicated data processing centers in our clients' offices provide us with an advantage in identifying contract opportunities, optimizing service to clients and developing products responsive to new market demands, such as seismic techniques applied to reservoir management. We believe that we are well positioned to benefit from the industry trend towards increased outsourcing. This trend is leading oil and gas companies to place greater emphasis on relationships and service quality (including health, safety and protection of the environment) in their selection of third party service providers, including geophysical services providers.

### ***Provide integrated services.***

We are committed to providing clients with a full array of seismic data services, from acquisition and processing to data interpretation and management. We believe that integration of compatible technology and equipment increases the accuracy of data acquisition and processing, enhances the quality of our client service and thereby improves productivity in oil and gas exploration and production. Our clients increasingly seek integrated solutions to better evaluate known reserves and improve the ratio of recoverable hydrocarbons from producing fields. We are continuing to develop our ability to provide geosciences solutions through a combination of various exploration and production services, including technical data management, reservoir characterization and interpretation of well information.

### ***Develop well-positioned data libraries.***

We will continue to develop large multi-client libraries in key basins throughout the world where the industry focuses its exploration budgets. We intend to take advantage of our recent vintage, well-positioned seismic data libraries and will capitalize on our strong experience in wide azimuth technology. For instance in the Gulf of Mexico, the industry's growing interest in wide-azimuth technology to explore complex geological environments has translated into high pre-funding levels for our Walker Ridge, Green Canyon, Garden Banks

## **Table of Contents**

and Three Corners surveys. We plan to start a new multi-client survey in the US waters of the Gulf of Mexico in 2012. Similarly, we will continue to expand the footprint of our multi-client library in Brazil and in the North Sea with the introduction of our new BroadSeis acquisition technology.

Onshore, our land library offers additional potential in North America, particularly in the shale gas plays where we started a significant onshore program in the Marcellus basin in 2011. We believe that our seismic data library is a strength in a market where a global library portfolio is increasingly attractive to clients.

### ***Develop reservoir applications.***

While seismic data was historically used primarily by oil and gas companies for exploration purposes, it has become a recognized tool for field development and reservoir management. We are progressively extending our core business towards compiling and analyzing seismic data of existing reservoirs in response to this trend. Through high-resolution images and our expertise in 4D seismic and permanent monitoring, we aim to assist hydrocarbon producers in better characterizing and predicting the static properties and dynamic behavior of their reservoirs.

### ***Enhance our cash liquidity position.***

We are also taking steps to enhance our cash liquidity position, increase our flexibility under our credit facilities, extend our existing debt maturities, and bolster our balance sheet in an uncertain global economic environment. To those ends, we redeemed U.S.\$530 million of our 7<sup>1/2</sup>% Senior Notes due 2015 with the proceeds of our OCEANE convertible bonds issued in January 2011 and a portion of the proceeds of our 6<sup>1/2</sup>% Senior Notes due 2021 issued in May 2011. We also repaid the U.S.\$508 million outstanding under the term loan B of our U.S. senior facilities (of which U.S.\$164 million, was to mature in 2014 and U.S.\$343 million was to mature in 2016) with a portion of the proceeds of our 6<sup>1/2</sup>% Senior Notes due 2021. In addition, we amended our U.S. and French revolving credit facilities on December 15, 2011 to improve the flexibility under our non-financial covenants and extend some of the final debt maturities under our U.S. revolving facility.

## **Industry Conditions**

Overall demand for geophysical services and equipment is dependent on spending by oil and gas companies for exploration, production development and field management activities. This spending depends in part on present and expected future oil and gas prices and the ability of our customers, particularly the small independent oil and gas companies, to secure financing for their projects. On the seismic supply side, decisions for capacity adjustments are based on estimates of demand for seismic services in the coming months (for land crews) or in the next two to three years (for marine seismic vessels). As a result, the supply and demand balance in seismic services is affected by decisions that were made up to three years earlier based on projected demand and from actual exploration expense levels of oil and gas companies.

In this context, we believe that the short-term outlook for the geophysical services sector, particularly the marine segment, is characterized by a continuing recovery in demand that will eventually satisfy the current market overcapacity and trigger price increase in 2012. We also believe that this continuing recovery in demand should sustain the current investment level in seismic equipment. Our short-term outlook is based on the following market analyses:

The strong recession experienced in geophysical services from mid-2008 to the end of 2009 led to a significant decrease in volume and prices, resulting in an overcapacity in marine and land seismic markets. At the end of 2009, there were clear signs that oil and gas companies would increase their exploration expenses which would trigger a rebound in demand. Most seismic companies then accelerated the launch of new capacities or released vessels that had been removed from operation to anticipate the beginning of a new growth cycle. The Deepwater Horizon platform disaster in April



---

## **Table of Contents**

2010 that resulted in a huge oil spill in the Macondo oil field in the Gulf of Mexico has severely reduced the demand for seismic studies in this part of the world. Demand in marine seismic grew elsewhere as expected, but not enough to offset the reduction in the number of vessels shooting in the Gulf of Mexico. Consequently, a sustained imbalance between supply and demand continued through 2010 and 2011 and prices stayed flat. Activity in the Gulf of Mexico is expected to recover in 2012, which combined with an increase in demand in offshore Angola and an expected strong North Sea summer season, should outstrip supply and translate into an increase in marine prices. Similarly in land seismic, demand rebounded but without any effect on prices. This growth in volume has nevertheless benefited the equipment sector, both for marine equipment (with new vessels released into the market and upgrades of old vessels), and for land equipment (with an overall increase in the average number of channels per crew for denser acquisitions).

In 2012, we expect oil and gas companies, supported by sustained higher oil prices, should continue to increase their exploration and production expenses by 10 to 15%, with a stronger emphasis on exploration, leading to increased demand for both marine and land seismic surveys. In marine seismic, we expect the market to be balanced during the second quarter of 2012. The land seismic market should stay vigorous in our key regions including in winter in North America. Processing, Imaging and Reservoir activity should benefit from the global increase in volumes and sophisticated imaging services for subsalt or sub-basalt offshore exploration.

Multi-client activity will continue to be closely linked to the schedule of the bid rounds for the Gulf of Mexico.

Longer term, we believe that the outlook for both the geophysical services sector and the geophysical equipment segment is fundamentally positive for a number of reasons:

First, oil and gas companies (including both international and national oil companies) and the large oil and gas consuming nations have perceived a growing and potentially lasting imbalance between reserves and future demand for hydrocarbons. A rapid rise in world consumption requirements, particularly in China and India, resulted in a growth in demand for hydrocarbons higher than anticipated, despite the recent economic downturn. In response to this growth, oil and gas companies should continue to increase their exploration and production investments in order to improve existing reservoir and regularly replace reserves.

Second, the seismic services market should continue to benefit from this increased spending since seismic services are key components both in the search for new reserves (pure exploration (early cycle)) and in the optimization of existing reservoirs (reservoir development, management and production (late cycle)). Significant technological developments in seismic equipment and services over the last decade have advanced the use of seismic technology in reservoir development and production, broadening its use over the lifecycle of reservoirs.

Each year, three to four million barrels of new oil have to be found in deeper and more complex geology in order to offset the declining rates of the existing reserves. Gas production from shale rocks, where seismic studies are used to enhance the yield, has developed remarkably well in North America, and may expand to other continents. We expect these fundamental trends to continue to drive increased demand for high-end seismic equipment and services in the medium-term. We believe that we are in a strong position to benefit from these long term trends.

### **History and Development of the Company**

Compagnie Générale de Géophysique (CGG) was established on July 23, 1931 to develop and market geophysical techniques for appraising underground geological resources. Since that time, CGG gradually specialized in seismic techniques adapted to oil and gas exploration and production, while continuing to develop a broad range of other geophysical activities. In 2007, CGG acquired Veritas DGC Inc. through a part cash, part stock transaction. CGG was renamed Compagnie Générale de Géophysique-Veritas ( CGGVeritas ), a *société anonyme* incorporated under the laws of the Republic of France and operating under the French *Code de commerce*, with a duration until 2030.

**Table of Contents**

Over the course of the last three years, we have completed various acquisitions and disposals which are described under Item 5: Operating and Financial Review and Prospects Factors Affecting our Results of Operations Acquisitions and Disposals included elsewhere in this annual report. Our historical and ongoing capital expenditures and sales of tangible assets are described under Item 5: Operating and Financial Review and Prospects Liquidity and Capital Resources included elsewhere in the annual report.

**Business Overview**

Our operations have historically been organized into two main segments: Services and Equipment. Services accounted for 72% and Equipment accounted for 28% of our consolidated revenues for the year ended December 31, 2011. The commercial activities for Equipment and Services are carried out in 18 key countries or geomarkets. In 2011, our two most significant customers accounted for 13.0% and 3.0% of our consolidated revenues compared with 6.9% and 6.0% in 2010 and 6.8% and 5.3% in 2009.

**Operating Revenues Data***Revenues by Activity*

The following table sets forth our consolidated operating revenues by activity in millions of euros or dollars, as the case may be, and the percentage of total consolidated operating revenues represented thereby, for the periods indicated:

	2011			2010			2009		
	M	M.U.S.\$	%	M	M.U.S.\$	%	M	M.U.S.\$	%
Contract Land acquisition	265.6	372.8	12%	286.9	381.4	13%	274.2	381.8	12%
Multi-Client Land acquisition	93.7	131.5	4%	109.9	145.9	5%	73.0	101.6	4%
<b>Total Land acquisition</b>	<b>359.3</b>	<b>504.3</b>	<b>16%</b>	<b>396.8</b>	<b>527.3</b>	<b>18%</b>	<b>347.2</b>	<b>483.4</b>	<b>16%</b>
Contract Marine acquisition	696.2	977.1	31%	585.2	778.1	27%	774.4	1,078.1	35%
Multi-Client Marine acquisition	260.3	365.4	11%	292.2	388.4	14%	297.2	413.7	13%
<b>Total Marine acquisition</b>	<b>956.5</b>	<b>1,342.5</b>	<b>42%</b>	<b>877.4</b>	<b>1,166.5</b>	<b>41%</b>	<b>1,071.6</b>	<b>1,491.8</b>	<b>48%</b>
Processing, Imaging & Reservoir	315.5	442.7	14%	292.7	389.1	13%	289.6	403.3	13%
<b>Total Services</b>	<b>1,631.3</b>	<b>2,289.5</b>	<b>72%</b>	<b>1,566.9</b>	<b>2,082.9</b>	<b>72%</b>	<b>1,708.4</b>	<b>2,378.5</b>	<b>77%</b>
<b>Total Equipment</b>	<b>636.4</b>	<b>890.9</b>	<b>28%</b>	<b>619.2</b>	<b>821.3</b>	<b>28%</b>	<b>524.8</b>	<b>730.8</b>	<b>23%</b>
<b>Total</b>	<b>2,267.7</b>	<b>3,180.4</b>	<b>100%</b>	<b>2,186.1</b>	<b>2,904.2</b>	<b>100%</b>	<b>2,233.2</b>	<b>3,109.3</b>	<b>100%</b>

*Revenues by Region (by location of customers)*

The following table sets forth our consolidated operating revenues by region in millions of euros or dollars, as the case may be, and the percentage of total consolidated operating revenues represented thereby, for the periods indicated:

	2011			2010			2009		
	M	M.U.S.\$	%	M	M.U.S.\$	%	M	M.U.S.\$	%
North America	502.4	704.9	22%	584.5	776.5	27%	501.5	698.3	22%
Latin America	457.0	641.2	20%	296.1	393.4	13%	156.8	218.3	7%
Europe, Africa & Middle East	808.9	1,133.7	36%	866.8	1,151.5	40%	982.1	1,367.3	44%
Asia Pacific	499.4	700.7	22%	438.7	582.8	20%	592.8	825.4	27%
<b>Total</b>	<b>2,267.7</b>	<b>3,180.4</b>	<b>100%</b>	<b>2,186.1</b>	<b>2,904.2</b>	<b>100%</b>	<b>2,233.2</b>	<b>3,109.3</b>	<b>100%</b>

---

## **Table of Contents**

### **Services**

Our geophysical Services segment is composed of the following divisions:

land contract: seismic data acquisition for land, transition zones and shallow water undertaken by us on behalf of a specific client;

marine contract: seismic data acquisition offshore undertaken by us on behalf of a specific client;

multi-client land and marine: seismic data acquisition undertaken by us and licensed to a number of clients on a non-exclusive basis;

processing, imaging and reservoir: processing, imaging and interpretation of geophysical data, data management and reservoir studies for clients.

As part of a global group reorganization, we reorganized the structure of our Services segment in July 2010. Our Services segment was previously organized by region. Since July 2010, our Services segment has been organized by division.

### ***Land Business***

#### ***Land Seismic Acquisition***

Land seismic acquisition includes all seismic surveying techniques where the recording sensor is either in direct contact with, or in close proximity to, the ground. Our Land division offers integrated services, including the acquisition and on site processing of seismic data on land, in transition zones and on the ocean floor (shallow water and seabed surveys). We undertake land surveys on both a contract and multi-client basis.

We are a significant land seismic acquisition contractor worldwide, including in North America, and particularly in areas requiring specific technologies (such as the high-channel count crews in the Middle-East) and operational expertise (such as arctic or shallow water operations). In 2011, we had an average of 19 active land crews performing 3D and 2D seismic surveys. Total land seismic activities – contract and multi-client surveys – accounted for 16% of our consolidated operating revenues in 2011. Contracts for land seismic acquisition accounted for 12% and land multi-client surveys accounted for 4% of our consolidated operating revenue in 2011.

Our land operations include surveying and recording crews. Surveying crews lay out the lines to be recorded and mark the sites for shot-hole placement or equipment location (except for stackless operations where the sources locations are indicated through GPS tools rather than marked on the field). Recording crews produce acoustic impulses and use recording units to synchronize the shooting and record the seismic signals via geophones. On a land survey where explosives are used as the acoustic source, the recording crew is supported by several drill crews. Drill crews operate ahead of the recording crew and bore shallow holes for explosive charges which, when detonated by the recording crew, produce the necessary acoustic impulse. Seismic surveying in transition zones and on the sea-bed is carried out by laying cables or other stationary measuring devices on the ocean floor.

Land seismic crews are equipped with advanced equipment and software adapted to the various types of terrain and conditions, including: the Sercel 428XL seismic data recorders; the Sercel SeaRay bay cable and the Trilobite autonomous recording node for sea-bed operations; the Sercel Nomad 65 and Nomad 90 vibrators, the Sercel VE 464 vibrator electronic control system used to synchronize and verify the emission of acoustical waves by vibrators; DSU3 Sercel digital 3 components sensors; Sercel Unite onshore wireless acquisition system; patented high vibroseis technologies such as HPVA and V1 which seek to increase the productivity of a crew; patented vibroseis broadband solution (EmphaSeis) which seek to broaden the frequency content of the signal emitted combined with specific acquisition and processing technologies; and on-site processing software for acquired data.

---

## **Table of Contents**

We believe that our technology and our experience enable us to offer high quality, fully integrated land seismic services. We have pioneered real-time positioning of geophones and seismic sources, quality control of positioning during land surveys, simultaneous shooting technologies and on-site processing, which together increase the accuracy and efficiency of such surveys.

One of the challenges inherent in land seismic acquisition surveys is gathering data without disrupting the sensitive ecosystems in which such surveys are frequently located. We have developed a strong position in environmentally sensitive zones, such as mountainous regions, tropical forests, swamps and arctic areas, by following a strict policy of preserving the natural environment to the extent possible. We also work in conjunction with the local community at site locations, hiring local employees and obtaining necessary local authorizations to alleviate potential opposition to our operations.

The difficulty of access to survey sites is a major factor in determining the number of personnel required to carry out a survey and the cost of a survey. A full crew for a land, transition zone or shallow water survey may range from a total of less than 100 to a few thousand members (principally composed of local employees in the latter case), and the cost of a survey can range from several hundred thousand to several million dollars per month, depending on the size of the team and the type and difficulty of the survey.

We work closely with our clients to plan surveys in accordance with their technical specifications while optimizing the resources required. This provides us with a competitive advantage in being selected to carry out surveys, whether such surveys are awarded based on competitive bids or directly negotiated agreements with clients. We regularly conduct land seismic acquisition surveys for national and international oil companies.

We have developed partnerships with local industry-related companies in several countries, including Saudi Arabia, other Gulf Cooperation Council (GCC) countries, Indonesia and Colombia. We contribute our international expertise, technical know-how, equipment and experienced key personnel to these partnerships as needed, while local partners provide their logistical resources, equipment and knowledge of the environment and local market.

In Saudi Arabia, our land seismic acquisition activities are conducted through Arabian Geophysical & Surveying Co. ( Argas ), a joint venture owned 49% by us and 51% by TAQA, our local partner. Our other Middle East operations are conducted through Ardiseis FZCO, a joint venture owned 51% by us and 49% by TAQA.

### *Land Multi-Client Library*

In 2011, we invested U.S.\$130 million ( 92 million) in land multi-client seismic surveys, in the Marcellus (Pennsylvania) and Haynesville (Louisiana) shale gas basins. A small project targeting a new shale oil play in Saskatchewan, Canada was completed in December 2011. Total revenues from multi-client land seismic surveys in 2011 were U.S.\$132 million ( 94 million), a 10% decrease in dollar terms year on year reflecting a weak price of gas in the North American market. Multi-client after-sales were U.S.\$32 million ( 23 million). The pre-financing level was 76% and as of December 31, 2011, the net book value of our land multi-client library was U.S.\$136 million ( 105 million).

### *Land Seismic Acquisition Business Development Strategy*

Our land seismic acquisition services are geographically and technologically well placed for high-end positioning and further development of local partnerships. Our Land strategy remains focused on differentiation and operational excellence rather than market share, and we try to avoid commoditized markets where price is the only differentiator. In that context, we have developed a unique expertise in North America's arctic regions, in the Middle-Eastern and North African deserts and in shallow water / transition zone areas, where we expect significant market growth and strong demand for high-end technologies.

## **Table of Contents**

In North America, and after years of largely commoditized seismic acquisition, (especially in the United States), we believe that the demand for land seismic acquisition services and for technology in particular will accelerate for contract and multi-client activities, driven by the strong development of shale plays and oil sands. This should represent an opportunity for our Land activity, both multi-client and contract, and our newly-created monitoring solutions group, which offers both passive (micro-seismic) and active (Seismovie, our patented buried source / receiver technology) technologies, and which we expect to grow strongly in the future.

In other geographical areas, the national oil companies are notably requesting increasingly advanced technologies, either in desert areas with very large channel count crews and high vibroseis productivity, or complex shallow water surveys using Ocean Bottom Cables such as the 4C Sercel SeaRay system. Our strategy for the land acquisition division is therefore to:

focus our presence in certain geographic markets, such as North America, Africa and the Middle East, where we believe we have a competitive advantage;

serve the increasing demand for high-resolution land seismic acquisition and high-end technology, through the expanded use of our UltraSeis broadband solutions, combining state of the art seismic equipment, fit-for-purpose wide azimuth geometries, superior processing technologies, patented high-productivity vibroseis technologies such as HPVA and V1 and our proprietary EmphaSeis broadband vibroseis technology, which have been successfully implemented in the Middle East, North Africa and North America;

accelerate the development of our Land Monitoring solutions where our proprietary technologies (Seismovie for onshore 4D monitoring and microseismic) are gaining visible market acceptance;

further reinforce our leadership position on ultra-high channel count crews, expected to grow significantly in the Middle East following our recent successes in Saudi Arabia, Qatar and Oman;

further expand our shallow water and OBS capabilities to address solid market growth (following recent successes in Saudi Arabia where we operate two large OBC contracts using Sercel SeaRay bay cable technologies, and the introduction of our proprietary Trilobite nodes) with the availability of the first thousand nodes crew planned for early 2012;

optimize our presence in North America to take advantage of the demand for seismic services and technology driven by strong shale plays activity to better offset the seasonality effect. We believe that the increased presence of major oil companies with a strong appetite for technology and stringent HSE requirements, the drive towards wireless technologies (where Sercel Unite technology represent an effective solution) as well as the development of our integrated shale gas solution are positive indicators for our ability to target high-end acquisitions; and

continue to promote our expertise in harsh environments, sensitive areas (in terms of environmental or community concerns), and in management of complex projects where barriers to entry are higher and pricing competition less intense.

We also plan to continue investing in multi-client land seismic data libraries, especially in the U.S, where we have a strong and recent vintage library.

### ***Marine Business***

#### ***Marine Seismic Acquisition***

With a fleet of 19 vessels at the end of 2011, we provide a full range of 3D and 2D marine seismic services, principally in the Gulf of Mexico, the North Sea and off the coasts of West Africa and Brazil, as well as in the Asia-Pacific region. We also have expertise in frontier areas and have been pioneering in the Arctic seas and the East coast of Africa.



---

## Table of Contents

Marine seismic surveys are conducted through the deployment of submersible cables (streamers) and acoustic sources (airguns) from marine vessels. Such streamers are each up to 10 kilometers long and carry hydrophone groups normally spaced 12.5 meters apart along the length of the streamer. The recording capacity of a vessel is dependent upon the number of streamers it tows and the number of acoustic sources it carries, as well as the configuration of its data recording system. By increasing the number of streamers and acoustic sources used, a marine seismic operator can perform large surveys more rapidly and efficiently.

We undertake both contract and multi-client marine seismic surveys. Contract surveys generally provide for us to be paid a fixed fee per square kilometer of data acquired. When we acquire marine seismic data on a contract basis, the customer contracts to pay for and directs the scope and extent of the survey and retains ownership of the data obtained. Some contracts also compensate us for external factors preventing acquisition such as abnormal weather. In regions where there is extensive petroleum exploration, such as Brazil, the Gulf of Mexico, West Africa, the Mediterranean Sea and the North Sea, we also undertake multi-client surveys, in which we fund the survey ourselves and retain ownership of the seismic data. This enables us to provide multiple companies access to the data by way of license. As a result, we have the potential to obtain multiple and higher revenues, while our customers who license the data have the opportunity to pay lower prices. The capacity to both acquire and process marine seismic data is an important element of our overall strategy to maintain and develop our leading position in marine seismic data acquisition and processing.

We operated 92% of our high-end 3D fleet on contract marine acquisition in 2011.

Total marine seismic activities – contract and multi-client surveys – accounted for 42% of our consolidated operating revenue in 2011. Marine seismic acquisition contracts accounted for 31% and multi-client marine accounted for 11% of our consolidated operating revenue in 2011.

### *Marine Seismic Acquisition Fleet*

As of December 31, 2011, our fleet was composed of 19 vessels, including 11 3D high capacity vessels (12 or more streamers), two 10 streamer 3D vessels, three 8 streamer 3D vessels and three 3D/2D vessels of lower capacity. A fleet of this size allows us to increase our geographical coverage and minimize unproductive time by reducing vessels' transit between areas of operation. Each vessel is equipped with geophysical recording instrumentation, digital geophysical streamer cable, cable location and geophysical data location systems, multiple navigation systems, a source control system that controls the synchronization of the energy source, and a firing system that generates the acoustic impulses. Streamer cables contain hydrophones that receive the acoustic impulses reflected by variations in the subsurface strata.

The *CGG Alizé*, *Oceanic Challenger*, *Symphony*, *Viking Vision*, *Viking Vanquish*, *Oceanic Endeavour*, *Geowave Voyager*, *Geowave Champion*, *Oceanic Phoenix*, *Oceanic Vega* and *Oceanic Sirius* (delivered to us and offered to clients in October 2011) can already deploy more than 12 streamers simultaneously.

Most 3D high capacity vessels are equipped with *Sentinel* solid streamers, which provide several advantages over liquid streamers, such as acquiring surveys in tougher sea conditions, improving the frequency content and signal-to-noise ratio of the recorded data and minimize environmental impacts.

In 2011, we continued the modernization program of our fleet with the introduction of three additional *Nautilus* positioning and control systems for the streamers on the *Oceanic Sirius*, *Oceanic Endeavour* and *Oceanic Phoenix*.

Our 2D vessels are used for 2D surveys or, when required, as source vessels for more complex operations, which have higher margins, such as for wide azimuth or complex undershooting surveys.

## **Table of Contents**

In addition, in 2010 we began an upgrade plan for our fleet of seismic vessels, aiming at a stronger position in the 12+ streamer segment. In line with this plan, after the upgrade of the *Viking Vanquish* in 2010, three other vessels were upgraded in 2011. The *Oceanic Phoenix* and the *Oceanic Endeavour* returned to the fleet during the second quarter of 2011 and the *Geowave Champion* entered the dockyard in fourth quarter of 2011 for an upgrade of its propulsion systems and streamers.

As part of our efforts to reposition the 3D fleet towards the very high-capacity market segment (more than 10 streamers), we plan to cancel the charter of the *Geowave Commander*, a vessel able to tow only 8 streamers, in 2012, prior to its scheduled expiration date in mid-2013. In anticipation of this move, we stopped commercializing the *Geowave Commander* in June 2011.

These steps are part of the savings plan announced by the Group at the end of 2010, which resulted into a restructuring cost of U.S.\$37 million.

We further enhanced the management of our fleet by transferring our ship management contracts, previously with Eidesvik, to a newly formed joint venture: CGGVeritas Eidesvik Shipmanagement AS.

We own some of the vessels in our fleet, are co-owners of three vessels (*CGG Alizé*, *Oceanic Vega* and *Oceanic Sirius*) and operate the rest under charter agreements. The Group fully owns the following 3D vessels: *Oceanic Challenger*, *Amadeus*, *Geowave Voyager* (since January 2011) and *Symphony*.

As part of our strategy to modernize and upgrade our fleet, we entered into an agreement with Eidesvik Seismic Vessel AS in 2007 for the supply of two large newly-built seismic vessels. The design of these two vessels includes the latest technological developments, and particularly Ulstein Design AS's most recent X-Bow design. The first vessel, the *Oceanic Vega*, was delivered in July 2010. The second vessel, the *Oceanic Sirius*, was delivered in October 2011. Both vessels are under a 12-year bareboat charter with joint ventures (Eidesvik Seismic Vessels AS and Oceanic Seismic Vessels AS). These two innovative, high capacity vessels are key components of our strategy of progressive fleet renewal, involving the staged retirement of the former generation of lower capacity vessels in conjunction with the introduction of these new platforms. The new vessels are purpose-designed for the efficient deployment of industry-leading Sercel solid streamer technology and Nautilus steerable streamer capability and configured for spreads of up to 16 long streamers, or 20 streamers for high-density applications.

In 2011, the *Elnusa Finder* (formerly named the *Pacific Finder*) replaced the *Veritas Voyager*, which was decommissioned in April at the end of its contract. Its ship management contract was transferred to the joint venture PT. Elnusa-CGGVeritas Seismic on December 22, 2011.

The *Amadeus* was contributed in March 2012 to a joint venture with Petrovietnam Technical Services Corporation (PTSC).



**Table of Contents**

The following table provides certain information concerning the seismic vessels we currently operate.

Vessel name	Building Year	Upgrade year	Integration year	Ship management expiry	Extension		Maximum no. of streamers <sup>(2)</sup>	Vessel length (m)
					options <sup>(1)</sup>	2D/3D		
CGG Alizé <sup>(9)</sup>	1999	n/a	1999	March 2014	n/a	3D	16	101
Amadeus	1999	n/a	2001	Owned	n/a	3D	8	84
Oceanic Challenger	2000	2005	2005	Owned	n/a	3D	12	91
Princess	1986	2001	2005	Owned	n/a	2D	3	76
Symphony	1988	1999	2001	Owned	n/a	3D	12	121
Veritas Viking	1998	2006	2007	December 2015	2x3 years + 1x17 months	3D	10	93
Viking II <sup>(9)</sup>	1999	n/a	2007	May 2015	n/a	3D	8	93
Viking Vanquish <sup>(9)</sup>	1999	2007	2007	November 2020	n/a	3D	12	93
Veritas Vantage <sup>(9)</sup>	2002	n/a	2007	June 2016	n/a	3D	10	93
Viking Vision	1993	2007	2007	July 2017	2x5 years	3D	14	105
Bergen Surveyor	1972	1997	2009	December 2012	5x1 year	3D	2	66
Geowave Commander	1997	2006	2009	May 2013	10x1 year	3D	8	85
Geowave Champion <sup>(4)</sup>	1994	2012	2009	December 2019	n/a	3D	12/14	107
Oceanic Phoenix <sup>(5)</sup>	2000	2011	2009	March 2019	10x1 year	3D	12/14	101
Geowave Voyager <sup>(3)</sup>	2005	2009	2009	Owned	10x1 year	3D	12	83
Oceanic Endeavour <sup>(6)</sup>	2007	2011	2009	April 2018	2x5 years	3D	16	92
Oceanic Vega	2010	n/a	2010	July 2022	4x5 years	3D	20	106
Elnusa Finder <sup>(7)(9)</sup>	2011	n/a	2011	March 2019	1x8 years	3D	4	68
Oceanic Sirius	2011	n/a	2011	October 2023	4x5 years	3D	20	106

<sup>(1)</sup> Number of years.

<sup>(2)</sup> Tow points.

<sup>(3)</sup> On January 13, 2011, the *Venturer* was sold to Norfield AS which sold us the *Geowave Voyager*.

<sup>(4)</sup> Number of streamers before vessel upgrade.

<sup>(5)</sup> This vessel was named *Geowave Master* until February 17, 2011.

<sup>(6)</sup> This vessel was named *Geowave Endeavour* until February 9, 2011.

<sup>(7)</sup> This vessel was named *Pacific Finder* until December 22, 2011; on that date its ship management contract was transferred to the joint-venture PT. *Elnusa CGGVeritas Seismic*.

<sup>(8)</sup> The time charters of the following vessels have been replaced by bareboat charters on the following dates: *Geowave Champion* (January 13, 2011), *Oceanic Sirius* and *Veritas Viking* (October 3, 2011), *Viking Vision* (October 24, 2011), *Veritas Vantage* (November 3, 2011), *Viking II* (November 7, 2011). Following the transfer of ownership of the *Venturer* to Norfield Shipping AS on January 13, 2011, a bareboat charter was signed on the same date.

<sup>(9)</sup> We have a purchase option with respect to this vessel.

Notes:

\* The *CGG Alizé* (in co-ownership within *Geomar*), the *Elnusa Finder* and the *Bergen Surveyor* are the only vessels under time charter. The other vessels are either fully owned or under bareboat charter. Among those under bareboat charter, the *Oceanic Sirius* and the *Oceanic Vega* are co-owned with *Oceanic Seismic Vessels AS* and *Eidesvik Seismic Vessels AS*, respectively.

\*\* For the following vessels, a purchase option is included: *CGG Alizé*, *Elnusa Finder*, *Viking Vanquish*, *Veritas Vantage*, *Viking II*.

---

## **Table of Contents**

### *Marine Multi-Client Library*

Our policy is generally to require a minimum share of the estimated cost of each multi-client survey to be covered by pre-commitments from clients (pre-funding) prior to commencement. We treat these multi-client projects as investments. In determining whether to undertake multi-client surveys, we consider factors that include the availability of oil and gas companies to pre-fund the survey, the location to be surveyed, the probability and timing of any future lease concessions and development activity in the area and the availability, quality and price of competing data. Once the final products are available to the market, customers license the data as-is ( after-sales ).

Multi-client survey production accounted for 8% of our high-end 3D fleet utilization in 2011. See Item 3: Key Information Risk Factors Risks Related to Our Business We invest significant amounts of money in acquiring and processing seismic data for multi-client surveys and for our data library without knowing precisely how much of the data we will be able to sell or when and at what price we will be able to sell the data.

The multi-client libraries provide ready-to-interpret 3D or 2D data and therefore accelerate the exploration cycle. We believe that having a high quality and well located multi-client data library is important for our ability to generate cash flow in the future.

We use the latest acquisition and processing technology for our multi-client programs. In particular, we used wide azimuth technology in the deep offshore waters of the Gulf of Mexico for improved sub-salt illumination. In 2011, we introduced our new broadband offer (BroadSeis) in the North Sea and Brazil to improve the resolution of the deeper reservoirs.

In 2011, we invested U.S.\$100 million ( 71 million) in multi-client library acquisition and processing. Total revenues from marine multi-client were U.S.\$365 million ( 260 million) in 2011, a 6% decrease in dollar terms from 2010. Marine multi-client after-sales were U.S.\$303 million ( 216 million).

The pre-funding level was at 63%, with well positioned multi-client libraries benefiting from increased customer interest. As of December 31, 2011, the net book value of our marine multi-clients library was U.S.\$392 million ( 303 million).

The situation in the Gulf of Mexico progressively normalized in 2011 and the seismic market slowly recovered from the aftermath of the Macondo oil spill and the ensuing moratorium. A lease sale was organized in December 2011, which generated strong sales of our wide-azimuth and narrow-azimuth library. At the end of 2011, our wide-azimuth coverage stood at approximately 2,320 OCS blocks, more than 54,000 square kilometers.

In Brazil, we continued to extend our unique position in the Santos basin and introduced our new broadband solution (BroadSeis). The new 11,000 square kilometers survey targets key pre-salt prospects between the Santos and Campos basins and provides enhanced frequencies at the reservoir level. The Brazilian coverage now stands at approximately 90,000 square kilometers.

In the North Sea we introduced our broadband solution (BroadSeis) with a new phase of 2,200 square kilometers added to our key core area in the central grabben (Cornerstone). The final results demonstrate the improved frequency content at the reservoir level. In addition, two new phases were added to our new program in the Southern North Sea targeting a new gas play concept.

In September 2011, we completed a strategic transaction whereby we sold our existing 2D library to Spectrum. This transaction secured a preferred partner for future strategic 2D ventures, while maintaining our focus on the 3D multi-client segment. The total proceeds of the sale amounted to U.S.\$40 million partly in cash, partly in equity (29% of Spectrum s capital).

---

## **Table of Contents**

### *Seabed*

Marine seismic data can also be acquired on the seabed and Ocean Bottom Cable (OBC) seismic data is of superior quality, but because this method was cumbersome and expensive in the early days, the towed streamer method became the dominant way to collect seismic data at sea. In recent years the improvements in equipment and survey efficiency and the need for more sophisticated data have revived OBC as a viable seismic data survey method. Today, oil companies frequently consider OBC to be the best seismic method for complex and subtle reservoir analysis. For many years, we have been a leader in OBC both in shallow and deep waters. The two most common ways to collect OBC data are by deploying a cable or by placing discrete point receivers (nodes) on the seafloor which record data before retrieval and redeployment to cover a wide area. We are currently the only company in the industry that offers both methods. Our OBC group, with its strong focus on research and development is located in the city of Bergen, on the west coast of Norway.

Recently, another dimension has been added to seabed seismic data acquisition by trenching cables into the seafloor for permanent reservoir monitoring. An early mover in this area, we offer high-end electrical cables through Sercel and modern fiber optic cables through Optoplan. We believe we are the only company in the industry that can offer a total package of equipment, installation, data collection, processing and reservoir characterization for permanent reservoir monitoring.

### *Marine Seismic Acquisition Business Development Strategy*

#### *Marine contract*

In 2011, in a difficult market and with overcapacity putting downward pressure on prices, we maintained our offshore seismic acquisition market share and continued our important investment program, in order to be in a good position to benefit from the more favorable commercial context expected for 2012.

The investment program that was announced in 2010 will be nearly complete by the end of 2012. It aims to harmonize our vessels, their equipment and the way our fleet operates according to current best standards. Largely restructured and improved during the low part of the economic cycle, we believe our fleet will be the largest and the best equipped in the industry (with more than 11 streamers per vessel on average vs. 10 streamers per vessel on average for our main competitors in the industry).

Finally, we will continue to implement our strategy of commercial and technological differentiation, which we will execute by positioning most of our vessels in the 3D 12+ streamer market segment, capitalizing on the superiority of our exclusive BroadSeis solution and synergies with our Processing Imaging and Reservoir division to deliver clients global solutions with reduced turnaround time. As part of our strategy, we will also continue to seek alliances with local players who are able to facilitate our access to markets that are currently closed.

#### *Marine multi-client*

In the field of offshore multi-client activities, we intend to capitalize on our well positioned library of recently acquired seismic data from key areas. We expect that investments in new multi-client programs will be significantly increased in 2012, with a focus on producing high end data sets benefiting from advanced technologies such as Wide Azimuth and BroadSeis and expanding our existing surveys in key basins.

### ***Processing, Imaging and Reservoir Business***

#### *Processing, Imaging and Reservoir*

Seismic data processing operations transform seismic data acquired in the field into 2D cross-sections, or 3D images of the earth's subsurface or 4D time-lapse seismic data using *geovation* and Hampson-Russell

## **Table of Contents**

software, our proprietary software products, or third party applications. These images are then interpreted by geophysicists and geologists for use by oil and gas companies in evaluating prospective areas, selecting drilling sites and managing producing reservoirs.

We provide seismic data processing and reservoir services through our network of data processing centers and reservoir teams located around the world. We operated 43 worldwide processing and imaging centers, including 13 dedicated client centers on December 31, 2011. Reservoir Processing and Imaging sales represented 14% of total consolidated revenues in 2011.

### *Data Processing Activity*

We process seismic data acquired by our land and marine seismic acquisition crews as well as seismic data acquired by non-affiliated third parties. Wide-Azimuth and high-density acquisition trends in marine and land seismic data have been a significant source of the growth in demand for our data processing services. In addition, we reprocess previously processed data using new techniques to improve the quality of seismic images. Demand for processing and imaging remained relatively strong overall in 2011. High-end imaging technologies were in high demand.

Innovation and the rapid development and deployment of new processing and imaging technologies are a very important component of our activities, particularly for our own multi-client datasets.

We have five international processing centers, which are located in Houston, London, Singapore, Paris and Calgary, and 25 regional centers open to all our customers. As a result, our customers benefit from privileged access to the expertise of our teams around the world, as well as superior computing power. In addition, we have 13 dedicated centers located within our clients' offices, which we believe makes us a leader in this sector. We believe that these dedicated centers are responsive to the trend among oil and gas companies to outsource processing work while maintaining a level of control. These dedicated centers enable our experts to work in close coordination with our clients and to adapt our processing technologies to their specific requests.

Beyond conventional processing and reprocessing, we are also increasingly involved in reservoir-applied geophysics, an activity that encompasses large integrated reservoir studies from reprocessing to full reservoir simulation. It also includes advanced technology studies such as reservoir characterization, stratigraphic inversion and stochastic reservoir modeling. We have enhanced our ability to provide these services globally and rapidly.

We operate visualization centers in our Houston, London and Singapore hubs which allow teams of our customers' geoscientists and engineers to view and interpret large volumes of complex 3D data. The visualization centers have imaging tools used for advanced interpretive techniques that enhance the understanding of regional as well as detailed reservoir geology. These visualization centers allow us to offer our expertise combined with the type of collaborative geophysical model building that is enabling oil companies to explore areas of complex geology such as the large sub-salt plays in the deepwater Gulf of Mexico.

We have groups of scientists available to perform advanced geophysical and geological interpretation. These experts work around the world, using third party and our own proprietary software to create subsurface models for our clients and advise them on how best to exploit their reservoirs. Their work is related to exploration as well as production activities.

Additionally, we license our proprietary Hampson-Russell and *geovation* processing software to companies desiring to do their own geophysical processing and interpretation.

---

## **Table of Contents**

### *Data Processing Business Development Strategy*

Our position in data processing and imaging as well as the skills and reputation of our experts and geoscientists make us the industry benchmark in this segment. Our strategy for the Processing Imaging and Reservoir business is to:

enhance our particular competencies in advanced technologies such as depth imaging, wide azimuth, broad band, multicomponent, 4D processing and reservoir characterization;

reinforce our close links with clients through both our open and dedicated centers as well as through the addition of technology centers, which are a collaborative approach to research and development;

leverage the natural synergies between seismic acquisition and processing. An example of this is the introduction of our BroadSeis technology for broadband marine seismic data, which requires the integration of Sercel recording equipment, with acquisition and processing techniques.

### **Equipment**

We conduct our equipment development and production operations through Sercel and its subsidiaries. We believe Sercel is the market leader in the development and production of seismic acquisition systems and specialized equipment in the land and marine seismic markets. Sercel is operated as an independent division and makes most of its sales to purchasers other than CGGVeritas. Sercel currently operates five seismic equipment manufacturing facilities, located in Nantes and Saint Gaudens in France, Houston, Singapore and Alfreton in England. In China, Sercel operates through Hebei Sercel-JunFeng Geophysical Equipment Co. Ltd ( Sercel JunFeng ), based in Hebei (China), in which Sercel acquired a 51% equity stake in 2004 and through Sercel Junfeng's subsidiary Xian Sercel Petroleum Exploration Instrument Co. Ltd ( Xian Sercel ), which Sercel previously owned jointly with BGP. Since November 2010, Xian Sercel has been fully owned by Sercel Junfeng. In addition, four sites in Toulouse, Les Ulis, Toulon and Brest (France) are dedicated to borehole tools, marine sources and submarine acoustic instrumentation, respectively.

In 2011, Sercel had revenues of U.S.\$1,142 million ( 816 million), a 14% increase in dollar terms from 2010 revenues of U.S.\$1,000 million ( 754 million). Sercel represented 28% of our consolidated revenue in 2011.

We estimate that the worldwide demand for geophysical equipment in 2011 increased in line with the increase in Sercel revenue, after a recovery of the market in 2010 following a decline in 2009. The 2011 increase was driven by the land demand, the increase in high channel crews and a growing Latin American market while marine demand was decreasing with a lower number of new build vessels. Sercel's market share in the seismic equipment market is estimated at around 60%.

### ***Sercel Activity***

Sercel offers and supports worldwide a complete range of geophysical equipment for seismic data acquisition, including seismic recording equipment, software and seismic sources, and provides its clients with integrated solutions. Sercel's principal product line is seismic recording equipment, particularly the 400 family of recording systems, the 408UL and the 428XL.

The 428XL was launched on November 2005 as a successor to the 408UL system. We believe that our 400 product series represents the market standard. The 428XL continues the characteristics that made the 408 a success, such as an evolutive architecture and the option of mixing different communication media (cable, radio, micro-wave, laser and fiber-optic) to form a true network allowing the user to define data routing and hence avoid obstacles in the field. In addition, the 428 XL offers enhanced possibilities in high density and multi-component land acquisition and is compatible with 408 field equipment.

---

## **Table of Contents**

Like the 408 system, the 428 system can be used with the digital sensor unit (DSU) featuring three component digital sensors based on MicroElectroMechanicalSystems (MEMS). Sercel enhanced its product range in September 2006 by acquiring Vibration Technology Ltd., a Scottish company specialized in wireless acquisition systems whose Unite technology is now fully integrated in the 428 environment.

Sercel is also a market leader for vibroseismic vehicles and for vibrator electronic systems (VE 464). Sercel's latest vibrator family, called Nomad, offers high reliability and unique ergonomic features. Nomad is available with either normal tires or a tracked drive system. The track drive system allows Nomad vibrators to operate in terrain not accessible to vehicles with tires. In sand dunes or arctic conditions, this can improve crew productivity. In particular, the Nomad 90 is capable of exerting a peak force 90,000 pounds and is believed to represent the heaviest vibrator on the market.

In the downhole domain, Sercel is offering its latest generation VSP tool, MaxiWave, which has been well received by our customers.

The Seal, our marine seismic data recording system, capitalizes on the 408 architecture and on our many years of experience in streamer manufacturing and is now implementing the latest 428 technological enhancements. We believe that the Seal is currently the sole system with integrated electronics. In 2005, Sercel launched the Sentinel solid streamer, a new product in its Seal line that is the outcome of the technological synergies realized in recent acquisitions. We estimate that Sentinel cables are used to equip a majority of new seismic vessels. In November 2006, Sercel launched SeaRay, an ocean bottom cable offered under several configurations for depth of 100 to 500 meters. This cable is based on the 428 family acquisition systems technology and integrates DSU 3 components.

The marine range of products has been further improved with the Nautilus, a totally integrated system for positioning seismic streamers, and the launch of SeaProNav, a navigation software that will allow real-time positioning for streamers.

In 2010, Sercel, through Optoplan, delivered to a client what we believe is the first permanent seabed recording system with fiber optic cable.

In addition to recording systems, Sercel develops and produces a complete range of geophysical equipment for seismic data acquisition and other ancillary geophysical products such as geophones, cables and connectors. Sercel significantly expanded its product range and increased its market share in the seismic equipment industry with the acquisitions of GeoScience Corporation in December 1999 and Mark Product in 2000. In October 2003, Sercel acquired Sodera S.A., a leading provider of air gun sources used mainly in marine seismic data acquisition. In January 2004, Sercel acquired a division of Thales Underwater Systems Pty Ltd. that develops and manufactures surface marine seismic acquisition systems, particularly solid streamers, and seabed marine seismic acquisition systems. The acquisition of a 51% stake in JunFeng, based in China, in January 2004 reinforced our manufacturing capabilities for geophone, cables and connectors, as well as our presence on the Chinese seismic market. Both Thales' seismic equipment business and JunFeng have been consolidated within the CGG Group from January 2004. In addition, through the acquisitions of Createch and Orca in 2004, Sercel is continuing its expansion while strengthening its position in two areas with perceived growth potential: sea-floor seismic systems and borehole seismic tools. In September 2006, Sercel acquired Vibration Technology Ltd, a Scottish company specialized in wireless systems. In May, 2008, Sercel acquired Metrolog, specialized in down-hole gauges, and in December 2008, Sercel acquired Quest Geo Solutions, a UK company focusing on navigation software. Early in 2009, Sercel acquired Optoplan, the Norwegian subsidiary of Wavefield specialized in permanent seabed recording systems using fiber optic technology.

As a result of these acquisitions, Sercel is a market leader in the development and production of both marine and land geophysical equipment. It is a global provider for the seismic acquisition industry with a balanced industrial position in terms of both product range and geographical presence.

## **Table of Contents**

### ***Equipment Business Development Strategy***

Our strategy for the Equipment segment is to:

use continuous and intensive research and development ( R&D ) efforts, combined with dedicated business acquisitions, to expand Sercel's range of products, improve its existing technology and strengthen its leading position in the geophysical equipment market; and

maintain Sercel's leading position in the seismic data equipment market by capitalizing on growth opportunities resulting from the strength of its current product base, the application of new technologies in all of its products as well as from its diversified geographical presence, including in emerging markets.

### **Seasonality**

Our land activity tends to increase in North America in the first quarter due to the Alaskan and Canadian winter season but significantly decreases thereafter. In marine seismic acquisition activities are seasonal in nature. We generally experience decreased revenues in the first quarter of each year due to the effects of weather conditions in the Northern Hemisphere and to the fact that our principal clients are generally not prepared to fully commit their annual exploration budget to specific projects during that period.

We have historically experienced higher levels of activity in our equipment manufacturing operations in the fourth quarter as our clients seek to fully deploy annual budgeted capital. The same happens in our multi-client activity with oil and gas companies that seek to fully deploy their exploration budget in the last quarter of the year.

### **Intellectual Property**

We continually seek the most effective and appropriate protection for our products, processes and software and, as a general rule, will file for patent, copyright or other statutory protection whenever possible. Our patents, trademarks, service marks, copyrights, licenses and technical information collectively represent a material asset to our business. However, no single patent, trademark, copyright, license or piece of technical information is of material importance to our business when taken as a whole. These patents last up to 20 years, depending upon the date filed and the duration of protection granted by each country.

### **Competition**

#### ***General***

Most contracts are obtained through a competitive bidding process, which is standard for the industry in which we operate. Important factors in awarding contracts include service quality, technological capacity, performance, reputation, experience of personnel, customer relations and long-standing relationships, as well as price. While no single company competes with us in all of our segments, we are subject to intense competition with respect to each of our segments. We compete with large, international companies as well as smaller, local companies. In addition, we compete with major service providers and government-sponsored enterprises and affiliates. Some of our competitors operate more data acquisition crews than we do and have substantially greater financial and other resources. Our views below regarding the state of the market in 2012 are forward-looking statements, and demand may in reality be higher or lower than our current expectations.

#### ***Land***

The land seismic market is extremely fragmented and characterized by intense price competition in its low end segment. The entrance on the international market of a significant number of formerly national competitors has driven prices down. In addition to CGGVeritas, the other significant service providers in the land seismic market

---

## **Table of Contents**

are WesternGeco, Global Geophysical Services, BGP, and Geokinetics. We believe that technology, quality of services and price are the principal bases of competition in this market, as well as relationships with local service providers, which are important, as is experience in challenging terrain. CGGVeritas is positioned in the high end segment of this market with, in certain cases, partners who bring local know-how. According to our estimates, after a decrease of 15% with a negative impact on prices in 2009, volume in the land seismic market rebounded and increased marginally in 2010, although, with stable market prices. In 2011, activity was low in North Africa and Middle East as a result of political instability in the region. Activity remained solid in the rest of the world in 2011. We expect that in 2012, land seismic activity should pick up across the world driven by increasing demand for exploration and enhanced recovery in existing reservoirs.

### ***Marine***

The offshore sector has four leading participants: WesternGeco, PGS, Fugro and CGGVeritas. From 1999 to mid-2004, the offshore market experienced excess supply, which put downward pressure on prices. Because of the high fixed costs in this sector, excess supply was not reduced by operators but rather channeled into multi-client libraries. Whereas supply remained flat in 2003, demand increased gradually until mid-2004 and more rapidly thereafter, leading to a rapid and significant price recovery. The market upturn was confirmed in the second half of 2004 with a continuous increase of contract volumes and multi-client sales of existing and new libraries, which continued until mid-2008. Following the decline in oil prices in the second half of 2008 and in 2009, demand in seismic services significantly decreased, which, together with the increase in the global fleet, has led to over-capacity in the offshore acquisition market and subsequent downward pressure on prices. We therefore implemented a capacity adjustment plan in 2009, as did some of our major competitors. We estimate the number of 3D vessels (six streamers or more) decreased from 58 vessels at the end of 2008 to 49 at the end of 2009. However, in 2010, as demand grew again, a significant number of new vessels which were ordered prior to the downturn entered the marine market. In addition, the seismic vessels that were operating in multi-client surveys in the Gulf of Mexico at the time of the Deepwater Horizon platform disaster were redeployed to the international contract market. Despite the growth in demand, the marine market remained oversupplied during all of 2010 and 2011. We estimate the number of 3D vessels (eight streamers or more) will increase by 5% in 2012, while demand should increase by more than 10%, driven by new discoveries, exploration of new frontier areas and optimization of existing reservoirs. See [Our Strategy](#) Actively respond to current market conditions for certain steps that we are taking to address current market conditions.

### ***Processing, imaging and reservoir***

The processing, imaging and reservoir sector is led by CGGVeritas and WesternGeco. This market is characterized by greater client loyalty than the acquisition sector, as evidenced by the presence of processing centers on client premises. Processing capacity has multiplied in recent years as a result of improvements in computing technology. This increase in computing power has allowed improved processing quality and deadlines, as well as the use of more complex and accurate algorithms. We estimate that the processing market was down 15% in 2009, flat in 2010 and up slightly in 2011. Looking forward, we expect that demand for processing should continue to increase, mainly driven by continued growing data volumes. We believe that our unique sophisticated imaging algorithms further differentiate us in the minds of our clients facing complex geologic challenges.

### ***Equipment***

Our principal competitor for the manufacture of seismic survey equipment is Ion Geophysical Inc. The market for seismic survey equipment is highly competitive and is characterized by continual and rapid technological change. We believe that technology is the principal basis for competition in this market, as oil and gas companies have increasingly demanded new equipment for activities such as reservoir management and data acquisition in difficult terrain. Oil and gas companies have also become more demanding with regard to the quality of data acquired. Other competitive factors include price and customer support services. The volume of



**Table of Contents**

sales in the seismic equipment market decreased by around one third in 2009, but rebounded by around 15% in 2010, for both marine equipment (streamers for newbuilds and existing vessels upgrades) and land equipment (denser acquisition trend). In 2011 demand for land equipment remained high driven by technology intensity, high channel count crews in the Middle-East and regional activity. Demand for offshore equipment remained stable in 2011 following a reduced number of vessels entering the seismic market. The acquisition of Geophysical Research Corporation in January 2012 builds upon Sercel's diversification into the well environment and more specifically the artificial lift market which we believe shows promising growth for the coming years.

**Organizational Structure**

CGGVeritas SA is the parent company of the CGGVeritas Group. Its principal subsidiaries are as follows:

Subsidiary	Jurisdiction of		% of interest
	Organization	Head office	
Sercel S.A.	France	Carquefou, France	100.0
CGGVeritas Services SA	France	Massy, France	100.0
CGGVeritas Services Holding B.V.	Netherlands	Amsterdam, Netherlands	100.0
CGG Marine Resources Norge AS	Norway	Hovik, Norway	100.0
CGGVeritas Marine B.V.	Netherlands	Amsterdam, Netherlands	100.0
Sercel Inc.	United States	Tulsa, Oklahoma, United States	100.0
CGGVeritas Services Holding (U.S.) Inc.	United States	Delaware, United States	100.0
CGGVeritas Services (U.S.) Inc.	United States	Delaware, United States	100.0
CGGVeritas Land (U.S.) Inc.	United States	Delaware, United States	100.0
CGGVeritas Services de Mexico	Mexico	Mexico City, Mexico	100.0
CGG do Brasil Participações Ltda.	Brazil	Rio de Janeiro, Brazil	100.0
CGGVeritas Services UK Ltd	UK	Crawley, UK	100.0
CGGVeritas Services (Singapore) Pte. Ltd	Singapore	Singapore	100.0
Ardisis FZCO	Dubai	Dubai	51.0

On January 13, 2011, we bought the shares of the company Voyager A.S. (renamed Exploration Vessel Resources II AS), a company registered in Norway, owning the seismic vessel *Geowave Voyager*.

**Property, Plant and Equipment**

The following table sets forth certain information relating to the principal properties of CGGVeritas Group:

Location	Type of facilities	Size (sq.m.)	Owned/ Leased	Lease expiration date
Paris, France	Headquarters of CGGVeritas SA	1,655	Leased	2016
<b>GEOPHYSICAL SERVICES</b>				
Massy, France	Registered office of CGGVeritas Services SA and Data processing center	17,815	Leased	2022
Massy, France	CGGVeritas University	1,488	Leased	2020
Redhill, England	Administrative offices and Operations computer hub	2,095	Leased	2029
Crawley, England	Manor Place Offices of CGGVeritas Services UK Ltd. and Data processing center	1,860	Leased	2012
Crawley, England	Crompton Way Offices of CGGVeritas Services UK Ltd. and Data processing center	5,903	Leased	2028
Oslo, Norway	Offices of CGG Marine Resources Norge AS and Data processing center of CGG Services Norge (branch)	2,250	Leased	2013



**Table of Contents**

<b>Location</b>	<b>Type of facilities</b>	<b>Size (sq.m.)</b>	<b>Owned/ Leased</b>	<b>Lease expiration date</b>
Bergen, Norway	Offices of CGGVeritas Services (Norway) AS, Wavefield Inseis AS, Exploration Vessel Resources, Exploration Investment Resources II AS and Multifield Geophysics AS	7,648	Leased	2019
Cairo, Egypt	Data processing center	2,653	Owned	N/A
Lagos, Nigeria	Registered office of CGG (Nigeria) Ltd and offices of Veritas Geophysical (Nigeria) Ltd	800	Leased	2013
Geneva, Switzerland	Registered office of CGGVeritas International	606	Leased	2017
Moscow, Russia	Registered office of CGGVostok & Data processing center	758	Leased	2013
Luanda, Angola	Offices of CGG Explo Branch and Data processing center	270	Leased	2015
Kuala Lumpur, Kuching, Malaysia	Registered office of CGGVeritas Services (Malaysia) Sdn Bhd and Data processing center	1,206	Leased	2014
Mumbai, India	Registered office of CGGVeritas Services India			
	Pvt Ltd and Data processing center	951	Leased	2016
Singapore	Registered office of CGGVeritas Services (Singapore) Pte. Ltd. and Data Processing Center	8,183	Leased	2019
Jakarta, Indonesia	Registered office of PT Veritas Mega Pratama and Data processing center	793	Leased	2014
Beijing, China	Office of CGGVeritas Technology Services (Beijing) Co, Ltd and Research and development center	533	Leased	2012
Perth, Australia	Registered office of CGGVeritas Services (Australia) Pty Ltd and Data processing center	1,580	Leased	2014
Bangkok, Thailand	Offices of CGGVeritas Services SA (branch)	567	Leased	2013
Calgary, Canada	Registered office of CGGVeritas Services (Canada) Partnership and Hampson Russell Ltd Partnership and Data processing center	8,640	Leased	2015
Calgary, Canada	Land Operation offices (Canada)	3,995	Leased	2014
Houston, Texas, USA	Principal executive offices of CGGVeritas Services (U.S.) Inc. and Data processing center	32,609	Leased	2020
Rio de Janeiro, Brazil	Registered office of CGG Do Brazil and Data processing center	1,521	Leased	2012/2013
Villahermosa, Mexico	Data processing center	660	Leased	2013
Mexico City, Mexico	Registered office of CGGVeritas Services de Mexico SA de CV	570	Leased	2013
Caracas, Venezuela	Administrative offices of EXGEO CA	315	Leased	2013
Caracas, Venezuela	Warehouse	50,000	Leased	2012
<b>EQUIPMENT</b>				
Carquefou, France	Sercel manufacturing and research & development facilities recording equipment (land and marine)	25,005	Owned	N/A
Saint Gaudens, France	Sercel manufacturing and research & development facilities	23,051	Owned	N/A
Houston, Texas, U.S.A (ParkRow, Fallstone A)	Offices and manufacturing premises of Sercel	33,932	Owned	N/A
Houston, Texas, U.S.A (Fallstone B, Techway, Waller)	Offices and manufacturing premises of Sercel	14,256	Leased	2014
Xu Shui, China				
	Manufacturing and research & development facilities	59,247	Owned	N/A
Calgary, Canada	Offices and warehousing premises of Sercel	3,995	Owned	N/A

## **Table of Contents**

We also lease other offices worldwide to support our operations. We believe that our existing facilities are adequate to meet our current requirements.

Information concerning our seismic vessels is set out under Marine Business Line above.

## **Environmental Matters and Safety**

A comprehensive Health, Safety and Environment (HSE) management system has been in place for many years, covering all activities. Particular emphasis is placed on risk management so as to continuously adapt the system to the evolution of each segment of activity. A dedicated HSE organization comprising 120 professionals supports the operating divisions in all aspects of the management system, from risk identification and control through training and communication to emergency response in the event of an incident.

Our operations are subject to a variety of international and national environmental and safety laws and regulations. We believe that we are in compliance with all applicable regulations.

In 2010, CGG do Brazil Participações Ltda. recorded a provision to cover a fine for not complying with a technical opinion issued by the Brazilian Ministry of Environment. This provision has been extended through 2011. The fine is not material and is still disputed by CGGVeritas. No other specific provision for environmental risks has been created by CGGVeritas or its subsidiaries and no other judicial or administrative procedure have been registered in this respect.

Below is a summary of our major accomplishments in 2011:

focus on High Risk/Low Frequency events, resulting in steady reduction in High Potential Incidents; no fatal accidents;

launch of the Rules to Live By program with an associated move to a fair and just consequence management approach;

continuation of the road transport safety program which has been paying off with a reduced moving vehicle crash rate and no related serious injuries;

completion of a solid worldwide energy consumption baseline for the Group.

## **Legal Proceedings**

From time to time we are involved in legal proceedings arising in the normal course of our business. We do not expect that any of these proceedings, either individually or in the aggregate, will result in a material adverse effect on our consolidated financial condition or results of operations.

### *ION litigation*

On February 16, 2011, the United States District Court for the Eastern District of Texas entered its final judgment and permanent injunction with regards to the patent lawsuit between Sercel and ION Geophysical (ION). The injunction enjoins Sercel from making, offering for sale, selling, using or importing Sercel digital sensor DSU technology and products in the United States. It does not restrict Sercel's ability to use, manufacture, sell or deliver the DSU products anywhere else in the world. It also does not relate to the Sercel 408UL and 428XL recording systems. Sercel can continue to promote, sell and deliver these systems in the United States. Specifically, the injunction states that the offer to sell the DSU products when the manufacture, sale and delivery occur outside the United States does not constitute an act of infringement or a violation of the injunction. Furthermore, the promotion or marketing of the DSU technology in the United States does not violate the injunction when the manufacture, sale and delivery occur outside of the United States.



## **Table of Contents**

On March 8, 2011, Sercel Inc. posted a U.S.\$12.8 million bond (corresponding to the U.S.\$10.7 million damages awarded to ION plus 20% interest) and filed a notice of appeal. We recorded a provision of this amount as of December 31, 2011.

On February 17, 2012, the United States Federal Circuit Court of Appeals affirmed the judgment of the lower court. The injunction will remain in effect until the patent expires in December 2015.

The parties will return to trial court to determine the amount of additional damages related to Sercel's SeaRays systems manufactured in Houston.

### *Requests for information made by the U.S. Department of Commerce's Bureau of Industry and Security:*

Following a request for information made by representatives of the U.S. Department of Commerce's Bureau of Industry and Security (BIS), we conducted an internal review of the facts surrounding shipments to our vessels operating in or near Cuba. During the course of our review, we discovered that, despite our precautions, some shipments may not have complied fully with our internal policies and possibly violated applicable export controls and sanctions laws. We have provided BIS with all of the information it has requested to date and are cooperating fully with it in this matter. We have also informed on a voluntary basis the U.S. Office of Foreign Assets Control.

The Company does not expect this matter to have any material impact on the Group's results of operation, financial position, or cash flows.

## **Item 4A: UNRESOLVED STAFF COMMENTS**

None.

## **Item 5: OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

### **Introduction**

Beginning July 1, 2010, our Group has been organized in five divisions and currently operates in two industry segments:

Geophysical services segment, which comprises:

Marine contract: seismic data acquisition offshore undertaken by us on behalf of a specific client;

Land contract: seismic data acquisition for land, transition zones and shallow water undertaken by us on behalf of a specific client;

Processing, Imaging and Reservoir: processing and imaging as well as interpretation of geophysical data, data management and reservoir studies for clients; and

Multi-client land and marine: seismic data acquisition undertaken by us and licensed to a number of clients on a non-exclusive basis;

Geophysical equipment segment, which we conduct through Sercel Holding S.A. and its subsidiaries, comprises our manufacturing and sales activities for seismic equipment used for data acquisition, both on land and marine.

## Edgar Filing: CGG VERITAS - Form 20-F

We report financial information by operating segment in accordance with our internal reporting system and the internal segment information that is used to manage and measure our performance.

### **Operating Results**

The following operating and financial review and prospects should be read in conjunction with our consolidated annual financial statements and the notes thereto included elsewhere in this annual report, which have been prepared in accordance with IFRS (International Financial Reporting Standards) as issued by the IASB (International Accounting Standards Board) and as adopted by the European Union on December 31, 2011.

---

## **Table of Contents**

### **Factors affecting our results of operations**

Our operating results are generally affected by a variety of factors, including changes in exchange rates, particularly the value of the euro against the dollar, and changes in oil prices, which are also generally denominated in dollars. See [Trend Information](#) and [Geophysical market environment](#) herein.

#### ***Foreign exchange fluctuations***

As a company that derives a substantial amount of its revenues from sales internationally, our results of operations are affected by fluctuations in currency exchange rates. Changes between the U.S. dollar and euro or other currencies may adversely affect our business by negatively impacting our revenues and earnings.

As certain trends in our business may be obscured by currency fluctuations, we have converted certain euro amounts in this [Operating and Financial Review and Prospects](#) into U.S. dollars. Converted figures are presented only to assist the reader in understanding our results and are not part of our reported financial statements and may not be indicative of changes in our actual or anticipated results. See [Trend Information Currency Fluctuations](#) below.

Unless otherwise indicated, balance sheet data expressed in U.S. dollars have been converted from euros at the exchange rate on the relevant balance sheet date, and income statement data in U.S. dollars have been converted from euros at the average exchange rate for the relevant year. The exchange rates as of December 31, 2009, 2010 and 2011 were U.S.\$1.4401, U.S.\$1.336 and U.S.\$1.2939, respectively, per euro, and the average exchange rates for the years 2009, 2010 and 2011 were U.S.\$1.392, U.S.\$1.3285 and U.S.\$1.4025 respectively, per euro.

#### ***Geophysical Market Environment***

Overall demand for geophysical services and equipment is dependent on spending by oil and gas companies for exploration, development and production and field management activities. We believe the level of spending of such companies depends on their assessment of their ability to efficiently supply the oil and gas market in the future and the current balance of hydrocarbon supply and demand.

The geophysical market has historically been extremely cyclical. We believe many factors contribute to the volatility of this market, such as the geopolitical uncertainties that can harm the confidence and visibility that are essential to our clients' long-term decision-making processes and the expected balance in the mid to long term between supply and demand for hydrocarbons. In this context, oil and gas companies, especially the large international oil companies, have budgeted an overall 10% to 15% increase in exploration and production spending in 2012, with a special focus on exploration. This should drive the progressive recovery of our seismic services divisions, especially marine, while Sercel should continue to reap the benefit of its large installed base and the sustained demand for technology intensity.

See [Item 4: Information on the Company Industry Conditions](#) for a discussion of developments in the geophysical Industry.

#### ***Acquisitions and disposals***

Acquisitions and disposals have had a significant impact on our year-on-year revenues. Recent acquisitions and disposals have included:

##### ***During 2011***

###### ***Norfield AS***

On January 13, 2011, the exchange of assets between certain subsidiaries of CGGVeritas and the Norwegian group Norfield was completed. As a result of this transaction, we acquired Voyager AS (renamed Exploration



---

## Table of Contents

Vessel Resources II AS), the owner of the seismic vessel *Voyager* and sold the seismic vessel *Venturer* to Norfield. CGGVeritas is no longer a shareholder of Norfield AS. CGGVeritas owns 100% of Exploration Vessel Resources II AS. This company has been fully consolidated in our financial statements since January 13, 2011.

We recorded a gain of 7.8 million in the line item Other revenues (expenses) in our statement of operations from the disposal of our assets in relation to this transaction.

On the date we acquired it, Exploration Vessel Resources II AS entered into a U.S.\$45 million credit facility secured by a pledge over the *Voyager* and subject to substantially the same covenants as our U.S. senior credit facilities.

### *Petrodata Consulting LLC*

On March 17, 2011, we purchased for U.S.\$2.5 million Petrodata Consulting LLC, a Moscow-based company offering static and dynamic reservoir modeling, reserve estimation and risking, and field development services to the international oil and gas industry. CGGVeritas owns 100% of the company. Petrodata Consulting LLC is fully consolidated in our financial statements.

### *PT Elnusa-CGGVeritas Seismic*

On April 7, 2011, an agreement was signed with PT Elnusa Tbk to create a marine joint venture company in Indonesia. The newly established company PT Elnusa-CGGVeritas Seismic delivers 2D and 3D marine seismic acquisition services to oil and gas company clients mainly in Indonesia and operates the first Indonesian-owned and flagged seismic vessel, the *Elnusa Finder*. We assigned the time charter agreement for that vessel to PT Elnusa-CGGVeritas Seismic on December 22, 2011.

PT Elnusa-CGGVeritas Seismic, under joint control, is 51% owned by Elnusa and 49% owned by CGGVeritas. This company has been accounted for under the equity method in our financial statements since July 5, 2011.

### *PTSC CGGVeritas Geophysical Survey Company Limited*

On April 19, 2011, we entered into an agreement with PetroVietnam Technical Services Corporation (PTSC) to create a marine joint venture company. The newly established company PTSC CGGVeritas Geophysical Survey Company Limited will deliver 2D and 3D marine seismic acquisition services to oil and gas company clients mainly operating in Vietnamese waters and the region. On March 27, 2012, we contributed the *Amadeus*, a high-capacity 3D seismic vessel, to the joint venture and PTSC contributed the *Binh Minh II*, a 2D seismic vessel.

### *CGGVeritas Eidesvik Ship Management AS*

On June 27, 2011, we signed a joint venture agreement with Eidesvik offshore to create a joint venture to manage ten high-capacity 3D vessels in the CGGVeritas fleet, including the two new X-BOW vessels, *Oceanic Vega* and *Oceanic Sirius*.

The joint venture, CGGVeritas Eidesvik Ship Management AS, is 51% owned by Eidesvik and 49% owned by CGGVeritas. This company has been accounted for under the equity method in our financial statements since June 27, 2011.

### *Spectrum ASA*

On July 28, 2011, we signed a strategic agreement with Spectrum, a Norwegian multi-client company, for the contribution of our 2D multi-client marine library for consideration in cash and a 25% equity stake in Spectrum, which together amounted to U.S.\$40 million. The transaction was finalized on September 15, 2011. We recognized a 13.4 million gain presented in the line item other revenues (expenses) in our statement of operations.



## **Table of Contents**

On October 3, 2011, in conjunction with this transaction, Spectrum issued convertible bonds for an aggregate amount of 9.7 million (NOK77 million). The conditions of this issue are described in the prospectus issued by Spectrum on September 14, 2011. In this scope, we were allocated 27,682,970 convertible bonds representing 3.5 million (NOK27.7 million). On December 30, 2011, we converted these bonds and received 1,977,355 shares of Spectrum.

As a result, CGGVeritas holds 10,840,181 shares of Spectrum, representing 29% of its share capital. This company has been accounted for under the equity method in our financial statements since September 15, 2011. The investment amounted to 20 million.

### *Cybernetix*

During 2011, we sold all of our shareholding in Cybernetix. The gain of 3 million from this disposal was recorded in the line item Other revenues (expenses) in our statement of operations.

### *Seismic vessels*

On October 3, 2011, the Group took delivery of the seismic vessel *Oceanic Sirius*. Oceanic Seismic Vessel AS, the owner of the vessel, has been accounted for under the equity method since the delivery date.

## ***During 2010***

### *Seismic vessels*

On January 22, 2010, we sold our seismic vessel *Harmattan* for U.S.\$3.4 million.

On February 9, 2010, we exercised our purchase option for the seismic vessel *Geo Challenger* (now named *Oceanic Challenger*) for NOK250 million. We also sent a termination notice for our time charter on the *Pacific Titan*.

On July 1, 2010, we took delivery of the *Oceanic Vega*, our new seismic vessel. Eidesvik Vessel A.S., owning the *Oceanic Vega*, is accounted for under the equity method in our financial statements.

### *Norfield AS*

On June 30, 2010, we entered into an agreement with Norfield AS to acquire full ownership of the seismic vessel *Voyager* in exchange for the *Venturer* and other assets as part of the restructuring of Norfield AS. As a result of this agreement, 59 million of assets to be transferred to Norfield AS were classified as held for sale on our balance sheet as of December 31, 2010. This agreement was subject to certain conditions precedent that were fulfilled on January 13, 2011.

### *Gardline*

On July 2, 2010, CGGVeritas Services Holding BV signed a Memorandum of Association with Gardline Geosurvey Limited to incorporate a new company in Singapore, Gardline CGGV Pte. Ltd., to operate the seismic vessel *Duke* in the Indian Ocean. CGGVeritas owns 49% of Gardline CGGV Pte. Ltd. This ownership interest is accounted for under the equity method in our financial statements.

### *Real estate*

On October 1, 2010, we took delivery of our new headquarter building in Massy pursuant to a 12 year lease contract with a purchase option exercisable from the end of the sixth year until the end of the lease agreement.



**Table of Contents***Xian Sercel Petroleum Exploration Instrument Co. Ltd. ( Xian Sercel )*

On November 4, 2010, our 51% owned subsidiary Hebei Sercel Junfeng Geophysical Prospecting Equipment Co. Ltd acquired full ownership of Xian Sercel through the contribution by Sercel Holding and BGP of their shares in Xian Sercel. Prior to that date, Xian Sercel was accounted for under equity method, and has been fully consolidated in our financial statements since then.

*During 2009**Wavefield*

On November 25, 2008, we launched a voluntary exchange offer to acquire 100% of the share capital of Wavefield Inseis ASA ( Wavefield ). We offered Wavefield shareholders one newly issued CGGVeritas share for every seven Wavefield shares. A total of 90,480,237 shares were tendered in the offer, representing 69.9% of the share capital of Wavefield. In consideration of the Wavefield shares tendered to the offer, we issued 12,925,749 new shares on December 18, 2008. The fair value of those issued shares amounted to 139.0 million. On December 30, 2008, we launched a mandatory public offer for the remaining 38,903,024 outstanding shares (i.e. 30.1% of the share capital) as well as for the 2,892,875 shares that could result from the exercise of stock options. At the end of the mandatory public offer period, which expired on January 27, 2009, we acquired 37,043,013 additional shares for a total of 98.6% of Wavefield s share capital. We then launched a squeeze-out process for the remaining outstanding shares of Wavefield at a price of NOK 15.17 per share to be paid in cash. In February 2009, we acquired Wavefield s remaining shares for 62 million, which was paid after the objection period expired. As a result, the minority interests on our balance sheet at December 31, 2008, recognized as a financial debt of 62 million due to our obligation to conduct a mandatory public offer, have been cancelled.

As of February 13, 2009, we owned 100% of Wavefield s share capital. Wavefield was de-listed from the Oslo Bors on February 16, 2009. The preliminary goodwill determined as of December 31, 2008 was revised upwards by an additional 87.7 million, resulting in a total goodwill related to the acquisition of 96.3 million as of December 31, 2009. The principal adjustments were related to fixed assets and unfavorable time charters.

The total consideration for the acquisition in our financial statements, including the remaining 30.1% acquired in February 2009, was 207.1 million (U.S.\$288.2 million).

*Cybernetix*

On January 8, 2009, Cybernetix conducted a 4 million share capital increase that was entirely subscribed by Sercel Holding, bringing its stake to a total of 749,480 shares, representing 46.10% of Cybernetix s share capital and 43.07% of its voting rights. The French financial markets regulator (*Autorité des Marchés Financiers*) exempted Sercel Holding from the requirement to conduct a tender offer for all shares when its holding exceeded 33.33%. The consideration for the share capital increase was 2 million in cash and the incorporation of a 2 million cash advance granted by Sercel Holding to Cybernetix in November 2008. Following disposals in 2009, Sercel Holding owned 44.56% of Cybernetix s share capital and 42.98% of its voting rights as of December 31, 2009. Our remaining shareholding was sold in 2010. Cybernetix was accounted for under the equity method in our financial statements as we did not exercise significant influence over operating and financial policies.

*Norfield AS*

Pursuant to the general meeting of Norfield AS s shareholders held on May 19, 2009, Wavefield subscribed to a capital increase in Norfield for approximately 3.6 million (U.S.\$5 million) by capitalizing an outstanding long-term loan owed to it by Norfield. The capital increase was pro rata to the shareholders existing interests in Norfield.

---

## **Table of Contents**

### *Multifield Geophysics AS ( Multifield )*

On May 29, 2009, Statoil Hydro Venture AS exercised its put option with our subsidiary Wavefield with respect to a 37% stake in Multifield for 2.9 million (NOK26 million). As a result, our shareholding in Multifield increased to 80.97%. Multifield is fully consolidated in our financial statements since June 30, 2009.

### *Eidesvik Seismic Vessel AS*

On December 10, 2009, Exploration Investment Resources II AS, a wholly-owned subsidiary of CGGVeritas, set up a joint venture with Eidesvik Shipping AS in order to share ownership of the two X-BOW vessels that were under construction (and have since been delivered). As of December 31, 2009, the Group's interest in the joint venture, Eidesvik Seismic Vessel AS is 49%. This company is accounted for under the equity method in our financial statements as of December 31, 2009.

## ***Backlog***

Backlog estimates are based on a number of assumptions and estimates, including assumptions as to exchange rates between the euro and the U.S. dollar and estimates of the percentage of completion contracts. Contracts for services are occasionally modified by mutual consent and in certain instances are cancelable by the customer on short notice without penalty. The historical relationships we have with many of our clients (most of which are large, well established companies) tends to reduce our exposure to the risk of early termination. Nevertheless, backlog as of any particular date may not be indicative of actual operating results for any succeeding period.

Backlog for our Services segment represents the revenues it expects to receive from commitments for contract services it has with its customers and, in connection with the acquisition of multi-client data, represents the amount of pre-sale commitments for such data. Backlog for our Equipment segment represents the total value of orders it has received but not yet fulfilled.

Our backlog for our Services and Equipment segments was U.S.\$1.46 billion as of January 1, 2012.

## **Critical Accounting Policies and Estimates**

Our significant accounting policies, which we have applied consistently, are fully described in note 1 to our consolidated financial statements included elsewhere in this document. However, certain of our accounting policies are particularly important to the portrayal of our financial position and results of operations, and these are described below.

In applying our accounting policies, management makes estimates, assumptions and judgment about uncertain matters that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements. Actual results could differ materially from those estimates under different assumptions or conditions.

Our significant estimates relate mainly to the expected cash-flows used to measure the recoverability of certain intangible assets such as deferred tax assets, our multi-client data library and goodwill and to determine the amortization rate of our multi-client surveys. To calculate the recoverable amount of our goodwill, we use estimates that are based on our outlook for the seismic industry, as well as the expected cash flows in our three-year plan and what we consider to be normative cash flows for the years thereafter. In 2011, our outlook for the seismic industry assumed a recovery starting progressively mid-2012. See note 11 to our consolidated financial statements included elsewhere in this document for the key assumptions used in our determination of asset recoverability and the sensitivity in changes in assumptions. Changed assumptions, in particular the discount rate and the normative cash flow, could significantly affect our impairment result.

## **Table of Contents**

### *Operating revenues*

Operating revenues are recognized when they can be measured reliably, and when it is likely that the economic benefits associated with the transaction will flow to the entity, which is at the point that such revenues have been realized or are considered realizable.

#### *Multi-client surveys*

Revenues related to multi-client surveys result from (i) pre-commitments and (ii) licenses after completion of the surveys ( after-sales ).

*Pre-commitments* Generally, we obtain commitments from a limited number of customers before a seismic project is completed. These pre-commitments cover part or all of the survey area blocks. In return for the commitment, the customer typically gains the right to direct or influence the project specifications, advance access to data as it is being acquired, and favorable pricing. We record payments that it receives during periods of mobilization as advance billing in the balance sheet in the line item Advance billings to customers .

We recognize pre-commitments as revenue when production has started based on the physical progress of the project, as services are rendered.

*After sales* Generally, we grant a license entitling non-exclusive access to a complete and ready for use, specifically defined portion of our multi-client data library in exchange for a fixed and determinable payment. We recognize after sales revenue upon the client executing a valid license agreement and having been granted access to the data. Within thirty days of execution and access, the client may exercise our warranty that the medium on which the data is transmitted (a magnetic cartridge) is free from technical defects. If the warranty is exercised, the Company will provide the same data on a new magnetic cartridge. The cost of providing new magnetic cartridges is negligible.

In case after sales agreements contain multiple deliverable elements, the revenue is allocated to the various elements based on specific objective evidence of fair value, regardless of any separate allocations stated within the contract for each element. Each element is appropriately accounted for under the applicable accounting standard.

*After sales volume agreements* We enter into a customer arrangement in which we agree to grant licenses to the customer for access to a specified number of blocks of the multi-client library. These arrangements typically enable the customer to select and access the specific blocks for a limited period of time. We recognize revenue when the blocks are selected and the client has been granted access to the data and if the corresponding revenue can be reliably estimated. Within thirty days of execution and access, the client may exercise our warranty that the medium on which the data is transmitted (a magnetic cartridge) is free from technical defects. If the warranty is exercised, the Company will provide the same data on a new magnetic cartridge. The cost of providing new magnetic cartridges is negligible.

#### *Exclusive surveys*

In exclusive surveys, we perform seismic services (acquisition and processing) for a specific customer. We recognize proprietary/contract revenues as the services are rendered. We evaluate the progress to date, in a manner generally consistent with the physical progress of the project, and recognize revenues based on the ratio of the project cost incurred during that period to the total estimated project costs as far as they can reliably be assessed.

The billings and the costs related to the transit of seismic vessels at the beginning of the survey are deferred and recognized over the duration of the contract by reference to the technical stage of completion.

## **Table of Contents**

In some exclusive survey contracts and a limited number of multi-client survey contracts, we are required to meet certain milestones. We defer recognition of revenue on such contracts until all milestones that provide the customer a right of cancellation or refund of amounts paid have been met.

### *Equipment sales*

We recognize revenues on equipment sales upon delivery to the customer when risks and rewards are fully transferred. Any advance billings to customers are recorded in current liabilities.

### *Software and hardware sales*

We recognize revenues from the sale of software and hardware products following acceptance of the product by the customer at which time we have no further significant vendor obligations remaining. Any advance billings to customers are recorded in current liabilities.

If an arrangement to deliver software, either alone or together with other products or services, requires significant production, modification, or customization of software, the entire arrangement is accounted for as a production-type contract, i.e. using the percentage of completion method.

If the software arrangement provides for multiple deliverables (e.g. upgrades or enhancements, post-contract customer support such as maintenance, or services), the revenue is allocated to the various elements based on specific objective evidence of fair value, regardless of any separate allocations stated within the contract for each element. Each element is appropriately accounted for under the applicable accounting standard.

Maintenance revenues consist primarily of post contract customer support agreements and are recorded as advance billings to customers and recognized as revenue on a proportional performance basis over the contract period.

### *Other geophysical sales/ services*

Revenues from our other geophysical sales/services are recognized as the services are performed and, when related to long-term contracts, using the proportional performance method of recognizing revenues.

### *Customer loyalty programs*

We may grant award credits to our main clients. These award credits are contractually based on cumulative services provided during the calendar year and attributable to future services.

These credits are considered as a separate component of the initial sale and measured at their fair value by reference to the contractual rates and the forecasted cumulative revenues for the calendar year. These proceeds are recognized as revenue only when the obligation has been fulfilled.

### *Multi-client surveys*

Multi-client surveys consist of seismic surveys to be licensed to customers on a non-exclusive basis. All costs directly incurred in acquiring, processing and otherwise completing seismic surveys are capitalized into the multi-client surveys (including transit costs when applicable). The value of our multi-client library is stated on our balance sheet at the aggregate of those costs less accumulated amortization or at fair value if lower. We review the library for potential impairment at each balance sheet date at the relevant level (independent surveys or groups of surveys).

We amortize the multi-client surveys over the period during which the data is expected to be marketed using an amortization rate applied to recognized revenues.





## **Table of Contents**

Multi-client surveys are classified into a same category when they are located in the same area with the same estimated sales ratio, such estimates generally relying on the historical patterns.

Depending on the category of the survey, we generally use amortization rates of 50%, 65%, 75%, 80% or 83.3% corresponding to the ratio of total estimated costs over total estimated sales, unless specific indications lead to apply a different rate.

For all categories of surveys and starting from data delivery, a minimum straight-line depreciation scheme is applied over a five-year period, if total accumulated depreciation from the applicable amortization rate is below this minimum level.

Multi-client surveys acquired as part of the business combination with Veritas and which have been valued for purchase price allocation purposes are amortized based on 65% of revenues and an impairment loss is recognized on a survey by survey basis in case of any indication of impairment.

### ***Development costs***

Expenditures on research activities undertaken with the prospect of gaining new scientific or technological knowledge and understanding are recognized in the income statement as expenses as incurred and are presented as Research and development expenses net . Expenditures on development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes, are capitalized if:

the project is clearly defined, and costs are separately identified and reliably measured,

the product or process is technically and commercially feasible,

we have sufficient resources to complete development, and

the intangible asset is likely to generate future economic benefits, either because it is useful to us or through an existing market for the intangible asset itself or for its products.

The expenditures capitalized include the cost of materials, direct labor and an appropriate proportion of overhead. Other development expenditures are recognized in the income statement as expenses as incurred and are presented as Research and development expenses net .

Capitalized development expenditures are stated at cost less accumulated amortization and impairment losses.

We amortize capitalized development costs over five years.

Research & development expenses in our income statement represent the net cost of development costs that are not capitalized, of research costs, offset by government grants acquired for research and development.

### ***Impairment***

In accordance with IAS 36 Impairment of assets , the carrying values of our assets (excluding inventories, deferred tax assets, assets arising from employee benefits and financial assets) are reviewed at each balance sheet date. If any indication exists that an asset may be impaired, we estimate the recoverable amount of this asset. Factors we consider important that could trigger an impairment review include the following:

significant underperformance relative to expected operating results based upon historical and/or projected data,

significant changes in the manner of our use of the acquired assets or the strategy for our overall business, and

**Table of Contents**

significant negative industry or economic trends.

The recoverable amount of tangible and intangible assets is the greater of their net fair value less costs to sell and value in use.

Goodwill, assets that have an indefinite useful life and intangible assets are allocated to cash generating units. We estimate the recoverable amount of these cash generating units at each balance sheet closing date.

We determine the recoverable amounts by estimating future cash flows expected from the assets or from the cash generating units, discounted to their present value using a discount rate that reflects the expected return on invested capital given the characteristics and risks attached to the asset.

We recognize an impairment loss whenever the carrying amount of an asset exceeds its recoverable amount. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Impairment losses are recognized in the income statement. Impairment losses recognized in respect of a group of non independent assets allocated to a cash-generating unit are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units (group of units) and then, to reduce the carrying amount of the other assets in the unit (group of units) on a pro rata basis.

A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the income statement unless the asset is carried at a revalued amount, in which case the reversal is treated as a revaluation increase.

Impairment losses recognized on goodwill cannot be reversed.

**Year ended December 31, 2011 compared with year ended December 31, 2010****Operating revenues**

The following table sets forth our consolidated operating revenues by division, and the percentage of total consolidated operating revenues represented thereby, during each of the periods stated:

	Year ended December 31,					
	2011		2010			
	U.S.\$ <sup>(1)</sup>	%	U.S.\$ <sup>(1)</sup>	%		
	(in millions of euros, except percentages)					
Land contract	265.6	372.8	12%	286.9	381.4	13%
Marine contract	696.2	977.1	31%	585.2	778.1	27%
Processing, Imaging and Reservoir	315.5	442.7	14%	292.7	389.1	13%
Multi-client	354.0	496.9	15%	402.1	534.3	18%
Total Services	1,631.3	2,289.5	72%	1,566.9	2,082.9	72%
Equipment	636.4	890.9	28%	619.2	821.3	28%
<b>Total</b>	<b>2,267.7</b>	<b>3,180.4</b>	<b>100%</b>	<b>2,186.1</b>	<b>2,904.2</b>	<b>100%</b>

<sup>(1)</sup> Dollar amounts for 2011 represent euro amounts converted at the average exchange rates of U.S.\$1.4035, U.S.\$1.4001 and U.S.\$1.4025 per for the Services segment, the Equipment segment and the consolidated financial statements, respectively. Dollar amounts for 2010 represent euro amounts converted at the average exchange rates of U.S.\$1.3294, U.S.\$1.3264 and U.S.\$1.3285 per for the Services segment, the Equipment segment and the consolidated financial statements, respectively.

---

## Table of Contents

Our consolidated operating revenues for the year ended December 31, 2011 increased 4% to 2,267.7 million from 2,186.1 million for 2010. Expressed in U.S. dollars, our consolidated operating revenues increased 10% to U.S.\$3,180.4 million for the year ended December 31, 2011 from U.S.\$2,904.2 million for 2010, reflecting the strong performance of our Equipment segment and the increase in the Marine contract activities of our Services segment, which was constrained by the ongoing marine overcapacity and continued unrest in some North Africa and Middle-East countries.

### Services

Operating revenues for our Services segment (excluding intra-group sales) increased 4% to 1,631.3 million for the year ended December 31, 2011 from 1,566.9 million for 2010. Expressed in U.S. dollars, operating revenues increased 10% from U.S.\$2,082.9 million for 2010 to U.S.\$2,289.5 million for the year ended December 31, 2011 mainly due to increased Marine contract activities.

### *Marine contract*

Operating revenues from our Marine contract division for the year ended December 31, 2011 increased 19% to 696.2 million from 585.2 million for 2010 (and increased 26% in U.S. dollar terms) as we allocated more of our 3D fleet to contract activity compared to multi-client. In 2011, our vessel availability and production rate were both 86%, compared to 88% and 91% respectively for 2010.

### *Land contract*

Operating revenues from our Land contract division decreased 7% to 265.6 million for the year ended December 31, 2011 from 286.9 million for 2010 (and decreased 2% in U.S. dollar terms) with delays observed in North Africa and Middle-East as a result of the unrest in some countries.

### *Processing, Imaging & Reservoir*

Operating revenues from our Processing, Imaging & Reservoir division increased 8% to 315.5 million for the year ended December 31, 2011 from 292.7 million for 2010 (and increased 14% in U.S. dollar terms), mainly due to increased demand for our high-end imaging technology.

### *Multi-client*

Operating revenues from our Multi-client division for the year ended December 31, 2011 decreased 12% to 354.0 million from 402.1 million for 2010 (and decreased 7% in U.S. dollar terms).

Multi-client marine data library revenues decreased 11% to 260.3 million for the year ended December 31, 2011 from 292.2 million for 2010 (and decreased 6% in U.S. dollar terms). Prefunding, with a rate of 63%, decreased 65% to 44.7 million for the year ended December 31, 2011 from 127.9 million for 2010 (and decreased 63% in U.S. dollar terms) as our 3D fleet was allocated mainly to contract activity in 2011, while we waited for better visibility in the Gulf of Mexico. After-sales increased 31% to 215.6 million for the year ended December 31, 2011 from 164.3 million for 2010 (and increased 39% in U.S. dollar terms), with a higher demand ahead of scheduled worldwide lease sales.

Multi-client land data library revenues decreased 15% to 93.7 million for the year ended December 31, 2011 from 109.9 million for 2010 (and decreased 10% in U.S. dollar terms). Prefunding, with a rate of 76% increased 22% to 70.7 million for the year ended December 31, 2011 from 57.9 million for 2010 (and increased 29% in U.S. dollar terms) due to our activity in the U.S. with our shale plays program activity in the U.S. After-sales decreased 56% to 23.0 million for the year ended December 31, 2011 from 51.9 million for 2010 (and decreased 53% in U.S. dollar terms) as demand remained low.

---

**Table of Contents****Equipment**

Operating revenues for our Equipment segment, including intra-group sales, increased 8% to 815.8 million for the year ended December 31, 2011 from 753.6 million for 2010. In U.S. dollar terms, revenues increased 14% to U.S.\$1,142.1 million for the year ended December 31, 2011 from U.S.\$999.6 million for 2010 mainly due to the significant increase in demand for land as a result of the increase in high channel count crews and also in certain regions.

Operating revenues for our Equipment segment, excluding intra-group sales, increased 3% to 636.4 million for the year ended December 31, 2011 from 619.2 million for the comparable period in 2010 (and increased 8% in U.S. dollar terms).

**Operating Expenses**

Cost of operations, including depreciation and amortization, increased 8% to 1,887.3 million for the year ended December 31, 2011 from 1,746.3 million for 2010. As a percentage of operating revenues, cost of operations increased to 83% for the year ended December 31, 2011 from 80% for 2010. Gross profit decreased 14% to 382.7 million for the year ended December 31, 2011 from 443.1 million for 2010, representing 17% and 20% of operating revenues, respectively.

Research and development expenditures decreased 4% to 54.9 million for the year ended December 31, 2011 compared to 57.0 million for the year ended December 31, 2010 (and increased 2% in U.S. dollar terms), representing 2% and 3% of operating revenues, respectively.

Marketing and selling expenses decreased 4% to 59.3 million for the year ended December 31, 2011 from 61.7 million for the year ended December 31, 2010 (and increased 1% in U.S. dollar terms).

General and administrative expenses decreased 14% to 145.1 million for the year ended December 31, 2011 from 168.4 million for 2010 (and decreased 9% in U.S. dollar terms) due to costs saving measures. As a percentage of operating revenues, general and administrative costs represented 6% for the year ended December 31, 2011 compared to 8% for the year ended December 31, 2010.

Other revenues amounted to 24.5 million for the year ended December 31, 2011 mainly due to a 7.8 million gain on disposal of assets in relation to the Norfield transaction completed on January 13, 2011 and a 13.4 million (U.S.\$19 million) gain on sale of our 2D marine data library in relation to the Spectrum transaction completed on September 15, 2011. Other expenses for the year ended December 31, 2010 amounted to 88.8 million, principally due to restructuring costs of 28.1 million and 70.4 million of impairment related to multi-client surveys.

**Operating Income (Loss)**

Our operating income increased significantly to 147.9 million for the year ended December 31, 2011 from 67.2 million for 2010, as a result of the factors described above. Expressed in U.S dollars, operating income was U.S.\$208 million for the year ended December 31, 2011 compared to U.S.\$220 million for the year ended December 31, 2010 (excluding restructuring costs and impairment of intangible assets in 2010).

Operating income from our Services segment amounted to 6.2 million for the year ended December 31, 2011 compared to an operating loss of 68.6 million for the year ended December 31, 2010. Expressed in U.S dollars, operating income was U.S.\$9 million for the year ended December 31, 2011 compared to U.S.\$37 million for the year ended December 31, 2010 (excluding restructuring costs and impairment of intangible assets in 2010).

Operating income from our Equipment segment increased 17% to 253.7 million for year ended December 31, 2011 from 217.2 million for 2010 (and increased 23% in U.S. dollar terms).

**Table of Contents****Financial Income and Expenses**

Cost of net financial debt increased 18% to 124.4 million for the year ended December 31, 2011 from 105.5 million for 2010 (and increased 24% in U.S. dollar terms) mainly due to (i) the accelerated amortization of U.S.\$22 million in issuing fees related to the redemption of U.S.\$530 million principal amount of our 7 1/2% Senior Notes due 2015 and repayment of the U.S.\$508 million outstanding under our term loan B facility, and (ii) U.S.\$2.8 million of interest paid on our 7 1/2% Senior Notes due 2015 between the issuance of 360 million principal amount of convertible bonds on January 27, 2011 and the partial redemption of the 7 1/2% Senior Notes due 2015 with the proceeds of the convertible bonds (following the notice period) on March 1, 2011.

Other financial income was 0.6 million for the year ended December 31, 2011 compared to 8.5 million for the year ended December 31, 2010, principally due to a U.S.\$19 million early redemption premium paid on our 7 1/2% Senior Notes due 2015 described above and favorable currency fluctuations.

**Income Taxes**

Income taxes amounted to 45.0 million for the year ended December 31, 2011 from 13.5 million for 2010. Income taxes for the years ended December 31, 2011 and 2010 included deferred tax assets of 52 million and 42 million, respectively, related to loss carry forward in France.

**Share of Income (Loss) in Companies under equity method**

Income from investments accounted for under the equity method was 11.7 million for the year ended December 31, 2011 compared to a loss of 0.7 million for the year ended December 31, 2010. This increase was mainly attributable to our share in the income of Argas, our joint venture in Saudi Arabia.

**Net Income (Loss)**

Net loss was 9.2 million for the year ended December 31, 2011 compared to a net loss of 44.0 million for the year ended December 31, 2010 as a result of the factors discussed above.

**Year ended December 31, 2010 compared with year ended December 31, 2009****Operating revenues**

The following table sets forth our consolidated operating revenues by business line, and the percentage of total consolidated operating revenues represented thereby, during each of the periods stated:

	Year ended December 31,					
	2010		2009			
	U.S.\$ <sup>(1)</sup>	%	U.S.\$ <sup>(1)</sup>	%		
	(in millions of euros, except percentages)					
Land contract	286.9	381.4	13%	274.2	381.7	12%
Marine contract	585.2	778.1	27%	774.5	1,078.2	35%
Processing, Imaging and Reservoir	292.7	389.1	13%	289.6	403.3	13%
Multi-client	402.1	534.3	18%	370.2	515.3	17%
Total Services	1,566.9	2,082.9	72%	1,708.5	2,378.5	77%
Equipment	619.2	821.3	28%	524.7	730.8	23%
<b>Total</b>	<b>2,186.1</b>	<b>2,904.2</b>	<b>100%</b>	<b>2,233.2</b>	<b>3,109.3</b>	<b>100%</b>

<sup>(1)</sup> Dollar amounts for 2010 represent euro amounts converted at the average exchange rates of U.S.\$1.3294 U.S.\$1.3264 and U.S.\$1.3285 per for the Services segment, the Equipment segment and the consolidated financial statements, respectively. Dollar amounts for 2009 represent euro amounts converted at the average exchange rates of U.S.\$1.3922, U.S.\$1.3924 and U.S.\$1.3923 per for the Services

*segment, the Equipment segment and the consolidated financial statements, respectively.*



---

## **Table of Contents**

Our consolidated operating revenues for the year ended December 31, 2010 decreased 2% to 2,186.1 million from 2,233.2 million for 2009. Expressed in U.S. dollars, our consolidated operating revenues decreased 7% to U.S.\$2,904.2 million for the year ended December 31, 2010 from U.S.\$3,109.3 million for 2009. This decrease was due to our Services segment.

### *Services*

Operating revenues for our Services segment, which was impacted by the events in the Gulf of Mexico and the continued oversupply in the marine market, decreased 8% to 1,566.9 million for the year ended December 31, 2010 from 1,708.5 million for 2009 and decreased 12% in U.S. dollar terms.

### *Marine contract*

Operating revenues from our Marine contract division for the year ended December 31, 2010 decreased 24% to 585.2 million from 774.5 million for 2009 and decreased 28% in U.S. dollar terms mainly due to challenging market conditions as overcapacity was prolonged by the reduction of activity in the Gulf of Mexico.

In 2010, our vessel availability rate was 88% and our production rate was 91%, compared to 89% for 2009 for both.

### *Land contract*

Operating revenues from our Land contract division increased 5% to 286.9 million for the year ended December 31, 2010 from 274.2 million for 2009 and was stable in U.S. dollar terms mainly due to higher activity in North America, driven by oil sand multi-component projects, and Middle East. We operated on average 15 crews worldwide in 2010 compared to 12 crews in 2009, including Argas crews in Saudi Arabia.

### *Processing, Imaging and Reservoir*

Operating revenues from our Processing, Imaging and Reservoir division increased 1% to 292.7 million for the year ended December 31, 2010 from 289.6 million for 2009 and decreased slightly 3% in U.S. dollar terms, which evidences a resistance of this segment at the bottom of the cycle. Demand for our high-end depth imaging technologies continued to grow.

### *Multi-client data library*

Operating revenues from our Multi-client division increased 9% to 402.1 million for the year ended December 31, 2010 from 370.2 million for 2009 and increased 4% in U.S. dollar terms.

Multi-client marine data library revenues decreased 2% to 292.2 million for the year ended December 31, 2010 from 297.2 million for 2009 and decreased 6% in U.S. dollar terms. Prefunding was 127.9 million for the year ended December 31, 2010 with a prefunding rate of 83% compared to 188.1 million for 2009. After-sales increased 50% to 164.3 million for the year ended December 31, 2010 from 109.2 million for the year ended December 31, 2009 and 43% in U.S. dollar terms. This increase was mainly fueled by high marine sales worldwide, including sales in the Gulf of Mexico and Brazil.

Multi-client land data library revenues increased 50% to 109.9 million for the year ended December 31, 2010 from 73.0 million for the comparable period of 2009 and increased 44% in U.S. dollar terms. Prefunding was 57.9 million with a prefunding rate of 90% for the year ended December 31, 2010 compared to 40.0 million for 2009. After-sales increased 57% to 51.9 million for the year ended December 31, 2010 compared to 33.0 million for 2009.

---

**Table of Contents***Equipment*

Operating revenues, including intra-group sales, for our Equipment segment increased 22% to 753.6 million for the year ended December 31, 2010 from 616.2 million for 2009. In U.S. dollar terms, revenues increased 17% to U.S.\$999.6 million for the year ended December 31, 2010 from U.S.\$858.0 million for 2009. Marine equipment sales increased significantly due to Sentinel solid streamer demand for new builds and vessel upgrades.

Operating revenues, excluding intra-group sales, increased 18% to 619.2 million from 524.7 million for 2009 and increased 12% in U.S. dollar terms.

*Operating Expenses*

Cost of operations, including depreciation and amortization, increased 2% to 1,746.3 million for the year ended December 31, 2010 from 1,710.5 million for 2009. As a percentage of operating revenues, cost of operations increased to 80% for the year ended December 31, 2010 from 77% for 2009. Gross profit decreased 16% to 443.1 million for the year ended December 31, 2010 from 530.2 million for 2009, representing 20% and 24% of operating revenues, respectively.

Research and development expenditures, net of government grants, decreased 8% to 57.0 million for the year ended December 31, 2010 from 62.1 for 2009, representing approximately 3% of operating revenues for both periods.

Marketing and selling expenses increased 2% to 61.7 million for the year ended December 31, 2010 from 60.6 million for 2009, representing approximately 3% of operating revenues for both periods.

General and administrative expenses decreased 8% to 168.4 million for the year ended December 31, 2010 compared to 182.7 million for 2009. As a percentage of operating revenues, general and administrative costs were stable at 8% for the years ended December 31, 2010 and 2009.

Other expenses amounted to 88.8 million for the year ended December 31, 2010 compared to 167.8 million for the year ended December 31, 2009. As announced on December 16, 2010, we launched a performance plan that led us to recognize restructuring costs of 28.1 million (U.S.\$37 million) and we impaired 70.4 million (U.S.\$94 million) of multi-client surveys.

Other expenses in 2009 included primarily our fleet restructuring plan, an impairment of goodwill of 216 million (U.S.\$300 million) on our marine cash generating unit and an impairment loss of 64 million (U.S.\$89 million) of the legacy Veritas multi-client surveys acquired before 2007.

*Operating Income (Loss)*

Our operating income was 67.2 million for the year ended December 31, 2010 compared to an operating loss of 160.6 million for 2009 as a result of the factors described above. Before restructuring costs and impairment losses, operating income was 165.7 million (U.S.\$220 million) for the year ended December 31, 2010 compared to 220.2 million (U.S.\$309 million) for 2009.

Operating loss from our Services segment was 68.6 million for the year ended December 31, 2010 compared to 236.7 million for the year ended December 31, 2009. In U.S. dollar terms, operating loss was U.S.\$91.5 million for 2010 compared to U.S.\$329.5 million for 2009. Before restructuring costs and impairment losses, operating income for 2010 was approximately U.S.\$37.1 million compared to U.S.\$203.4 million.

Operating income from our Equipment segment increased 62% to 217.2 million for the year ended December 31, 2010 from 133.8 million for 2009. In U.S. dollar terms, operating income increased 55% to U.S.\$288.2 million from U.S.\$186.3 million.

---

## **Table of Contents**

### ***Financial Income and Expenses***

Cost of net financial debt was stable 105.5 million for the year ended December 31, 2010 and decreased 4% in U.S. dollar terms.

Other financial gain was 8.5 million for the year ended December 31, 2010 compared to a financial expense of 11.2 million for 2009 due to favorable changes in currency exchange rates.

### ***Income Taxes***

Income taxes amounted to 13.5 million for the year ended December 31, 2010 compared to tax credits of 9.8 million for 2009. Income taxes for the year ended December 31, 2010 included a deferred tax asset of 42.2 million related to loss carry forward in France.

### ***Share of Income (Loss) in Companies under equity method***

Income from investments accounted for under the equity method decreased to 0.7 million for the year ended December 31, 2010 from 8.3 million for the year ended December 31, 2009 mainly due to our share in the income of Argas, our joint venture in Saudi Arabia.

### ***Net Income (Loss)***

Net loss was 44.0 million for the year ended December 31, 2010 compared to a net loss of 258.9 million for 2009 as a result of the factors discussed above.

### **Liquidity and Capital Resources**

Our principal liquidity needs are for the funding of ongoing operations, capital expenditures (particularly repairs and improvements to our seismic vessels), investments in our multi-client data library and acquisitions.

Our capital expenditures for the years 2011, 2010 and 2009 are described below under Cash Flows Investing Activities . We plan to make the following capital expenditures in 2012:

recurring industrial capital expenditures of around U.S.\$250 million, including the continued strengthening of our high-end differentiation in Land, where our crews will be focused on ultra-high resolution configurations, utilizing the Sercel 428XL and UNITE wireless system;

U.S.\$65 million additional industrial capital expenditures related to the upgrade of the *Geowave Champion* which is expected to return to operations in the second quarter of 2012 bringing our 3D fleet to 15 high-end vessels including 11 with 12+ streamers and 4 with 8-10 streamers. All vessels will be equipped with BroadSeis in 2012;

marine multi-client capital expenditures of between U.S.\$200 million and U.S.\$250 million, with a prefunding rate around 75% and amortization rate around 60%. The investments include new Gulf of Mexico programs where visibility has improved as future lease rounds have been announced; and

land multi-client capital expenditures of between U.S.\$120 million and U.S.\$150 million, with a prefunding rate around 75% and amortization rate around 80%.

We intend to fund our liquidity needs through cash generated from operations, senior notes and borrowings under our U.S. and French revolving credit facilities. Our U.S. revolving credit facility is for up to U.S.\$79 million (undrawn as of December 31, 2011), maturing January 2014, and our French revolving credit facility is



---

## **Table of Contents**

for up to U.S.\$200 million (undrawn as of December 31, 2011), maturing February 2014. We have also from time to time in the past raised funds through issuances of shares and convertible bonds and may do so in the future.

Our ability to make scheduled payments of principal, or to pay the interest or additional interest, if any, on, or to refinance our indebtedness, or to fund planned capital expenditures will depend on our future performance, which, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. Based upon our current operating situation, we believe that cash flow from operations, available cash and short-term investments, together with borrowings available under the U.S. revolving facility and the French revolving facility, will be adequate to meet our future liquidity needs for the next 12 months. Our assumptions with respect to future costs may not be correct, and funds available to us from the sources discussed above may not be sufficient to enable us to service our indebtedness, including the notes, or cover any shortfall in funding for any unanticipated expenses. A downgrade of our credit ratings could reduce our ability to access credit markets on attractive terms or at all in the future. In addition, to the extent we make future acquisitions, we may require new sources of funding including additional debt, or equity financing or some combination thereof. We may not be able to secure additional sources of funding on favorable terms.

### ***Cash Flows***

#### ***Operating Activities***

Our net cash provided by operating activities was 581.4 million for the year ended December 31, 2011 compared to 450.0 million for 2010 and 616.8 million for 2009.

Before changes in working capital, our net cash provided by operating activities was 498.6 million for the year ended December 31, 2011 compared to 500.9 million for 2010 and 600.6 million for 2009. Changes in working capital for the year ended December 31, 2011 had a favorable impact of 82.8 million in part due to a high level of client payments received at year-end, compared to a negative impact of 50.9 million for 2010 and a positive impact of 16.2 million in 2009.

#### ***Investing Activities***

Our net cash used in investing activities was 402.3 million for year ended December 31, 2011 compared to 418.6 million for 2010 and 479.7 million for 2009.

During the year ended December 31, 2011, capital expenditures amounted to 260.7 million compared to 210.4 million and 170.1 million for the years ended December 31, 2010 and 2009, respectively.

In 2011, we upgraded our seismic vessels *Oceanic Phoenix* and *Oceanic Endeavour* and equipped the *Pacific Finder* (renamed *Elnusa Finder*) and the *Oceanic Sirius*, delivered in June and October 2011, respectively, with Sentinel streamers. In 2010, we equipped the *Viking II* and the *Oceanic Vega* with Sentinel streamers and we started the upgrade of the *Geowave Master* (now named *Oceanic Phoenix*) and *Geowave Endeavour* (now named *Oceanic Endeavour*). In 2009, we equipped the *Geowave Voyager*, delivered in January 2009, with Sentinel streamers. We also equipped some of our seismic vessels with the Sercel Nautilus positioning device and our shallow water crews were equipped with SeaRay systems.

We invested 163.3 million in our multi-client library during the year ended December 31, 2011, primarily in North America and Brazil. In 2010 and 2009, we invested 219.3 and 229.3 million, respectively, in our multi-client library, primarily in the Gulf of Mexico and Brazil. As of December 31, 2011, the net book value of our marine and land multi-client data library was 407.5 million compared to 451.2 million as of December 31, 2010 and 469.1 million as of December 31, 2009.

---

## **Table of Contents**

Proceeds from disposals of assets in 2011 corresponded mainly to the sale of our 2D multi-client marine library. Proceeds from sales of assets in 2010 corresponded mainly to the sale of the *Harmattan* and, in 2009, to the sale of the *Fohn* and *Orion*.

During the year ended December 31, 2009, we acquired the remaining 30% of Wavefield for 62 million as part of the mandatory offer launched in December 2008 and the squeeze-out process which closed in February 2009.

### ***Financing Activities***

Our net cash used in financing activities for the year ended December 31, 2011 was 115.3 million compared to 207.8 million in 2010 and net cash provided by financing activities of 167.0 million in 2009.

On January 27, 2011, we issued 12,949,640 bonds convertible into and/or exchangeable for new or existing shares of our company to be redeemed on January 1, 2016.

On March 1, 2011, we redeemed U.S.\$460 million aggregate principal amount of our U.S.\$530 million 7 1/2% Senior Notes due 2015 at a price of 103.75% plus accrued interest, and on June 30, 2011, we redeemed the remaining U.S.\$70 million aggregate principal amount of such notes at a price of 102.5% plus accrued interest. The first redemption was financed through the issuance of convertible bonds described above and the second redemption was financed through the issuance of Senior Notes described immediately below.

On May 31, 2011, we issued U.S.\$650 million principal amount of 6 1/2% Senior Notes due June 1, 2021. The senior notes were issued at a price of 96.45% of their principal amount, resulting in a yield of 7%. We used the net proceeds of the issuance to redeem the remainder of our U.S.\$530 million 7 1/2% Senior Notes due May 2015 and to repay in full the U.S.\$508 million outstanding under our term loan B facility.

On February 26, 2010, we repaid 35 million under our French revolving facility.

On June 9, 2009, we issued U.S.\$350 million principal amount of 9 1/2% Senior Notes due 2016. The notes were issued at a price of 97.0% of their principal amount, resulting in a yield of 10 1/8%. The senior notes will mature on May 15, 2016. We used the proceeds from the notes to replace cash used to repay U.S.\$100 million of our term loan B facility on May 21, 2009 and to fund the three quarterly U.S.\$27.5 million amortization payments due during the remainder of 2009 under our term loan B facility. We also used a portion of the net proceeds to repay U.S.\$50 million of indebtedness outstanding under our CGG Marine Resources Norge AS and CGGVeritas Services (Norway) AS (formerly Exploration Resources) credit facilities.

On October 30, 2009, we prepaid a further U.S.\$100 million of our term loan B facility.

### ***Financing Arrangements***

The following is a description of the terms of our material financing arrangements.

#### ***U.S. Revolving Facility***

On January 12, 2007, we entered into a U.S.\$1.115 billion senior secured credit agreement with Credit Suisse as administrative agent and collateral agent and the lenders party thereto, pursuant to which we borrowed a U.S.\$1.0 billion senior secured term loan B facility and obtained a U.S.\$115 million senior secured U.S. revolving facility (which revolving facility includes letter of credit and swingline subfacilities). Aggregate commitments under the U.S. revolving facility were increased to U.S.\$140 million on January 26, 2007. We repaid in full the term loan B facility on June 2, 2011. At December 31, 2011, the U.S. revolving facility was undrawn.

---

## Table of Contents

Proceeds of loans under the U.S. revolving facility may be used for the general corporate purposes of the borrower and other subsidiaries of CGGVeritas. Revolving loans may be made at any time prior to the final maturity of the U.S. revolving facility, of which a portion matured on January 12, 2012 and, following our amendment to the facility on December 15, 2011 (as described below), the remainder (U.S.\$79 million) matures on January 12, 2014.

The obligations of CGGVeritas Services Holding (U.S.) Inc. as borrower under the U.S. revolving facility are guaranteed by us and certain of our subsidiaries. We have pledged first-priority security in the shares of CGGVeritas Services Holding B.V., CGGVeritas Services Holding (U.S.) Inc. and certain of our other first-tier subsidiaries, as well as material first-tier subsidiaries of CGGVeritas Services Holding (U.S.) Inc. In addition, certain guarantors have provided first-priority security interests in certain of their respective tangible and intangible assets, including (without limitation) certain vessels, real property, mineral rights, deposit accounts and intellectual property. In the case of certain of our subsidiaries (most notably CGGVeritas Services Holding (U.S.) Inc. and certain U.S. and Canadian subsidiaries), the collateral may comprise substantially all of their respective assets.

Our obligations under, and the guarantees issued in respect of the French revolving facility described below rank *pari passu* in right of payment with the obligations under the guarantees issued in respect of the U.S. revolving credit facility. The lien priority and other creditors' rights issues in respect of the U.S. revolving credit facility are set forth in an intercreditor agreement that provides, among other things, that so long as any obligations are outstanding under the U.S. revolving credit facility, Credit Suisse (acting as agent for the U.S. revolving credit facility lenders as first lien lenders) will control all remedies and other action related to the collateral.

In addition, the U.S. revolving credit facility agreement contains affirmative and negative covenants that affect our ability, among other things, to borrow money, incur liens, dispose of assets and acquisitions and pay dividends or redeem shares. Events of default under the U.S. revolving credit facility include, among other things, payment and covenant breaches, insolvency of us or our subsidiaries, the occurrence of certain events constituting a change of control and certain defaults in respect of other material financial indebtedness.

The U.S. revolving credit facility agreement was amended on December 12, 2008, May 21, 2009, July 15, 2010 and December 15, 2011.

The first amendment provided us with greater flexibility with respect to (i) the acquisition of companies through a tender offer process, (ii) share buybacks and (iii) recapitalization of subsidiaries that are not guarantors under our credit agreements. In consideration of these amendments, we (i) repaid U.S.\$50 million of the term loan B on December 12, 2008 and (ii) increased the four quarterly installments due under the term loan facility in 2009 to U.S.\$27.5 million each from U.S.\$2.5 million each. Half of these additional payments (U.S.\$75 million) were set off against required cash sweep prepayments due in 2010.

The second amendment (i) increased our flexibility under the financial covenants by modifying the interest coverage and leverage ratios, (ii) included an additional covenant limiting capital expenditures, (iii) allowed us to dispose of additional seismic vessels in exchange for joint venture interests and (iv) increased our ability to incur 114 unsecured senior debt. In consideration of these additional amendments, we (i) repaid U.S.\$100 million of the term loan B on May 21, 2009 and (ii) increased the applicable margin for all borrowing under the U.S. revolving credit facility by 100 basis points.

We amended our U.S. revolving credit facility a third time on July 15, 2010 in order to provide us with additional flexibility under certain ratios and tests.

On December 15, 2011, we further amended our U.S. senior facilities agreement. This amendment extended the maturity of U.S.\$79 million out of the total U.S.\$140 million of available commitments by two years, from January 2012 to January 2014. In addition, this amendment (i) provided us with increased flexibility under

---

**Table of Contents**

certain covenants, including our ability to make acquisitions and investments, incur debt and pay distributions, (ii) removed restrictions on our ability to make capital expenditures, and (iii) redefined the financial covenants as follows:

a maximum ratio of total net financial debt to EBITDAS of 2.50:1 at the end of each quarter for the 12-month testing periods ending December 31, 2012 and 2013; and

and a minimum ratio of EBITDAS to total interest costs of 3.00:1 for at the end of each quarter for the 12-month testing periods ending December 31, 2012 and 2013.

Borrowings under U.S. revolving facility bear interest, at the option of the borrower, at the rate of adjusted LIBOR plus either 2.75% or 3.00% or the Alternate Base Rate plus either 1.75% or 2.00%, in each case depending on the corporate rating of CGGVeritas by Standard & Poor's and the corporate family rating of CGGVeritas by Moody's. The Alternate Base Rate is the higher of Credit Suisse's Prime Rate, the Federal Funds Effective Rate plus 1/2 of 1.0% and the adjusted LIBOR rate for a one-month interests period plus 1.0%.

The term loan B facility originally amortized in equal quarterly installments of U.S.\$2.5 million, with the balance payable on January 12, 2014. The December 2008 amendment increased the quarterly installments on March 31, June 30, September 30 and December 31, 2009 to U.S.\$27.5 million each. On June 29, 2007, we prepaid U.S.\$100 million of the term loan B, on December 12, 2008, we prepaid an additional U.S.\$50 million, on May 21, 2009, we prepaid an additional U.S.\$100 million and on October 30, 2009 we prepaid a further U.S.\$100 million. We repaid the remaining U.S.\$508 million outstanding under the term loan B on June 2, 2011 with the proceeds of our 6 1/2% Senior Notes due 2021.

*French Revolving Facility*

On February 7, 2007, we entered into a U.S.\$200 million French law revolving credit agreement with CGGVeritas as borrower, Natixis as administrative agent, Credit Suisse as collateral agent and the lenders party thereto. The proceeds of the French revolving facility may be drawn in dollars or in euros, and may be used for the general corporate purposes of the borrower. At December 31, 2011, our French revolving facility was undrawn.

Each cash advance under the French revolving facility must be repaid in full at the end of the relevant interest period of one month to twelve months and is available for redrawing during the availability period. All drawings under the French revolving facility must be repaid on the final maturity date on February 7, 2014.

Our obligations under the French revolving facility are guaranteed by the same guarantors that guarantee the U.S. senior facilities (including CGGVeritas Services Holding (U.S.) Inc.), and are secured by the same security interests granted to secure the obligations under the U.S. senior facilities.

The French revolving facility was amended on December 12, 2008, May 28, 2009, November 4, 2010 and December 15, 2011.

The first amendment provides us with greater flexibility with respect to (i) the acquisition of companies through a tender offer process, (ii) share buybacks and (iii) recapitalization of subsidiaries that are not guarantors under our credit agreements.

The second amendment (i) increased our flexibility under the financial covenants by modifying the interest coverage and leverage ratios, (ii) included an additional covenant limiting capital expenditures, (iii) allowed us to dispose of additional seismic vessels in exchange for joint venture interests and (iv) increased our ability to incur unsecured senior debt. In consideration of this amendment, we increased the applicable percentage for all borrowing under the French revolving facility by 100 basis points.



---

**Table of Contents**

The third amendment extended the maturity of the French revolving facility until February 2014 and revised the financial ratios as follows:

a maximum ratio of total net debt to EBITDAs of 2.50:1 at the end of each quarter for the 12-month testing period ending December 31, 2012; and 2.25:1 at the end of each quarter for the 12-month testing period ending December 31, 2013;

a minimum ratio of EBITDA to total interest costs of 3.50:1 at the end of each quarter for the 12-month testing period ended December 31, 2012; and 4.00:1 at the end of each quarter for the 12-month testing period ended December 31, 2013.

On December 15, 2011, we further amended the French revolving facility to provide additional flexibility under our non-financial covenants, in particular our ability to make acquisitions and investments, incur debt and pay distributions. In consideration of these amendments we agreed to cap the amount of total borrowings under the facility at U.S.\$100 million at any one time and revised the amount of capital expenditures we are permitted to make each year from the greater of U.S.\$750 million and 50% of EBITDA to the greater of U.S.\$600 million and 50% of EBITDA. As amended, the amount of capital expenditures subject to this test is reduced by the amount of our multi-client prefunding revenue.

The revolving loans (other than swingline loans) bear interest (computed on the basis of the actual number of days elapsed over 360) at a rate per annum equal to the aggregate of: (i) the applicable margin; (ii) EURIBOR in relation to loans made in euro and LIBOR in relation to loans made in dollars for the relevant interest period; and (iii) mandatory costs, if any.

The swingline loans bear interest (computed on the basis of the actual number of days elapsed over 360) at a rate per annum equal to the aggregate of: (i) the applicable margin; (ii) EONIA; and (ii) the mandatory cost (if any).

The applicable margin ranges from 3.00% to 3.25%, depending on the corporate rating of CGGVeritas by Standard & Poor's and the corporate family rating of CGGVeritas by Moody's.

*Other Debt Securities*

OCEANE convertible bonds

On January 27, 2011, we issued 12,949,640 bonds convertible into and/or exchangeable for new or existing shares of our company (OCEANEs) maturing on January 1, 2016. The OCEANE convertible bonds' nominal value was set at 27.80 per bond, representing an issue premium of 25% of the CGGVeritas' reference share price on the regulated market of NYSE Euronext in Paris. The OCEANE convertible bonds bear interest at a rate of 1.75% payable semi-annually in arrears on January 1 and July 1 of each year. The bonds entitle the holders to receive new and/or existing CGGVeritas shares at the ratio of one share per one bond, subject to adjustments. Under certain conditions, the bonds may be redeemed prior to maturity at our option. We used the net proceeds of the issuance to redeem U.S.\$460 million principal amount of our U.S.\$530 million 7 1/2% Senior Notes due 2015.

6 1/2% Senior Notes due 2021

On May 31, 2011 we issued U.S.\$650 million in aggregate principal amount of 6 1/2% Senior Notes due 2021. These notes are guaranteed on a senior basis by the same guarantors that guarantee our senior facilities (including CGGVeritas Services Holding (U.S.) Inc.). We used the proceeds from the notes to repay the U.S.\$508 million remaining outstanding under the term loan B facility of our U.S. senior facilities and to redeem the U.S.\$70 million principal amount remaining outstanding under our 7 1/2% Senior Notes due 2015. On December 8, 2011, these notes were exchanged for identical notes registered with the SEC.

**Table of Contents**9<sup>1</sup>/<sub>2</sub>% Senior Notes due 2016

On June 9, 2009 we issued U.S.\$350 million in aggregate principal amount of 9<sup>1</sup>/<sub>2</sub>% Senior Notes due 2016. These notes are guaranteed on a senior basis by the same guarantors that guarantee our senior facilities (including CGGVeritas Services Holding (U.S.) Inc.). We used the proceeds from the notes to replace cash used to repay U.S.\$100 million of our term loan B facility on May 21, 2009, and to fund the three quarterly U.S.\$27.5 million amortization payments due during the remainder of 2009 under the term loan B facility. The remaining amount was used to repay indebtedness of approximately U.S.\$50 million in respect of certain seismic vessels and to fund ongoing operations. On January 5, 2010, these notes were exchanged for identical notes registered with the SEC.

7<sup>3</sup>/<sub>4</sub>% Senior Notes due 2017

On February 9, 2007, we issued U.S.\$400 million in aggregate principal amount of 7<sup>3</sup>/<sub>4</sub>% Senior Notes due 2017. These notes are guaranteed on a senior basis by the same guarantors that guarantee our senior facilities (including CGGVeritas Services Holding (U.S.) Inc.). We used the net proceeds from the notes to repay part of the U.S.\$700 million outstanding under the bridge loan facility used to finance the Veritas acquisition.

*Other Credit Facilities*

## Geomar secured term loan facility

On April 30, 2007, Geomar entered into a U.S.\$25 million credit facility to refinance the purchase price of the seismic vessel *CGG Alizé*. The facility is secured by a pledge over the vessel. At December 31, 2011, the amount outstanding under this facility was U.S.\$9.0 million. This facility matures on June 5, 2014.

## Voyager AS (renamed Exploration Vessel Resources II AS) secured term loan facility

On January 13, 2011, Exploration Vessel Resources II entered into a U.S.\$45 million credit facility to refinance part of the existing debt of the company as of the date of its acquisition by the Group. The facility is secured by a pledge over the vessel and is subject to substantially the same covenants as the Term Loan B. At December 31, 2011, the amount outstanding under this facility was U.S.\$38.4 million. This facility matures on August 31, 2016.

***Financial Debt***

Gross financial debt was 1,501.0 million as of December 31, 2011, 1,485.6 million as of December 31, 2010 and 1,399.0 million as of December 31, 2009. Net financial debt was 1,090.3 million as of December 31, 2011, 1,149.7 million as of December 31, 2010, and 918.7 million as of December 31, 2009. The ratio of net debt to equity for the years ended December 31, 2011, 2010 and 2009 was 37%, 41% and 35%, respectively.

Gross financial debt is the amount of bank overdrafts, plus current portion of financial debt, plus financial debt, and net financial debt is gross financial debt less cash and cash equivalents. Net financial debt is presented as additional information because we understand that certain investors believe that netting cash against debt provides a clearer picture of the financial liability exposure. However, other companies may present net financial debt differently than we do. Net financial debt is not a measure of financial performance under IFRS and should not be considered as an alternative to any other measures of performance derived in accordance with IFRS.

**Table of Contents**

The following table presents a reconciliation of net financial debt to financing items of the balance sheet at December 31, 2011, 2010 and 2009:

	Year ended December 31,		
	2011	2010	2009
	(in millions of euros)		
Bank overdrafts	4.6	4.5	2.7
Current portion of financial debt	49.9	74.5	113.5
Financial debt	1,446.5	1,406.6	1,282.8
<b>Gross financial debt</b>	<b>1,501.0</b>	<b>1,485.6</b>	<b>1,399.0</b>
Less cash and cash equivalents	(410.7)	(335.9)	(480.3)
<b>Net financial debt</b>	<b>1,090.3</b>	<b>1,149.7</b>	<b>918.7</b>

**EBITDAS**

EBITDAS for the years ended December 31, 2011, 2010 and 2009 was 607.3 million, 596.2 million and 658.9 million, respectively.

EBITDAS is defined as earnings before interest, tax, depreciation, amortization and share-based compensation cost. Share-based compensation includes both stock options and shares issued under our share allocation plans. EBITDAS is presented as additional information because we understand that it is one measure used by certain investors to determine our operating cash flow and historical ability to meet debt service and capital expenditure requirements. However, other companies may present EBITDAS differently than we do. EBITDAS is not a measure of financial performance under IFRS and should not be considered as an alternative to cash flow from operating activities or as a measure of liquidity or an alternative to net income as indicators of our operating performance or any other measures of performance derived in accordance with IFRS.

The following table presents a reconciliation of EBITDAS to Net cash provided by operating activities, according to our cash-flow statement, for the periods indicated:

	Year ended December 31,		
	2011	2010	2009
	(in millions of euros)		
<b>EBITDAS</b>	<b>607.3</b>	<b>596.2</b>	<b>658.9</b>
Other financial income (loss)	0.6	8.5	(11.2)
Variance on Provisions	(15.3)	(19.7)	27.2
Net gain on disposal of fixed assets	(16.8)		3.2
Dividends received from affiliates	4.9	2.4	0.7
Other non-cash items	(14.7)	(13.3)	(4.0)
Income taxes paid	(67.4)	(73.2)	(74.2)
Change in trade accounts receivables	43.7	(69.0)	95.7
Change in inventories and work-in-progress	(7.7)	(26.8)	59.4
Change in other current assets	30.3	(18.9)	22.4
Change in trade accounts payables	(9.3)	84.2	(121.5)
Change on other current liabilities	34.6	(9.5)	(33.5)
Impact of changes in exchange rate	(8.8)	(10.9)	(6.3)
<b>Net cash provided by operating activities</b>	<b>581.4</b>	<b>450.0</b>	<b>616.8</b>

**Table of Contents****Free cash flow**

We define free cash flow as cash flow from operations minus (i) Total net capital expenditures and Investments in multi-client surveys set out in our consolidated statement of cash flows under Investing, and (ii) Financial expenses paid set out in our consolidated statement of cash flows under Financing.

Free cash flow amounted to U.S.\$94 million ( 67 million) in 2011 compared to a negative free cash flow of U.S.\$108 million ( 81 million) in 2010.

**Contractual obligations**

The following table sets forth our contractual obligations as of December 31, 2011:

	Payments due by period				Total
	Less than 1 year	2-3 years	4-5 years	After 5 years	
(in millions of euros)					
<b>Long-term debt obligations:</b>					
Repayments : fixed rates	2.9	4.4	613.6	780.2	1,401.1
Repayments : variables rate <sup>(a)</sup>	9.5	16.1	11.3	0.0	36.9
Bonds and facilities interest	89.9	178.5	155.3	153.1	576.8
<b>Total Long-term debt obligations</b>	<b>102.3</b>	<b>199.0</b>	<b>780.2</b>	<b>933.3</b>	<b>2,014.8</b>
<b>Finance leases:</b>					
Finance lease Obligations : fixed rates	13.2	21.7	21.2	54.5	110.6
Finance lease Obligations : variables rate <sup>(a)</sup>	18.5	2.9	0.0	0.0	21.4
<b>Total Finance lease obligations</b>	<b>31.7</b>	<b>24.6</b>	<b>21.2</b>	<b>54.5</b>	<b>132.0</b>
<b>Operating leases<sup>(b)</sup></b>					
Bareboat agreements	91.8	166.9	161.1	247.5	667.4
Other operating lease agreements	34.6	51.5	39.0	58.0	183.0
<b>Total Operating lease obligations</b>	<b>126.4</b>	<b>218.4</b>	<b>200.1</b>	<b>305.5</b>	<b>850.4</b>
<b>Total Contractual Obligations<sup>(c)</sup></b>	<b>260.4</b>	<b>442.0</b>	<b>1,001.5</b>	<b>1,293.3</b>	<b>2,997.2</b>

(a) Payments are based on the variable rates applicable as of December 31, 2011.

(b) Includes the five-year marine charter agreement signed with Bourbon for six new support vessels.

(c) Payments in foreign currencies are converted in euros at December 31, 2011 exchange rates.

**Off-Balance Sheet Arrangements**

We have not entered into any other off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

**Trend information****Currency Fluctuations**

## Edgar Filing: CGG VERITAS - Form 20-F

Certain changes in operating revenues set forth in U.S. dollars in this Annual Report on Form 20-F were derived by converting revenues recorded in euros at the average rate for the relevant period. Such information is presented in light of the fact that most of our revenues are denominated in U.S. dollars while our consolidated financial statements are presented in euros. Converted figures are presented only to assist in an understanding of our operating revenues but are not part of our reported financial statements and may not be indicative of changes in our actual or anticipated operating revenues.

---

**Table of Contents**

Our business faces foreign exchange risks because a large percentage of our revenues and cash receipts are denominated in U.S. dollars, while a significant portion of our operating expenses and income taxes accrue in euro and other currencies. Movements between the U.S. dollar and euro or other currencies may adversely affect our operating revenues and results. In the years ended December 31, 2011, 2010 and 2009, more than 90% of our operating revenues and approximately two-thirds of our operating expenses were denominated in currencies other than euros. These included U.S. dollars and, to a significantly lesser extent, Canadian dollars, Brazilian reais, Australian dollars, Norwegian kroner and British pounds. In addition, a significant portion of our revenues that were invoiced in euros related to contracts that were effectively priced in U.S. dollars, as the U.S. dollar often serves as the reference currency when bidding for contracts to provide geophysical services to the oil and gas industry.

Fluctuations in the exchange rate of the euro against such other currencies, particularly the U.S. dollar, have had in the past and will have in the future a significant effect upon our results of operations, which are reported in euros. For financial reporting purposes, depreciation of the U.S. dollar against the euro will negatively affect our reported results of operations since U.S. dollar-denominated earnings that are converted to euros are stated at a decreased value. Moreover, and in addition to the impact of the conversion of the U.S. dollar at a decreased value, since we participate in competitive bids for data acquisition contracts that are denominated in U.S. dollars, the depreciation of the U.S. dollar against the euro harms our competitive position against companies whose costs and expenses are denominated to a greater extent in U.S. dollars. While we attempt to reduce the risks associated with such exchange rate fluctuations through our hedging policy, we cannot assure you that we will maintain our profitability level or that fluctuations in the values of the currencies in which we operate will not materially adversely affect our future results of operations. As of the date of this annual report, we estimate our annual fixed expenses in euros to approximately 400 million and as a result, an unfavorable variation of U.S.\$0.1 in the average yearly exchange rate between the U.S. dollar and the euro would reduce our operating income and our shareholders' equity by approximately U.S.\$40 million.

As of December 31, 2011 we and our subsidiaries whose functional currency is the euro had dollar-denominated assets and liabilities of U.S.\$1,560 million and U.S.\$1,484 million, respectively. Our net exchange rate exposure was U.S.\$76 million before hedging and U.S.\$14 million after taking into account hedging arrangements of U.S.\$62 million. As a result of our compliance with IAS 12 Income Taxes, our results of operation are also exposed to the effect of exchange rate variations on our deferred tax amounts when the functional currency for an entity that owns an asset is not the same as the currency used for taxation purposes. This is the case for several Norwegian subsidiaries that own offshore assets (vessels and equipment) for which the functional currency is the U.S. dollar, whereas the taxable currency is the Norwegian kroner.

We attempt to match foreign currency revenues and expenses in order to balance our net position of receivables and payables denominated in foreign currencies. For example, charter costs for our vessels, as well as our most important computer hardware leases, are denominated in U.S. dollars. Nevertheless, during the past five years such dollar-denominated expenses have not equaled dollar-denominated revenues principally due to personnel costs payable in euros.

In addition, to be protected against the reduction in value of future foreign currency cash flows, we follow a policy of selling U.S. dollars forward at average contract maturity dates that we attempt to match with future net U.S. dollar cash flows (revenues less costs in U.S. dollars) expected from firm contract commitments, generally over the ensuing six months. At December 31, 2011, 2010 and 2009, we had U.S.\$157.8 million (with a euro equivalent-value of 122 million), U.S.\$128.1 million (with a euro equivalent-value of 95.9 million) and U.S.\$139.5 million (with a euro equivalent-value of 96.8 million), respectively, of notional amounts outstanding under euro/U.S. dollar forward exchange contracts and other foreign exchange currency hedging instruments.

We do not enter into forward foreign currency exchange contracts for trading purposes.

## **Table of Contents**

### ***Interest Rates***

Drawings under our credit facilities incur interest at variable rates that are reset at each interest period (generally between one and 60 months). As a result, our interest expenses vary in line with movements in short-term interest rates. However, a 96% of our debt consists of fixed-rate bonds, along with some fixed-rate finance leases and fixed-rate medium-term bank credit facilities with variable maturities. This debt is not exposed to interest rate fluctuations.

As of December 31, 2011, our variable-rate assets (net of liabilities) due in less than one year totaled 259 million.

Our variable interest rate indebtedness carried an average interest rate of 2.9% in 2011 and our investments and other financial assets earned interest at an average rate of 0.25%. As a result, a 1% increase in interest rates would reduce our income before tax and shareholders equity by 0.6 million, whereas a 1% decrease in interest rates would increase our income before tax and shareholders equity by 0.6 million.

### ***Inflation***

Inflation has not had a material effect on our results of operations during the periods presented. We operate in, and receive payments in the currencies of, certain countries with historically high levels of inflation, such as Mexico, Brazil and Venezuela. We attempt to limit such risk by, for example, indexing payments in the local currency against, principally, the U.S. dollar exchange rate at a certain date to account for inflation during the contract term.

### ***Income Taxes***

We conduct the majority of our activities outside of France and pay taxes on income earned or deemed profits in each foreign country pursuant to local tax rules and regulations.

We have significant tax losses carried forward that are available to offset future taxation on income earned in certain OECD countries. We recognize deferred tax assets when a history of recent taxable profit exists and when it is probable that future taxable profit will be available.

### ***Seasonality***

Our land and marine seismic acquisition activities are usually seasonal in nature as a consequence of weather conditions in the Northern Hemisphere and of the timing chosen by our principal clients to commit their annual exploration budget to specific projects. We have historically experienced higher levels of activity in our equipment manufacturing and multi-client operations in the fourth quarter as our clients seek to fully deploy annual budgeted capital.

## **Item 6: DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES** **Directors and Senior Management**

### ***Board of Directors***

Under French law, the Board of Directors determines our business strategy and monitors its implementation. Subject to the specific powers granted by the ordinary general shareholders meeting, the Board of Directors deals with any issues relating to our affairs. In particular, the Board of Directors prepares and presents our year-end accounts to our ordinary general shareholders meeting. Our Board of Directors consists of between six and fifteen members elected by our shareholders. Under French law, a director may be an individual or a legal entity for which an individual is appointed as permanent representative.

**Table of Contents**

Our *statuts* (memorandum and articles of association) provide that each director is elected for a four-year term by the ordinary general shareholders meeting. There is no obligation for directors to be French nationals. According to French corporate law, a physical person may simultaneously hold the office of director in no more than five *sociétés anonymes* whose registered offices are located on French territory, subject to certain exceptions. Pursuant to the Board's internal regulations each director is required to own at least 500 of our shares.

Directors are required to comply with applicable law and our *statuts*. Under French law, directors are responsible for actions taken by them that, *inter alia*, are contrary to the company's interests and may be held liable for such actions both individually and jointly with the other directors.

The following table sets forth the names of our current Directors, their positions, the dates of their initial appointment as Directors and the expiration dates of their current term.

Name	Position	Initially appointed	Term expires
Robert Brunck <sup>(1)(2)(7)</sup>	Chairman	1998	2012
Jean-Georges Malcor	Chief Executive Officer and Director	2011	2015
Olivier Appert <sup>(1)(3)(7)</sup>	Director	2003	2012
Loren Carroll <sup>(4)</sup>	Director	2007	2013
<i>(independent director)</i> <sup>(6)</sup>			
Rémi Dorval <sup>(3)(4)</sup>	Director	2005	2014
<i>(independent director)</i> <sup>(6)</sup>			
Jean Dunand <sup>(4)</sup>	Director	1999	2013
<i>(independent director)</i> <sup>(6)</sup>			
Gilberte Lombard <sup>(4)</sup>	Director	2011	2015
<i>(independent director)</i> <sup>(6)</sup>			
Hilde Myrberg <sup>(3)(5)</sup>	Director	2011	2015
<i>(independent director)</i> <sup>(6)</sup>			
Denis Ranque <sup>(1)(2)</sup>	Director	2010	2014
Robert Semmens <sup>(1)(3)</sup>	Director	2011	2015
Kathleen Sendall <sup>(2)(5)</sup>	Director	2010	2014
<i>(independent director)</i> <sup>(6)</sup>			
Daniel Valot <sup>(4)(7)</sup>	Director	2001	2012
<i>(independent director)</i> <sup>(6)</sup>			
David Work <sup>(2)(3)(5)</sup>	Director	2007	2013
<i>(independent director)</i> <sup>(6)</sup>			
Terence Young <sup>(2)(5)</sup>	Director	2007	2013
<i>(independent director)</i> <sup>(6)</sup>			

<sup>(1)</sup> Member of Strategic Committee.

<sup>(2)</sup> Member of Technology Committee.

<sup>(3)</sup> Member of Appointment-Remuneration Committee.

<sup>(4)</sup> Member of Audit Committee.

<sup>(5)</sup> Member of Health, Safety, Environment & Sustainable Development Committee.

<sup>(6)</sup> Independent director within the meaning of the governance code of the Association Française des Entreprises Privées - Mouvement des Entreprises de France. See Item 6: Directors, Senior Management and Employees Board Practices .

<sup>(7)</sup> Renewal of this term office will be proposed to the General Meeting to be held on May 10, 2012.

**Mr. Robert Brunck**, 62, has been the Chairman of our Board of Directors since May 1999 and was also Chief Executive officer until June 30, 2010. Mr. Brunck was Vice Chairman and President from September 1998



---

**Table of Contents**

to May 1999 and was President and Chief Operating Officer from February 1995 to September 1998. Mr. Brunck was Vice President of Administration and Development from 1991 to 1995 and Chief Financial Officer from 1989 to 1991. He is Chairman of the *Association pour la Recherche et le Développement des Méthodes et Processus Industriels*, Director of the *Centre Européen d'Éducation Permanente*, Director of the *Ecole Nationale Supérieure de Géologie*, Director of the Bureau of Geological and Mining Research, Director of the *Groupement des Entreprises Parapétrolières et Paragazières Association Française des Techniciens du Pétrole (GEP AFTP)*, and Director and a member of the Appointment and Remuneration Committee of Nexans.

**Mr. Jean-Georges Malcor**, 55, has been Chief Executive Officer of CGGVeritas since June 30, 2010 and a Director of CGGVeritas since May 4, 2011. From January 1, 2010 to June 30, 2010, he was President of CGGVeritas. Mr. Malcor began his career at the Thales group as an acoustic engineer (1983-1987) in the Underwater Activities division where he was in charge of hydrophone and geophone design and towed streamer programs. He then moved to Sydney-based Thomson Sintra Pacific Australia, becoming Managing Director of the company in 1990. Mr. Malcor became Director of Marketing & Communications (1991), then Director, Foreign Operations of Thomson Sintra Activités Sous-Marines (1993). In 1996, he was appointed Managing Director of Thomson Marconi Sonar Australia which was, in addition to its military activities, the lead developing company for the solid geophysical streamer. In 1999 he became the first Managing Director of the newly formed joint venture Australian Defense Industry. During this time he operated the Sydney based Woolloomooloo Shipyard (the largest dry dock in the southern hemisphere). In 2002, he became Senior Vice President, International Operations of Thales International. From 2004 to 2009, he was Senior Vice President in charge of the Naval Division, supervising all naval activities in Thales including ship design, building and maintenance. In January 2009, he became Senior Vice President in charge of the Aerospace Division. In June 2009, he moved to the position of Senior Vice President, Continental Europe, Turkey, Russia, Asia, Africa, Middle East, and Latin America. He also serves as Chairman and Chief Executive Officer of CGGVeritas Services SA, Chairman of the Supervisory Board of Sercel Holding SA, and a member of the Board of Directors of Ardisis FZCO and of the Arabian Geophysical and Surveying Company (ARGAS). He is also a Director and member of the Audit Committee of ST Microelectronics, a Director of the *Association des Centraliens* and of the *Fondation Villette Entreprises*.

**Mr. Olivier Appert**, 63, has been Chairman and Chief Executive Officer of IFP Energies Nouvelles (previously named the French Petroleum Institute (*Institut Français du Pétrole*, or IFP)) since April 2003. Mr. Appert was President for long-term co-operation and energy policy analysis within the International Energy Agency until October 1999. He is also a Director, a member of the Strategic Committee and a member of the Ethics & Governance Committee of Technip, Director of Storengy and Director of the *Institut de Physique du Globe de Paris*.

**Mr. Loren Carroll**, 68, joined our Board of Directors on January 12, 2007. Until that date, Mr. Carroll had been a Director of Veritas since 2003. Mr. Carroll is currently a financial and strategic business consultant. Until his retirement in April 2006, Mr. Carroll was President and Chief Executive Officer of M-I Swaco L.L.C. and was also Executive Vice President of Smith International, Inc. Mr. Carroll joined Smith International in December 1984 as Vice President and Chief Financial Officer. In January 1988, he was appointed Executive Vice President and Chief Financial Officer of Smith International and served in that capacity until March 1989. Mr. Carroll then rejoined Smith International in 1992 as Executive Vice President and Chief Financial Officer. Smith International held a 60% interest in M-I Swaco L.L.C. Until 2010, he was a Director of Smith International and a member of the Supervisory Board of CGGVeritas Services Holding BV. Mr. Carroll currently serves as a Director, a member of the Compensation Committee and Chairman of the Nominating & Corporate Governance Committee of Forest Oil Corporation and Director, Chairman of the Compensation Committee and a member of the Nominating and Corporate Governance Committee of KBR Inc.

**Mr. Rémi Dorval**, 61, is Executive Vice President of VINCI. Until 2010, he was Chief Executive Officer and Director of Soletanche-Bachy Entreprise, Senior Executive Vice President of Soletanche Freyssinet, Director, Chairman and Chief Executive Officer of Solétanche Bachy France, Chairman of Forsol, Chairman of

**Table of Contents**

SB 2007, a Director of SHPIC, Bachy Soletanche Holdings, SBUSA, Soldata Iberia and Nicholson. He was also a member of the Supervisory Board of CGGVeritas Services Holding BV. Mr. Dorval currently serves as Director of Soletanche Freyssinet.

**Mr. Jean Dunand**, 72, holds a Master's degree in Economics and is also a graduate of the Institute of Business Administration from the University of Paris. He started his career in the financial department of the *Compagnie Française des Pétroles*, now named TOTAL, where he stayed four years. Then, he held the operational positions of Chief Financial Officer and General Secretary mainly in upstream, but also in downstream, chemical and diversification of this group, both in France and abroad. Seconded to the *Institut Français du Pétrole* (French Petroleum Institute, now named *IFP Energies Nouvelles*), he also served as Financial and Legal Director of ISIS (financial holding of this group) from 1999 to December 2001.

**Ms. Gilberte Lombard**, 68, joined our Board of Directors on May 4, 2011. She held various financial positions within HSBC France (formerly Credit Commercial de France) from 1990 until her retirement in February 2011. She began her career as a financial analyst and then joined the M&A department of Credit Commercial de France. After Credit Commercial de France was privatized in 1987, she became the investor relations officer in charge of relationships with financial analysts and institutional investors. She also coordinated the information policy for both major bank shareholders and individual bank shareholders from 1987 to 2000. In 2000, she was appointed as head of financial transactions in charge of structuring and implementing sales, acquisitions and mergers for HSBC France (which by now had taken over Credit Commercial de France) and managing its industrial and financial portfolio. She was appointed as Secretary of the Board of Directors in 1990. She was also appointed as member of the board and the audit committee of several companies within the HSBC group in France. Ms. Lombard continues to serve as a member of the Supervisory Board, Chairman of the Audit Committee and member of the Remuneration Committee of Zodiac Aerospace, and Director, Chairman of the Remuneration Committee and member of the Audit Committee of Robertet SA, two Euronext Paris-listed companies. Ms. Lombard holds a masters degree in Economic Sciences and is a graduate of the INSEAD Advanced Management Program.

**Ms. Hilde Myrberg**, 54, joined our Board of Directors on May 4, 2011. She has been Senior Vice President of Corporate Governance & Compliance at Orkla ASA, a Norwegian company listed on the Oslo stock exchange and operating in the branded consumer goods, aluminum solutions, materials, renewable energy and financial investment sectors, since January 1, 2011, where she also serves as Secretary of the Board. From 2006 to 2011, she was Executive Vice President at Orkla ASA as the head of corporate functions, including HR, communication, legal and internal audit. Previously, she served as head of the markets sector, including activities ranging from platform to market oil & gas and the power and renewable energy business, at Hydro Oil & Energy until 2006. She has been a Director of Renewable Energy Corporation ASA since 2009 and a Director and Vice-Chairman of the Board of Petoro AS since 2006. She also serves as member of the Supervisory Board of Gjensidige Forsikring ASA and of Jotun AS. From 2006 to 2011, she served as board member of Borregaard AS, Sapa AB and Orkla Brands AS (Orkla subsidiaries). From 2005 to 2007, she was a board member of Kongsberg Automotive ASA. Ms. Myrberg holds a law degree from the University of Oslo and an MBA from INSEAD.

**Mr. Denis Ranque**, 60, joined our Board of Directors on May 5, 2010. He is a graduate of French *Ecole Polytechnique* and *Ecole des Mines*. He began his career at the French Ministry for Industry, where he held various positions in the energy sector, before joining the Thomson group in 1983 as planning director. In 1984, he became director of space business, then, from 1986, director of the division's microwave tubes department. Mr. Denis Ranque took over as chief executive of this company in 1989. In April 1992, he was appointed Chairman and Chief Executive Officer of Thomson Sintra Activités Sous-Marines. Four years later, he became Chief Executive Officer of Thomson Marconi Sonar, the sonar systems joint venture set up by Thomson CSF and GEC-Marconi. From January 1998 to May 2009, Mr. Denis Ranque was appointed Chairman and Chief Executive Officer of Thomson-CSF group, now called Thalès. Since October 2001, he has been Chairman of the Board of the *Ecole Supérieure des Mines de Paris* and since September 2002, he has been Chairman of the *Cercle de l'Industrie*, an association which unites the France's biggest industrial companies. He has also been a member of the Board of Directors and member of the Financial Statements Committee of Saint-Gobain since

---

**Table of Contents**

2003. Since 2009, he has been a member of the Board of Directors and Chairman of the Audit Committee of CMA-CGM. He is also a member of the Board of Directors of the *Fonds Stratégique d Investissement (FSI)*, a member of the Board of Directors of the *Centre National de la Recherche Scientifique (CNRS)*, Chairman of the Board of SCILAB Enterprises and serves as Chairman of the Board and a member of the Remuneration, Nominations and Governance Committee of Technicolor, and Chairman of the *Association Nationale Recherche Technologie* and *Chairman of the Fondation Paris-Tech*.

**Mr. Robert Semmens**, 54, is an independent consultant, a private investor and adjunct professor of finance at the Leonard N. Stern School of Business (New York University). He was co-founder and General Partner of The Beacon Group LLC from 1993 to 2001. Until 2010, Mr. Semmens was a member of the Supervisory Board of Sercel Holding S.A. He currently serves as Director of MicroPharma Ltd., a Director of Bronco Holdings LLC, and Advisory Director of Sense Networks Inc.

**Ms. Kathleen Sendall**, 59, joined our Board of Directors on May 5, 2010. She is a graduate of Queen's university (Ontario) and of the Western Ontario Business School. She began her career as a junior process engineer for Petro-Canada in 1978, and then was a project engineer for compressor station design and construction at Nova, an Alberta corporation for two years. Mrs. Sendall then held various positions within Petro-Canada between 1984 and 1996. From 1996 to 2000, she was Vice President Engineering & Technology, and was then Vice President, Western Canada Development & Operations until 2002. Mrs. Sendall was appointed Vice President, North America Natural Gas of Petro-Data from 2002 to 2009. She was also a Governor on the Board of Governors of the University of Calgary until 2010. Mrs. Sendall is an active member of several associations among which the Association of Professional Engineers, Geologists and Geophysicists of Alberta and the Society of Petroleum Engineers. She is a member of the Board of Directors and Vice-Chairman of Alberta Innovates Energy & Environment Solutions, and she also serves as a Director of ENMAX, Michaele Jean Legacy Foundation and Canadian Center for Energy Information.

**Mr. Daniel Valot**, 67, was Chairman and Chief Executive Officer of Technip from September 1999 until April 2007. Mr. Valot was President of Total Exploration and Production, and was a member of the Total Group Executive Committee from 1995 to 1999. Until 2010, he was a member of the Supervisory Board of CGGVeritas Services Holding B.V. Mr. Valot is a Director, a member of the Strategy Committee, the Audit Committee, the Compensation & Nomination Committee and the Risk Committee of SCOR and a Director of Dietswell.

**Mr. David Work**, 66, joined our Board of Directors on January 12, 2007. Until that date, Mr. Work had been a Director of Veritas since 2004. Mr. Work is currently an oil and gas industry consultant. From 2001 until October 2003, he served as the Chairman of Energy Virtual Partners, Inc., a privately-held company engaged in the business of managing under-resourced oil and gas properties. For more than five years prior to his retirement from BP Amoco in October 2000, he served in various management capacities with Amoco and BP Amoco, including Group Vice President of exploration and, finally, as Regional President in the United States. Mr. Work currently also serves as a Director of Cody Resources LLC, and is Director and a member of the Compensation Committee of WPX Energy Inc.

**Mr. Terence Young**, 65, joined our Board of Directors on January 12, 2007. Until that date, Mr. Young had been a Director of Veritas since 2005. Mr. Young is currently a professor and head of the Department of Geophysics at the Colorado School of Mines and has served as such since 2000. From 1983 until 2000, Mr. Young was employed by Mobil Research and Development Corporation in a variety of roles, the last of which was as a visiting scholar at the Institute for Statistics and Its Applications, Carnegie Mellon University. From 1982 to 1983, he served as a research geophysicist with Compagnie Générale de Géophysique, from 1979 to 1982, he served as assistant professor, Colorado School of Mines, and from 1969 to 1974 was a pilot and flight instructor in the United States Navy.

#### *Executive Officers*

Under French law and our current *statuts*, the Chief Executive Officer has full executive authority to manage our affairs. The Board of Directors has the power to appoint and remove the Chief Executive Officer at

**Table of Contents**

any time. Under French law and our current *statuts*, the Chief Executive Officer has full power to act on our behalf and to represent us in dealings with third parties, subject only to (i) the corporate purpose of the Company, (ii) those powers expressly reserved by law to the Board of Directors or our shareholders and (iii) limitations that the Board of Directors may resolve, such limitations not being binding on third parties. The Chief Executive Officer determines and is responsible for the implementation of the goals, strategies and budgets for our different businesses, which are reviewed and monitored by the Board of Directors. In accordance with French corporate law, our current *statuts* provide for either the election by the Board of Directors of one person to assume the position of Chairman and Chief Executive Officer or the division of such functions between two different persons. In its session of June 30, 2010, the Board of Directors decided to separate the roles of Chairman and Chief Executive Officer. Since that date, Mr. Brunck has held the position of Chairman and Mr. Malcor has held the position of Chief Executive Officer, with both positions to be held until the General Meeting convened to approve the financial statements for the financial year ended December 31, 2011. Our current *statuts* provide also that the Board of Directors may appoint up to five Senior Executive Vice-Presidents (*Directeurs Généraux Délégués*) upon proposal of the Chief Executive Officer, whether or not this person is also the Chairman of the Board. Stéphane-Paul Frydman and Pascal Rouiller were appointed to this position by our Board of Directors on February 29, 2012.

The following table sets forth the names of our current Executive Officers who serve as members of our Executive Committee, their current positions with us and the first dates as of which they served as our Executive Officers.

Name	Current position	Executive officer since
Jean-Georges Malcor	Chief Executive Officer	2010
Stéphane-Paul Frydman	Senior Executive Vice President	2012
	Executive Vice President, Finance	2003
Pascal Rouiller	Senior Executive Vice President	2012
	Executive Vice President, Equipment Division	1997
Stéphan Midenet	Executive Vice President, Land Division	2010
Colin Murdoch	Executive Vice President, Processing, Imaging & Reservoir Division	2010
Luc Schlumberger	Executive Vice President, Multi-Client & New Ventures Division	2010
Benoît Ribadeau-Dumas	Executive Vice President, Marine Division	2010
Gérard Chambovet	Executive Vice President, General Secretary	1995
Pascal Rosset	Executive Vice President, Human Resources	2011
Thierry Le Roux	Executive Vice President, Business Development	1995
Thierry Brizard	Executive Vice President, Technology	2010
Lionel Lhommet	Executive Vice President, Geomarkets & Global Marketing	2010
Eva Rudin	Executive Vice President, Global Operational Excellence	2011
Dominique Robert	Executive Vice President, Special Advisor to the Chief Executive Officer	2010

**Mr. Stéphane-Paul Frydman**, 48, was appointed Senior Executive Vice President on February 29, 2012. He is also Executive Vice President, Finance since July 1, 2010 and Group Chief Financial Officer since January 2007. Before that time, he had been Group Controller, Treasurer and Deputy Chief Financial Officer since September 2005, Deputy Chief Financial Officer of the CGG group since January 2004 and Vice President in charge of corporate financial affairs reporting to the Chief Financial Officer since December 2002. Prior to joining CGG, Mr. Frydman was an Investor Officer of Butler Capital Partners, a private equity firm, from April 2000 to November 2002, and Industrial Advisor to the French Minister of the Economy and Finances from June 1997 to March 2000. Mr. Frydman is a Director of Sercel SA, CGGVeritas Services SA, CGGVeritas Services Holding (U.S.) Inc. and CGGVeritas Eidesvik Ship Management AS. He is a member of the Supervisory Board of Sercel Holding.

**Mr. Pascal Rouiller**, 58, was appointed Senior Executive Vice President on February 29, 2012. He is also Executive Vice President, Equipment Division since July 1, 2010 and Chief Executive Officer of Sercel since

**Table of Contents**

September 2005 after having served as Chief Operating Officer of the Sercel group since December 1999. Mr. Rouiller was Vice President of our Product segment from October 1995 to December 1999 and Vice President for the Asia-Pacific region from May 1992 to September 1995. Mr. Rouiller is Chairman of the Management Board of Sercel Holding, Chairman of the Board of Directors of Sercel (Beijing) Technological Services Co. Ltd. and of Sercel Australia Pty. Ltd., President of Sercel Canada Ltd., Vice-President of Sercel-GRC, member of the Board of Directors of Hebei Sercel Junfeng Geophysical Prospecting Equipment Co. Ltd. and of Sercel Singapore Private Ltd., and Chief Executive Officer of Sercel Inc.

**Mr. Stéphan Midenet**, 39, has been Executive Vice President, Land Division since July 1, 2010. He began his career at CGGVeritas as a field engineer in the Land Acquisition Division (1998-2002), with various assignments worldwide. In 2003, he assumed the role of Operations Supervisor for land seismic operations in Indonesia before becoming Managing Director of the subsidiary in charge of these activities. In 2005, he was named Vice President, Sales & Marketing for the Eastern Hemisphere Land Division. This was followed in 2008 by his appointment as Senior Vice President, Sales & Marketing for the Asia Pacific region. In 2009, Mr. Midenet became Senior Vice President of the Land Acquisition division for the Europe, Africa, Middle-East and Asia Pacific regions. He is currently Director of Ardiseis FZCO and Managing Director of CGGVeritas Services Holding (Latin America) BV.

**Mr. Colin Murdoch**, 56, has been Executive Vice President, Processing, Imaging & Reservoir Division since July 1, 2010. He began his career in the industry as data processing geophysicist with Seiscom Delta in Dublin, while also spending time as an Assistant Party Chief on a field crew in Indonesia. He joined McKinley Smith, a geological/geophysical consulting firm based in Ireland, where he was engaged in interpretation of seismic data and prospect generation. In 1983, he joined Digicon Geophysical Corp. as a Data Processing Manager in Caracas, and he moved to Houston two years after in order to run a dedicated processing center for UNOCAL. In 1985, He joined Entropic Geophysical, based in California, as Land Processing Manager. In 1987, he returned to Digicon Geophysical Corp. where he held a number of positions in Data Processing, including Manager for North and South America. In 1994 he became Vice President of Data Processing & Technology. Mr. Murdoch has held a variety of senior roles through the evolution of the organization to what is today CGGVeritas. He is more particularly Director and Officer of CGGVeritas Land (U.S.) Inc., CGGVeritas Services Holding (U.S.) Inc., CGGVeritas Services (U.S.) Inc., Veritas Investment Inc., Veritas Geophysical (Mexico) LLC, Viking Maritime Inc., Director of Alitheia Resources Inc. and Chairman of Veritas Geoservices Ltd SA.

**Mr. Luc Schlumberger**, 55, has been Executive Vice President, Multi-Client & New Ventures Division since July 1, 2010. Mr. Schlumberger is a geologist by background and holds a master's degree from Montpellier University, France. He has over 29 years of experience in the exploration & production industry. He started with CGGVeritas in 1981 as a Processing Geophysicist and has held various senior positions throughout the world within CGGVeritas. Prior to his assignment as Executive Vice President for Latin America, Mr. Schlumberger led the Multi-Client Data Library business line as well as the Processing & Imaging business unit in the Western Hemisphere. He is currently Director of CGGVeritas Services de Mexico, S.A. de C.V., Director and Officer of Alitheia Resources Inc., Officer of CGGVeritas Land (U.S.) Inc., CGGVeritas Services (U.S.) Inc., Veritas Geophysical III and Veritas Geophysical IV, and Director of Viking Maritime Inc. and Veritas Investments Inc.

**Mr. Benoît Ribadeau-Dumas**, 39, has been Executive Vice President, Marine Division since September 1, 2010. He began his career as a civil servant in the French Public Administration. He held a variety of roles including two years (2002-2004) as a member of the French Prime Minister's private staff, in charge of administrative reforms and decentralization. In 2004, he joined the aerospace and defense group Thalès as Corporate Development Director, in charge of group strategy, mergers and acquisitions and relationships with shareholders. He then was appointed as Head of two operational business lines, first as Managing Director of the Air Traffic Management Systems in 2007, and, since 2009, as Chief Executive Officer of Thalès Underwater Systems. Mr. Ribadeau-Dumas joined CGGVeritas in his current role in September 2010. He serves as Director of CGGVeritas Services (Norway) AS, CGGVeritas Eidesvik Ship Management AS and CGG Marine Resources Norge AS, and as Managing Director of CGGVeritas Marine B.V.

**Table of Contents**

**Mr. Gérard Chambovet**, 59, has been Executive Vice President, General Secretary since July 1, 2010. Before that date, he had been Senior Executive Vice President Human Resources, Communication, HSE and Audit since January 2007. Previously, he had been Senior Executive Vice President, Technology, Planning & Control and Communication since January 2005 and Senior Executive Vice President of our Services segment since October 1998. Mr. Chambovet was Executive Vice President of our Acquisition Product line from March 1995 to October 1998 and was Manager of our data processing center in Massy, France from 1987 to 1995. Mr. Chambovet is a Director of Sercel S.A. and member of the Supervisory Board of Sercel Holding S.A. He also serves as Director of CGGVeritas Services SA and CGGVeritas Services Holding (U.S.) Inc.

**Mr. Pascal Rosset**, 56, has been Executive Vice President, Human Resources since January 1, 2012. He started his career with CGG in 1980 in the field as a geophysicist and then Party Chief in the Middle East and North Africa before taking country and regional operational responsibilities for Land in the Far East (Indonesia, Singapore, China). From 1991 to 2004, his responsibilities covered data processing and data management leading to the position of Vice-President Eastern Hemisphere and later as Head of Resources, Research & Industrialization for the Processing Business Unit (Malaysia, Norway, France, UK). In 2005, he became the joint Managing Director of CGG International and CGG University. From the end of 2007 until 2011 he occupied several senior HR Vice President positions including Head of HR Services and Group SVP People Development. He is Director of Viking Global Offshore Limited and Managing Director of CGGVeritas International SA.

**Mr. Thierry Le Roux**, 58, has been the Executive Vice President, Business Development since October 2010. Before that date, he had been Advisor to the Chief Executive Officer and in charge of the Group's Business Development and Technology since 2009. He was President and Chief Operating Officer from January 2007 to 2009, Group President and Chief Financial Officer from September 2005 to January 2007, and Senior Executive Vice President of our Equipment segment since October 1998. Mr. Le Roux was Executive Vice President of CGG's Geophysical Equipment operations from March 1995 to October 1998. He was Business Development Manager from 1992 to 1995 and Far East Manager from 1984 to 1992. Mr. Le Roux is Chairman of the Board of Sercel SA, Sercel Inc., Hebei Sercel-Jungfeng Geophysical Prospecting Equipment Co. Ltd, Sercel England, Geosensor Corp., Interactive Networks Technologies Inc. and Opseis International Sales Inc., as well as Chairman of the Supervisory Board of Tronic's Microsystems SA, Vice-Chairman and member of the Supervisory Board of Sercel Holding, member of the Supervisory Board of CGGVeritas Technology Services (Beijing) Co. Ltd. and a Director of Sercel Singapore Private Ltd., STX Corp., CGGVeritas Services Holding (U.S.) Inc., Cybernetix SA and PTSC CGGV Geophysical Survey Company Ltd.

**Mr. Thierry Brizard**, 58, has been Executive Vice President, Technology since October 1, 2010. He joined the Underwater Activities Division of Thalès in 1980 as Hardware/Software Engineering charge of the 2040 sonar display for the Royal Navy. At the end of 1987, he moved to Sydney to found Thomson Sintra Pacific. Returning to France in 1991, he took the lead of the Digital Electronic Department of Thomson Marconi Sonar. In 1995, he was promoted Director of the Signal Processing Common Efficiency Team (CET) across the whole of Thalès. In April 1997, he moved to the Land & Joint Division and was seconded as Technical Director to the Midsco international Joint-Venture in the United States to complete the development of the Link16 Low Volume Terminal Mids. In 2000, created his own company, XIOS, to exploit one of his patents and developed a low cost navigation system for divers. In 2001, he returned to the Business Group Air Defense (BGAD) of Thalès as Vice President, Research & Development in 2002. In 2004, his area of responsibility extended to the perimeter of the Air Systems Division. In November 2005, he moved to the United States to work as Senior Technical Director of the ThalèsRaytheonSystems' Air Command and Control Systems Programs (ACCS LOC1). During his last years of service for Thalès, he was appointed Vice President, Research & Development for the Thalès Naval and Land Divisions. Mr. Brizard joined CGGVeritas in October 2010 in his current position.

**Mr. Lionel Lhommet**, 49, has been Executive Vice President, Geomarkets & Global Marketing since July 1, 2010. He began his career in 1985 at CGG as Party Chief for land acquisition seismic crews in Africa. In 1988, he became Key Account Manager within 3Com, a Californian start-up specialized in computer networking. In 1996, he joined Petrosystems as Vice President, Sales & Operations, a CGG subsidiary dedicated to G&G interpretation software development. In 1998 he was appointed a Director of Flagship LLC, a Houston-based

**Table of Contents**

reservoir characterization software provider. In 2001, he founded his own company, PROGNOST Systems, where he developed artificial intelligence systems for downstream industries. In 2003, he re-joined CGGVeritas as Vice President, Business Development and R&D for Land & Shallow Water seismic acquisition. Following the merger with Veritas, M. Lhommet became Executive Vice President in charge of the Land Acquisition Product Line and then in 2009 he became responsible for the management of all CGGVeritas Services for Europe, Africa, Middle-East and Asia Pacific regions. He is currently Chairman of the Board of Compagnie Générale de Géophysique (Nigeria) Ltd, Director of ARGAS, VSfusion LLC, Veritas Caspian LLP and General Manager of CGG Explo.

**Ms. Eva Rudin**, 43, has been Executive Vice President, Global Operations Excellence (GOE) since January 1, 2012. After many years in the automotive industry, working for companies such as Volvo, Renault and Nissan and in different roles covering fields such as maintenance, process engineering, supply chain and sourcing, Ms. Rudin joined CGGVeritas in 2009 as Senior Vice President Global Sourcing. In 2010, the supply chain was added to her scope of responsibility. She now heads the GOE Function of CGGVeritas, which covers Business IT, Global Sourcing & Supply Chain, Quality & Performance, Trade Compliance and Best Practice.

**Mr. Dominique Robert**, 60, has been Executive Vice President, Global Operational Excellence since July 1, 2010. After having worked four years in Algeria for the Ministry of Public Works (roads and airstrips), he joined CGGVeritas in 1979 as Party Chief for a land seismic crew in Indonesia. He has been assigned abroad in different countries during his career and held many different managerial positions in CGGVeritas, mainly in the Asia Pacific region from 1985 to 2000. In 2000, he came back to France and worked as Chief Executive Officer of Flagship, a CGGVeritas software division. In 2001, Mr. Robert was appointed Executive Vice President, Land & Shallow Water seismic data acquisition and in 2007, following the merger with Veritas, he became Executive Vice President of the Europe, Africa, Middle-East region. He holds the positions of Managing Director of CGGVeritas Services Holding BV and Deputy Chief Executive Officer of CGGVeritas Services SA.

**Compensation**

The aggregate compensation of our Executive Officers, including the Chief Executive Officer, includes both a fixed element and a bonus element. The bonus due to the general management for a given fiscal year is paid during the first semester of the next fiscal year. As a result of this bonus, the aggregate compensation may substantially vary from one year to another.

The aggregate compensation of our Executive Officers (including the Chief Executive Officer) paid in fiscal year 2011 was 6,844,882 including the benefits in kind but excluding Directors' fees.

Chairman of the Board and Chief Executive Officer

*Chairman of the Board*

The aggregate compensation paid to Mr. Brunck, Chairman of the Board, in fiscal year 2011 was 275,000 of fixed compensation plus 6,840 of benefits in kind (company car). The variable part of the Chairman's compensation in 2011 was based on the achievement of personal objectives related to his missions described below. His target amount was set at 50% of his fixed remuneration. Mr. Brunck was paid his 2011 bonus of 103,125 in March 2012. Finally, Mr. Brunck received 49,997.56 in his capacity as Director in 2011.

Starting in fiscal year 2012, Mr. Brunck will no longer receive variable compensation or Directors' fees.

*Chief Executive Officer*

The aggregate compensation paid to Mr. Malcor, Chief Executive Officer, in fiscal year 2011 was 600,000 of fixed compensation plus 6,840 of benefits in kind (company car). For fiscal year 2011, Mr. Malcor's bonus depended upon the achievement of personal objectives (representing one third of the bonus) and financial objectives (representing two thirds of the bonus). His target amount is set at 100% of his fixed remuneration. The

**Table of Contents**

financial objectives related to the Group revenues (weighted 30% of the total financial objectives), operating income (weighted 35%), EBITDAS less capital expenditures (weighted 20%) and Group free cash flow (weighted 15%). Mr. Malcor was paid his 2011 bonus of 608,502 in March 2012.

The aggregate compensation of Mr. Brunck, Chairman of the Board, and of Mr. Jean-Georges Malcor, Chief Executive Officer, over the last two years are set forth below:

<b>Robert Brunck</b>	<b>2010</b>		<b>2011</b>	
	<b>Amounts earned</b>	<b>Amounts paid</b>	<b>Amounts earned</b>	<b>Amounts paid</b>
<b>Chairman of the Board of Directors</b>				
Fixed compensation	447,500.00	447,500.00	275,000	275,000
Variable compensation	139,738.00	0.00 <sup>(1)</sup>	103,125.00 <sup>(2)</sup>	139,738 <sup>(3)</sup>
Exceptional compensation	N/A	N/A	N/A	N/A
Retirement Indemnity	N/A	370,450.00	N/A	N/A
Director's fees	47,946.24	50,762.99 <sup>(4)</sup>	49,997.56 <sup>(5)</sup>	47,946.24 <sup>(6)</sup>
Benefits in kind	6,840.00	6,840.00	6,840.00	6,840.00
<b>Total</b>	<b>642,024.24</b>	<b>875,552.99</b>	<b>434,962.56</b>	<b>469,524.24</b>

(1) The Executive Officers and the other members of the Executive Committee decided to forego their 2009 bonus.

(2) Paid in January 2010 for fiscal year 2009.

(3) Paid in March 2011 for fiscal year 2010.

(4) Paid in March 2012 for fiscal year 2011.

(5) Paid in January 2011 for fiscal year 2010.

(6) Paid in January 2012 for fiscal year 2011.

<b>Jean-Georges Malcor</b>	<b>2010</b>		<b>2011</b>	
	<b>Amounts earned</b>	<b>Amounts paid</b>	<b>Amounts earned</b>	<b>Amounts paid</b>
<b>Chief Executive Officer</b>				
Fixed compensation	500,000.00	500,000.00	600,000.00	600,000.00
Variable compensation	169,850.00	N/A	608,502.00 <sup>(1)</sup>	169,850.00 <sup>(2)</sup>
Indemnity paid upon termination of the employment agreement	22,500.00	22,500.00	N/A	N/A
Exceptional compensation	N/A	N/A	N/A	N/A
Director's fees	N/A	N/A	N/A	N/A
Benefits in kind	6,270.00	6,270.00	6,840.00	6,840.00
<b>Total</b>	<b>698,620.00</b>	<b>528,770.00</b>	<b>1,215,342.00</b>	<b>776,690.00</b>

(1) Paid in March 2011 for fiscal year 2010.

(2) Paid in March 2012 for fiscal year 2011.

Non-compete agreement with Mr. Malcor

On June 30, 2010, the Board of Directors approved, in accordance with procedures applicable to related party agreements and provided for by section L.225-38 et seq. of the French Commercial Code, the signature of a non-compete agreement between the Company and Mr. Malcor. This agreement was ratified by the general meeting of shareholders of May 4, 2011.

This non-compete agreement applies to any geophysical data acquisition, processing or interpretation services or the provision of equipment or products designed for the acquisition, processing or interpretation of geophysical data. Mr. Malcor has agreed that he will not contribute to



## Edgar Filing: CGG VERITAS - Form 20-F

projects or activities in the same field as those in which he was involved at CGGVeritas for period of 18 months starting on the date on which he leaves the Group.

---

## **Table of Contents**

In consideration for this undertaking, Mr. Malcor will be entitled to receive compensation corresponding to 100% of his annual reference compensation as defined in the indemnity letter described below upon leaving the Group.

### *Special termination indemnity for Mr. Malcor*

On December 19, 2008, the Board of Directors decided to refer to the recommendations on the compensation of executive officers of listed companies that were published by the AFEP-MEDEF on October 6, 2008 and incorporated into the AFEP-MEDEF consolidated code of corporate governance of December 2008.

Pursuant to this code, the Board of Directors decided, upon the appointment of Mr. Malcor as Chief Executive Officer of the Company on June 30, 2010, to terminate his employment agreement. In addition, the Board of Directors resolved that Mr. Malcor would be entitled to receive a special termination indemnity upon his termination as Chief Executive Officer, only in case of forced departure relating to a change of control or change of strategy. Pursuant to article L.225-42-1 of the French Commercial Code, the payment of this special termination indemnity remains subject to the achievement of the following conditions related to the Company's performance.

The global indemnity amount shall not exceed 200% of the reference annual compensation (as defined below) and shall be equal to the difference between:

a gross amount of 200% of the gross fixed compensation paid by the Company to Mr. Malcor during the twelve-month period preceding his departure date, to which is added the annual average of the variable compensation paid by the Company to Mr. Malcor (i) with respect to fiscal years closed over the 36-month period preceding his departure date or (ii) over the full years of presence with the Company starting from January 1, 2010, in the event that he leaves the Group less than 36-months after he joined the Company (the Reference Annual Compensation), and

any sum to which Mr. Malcor may be entitled as a result of such termination, including any sums to be paid further to the application of his non-competition commitment.

Pursuant to article L.225-42-1 of the French Commercial Code, the payment of this special termination indemnity remains subject to the achievement of the following conditions related to the Company's performance:

The average, over the 60 trading days preceding the departure date, of the ratio between the CGGVeritas ADS price over the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>) index shall equal at least two-third of the same average ratio (i) four years before or (ii) as of January 1, 2010 if Mr. Malcor leaves the Group before his fourth year;

The average, over the 60 trading days preceding the departure date, of the ratio between the CGGVeritas share price over SBF 120 index shall equal at least two-third of the same average ratio (i) four years before or (ii) as of January 1, 2010 if Mr. Malcor leaves the Group before his fourth year;

The average margin of the Group EBITDAS (i) over the 4 years preceding the departure date or (ii) over a period starting as from January 1, 2010 if Mr. Malcor leaves the Group before his fourth year, shall be at least 25%.

Payment of the full amount of the special termination indemnity is subject to the fulfillment of two conditions out of three. In case only one condition is fulfilled, then Mr. Malcor will be entitled to receive only 50% of the special termination indemnity.

Finally, pursuant to article L.225-42-1 of the French Commercial Code, the Board of Directors will verify prior to the payment of the special severance payment (i) that the performance conditions described above are duly fulfilled and (ii) that the payment of the special termination indemnity complies with the corporate governance code applicable at the date of departure.

Mr. Brunck does not benefit from any indemnity letter.



---

**Table of Contents**

*General benefits plan*

On June 30, 2010, the Board of Directors approved, the extension to Mr. Brunck and Mr. Malcor of the benefit of the Group's general benefits plan applicable to all employees. This agreement was ratified by the general meeting of shareholders of May 4, 2011.

*Individual benefits plan*

On June 30, 2010, the Board of Directors approved the execution of a supplementary individual benefits plan for Mr. Malcor and authorized the Company to pay an initial amount of 43,000. This agreement was ratified by the general meeting of shareholders of May 4, 2011. This plan took effect in September 2011, for a period ending on December 31, 2014. In addition, on November 30, 2011, the Board of Directors authorized the final execution of this agreement as per the final conditions proposed by the insurer and authorized the Company to pay an additional amount of 40,000 for the duration of the agreement.

*Individual insurance covering loss of employment*

The Board of Directors authorized, on June 30, 2010, the Company to subscribe with GSC Gan, as from July 1, 2010, an individual insurance policy covering loss of employment, in favor of Mr. Malcor. The annual subscription fee payable by the Company amounts to 10,000 for 2011. This insurance provides for the payment of a maximum of 13% of his 2011 target compensation (corresponding to 160,037), for a duration of twelve months. This agreement was ratified by the general meeting of shareholders of May 4, 2011.

*Supplemental retirement plan:*

A supplemental retirement plan for the members of the Executive Committee and the Management Board of Sercel Holding (whom we refer to herein as the Beneficiaries) was implemented on January 1, 2005. The Chairman of the Board and the Chief Executive Officer benefit from this plan. It is an additive defined benefit plan with a cap. Accruals are acquired per year of services, with a ceiling of 20 years.

Further, to participate in the plan, the Beneficiaries shall comply with the following main cumulative conditions:

have liquidated their social security pension and all possible other rights to pensions,

have accrued at least 5 years of service as a member of the Executive Committee of the Group until 55 years of age, and

end their professional career when leaving the Company.

As of December 31, 2011, the Company's commitment under the supplemental retirement plan corresponds for the Chief Executive Officer to an annual pension equal to 15% of his annual 2011 target compensation.

The aggregate present benefit value of this supplemental plan as of December 31, 2011 was 8,590,862 of which 1,185,924 has been recorded as an expense for fiscal year 2011. Of these amounts, the portions relating to the Chief Executive Officer were 1,960,523 and 182,704 respectively.

**Senior Executive Vice-Presidents**

*Compensation*

Mr. Stéphane-Paul Frydman:

The Board of Directors agreed that Mr. Frydman will carry out his duties as Executive Vice-President Finance pursuant to his current employment agreement. As such, his fixed compensation amounts to 320,000 plus 4,800 in benefits in kind (company car). His 2011 variable compensation amounted to 194,952.

The Board of Directors has set his fixed remuneration as Senior Executive Vice-President at 80,000, as from March 1, 2012.



---

## **Table of Contents**

His variable compensation as Senior Executive Vice-President, for fiscal year 2012 will be determined by the Board of Directors, in consultation with the Appointment-Remuneration Committee, in the first quarter 2013 based on the 2012 financial statements. The variable compensation is conditioned on meeting certain individual objectives (representing half of the variable compensation) and financial objectives (representing half of the variable compensation).

Mr. Pascal Rouiller:

The Board of Directors agreed that Mr. Rouiller will carry out his duties as Executive Vice-President Equipment pursuant to his current employment agreement. As such, his fixed compensation amounts to 320,000 plus 5,280 in benefits in kind (company car). His 2011 variable compensation amounted to 251,013.

The Board of Directors has set his fixed remuneration as Senior Executive Vice-President at 80,000, as from March 1, 2012.

His variable compensation as Senior Executive Vice-President, for fiscal year 2012 will be determined by the Board of Directors, in consultation with the Appointment-Remuneration Committee, in the first quarter 2013 based on the 2012 financial statements. The variable compensation is conditioned on meeting certain individual objectives (representing half of the variable compensation) and financial objectives (representing half of the variable compensation).

### *Special termination indemnity for Messrs. Frydman and Rouiller:*

The benefits granted to Messrs. Frydman and Rouiller in case of their departure from the Group include the following:

Messrs. Frydman and Rouiller (the Beneficiaries ) will benefit from a special termination indemnity in the event of a forced departure relating to a change of control or of strategy. The amount of this indemnity is set at the difference between (i) a gross amount equal to 200% of their reference annual compensation and (ii) any amounts to which they may claim entitlement in case of departure from the Group, particularly, the indemnities that could be paid in connection with their non-compete agreement referred to below. The global amount of such special termination indemnity shall not exceed 200% of the reference annual compensation.

In accordance with Article L. 225-42-1 of the French Commercial Code, payment of the special termination indemnity is subject to performance conditions to be assessed with regard to the Company's performance based on the fulfillment of at least two of the following three objectives:

The average of the ratio between the CGGVeritas ADS price over the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>) index over the 60 trading days preceding the date of departure shall equal at least two-third of the same average ratio assessed over the same period of 60 trading days 4 years before the Beneficiary leaves the Group;

The average of the ratio between the CGGVeritas share price over SBF 120 index over the 60 trading days preceding the date of departure shall equal at least two-third of the same average ratio assessed over the same period of 60 trading days 4 years before the Beneficiary leaves the Group;

The average Group EBITDAS margin over the 4 years preceding the date of departure shall be at least 25%.

Should only one of the objectives be fulfilled, then the Beneficiary would only be entitled to 50% of his special termination indemnity.

### *Non-compete agreement*

On February 29, 2012, the Board of Directors approved a non-compete agreement to be entered into between the Company and Messrs. Frydman and Rouiller.

**Table of Contents**

This non-compete agreement applies to any geophysical data acquisition, processing or interpretation services or the provision of equipment or products designed for the acquisition, processing or interpretation of geophysical data. Messrs. Frydman and Rouiller have agreed that they will not contribute to projects or activities in the same field as those in which they were involved at CGGVeritas for period of 18 months starting on the date on which they leave the Group.

In consideration of this non-compete agreement, Messrs. Frydman or Rouiller would receive compensation corresponding to 100% of their annual reference remuneration as defined in their protection letter.

*Collective benefit plan*

On February 29, 2012, the Board of Directors approved the application of the collective benefit plan applicable to all the employees of the Group, to Messrs. Frydman and Rouiller.

*Supplementary retirement plan*

On February 29, 2012, the Board of Directors authorized the Company to apply the benefit of the supplementary retirement plan implemented on January 1, 2005 and applicable in particular to the members of the Group's Executive Committee, to Messrs. Frydman and Rouiller.

**Directors**

Directors as a group received aggregate compensation of 730,000 in January 2012 for services provided in their capacity as Directors during fiscal year 2011. No amounts were set aside or accrued by us or our subsidiaries to provide pension, retirement or similar benefits to Directors. Directors' service contracts do not provide for benefits upon termination.

The following table sets forth the amounts CGGVeritas and its subsidiaries paid to Directors of CGGVeritas, in their capacity as Directors, for the year ended December 31, 2011:

Name	Amount paid to CGGVeritas directors by the Company or one of its subsidiaries for fiscal
	year 2011
Robert Brunck	49,997.56
Jean-Georges Malcor <sup>(1)</sup>	N/A
Olivier Appert	44,379.32
Loren Carroll	62,297.52
Rémi Dorval	58,302.40
Jean Dunand	52,254.78
Anders Farestveit <sup>(2)</sup>	17,490.36
Yves Lesage <sup>(2)</sup>	19,463.31
Gilberte Lombard <sup>(1)</sup>	26,557.11
Hilde Myrberg <sup>(1)</sup>	30,624.74
Denis Ranque	44,969.15
Robert F. Semmens	70,989.01
Kathleen Sendall	69,667.07
Daniel Valot	40,314.61
David Work	78,974.70
Terence Young	63,718.36

<sup>(1)</sup> Appointed as Director of the Company on May 4, 2011.

<sup>(2)</sup> Resigned from his duties of Director of the Company on May 4, 2011.





---

## **Table of Contents**

As of March 31, 2012, our Directors and Executive Officers held an aggregate of 349,567 shares and 2,350 ADS of CGGVeritas. As of March 31, 2012, our Directors and Executive Officers held options to purchase an aggregate of 3,590,385 ordinary shares and a maximum of 229,650 performance shares. As of March 31, 2012, none of our Directors and Executive Officers held, on an individual basis, shares and options representing 1% or more of our outstanding capital.

### **Board Practices**

In accordance with the Board of Directors' resolution of December 19, 2008, the Company complies with the AFEP-MEDEF code of corporate governance for listed companies (the AFEP-MEDEF Code). Pursuant to the standards set forth in the AFEP-MEDEF Code, we believe that nine of our Directors do not have any relationship with CGGVeritas, the Group or its management that could impair their freedom of judgment and thus qualify as independent. Those Directors are Mr. Carroll, Mr. Dorval, Mr. Dunand, Mr. Valot, Mr. Work, Mr. Young, Ms. Sendall, Ms. Lombard and Ms. Myrberg. We also believe that the previous position of Mr. Carroll, Mr. Work and Mr. Young as members of the Board of Directors of Veritas do not impair their independence. Our Board of Directors reviews, on an annual basis, the qualification of Directors as independent pursuant to the AFEP-MEDEF Code.

Pursuant to article L.225-35 of the French Commercial Code, the Board of Directors determines the broad lines of the Company's business and sees to their implementation. Subject to the powers expressly granted to shareholders' meetings, and within the limits of the Company's corporate purpose, the Board of Directors reviews any question relating to the conduct of the Company's business and decides all pertinent issues through its deliberations.

The Board of Directors carries out any controls and checks it deems appropriate.

In 2011, the Board of Directors of the Company met eight times. The average attendance rate of Directors at these meetings was 89%.

During these meetings, the Board approved the Company's annual financial statements and the 2010 consolidated annual financial statements and reviewed the quarterly and half-year results for fiscal year 2011. The 2012 pre-budget was also reviewed by the Board.

The Board also convened the general meeting of shareholders held on May 4, 2011 and approved the reports and resolutions to be submitted to shareholders' approval.

The Board of Directors approved the details of the compensation of the Chairman of the Board and the Chief Executive Officer along with the terms and conditions of the protection letter of the Chief Executive Officer. This letter, as amended by a decision of the Board of Directors of February 24, 2011, was ratified by the annual shareholders' meeting held on May 4, 2011.

The Board also decided to implement (i) a stock-options plan for certain employees of the Group and a specific plan for the Chairman of the Board and the Chief Executive Officer, subject to performance conditions in conformity with the AFEP-MEDEF Code, and (ii) a performance shares plan for certain employees, the Chairman of the Board and the Chief Executive Officer.

With respect to financing operations, the Board also approved (i) a convertible bond issue in an aggregate amount of 360 million, and (ii) a senior notes issue in an aggregate amount of U.S.\$650 million.

Finally, the Board also approved the partnership between the Company and Spectrum ASA.

**Table of Contents**

***Appointment-Remuneration Committee:***

**Responsibilities:**

The responsibilities of this Committee in terms of propositions and/or recommendations to be made to the Board of Directors relate to:

1. the compensation to be paid to the senior executive officers ( *mandataires sociaux* ) to be appointed from time to time, including the procedures for setting the variable part thereof and the grant of possible benefits in kind;
2. all provisions relative to the retirement of the senior executive officers considered as *mandataires sociaux*;
3. for the *mandataires sociaux*, the deferred elements of the compensation packages (pension, severance payment) to be submitted to the shareholders' annual meeting;
4. the evaluation of financial consequences on the Company's financial statements of all compensation elements for *mandataires sociaux*;
5. the contracts between the Company and a *mandataire social*;
6. the possible candidacies for filling Director's positions, positions as senior executive officer considered as *mandataire social* or positions as a member of a Board Committee.
7. the periodical review of the independence of Board members;
8. the Directors' fees level and their allocation rules;
9. the realization of capital increases reserved for the employees; and
10. the installation of equity-based compensation plans.

In addition to the assignments described above, this Committee is also in charge of:

1. examining the compensation of Executive Committee members and its evolution;
2. carrying out performance evaluations of the Board and its committees;
3. carrying out performance evaluations of the Chairman of the Board and the Chief Executive Officer;

## Edgar Filing: CGG VERITAS - Form 20-F

4. reviewing the succession planning process for Executive Committee members;
5. ensuring compliance of compensation and benefits policies with all applicable regulations;
6. reviewing compensation data and other related information to be publicly disclosed by the Company in its annual reports and any other reports to be issued pursuant to applicable laws and regulations; and
7. approving the policy and process of verifying and reimbursing expenses of the members of the Board and the *mandataires sociaux*. The Committee may also consider any question submitted to it by the Chairman in connection with one of the matters mentioned above.

The work of the Committee is recorded in its minutes. In addition, the Chairman of the Committee submits a report to the Board of Directors whenever the Board of Directors must make a decision relating to the appointment of a senior executive officer or a remuneration issue.

The Board of Directors reviews the operating procedures of the Appointment-Remuneration Committee during its annual review of its own performance as well as every three years when performing a more thorough review through individual interviews with an external consultant.

---

## **Table of Contents**

### **Composition:**

The members of the Committee are as follows:

Rémi Dorval (Chairman)<sup>(\*)</sup>

Olivier Appert

Robert Semmens

David Work<sup>(\*)</sup>

Hilde Myrberg<sup>(\*)</sup>

<sup>(\*)</sup> independent director

In compliance with the AFEP-MEDEF Code, this Committee is composed of a majority of independent Directors.

### **Activity in 2011:**

In 2011, this Committee met nine times. The average meeting attendance rate was 92%.

During these meetings, the Committee examined, inter alia, (i) the remuneration of the Chairman of the Board and the Chief Executive Officer and their 2011 objectives, (ii) the revision of the protection letter for the Chief Executive Officer, (iii) the amount of the Directors' fees and their allocation rules, (iv) the policy governing allocation of performance shares and stock-options within the Group, (v) the report on the qualification of Directors as independent prior to its submission to the Board of Directors, (vi) the paragraphs in the annual reports (including the management report, *Document de Référence* and annual report on Form 20-F) regarding the compensation of the *mandataires sociaux*, (vii) the 2011 bonus plans, (viii) the succession planning of Executive Committee members, (ix) the implementation of the evaluation process for the Board, the Chairman and the Chief Executive Officer, (x) the organisation of the annual Board seminar, (xi) the review of the internal rules and regulation of the Board of Directors, (xii) the appointment of two new Directors, and (xiii) the composition of Board committees.

In addition, the Company complies with the provisions of the AFEP-MEDEF Code relating to the remuneration of the executive officers with the following exception relating to the supplementary pension plan: in some particular circumstances (in the event of the death, incapacity or dismissal of the beneficiary, except in case of gross or serious misconduct, after reaching the age of 55 and not followed by any other professional activity) a senior executive officer may still benefit from the supplementary pension plan in effect even though he is no longer an employee of the Group. Taking into consideration circular no. 105/2004 issued by the French Social Security Department on March 8, 2004, these exceptions are maintained with regard to the following elements:

the current supplementary pension plan may continue to apply on a uniform and identical basis to all the other executive officers also benefiting from this plan without further consequences; and

given the seniority of certain beneficiaries of this plan and in light of their service over the years, it would be unjustified for them to lose the benefit of the pension commitments made by the Company solely because of a departure arising under very special circumstances (death, disability) or occurring shortly before retirement, making it difficult to find further employment (dismissal without gross and serious misconduct, after the age of 55, not followed by any other professional activity).

### **Strategic Planning Committee:**

#### **Responsibilities:**

The responsibilities of the Strategic Planning Committee relate to the following:

business plans and budgets,

**Table of Contents**

strategic options for the Company,

organic development, and

projects related to financial transactions.

This Committee customarily meets before each Board meeting and more often if necessary.

**Composition:**

The members of the Committee are as follows:

Robert Brunck (Chairman)

Olivier Appert

Denis Ranque

Robert Semmens

**Activity in 2011:**

During 2011, the Strategic Planning Committee met seven times. The average attendance rate of committee members was 82%.

During these meetings, the Committee was consulted regarding, inter alia, (i) the 2011-2012 forecasts, (ii) the joint ventures with Elnusa, Geotech and Petrovietnam, (iii) the OCEANE convertible bonds issued in an aggregate principal amount of 360 million and senior notes issued in an aggregate principal amount of U.S.\$650 million, (iv) the 2012 pre-budget, and (v) the amendments to the French and U.S. revolving credit facilities.

***HSE/Sustainable Development Committee***

**Responsibilities:**

The responsibilities of this Committee are the following:

to determine the main areas for improvement of HSE performance on an ongoing basis and to assess on a regular basis the progress made by comparison with other companies in the industry;

to review the high-rated risks, established or not (HPI), to examine their causes and the related mitigation actions;

to monitor any major HSE crisis and the related mitigation actions; and

to keep the Board of Directors informed of the measures taken by the Group in relation to HSE as well as the Group's initiatives with respect to sustainable development.

**Composition:**

The members of the Committee are as follows:

Kathleen Sendall (Chairman)<sup>(\*)</sup>

Terence Young<sup>(\*)</sup>

Hilde Myrberg<sup>(\*)</sup>

David Work<sup>(\*)</sup>

<sup>(\*)</sup> independent director

## **Table of Contents**

### **Activity in 2011:**

In 2011, the Committee met three times. The average attendance rate of committee members was 92%.

During these meetings, the HSE management system and organization and any corporate responsibility actions were presented to the Committee in order for the committee to make its own recommendations. The Committee also reviewed the HSE good practices implemented within the Group. The outcome of the HSE audits and high potential incidents were presented, as well as the related action plans. The Committee was also kept informed of developments affecting our operating sites and the evacuation procedures that were implemented due to the events in North Africa and the Middle-East. Committee members also participated in a HSE visit of one of our sites and determined the 2012 HSE objectives.

### **Audit Committee:**

#### **Responsibilities:**

Pursuant to its Charter, the Audit Committee is responsible for assisting the Board of Directors and preparing its assignments.

In the scope of the duties of the Audit Committee as defined by law, the Audit Committee shall, *inter alia*:

- a. monitor the financial reporting process;
- b. monitor the effectiveness of the Company's internal control and risk management systems;
- c. monitor the statutory audit of the annual and consolidated accounts; and
- d. review and monitor the independence of the statutory auditors.

In this scope, the Committee is specifically in charge of:

#### **Assignments relating to accounts and financial information:**

reviewing and discussing with management and the statutory auditors the following items:

the consistency and appropriateness of the accounting methods adopted for establishment of the corporate and consolidated financial statements,

the consolidation perimeter,

the draft annual and consolidated accounts, semi-annual and quarterly consolidated financial statements along with their notes, and especially off-balance sheet arrangements,

the quality, comprehensiveness, accuracy and sincerity of the financial statements,



hearing the statutory auditors report on their review, including any comments and suggestions they may have made in the scope of their audit,

examining the draft press releases related to the Group financial results and proposing any modifications deemed necessary,

reviewing the annual report on Form 20-F and the *Document de Référence*,

raising any financial and accounting question that it considers important.

Assignments relating to risk management and internal control:

reviewing with management (i) the Company's policy on risk management, (ii) the analysis made by the Company of its major risks (risk mapping) and (iii) the programs put in place to monitor them,

**Table of Contents**

reviewing with management (i) the role and responsibilities with respect to internal control; (ii) the principles and rules of internal control defined by the Company on its general internal control environment (governance, ethics, delegation of authority, information systems) and on the key processes (treasury, purchase, closing of the accounts, fixed assets), (iii) internal control quality as perceived by the Company and (iv) significant deficiencies, if any, identified by the Company or reported by the external auditors (article L.823-16 of the French Commercial Code) as well as the corrective actions put into place,

reviewing (i) the Report of the Chairman on Board of Directors Composition, Preparation and Organization of the Board of Directors Work, and Internal Control and Risk Management and (ii) the conclusions of the external auditors on this report.

Assignments relating to internal audit:

reviewing with management:

the organization and operation of the internal audit,

the activities and in particular the missions proposed in the scope of the internal audit plan approved by management and presented to the Committee,

results of internal audit reviews.

Assignments relating to external audit:

reviewing with the statutory auditors their annual audit plan,

hearing, if necessary, the statutory auditors without management being present,

monitoring the procedure for selection of the auditors and issuing a recommendation to the Board of Directors on the statutory auditors whose appointment is to be submitted to the shareholders meeting,

monitoring the independence of the statutory auditors on annual basis,

discussing, possibly individually, the audit work with the statutory auditors and management and reviewing regularly with management the auditors fees. Within the framework of a procedure that it determines annually, the Committee has sole authority to authorize performance by the auditors and/or by the members of their network of services not directly relating to their auditing mission,

Other assignments:

## Edgar Filing: CGG VERITAS - Form 20-F

reviewing with management and, when appropriate, the external auditors the transactions that bind, directly or indirectly, the Company and its executive officers,

handling, anonymously, any feedback concerning a possible internal control problem or any problem of an accounting and financial nature,

Finally, the Company's management must report to the Committee any suspected fraud of a significant amount so that the Committee may proceed with any verification that it deems appropriate.

The following persons attend the Committee meetings: the Chairman of the Board of Directors, the members of the Executive Committee, including the Chief Executive Officer and the Chief Financial Officer, the auditors, the Senior Vice-President Internal Audit, and any person whom the Committee wishes to hear.

Minutes of each meeting are taken. Furthermore, the Chairman of the Committee reports on its work at every Board of Directors' meeting. This report is recorded in the minutes of the Board of Directors' meeting.

---

## Table of Contents

### Composition:

The members of the Committee are as follows:

Jean Dunand (Chairman)<sup>(\*)</sup>

Loren Carroll<sup>(\*)</sup>

Rémi Dorval<sup>(\*)</sup>

Gilberte Lombard <sup>(\*)</sup>

Daniel Valot<sup>(\*)</sup>

<sup>(\*)</sup> independent director

Mr. Dunand was appointed as Financial Expert by the Board of Directors in 2003 pursuant to section 407 of the Sarbanes Oxley Act.

Both Mr. Dunand and Mr. Carroll qualify as independent members of the Committee with specific competences in financial and accounting matters pursuant to article L.823-19 of the French Commercial Code.

During the years he spent at the Total Group, Mr. Dunand developed an extensive financial and accounting expertise through the various positions he has held, especially as CFO of several Total subsidiaries located in countries where CGGVeritas also operates. Mr. Carroll, through the positions he held over 15 years within Arthur Andersen, developed an extensive accounting and auditing practice, especially for public companies. He then became Chief Financial Officer of Smith International, a supplier of products and services to the oil and gas, petrochemical, and other industrial markets. Within Smith International, he was in charge of investor relations, supervision of financial activities of Public Corporation (NYSE) and merger, acquisitions and strategic development. Both Mr. Dunand and Mr. Carroll are therefore very familiar with the financial and accounting specificities of our industrial sector and those linked to our international activities.

In compliance with the provisions of the AFEP-MEDEF Code, two thirds of the Committee is composed of independent directors. The committee has relied upon the report issued by the French *Autorité des Marchés Financiers* on audit committees.

### Activity in 2011:

In 2011, the Committee met nine times with an average attendance rate of committee members of 93%.

During these meetings, the Committee reviewed draft versions of the annual consolidated financial statements for 2010, and the consolidated financial statements for the first quarter, the first semester and the third quarter of 2011. It also reviewed the 2011 forecasts. The Committee also provided to the Board its recommendations concerning these financial statements. The Committee reviewed the Chairman's report on Board of Directors' Composition, Preparation and Organization of the Board of Directors' Work and on Internal Control and Risk Management, the annual report on Form 20-F and the *Document de Référence*.

The Committee also met with the external auditors without management present. During this meeting, the auditors and the Committee had an overview of the audit work performed for the closing of the 2010 financial statements.

The Committee also approves and implements, on an annual basis, a review plan of the main risks of the Group and of certain specific risks that the Committee determines.

The Committee examined the work to be performed by the statutory auditors in the scope of their audit on the 2011 financial statements and approved their fee estimates for this work. In compliance with the Committee's procedures for its prior approval of non-audit services provided by the members of our auditors' network, the Committee reviewed such services performed in 2011 and approved them as necessary.



## **Table of Contents**

The Committee reviewed the activities of the internal audit team, which acts according to a plan established by the Executive Committee and presented to the Committee. This plan is established in light of perceived operational and financial risks with the goal of systematically reviewing the major entities of each business division every three years.

The Committee was also kept regularly informed on the assessment of internal control procedures pursuant to section 404 of the Sarbanes-Oxley Act and of the results thereof. The external auditors and the internal audit presented their respective conclusions.

The Committee also followed the evolution of the Group's legal perimeter and, in particular the rationalization program for the Group's legal structures.

In addition, at year end the Committee carried out a detailed review of the multi-client library and was regularly kept informed of the Group's situation with respect to cash, debt, cash flow forecasts and the Group's hedging policy.

### ***Technology Committee:***

#### **Responsibilities:**

The Committee is responsible for assisting the Board in reviewing:

the technology offer from competitors and other oil service companies,

the Group's development strategy in reservoir imaging, including seismic and opportunities in other oilfield services and products,

the main development programs in services and equipment,

research and development ( R&D ) budgets, and

the protection of intellectual property.

The Technology Committee usually meets twice a year.

#### **Composition:**

The members of the Committee are as follows:

Robert Brunck (Chairman)

Denis Ranque

Kathleen Sendall<sup>(\*)</sup>

David Work<sup>(\*)</sup>

Terence Young<sup>(\*)</sup>

(\*) independent director

Activity in 2011:

In 2011, the Committee met twice with an attendance rate of 80%.

During these meetings, the Committee reviewed the strategic actions plans in technology and intellectual property, the latest technological developments of the Group's divisions, and certain specific technological projects.

---

## **Table of Contents**

### **Employees**

As of December 31, 2011, we had 7,198 permanent employees worldwide as well as several thousand auxiliary field personnel on temporary contracts. Of the total number of permanent employees, 4,425 were involved in the Services segment, 2,175 in the Equipment segment and 50 worked at the Corporate level. We have never experienced a material work stoppage and consider our relations with our employees to be good. We permanently employ more than 5,000 technicians and persons holding engineering degrees and have developed a significant in-house training program.

Our workforce of permanent employees decreased from 7,264 at December 31, 2010 to 7,198 at December 31, 2011. The net decrease of 66 people is the result of a careful policy to replace leavers selectively within the context of our Performance Action Plan and promote people internally, in particular for our Marine onboard staff, and some selective and limited headcount reductions. The net decrease is principally the result of a net decrease of 26 people in the Marine division and a net decrease of 19 people in the Land division, mainly field staff in both cases. The Support function headcount was been reduced by 7 people. No collective departure plan was implemented in 2011.

In 2011 we continued our recruiting efforts to respond to turnover (839 leavers), with the objective of not only replacing leavers but also reinforcing our competences in various domains. We hired a total of 773 permanent employees worldwide. The competences required for our activities continues to evolve, requiring more demanding selection criteria in the hiring process. This is particularly true for our Processing, Imaging & Reservoir division, with a strong focus on candidates with Ph. Ds.

The Company continues to implement targeted recruitment programs, including for geophysicists for our Processing, Imaging & Reservoir centers, specialists for our research & development departments in all divisions, maritime specialists in Marine and high-potential managers in Land. To cope with this demand, we are reinforcing our partnership and collaboration with the Universities, Schools and Professional Associations education initiatives (SEG, EAGE). Through our own CGGVeritas University we also maintain our efforts to develop managerial and expert training programs adapted to our needs, as well as individual soft skills training and HSE and technical training.

In accordance with French law each of our French subsidiaries (representing a total of 1,822 employees) has an Employee Representation Committee (*Comité d'Entreprise*) consisting of representatives elected by our employees. The Employee Representation Committee reports regularly to employees, represents employees in relations with management, is consulted on significant matters relating to employee working conditions and is regularly informed of economic developments.

Similarly a Personnel Commission of elected employees is in place for our field and expatriate staff employed by CGGVeritas International, set up under the specifications of the Swiss *Code des Obligations*.

In Singapore, 37 people were represented under the collective agreement as of December 31, 2011. This represents 18% of our Singapore workforce. These employees are represented by the Singapore Industrial and Services Employees Union (SISEU), an affiliated union of the National Trade Union Congress.

Offshore crews on Norwegian contracts (74 people) are under a collective agreement. Salaries and other conditions are negotiated with their shop steward and a representative is nominated to represent the union. For office employees (40 people) there are two different agreements in place, but salaries are decided individually. For all of Norway, excluding Sercel, 45% of the personnel are covered under collective agreements.

### **Share Ownership**

In accordance with French law, we are authorized annually by our shareholders at the extraordinary general meeting to issue ordinary shares for sale to our employees and employees of our affiliates who elect to participate



**Table of Contents**

in our Group Employee Savings Plan (*Plan d'Epargne Entreprise Groupe*) instituted in 1997 (the Group Plan). Our shareholders, at the extraordinary general meeting held on May 4, 2011, renewed our authorization to issue up to 6,250,000 ordinary shares in sales to employees and affiliates who participate in the Group Plan. We may offer ordinary shares pursuant to the Group Plan at a price neither higher than the average market price for the 20 business days preceding the date on which the Board of Directors sets the commencement date for the offering, nor lower than 80% of such average market price. As of December 31, 2011, Group employees held 81,000 shares corresponding to 0.05% of the share capital and 0.10% of the voting rights.

*Stock-options*

Pursuant to resolutions adopted by our Board of Directors on May 11, 2006, March 23, 2007, March 14, 2008, March 16, 2009, January 6, 2010, March 22, 2010, October 21, 2010 and March 24, 2011, our Board of Directors has granted options to certain of our employees, executive officers and Directors to subscribe for an aggregate of 7,889,263 ordinary shares taking into account the various adjustment made to the number of stock options issued pursuant to French law. Options with respect to 7,048,387 ordinary shares remained outstanding as of March 31, 2012. The following table sets forth certain information relating to these stock options plans as of March 31, 2012:

<b>Date of Board of Directors resolution</b>	<b>Options granted<sup>(1)</sup></b>	<b>Number of beneficiaries</b>	<b>Options exercised (ordinary shares) at March 31, 2012</b>	<b>Options outstanding at March 31, 2012</b>	<b>Exercise price per ordinary share<sup>(1)</sup></b>	<b>Expiration date</b>
May 11, 2006 <sup>(4)(2)</sup>	1,012,500	171	2,500	951,095	26.26	May 10, 2014
March 23, 2007 <sup>(5)(3)</sup>	1,308,750	145	2,000	1,164,000	30.4	March 23, 2015
March 14, 2008 <sup>(6)(3)</sup>	1,188,500	130	0	1,079,340	32.57	March 14, 2016
March 16, 2009 <sup>(7)(3)</sup>	1,327,000	149	261,116	972,544	8.82	March 16, 2017
January 6, 2010 <sup>(8)(3)</sup>	220,000	1	0	220,000	14.71	January 6, 2018
March 22, 2010 <sup>(9)(3)</sup>	1,548,150	339	37,295	1,440,918	19.44	March 22, 2018
October 21, 2010 <sup>(10)(3)</sup>	120,000	3	0	120,000	16.887	October 21, 2018
March 24, 2011 <sup>(11)(3)</sup>	1,164,363	366	0	1,100,490	25.48	March 24, 2019
<b>Total</b>	<b>7,889,263</b>		<b>302,911</b>	<b>7,048,387</b>		

<sup>(1)</sup> Pursuant to French law and the terms of the stock option plans, the numbers of options initially granted and the exercise price were adjusted following our share capital increase in December 2005 and our five-for-one stock split in June 2008. The figures shown are after adjustment.

<sup>(2)</sup> The stock option plans provide for the cancellation of the non-vested options if the holder is no longer our employee, director or executive officer.

<sup>(3)</sup> The stock option plans provide for the cancellation of the options whether vested or not if the holder is no longer our employee, director or executive officer.

<sup>(4)</sup> Options under the 2006 plan vest by one-fourth each year from May 2006 and can be exercised at any time. However the resulting shares cannot be sold by French tax residents before May 12, 2010.

<sup>(5)</sup> Options under the 2007 plan vest by one-third each year from March 2007 and can be exercised at any time. However the resulting shares cannot be sold by French tax residents before March 24, 2011.

<sup>(6)</sup> Options under the 2008 plan vest by one-third each year from March 2008 and can be exercised at any time. However the resulting shares cannot be sold by French tax residents before March 17, 2012.

<sup>(7)</sup> Options under the 2009 plans vest by one-third each year from March 2009 and can be exercised at any time. However the resulting shares cannot be sold by French tax residents before March 17, 2013. The 2009 plans consist of a plan granting 200,000 options to the Chairman and Chief Executive Officer and 125,000 options to the Chief Operating Officer (subject to certain performance conditions and a plan granting 1,002,000 options to certain other officers and employees.



**Table of Contents**

- (8) 110,000 options vest immediately, 55,000 will vest as of January 7, 2011 and 55,000 as of January 7, 2012. However during the first four years, the resulting shares cannot be sold by French tax residents before January 7, 2013 for the first batch and, January 7, 2014 for the second and third batches.
- (9) Options under the March 2010 plans vest by one-third each year from March 2010 and can be exercised at any time. However the resulting shares cannot be sold by French tax residents before March 23, 2014. The March 2010 plans consist of a plan granting 200,000 options to the Chief Executive Officer (subject to certain performance conditions) and a plan granting 1,348,150 options to certain other officers and employees.
- (10) Options under the October 2010 plan vest by one-third each year from October 2010 and can be exercised at any time. However the resulting shares cannot be sold by French tax residents before October 22, 2014. The October 2010 plan consists of a plan granting 120,000 options to three members of the Executive Committee.
- (11) Options under the March 2011 plans vest by one-third each year from March 2011 and can be exercised at any time. However the resulting shares cannot be sold by French tax residents before March 25, 2015. The March 2011 plans consist of a plan granting 66,667 options to the Chairman and 133,333 options to the Chief Executive Officer (subject to certain performance conditions) and a plan granting 964,363 options to certain other officers and employees.

The stock options allocated to Mr. Brunck, Chairman of the Board of Directors, and Mr. Malcor, Chief Executive Officer, (the Executive Officers) under the plans implemented by the Company over the last two years are set forth below:

Name of the Executive Officer	Date of the Plan	Number of options allocated during fiscal year	Valuation of options pursuant to the method used for consolidated financial statements ( )		Exercise period
			Subscription price <sup>(1)</sup>		
Robert Brunck	03/22/2010	200,000 <sup>(2)</sup>	1,515,000	19.44	From 03/23/2011 to 03/22/2018 inclusive
Robert Brunck	03/24/2011	66,667 <sup>(2)</sup>	373,122	25.48	From 03/25/2012 to 03/24/2019 inclusive
Jean-Georges Malcor	01/06/2010 <sup>(3)</sup>	220,000	1,810,600	14.71	From 01/07/2010 to 01/06/2018 inclusive
Jean-Georges Malcor	03/22/2010 <sup>(3)</sup>	162,500	1,641,250	19.44	From 03/23/2011 to 03/22/2018 inclusive
Jean-Georges Malcor	03/24/2011	133,333 <sup>(2)</sup>	746,238	25.48	From 03/25/2012 to 03/24/2019 inclusive

(1) The subscription price corresponds to the average of the opening share prices of the share on the last 20 trading days prior to the meeting of the Board of Directors granting the options.

(2) Subject to the performance conditions described below.

(3) As of the date of this plan, Mr. Jean-Georges Malcor was not yet an Executive Officer of the Company. Therefore, the stock-options allocated to him in 2010 are not subject to performance conditions.

The valuation of the options pursuant to the method used to prepare the consolidated financial statements does not necessarily correspond to the actual value that the beneficiary could derive from the exercise of the options. The exercise of the options is not permitted during the first three years of the plan and is subject to the fulfillment of certain performance conditions. Moreover, the gain before tax that a stock-option beneficiary may derive from the option exercise depends upon the share market price on the exercise date. This gain could be nil if, during the duration of the plan, the exercise price remains above the share market price.

**Table of Contents**

Stock-options are allocated without any possible discount. The conditions of the plans applying to the Executive Officers are those of the general plans, plus those described below. Regarding the plan of March 22, 2010, these conditions are only applicable to Mr. Robert Brunck. As Mr. Jean-Georges Malcor was not an Executive Officer on March 22, 2010, he benefited from the general plan applicable to the other senior managers and employees of the Group.

*Performance conditions:*

The Board of Directors decided, in accordance with the provisions of the AFEP-MEDEF code that, for the first three years of the plans dated March 22, 2010 and March 24, 2011, the acquisition of options is subject to performance conditions based on the achievement of one of the three objectives stated below:

a share price performance objective relative to the SBF 120 index;

a share price performance objective relative to the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>);

a financial indicator objective of EBITDAS denominated in U.S. dollars and related to the target for the annual variable portion of compensation of the Executive Officers.

*Obligation to keep stock-options in registered form:*

In compliance with the provisions of article L.225-185 of the French Commercial Code, the Board of Directors decided that the number of shares resulting from the exercise of stock options that the Executive Officers will have to keep under the registered form until the end of their term shall account for 20% of the amount of the gain on the purchase price realized when exercising the options granted by the Board of Directors on March 22, 2010 and March 24, 2011.

*Performance shares:*

At the extraordinary general shareholders' meeting held on April 29, 2008, a performance share plan was approved by shareholders whereby performance shares representing up to 1% of our share capital outstanding on the date of allocation may be granted in one or several allocations by the Board of Directors to certain of our employees and executive officers during the 38-month period following the plan's approval. Pursuant to such shareholders' resolution, the Board allocated (i) 509,925 performance shares to 332 beneficiaries on March 22, 2010 and (ii) 488,586 performance shares to 365 beneficiaries on March 24, 2011.

The performance shares allocated to Mr. Brunck, Chairman of the Board and Mr. Malcor, Chief Executive Officer, under the plans implemented by the Company over the last two years are set forth below:

Name of the Executive Officer	Date of the Plan	Number of shares allocated during fiscal year	Valuation of options pursuant to the method used for		Date of availability	Performance conditions
			consolidated financial statements (€)	Final allocation date		
Robert Brunck	03/22/2010	27,500	550,825	03/22/2012	03/22/2014	EBIT EBITDAS
Robert Brunck	03/24/2011	13,750	355,300	03/24/2013	03/24/2015	EBIT EBITDAS
Jean-Georges Malcor <sup>(1)</sup>	03/22/2010	22,500	450,675	03/22/2012	03/22/2014	EBIT EBITDAS
Jean-Georges Malcor	03/24/2011	27,500	710,600	03/24/2013	03/24/2015	EBIT EBITDAS

<sup>(1)</sup> *As of the date of this plan, Mr. Malcor was not yet an Executive Officer of the Company.*

**Table of Contents**

Starting in 2012, Mr. Brunck, Chairman of the Board of Directors, will no longer be allocated stock options or performance shares.

*Plans dated March 22, 2010 and March 24, 2011:*

Pursuant to article L.225-197-1 of the French Commercial Code, the Board of Directors decided that the number of performance shares allocated to the Executive Officers with respect to the plans dated March 22, 2010 and March 24, 2011 will be set at 10% of such allocation, which the Executive Officers will have to keep in registered form until the end of their term.

In accordance with the AFEP-MEDEF code, the Board of Directors also decided on March 22, 2010 and March 24, 2011 to set the number of additional shares that the Executive Officers are required to purchase at the end of the allocation period of the performance shares granted under the 2010 and 2011 plans at one share for 20 allocated shares.

The Board of Directors agreed on February 29, 2012 that, for the plan dated March 22, 2010, the performance condition based on EBI was fulfilled up to 153% for the Equipment segment and up to 75% at the Group level. None of the performance conditions were fulfilled for the Services segment. As a result, Messrs. Brunck and Malcor will be allocated 8,695 and 7,114 shares respectively under this plan.

**Item 7: PRINCIPAL SHAREHOLDERS**  
**Major Shareholders**

The table below sets forth certain information with respect to entities known to us or ascertained from public filings to beneficially own a significant percentage of our voting securities as at March 31, 2012 and December 31, 2011, 2010 and 2009.

Identity of Person or Group	March 31, 2012		2011		December 31, 2010		2009	
	% of shares	% of voting rights	% of shares	% of voting rights	% of shares	% of voting rights	% of shares	% of voting rights
Fonds Stratégique d Investissement ( FSI )	6.50	6.22	6.50	6.22	6.00	5.75		
Manning & Napier	4.99	4.78	4.99	4.77	6.17	5.91		
Black Rock, Inc.	4.93	4.72	4.93	4.72	5.40	5.17		
IFP Energies Nouvelles (formerly Institut Français du Pétrole)	4.18	8.00	4.18	8.00	4.19	8.03	4.33	8.26
Jupiter Asset Management							3.87	3.69
FCPE CGG Actionnariat <sup>(*)</sup>	0.05	0.10	0.05	0.10	0.05	0.10	0.05	0.10
Treasury stock	0.53	0	0.53	0	0.53	0	0.40	0
Public	78.82	76.18	78.82	76.19	77.66	75.04	91.35	87.95
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

<sup>(\*)</sup> Shares held by CGGVeritas Group employees.

Our *statuts* provide that each ordinary share that is fully paid and has been held in registered form by the same shareholder for a period of at least two consecutive years will entitle such shareholder to two votes at meetings of shareholders. As of March 31, 2012, IFP Energies Nouvelles had held 6,346,610 fully paid ordinary shares in registered form for two consecutive years, giving IFP Energies Nouvelles 8% of the voting power of the outstanding ordinary shares as at such date. Other than in this respect, our ordinary shares carry identical voting

**Table of Contents**

rights. Our *statuts* provide that fully paid ordinary shares may be held in either registered form or bearer form at the option of the shareholder. Substantially all ordinary shares held by shareholders other than IFP Energies Nouvelles are presently held in bearer form.

On March 9, 2012, FSI and IFP Energies Nouvelles announced that they had entered into a shareholders' agreement relating to their shareholding in order to implement a common approach on the matters relating to the Company.

On January 27, 2011, we issued 12,949,640 bonds convertible into and/or exchangeable for new or existing shares of the Company to be redeemed on January 1, 2016 for a total nominal amount of 360 million. The net proceeds of the issuance were used to actively manage our indebtedness and in particular to redeem U.S.\$460 million in principal amount of our U.S.\$530 million 7.5% senior notes due May 2015, allowing us to reduce our cash interest expense. The convertible bonds will entitle the holders to receive new and/or existing CGGVeritas shares at the ratio of one share per one bond, subject to adjustments. Under certain conditions, the bonds may be redeemed prior to maturity at our option.

On December 18, 2008, in connection with the acquisition of Wavefield, we issued 12,925,749 ordinary shares to be paid as consideration to former holders of Wavefield common stock.

See Item 9: The offer and Listing - Offer and Listing Details for information regarding holdings of our shares in the United States.

**Related Party Transactions**

We sell products and services to related parties, pursuant to arm's length contracts. We also receive products and services from related parties in exchange.

	2011	2010	2009
	(in millions of euros)		
Sales of geophysical equipment to Argas	3.0	47.1	27.7
Equipment rentals and services rendered to Argas	10.8	8.3	46.3
Charter revenues received from LDA for the <i>Alizé</i>	9.8	10.8	10.0
Sales of geophysical equipment to Xian Sercel Petroleum Exploration Instrument Co. Ltd <sup>(1)</sup>		7.3	5.9
Charter revenues received from Veri-Illuq Geophysical Ltd.			16.7
Equipment rentals and services rendered for PT Elnusa-CGGVeritas Seismic	12.3		
<b>Income</b>	<b>35.9</b>	<b>73.5</b>	<b>106.6</b>
Charter expenses and ship management from Norfield AS <sup>(1)</sup>		31.6	22.8
Equipment purchase and rentals from Argas	6.2	17.0	14.9
Charter expenses for <i>Alizé</i> paid to LDA	11.0	11.4	10.3
Charter expenses from Eidesvik Seismic Vessels AS	12.3	8.1	
Charter expenses from Oceanic Seismic Vessels AS	3.2		
Ship management expenses from CGGVeritas Eidesvik Ship Management AS	6.4		
Costs of services rendered by PT Elnusa-CGGVeritas Seismic	9.6		
Purchases of geophysical equipment from Tronic s	6.3	4.3	5.7
Cost of services rendered by Gardline CGGV Pte Ltd	1.0	1.6	
<b>Expenses</b>	<b>56.0</b>	<b>74.0</b>	<b>53.7</b>

**Table of Contents**

	2011	2010	2009
	(in millions of euros)		
Trade receivables from Argas	3.1	21.0	6.8
Trade receivables from Norfield AS <sup>(1)</sup>		7.6	8.0
Trade receivables from Gardline CGGV Pte Ltd.		0.8	
Trade receivables from PT Elnusa-CGGVeritas Seismic.	11.4		
Trade receivables from Veri-Illuq Geophysical Ltd.			1.4
Trade receivables from Spectrum ASA	2.2		
Trade receivables from LDA	5.5		
<b>Trade accounts and notes receivable</b>	<b>22.2</b>	<b>29.4</b>	<b>16.2</b>
Loan to Eidesvik Seismic Vessel AS		5.3	4.2
<b>Financial assets</b>		<b>5.3</b>	<b>4.2</b>
Accounts payable to Argas	2.3	4.8	2.5
Accounts payable to LDA	3.0	1.9	0.3
Accounts payable to Gardline CGGV Pte Ltd.	1.0	1.6	
Accounts payable to Eidesvik Seismic Vessels AS	1.3	1.0	
Accounts payable to Oceanic Seismic Vessels AS	2.2		
Accounts payable to Spectrum ASA	2.6		
Accounts payable to PT Elnusa-CGGVeritas Seismic	10.0		
<b>Trade accounts and notes payables</b>	<b>22.4</b>	<b>9.3</b>	<b>2.8</b>
Finance lease debt to Norfield AS <sup>(1)</sup>		29.9	37.4
Finance lease debt to Eidesvik Seismic Vessel AS	9.6	9.4	
Finance lease debt to Oceanic Seismic Vessels AS	7.9		
<b>Financial liabilities</b>	<b>17.5</b>	<b>39.3</b>	<b>37.4</b>
Future leases commitments to Oceanic Seismic Vessels AS	115.4	157.0	
Future leases commitments to Eidesvik Seismic Vessels AS	133.3	120.8	371.9
Future leases commitments to Norwegian Oilfield AS <sup>(1)</sup>		126.1	131.1
Future ship management costs to LDA net	6.3	8.8	10.7
Future ship management costs to CGGVeritas Eidesvik Ship Management AS	199.6		
<b>Contractual Obligations</b>	<b>454.6</b>	<b>412.7</b>	<b>513.7</b>

<sup>(1)</sup> *Cybernetix was accounted for under the equity method until November 2011, Norfield AS until January 2011 and Xian Sercel Petroleum Exploration Instrument Co. Ltd. until November 2010 (see note 2 to our consolidated financial statements included elsewhere in this document).*

Louis Dreyfus Armateurs ( LDA ) provides ship management services for a portion of our fleet. In addition, LDA is the owner, together with the Group, of Geomar owner of the seismic vessel *Alizé* . Geomar provides vessel charter services to LDA.

Argas, Eidesvik Seismic Vessel AS, Oceanic Seismic Vessel AS, Gardline CGGV Pte Ltd, Spectrum ASA, CGGVeritas Eidesvik Ship Management AS, Veri-Illuq Geophysical Ltd. and PT Elnusa-CGGVeritas Seismic are companies accounted for under the equity method. Tronic s is 16% owned by the Group.

No credit facility or loan was granted to the Company by shareholders during the last three years.

Key management personnel includes the Chief Executive Officer, the executive committee members and executive officers ( *mandataires sociaux* ).





**Table of Contents*****Contractual indemnity in case of termination of Executive Officer functions***

The benefits granted to Mr. Malcor in case of termination of his functions as Executive Officer were approved by the Board of Directors meeting held on February 24, 2011 and ratified by the General Meeting of May 4, 2011, pursuant to article L.225-42-1 of the French Commercial Code. Mr. Malcor does not benefit from any contractual termination indemnity, except in case of a forced departure relating to a change of control or a change of strategy.

**Interests of Experts and Counsel**

None.

**Item 8: FINANCIAL INFORMATION  
Consolidated Statements and Other Financial Information**

Reference is made to Item 18 for a list of all financial statements and notes thereto filed as a part of this annual report.

**Item 9: THE OFFER AND LISTING  
Offer and Listing Details**

The trading market for our ordinary shares is Euronext Paris S.A., where the ordinary shares have been listed since 1981. American Depositary Shares, or ADSs, representing ordinary shares have been traded on the New York Stock Exchange since May 1997. Each ADS represents one ordinary share. The ADSs are evidenced by American Depositary Receipts, or ADRs, issued by The Bank of New York, as Depositary, and are traded under the symbol *CGV*. The Bank of New York has advised us that as of March 31, 2012, there were 4,313,263 ADSs outstanding, which are held of record by five registered holders. On the basis of this information, the ADSs held on such date in the United States represented approximately 2.84% of our outstanding ordinary shares. Our by-laws provide that fully paid ordinary shares may be held in either registered or bearer form at the option of the shareholder.

***Price Information on Euronext Paris.***

The tables below set forth, for the periods indicated, the high and low prices for the outstanding ordinary shares on Euronext Paris as reported by NYSE Euronext.

The table below indicates the high and low market prices for our most recent six months:

	Price per Share	
	High	Low
	( )	
<b>2012</b>		
March	23.75	20.73
February	24.19	20.76
January	21.93	17.83
<b>2011</b>		
December	18.50	15.33
November	18.10	14.11
October	17.72	11.43

**Table of Contents**

The table below indicates the quarterly high and low market prices for our two most recent financial years and the first quarter of 2012:

	Price per Share High      Low ( )	
<b>2012</b>		
First Quarter	24.19	17.83
<b>2011</b>		
First Quarter	27.78	21.03
Second Quarter	26.45	21.79
Third Quarter	25.84	12.42
Fourth Quarter	18.50	11.43
<b>2010</b>		
First Quarter	21.44	14.92
Second Quarter	24.98	14.63
Third Quarter	17.35	12.93
Fourth Quarter	23.49	15.90

The table below indicates the high and low market prices for the five most recent financial years:

	Price per Share High      Low ( )	
2011	27.78	11.43
2010	24.98	12.93
2009	17.19	7.63
2008	199.99	8.44 <sup>(1)</sup>
2007	241.49	138.11

<sup>(1)</sup> Reflects the five-for-one stock split effective as of June 3, 2008.

**Price Information on the NYSE**

The table below sets forth, for the periods indicated, the high and low sale prices for the ADSs representing our ordinary shares on the New York Stock Exchange:

The table below indicates the high and low market prices for our most recent six months:

	Price per Share High      Low (U.S.\$)	
<b>2012</b>		
March	31.46	27.16
February	31.48	27.61
January	28.66	24.09
<b>2011</b>		
December	24.58	19.92
November	24.66	18.77
October	25.43	15.08



**Table of Contents**

The table below indicates the quarterly high and low market prices for our two most recent financial years and the first quarter of 2012:

	Price per Share High      Low (U.S.\$)	
<b>2012</b>		
First Quarter	31.48	24.09
<b>2011</b>		
First Quarter	38.12	28.27
Second Quarter	37.50	31.96
Third Quarter	32.50	24.80
Fourth Quarter	24.58	19.92
<b>2010</b>		
First Quarter	28.57	22.26
Second Quarter	33.39	17.77
Third Quarter	22.78	16.42
Fourth Quarter	30.70	22.41

The table below indicates the yearly high and low market prices on a yearly basis for the five most recent financial years:

	Price per Share High      Low (U.S.\$)	
2011	38.12	19.92
2010	33.39	16.42
2009	25.34	9.67
2008	58.48	10.50
2007	68.78	34.99

**Trading on Euronext Paris**

Official trading of listed securities on Euronext Paris is transacted through stockbrokers and other financial intermediaries, and takes place continuously on each business day from 9:00 a.m. through 5:25 p.m., with a pre-opening session from 7:15 a.m. through 9:00 a.m. during which transactions are recorded but not executed. Any trade effected after the close of a stock exchange session is recorded, on the next Euronext Paris trading day, at the closing price for the relevant security at the end of the previous day's session. Euronext Paris publishes a daily Official Price List that includes price information concerning listed securities. Euronext Paris has introduced continuous trading during trading hours by computer for most listed securities. Shares listed on Euronext Paris are placed in one of three categories depending on the issuer's market capitalization. Our outstanding ordinary shares are listed on Euronext Paris in the category known as *Continu*, which includes the most actively traded shares.

**Plan of Distribution**

Not applicable.

**Markets**

Our ordinary shares are listed on Euronext Paris. American Depositary Shares representing our ordinary shares are listed on the New York Stock Exchange. Our 7<sup>3/4</sup>% senior notes due 2017, our 9<sup>1/2</sup>% senior notes due 2016 and our 6<sup>1/2</sup>% senior notes due 2021 are listed on the Euro MTF market in Luxembourg.

## **Table of Contents**

### **Selling Shareholders**

Not applicable.

### **Dilution**

Not applicable.

### **Expenses of the Issue**

Not applicable.

## **Item 10: ADDITIONAL INFORMATION**

### **Share Capital**

Not applicable.

### **Memorandum and By-laws**

Our company is a *société anonyme*, a form of limited liability company, established under the laws of France, and we are registered with the Trade Register of Paris, France under the number 969 202 241 RCS Paris. Our financial year begins on January 1 and ends on December 31 of each calendar year. The following paragraphs set forth information concerning our share capital and provide related descriptions of certain provisions of our by-laws (*statuts*), and applicable French law. This information and description do not purport to be complete and are qualified in their entirety by reference to our by-laws.

### ***Object and Purposes***

Under Article 2 of our *statuts*, our object is:

to develop and operate, in any form and under any conditions whatsoever, any and all businesses relating to the geophysical surveying of soil and subsoil in any and all countries, on behalf of third parties or ourselves;

to participate directly or indirectly in any business, firm or company whose object would be likely to promote our object; and

generally, to engage in any commercial, industrial, mining, financial, personal or real property activities relating directly or indirectly to the above objects without limitation or reserve.

### ***Directors***

For a further description of the Board of Directors powers under French law and our *statuts*, see Item 6: Directors, Senior Management and Employees.

### ***Transaction with Interested Directors***

French corporate law provides for prior approval and control of transactions entered into between, directly or indirectly, us and our Ddirectors, Chief Executive Officer, Chief Operating Officer and, or any entity in which any of these persons is at the same time an owner, partner with unlimited liability, managing director, member of the supervisory board or an executive officer, unless the transaction is entered into in the ordinary course of business and under normal terms and conditions. Transactions entered into between us and one of our shareholders who

holds, directly or indirectly, more than 10% of our voting rights, or with an entity controlling such a shareholder, are also considered related party transactions requiring the prior approval of our Board of Directors.

---

## **Table of Contents**

The interested party has the obligation to inform our Board of Directors as soon as it is aware of the existence of the related party transaction, and a majority of our disinterested Directors must approve the transaction.

If a related party transaction is pre-approved by the majority of our disinterested Directors, our chairman must then report the authorized transaction to our statutory auditors within one month following the entering into of this transaction. The auditors must then prepare a special report on the transaction to be submitted to our shareholders at their next general meeting, during which our shareholders would consider the transaction for ratification (any interested shareholder would be excluded from voting). If the transaction is not ratified by the shareholders, such absence of ratification would normally and except in the case of fraud have no impact on the validity of the transaction, but the shareholders may in turn hold the Board of Directors or interested representative of the Company liable for any damages suffered as a result thereof.

Any related party transaction concluded without the prior consent of a majority of our disinterested Directors can be voided by a court, if we incur a loss as a result. In addition, an interested related party may be held liable on this basis.

### *Power to Decide Upon the Compensation of Directors, Chairman and Chief Executive Officer*

Under our *statuts*, the shareholders' meeting may provide for the payment to the Directors of an annual fixed sum for their attendance at board meetings (*jetons de présence*). The amount of such compensation remains unchanged until further decision by the shareholders' meeting. The Board of Directors allocates this amount between its members in the manner it deems appropriate.

Under our *statuts*, the Board of Directors has authority to determine the compensation of its chairman as well as of its Chief Executive Officer and Senior Executive Vice-Presidents.

### *Borrowing Powers Exercisable by the Directors*

Under French company law and our *statuts*, directors other than legal entities are forbidden to take out loans from CGGVeritas in any form whatsoever or to have CGGVeritas grant them an overdraft in current account or otherwise. It is also forbidden to have CGGVeritas stand as surety for them or back their commitments in respect of third parties. This prohibition also applies to chief operating officers and to permanent representatives of legal-entity directors. It also applies to the spouses, lineal forebearers or descendants of the persons referred to in this paragraph and also to any trustee.

Also, under article L.225-43 of the French Commercial Code, directors and executive officers may not borrow money or obtain a guarantee from the Company. Any such loan or guarantee would be void and may not be relied upon by third parties.

### *Retirement of Directors under an Age Limit Requirement*

Under our *statuts*, the Chairman of the Board's term of office ends, at the latest, after the annual Ordinary Shareholders' Meeting following the date on which he reaches the age of 65. However, the Board of Directors may further extend the office of the Chairman, one or more times for a total period not to exceed three years. Our *statuts* also provide that when the offices of Chairman and Chief Executive Officer are held by the same person, the Chief Executive Officer's term of office ends on the same date as that of the Chairman. In accordance with article L.225-19 of the French Commercial Code, no more than one-third of the members of the Board of Directors may be more than 70 years old, unless the *statuts* of the Company provide otherwise. Our *statuts* do not contain any provisions contrary to this limitation.

### *Number of Shares Required for a Director's Qualification*

Under our *statuts*, throughout his term of office, each director must own at least one share. Nevertheless, the internal regulations of the Board provides that each director owns at least five hundred shares of the Company.



---

## **Table of Contents**

### ***Share Capital***

As of March 31, 2012, our issued share capital amounts to 60,748,799 divided into 151,871,998 shares of the same class with a nominal value of 0.40 per share. The shares are fully paid. Pursuant to our *statuts*, fully paid shares may be held either in registered or in bearer form at the option of the shareholder. The *statuts* also allow us to avail ourselves of a procedure known as *titres au porteur identifiable*s by which we may request Euroclear France to disclose the name, nationality, address and the number of shares held by the holders of any of our securities which have, or may in the future have, voting rights. See Form, Holding and Transfer of Shares.

### ***Dividend and Liquidation Rights***

We may only distribute dividends out of our distributable profits, plus any amounts held in our reserve which the shareholders decide to make available for distribution, other than those reserves which are specifically required by law. Distributable profits consist of our unconsolidated net profit in each fiscal year, as increased or reduced by any profit or loss carried forward from prior years, less any contributions to the reserve accounts pursuant to law.

Under French law, before dividends may be paid with respect to any fiscal year, we must contribute a minimum of 5% of our annual unconsolidated net income to a legal reserve fund, until it reaches an amount equal to 10% of our outstanding share capital. The legal reserve is distributable only upon our liquidation.

Our *statuts* provide that the general shareholders meeting, either on a recommendation from the Board of Directors or on its own initiative, may allocate all or part of our distributable profits, if any, to one or more special or general reserves or to keep such profits as retained earnings to be carried forward to the next fiscal year. Any remaining distributable profits are distributed to shareholders as dividends in proportion to their holdings. However, except in the case of a decrease in share capital which aims to offset losses, no distribution may be made to shareholders when the shareholders equity is or would become, as a result of the distribution, less than the amount of the share capital increased by amounts held in reserve accounts pursuant to law. The methods of payment of dividends are determined by the annual general meeting of shareholders or by the Board of Directors in the absence of a decision by the shareholders. According to our *statuts*, the general meeting has the power to give each shareholder the option of receiving all or part of its dividend payment in either cash or shares.

If we have earned distributable profits since the end of the preceding fiscal year, as shown on an interim income statement certified by our auditors, the Board of Directors has the authority, without the approval of shareholders, to distribute interim dividends to the extent of such distributable profits for the period covered by the interim income statement.

Subject to the statement above regarding interim dividends, the payment of dividends is fixed at the ordinary general meeting of shareholders at which the annual accounts are approved, upon the recommendation of the Board of Directors. Under French law, dividends are normally distributed to shareholders in proportion to their respective holdings. Dividends are payable to all holders of shares, except for treasury stock, issued and outstanding on the date of the shareholders meeting approving the distribution of dividends or, in the case of interim dividends, on the date of the Board of Directors meeting approving the distribution of interim dividends. We must make annual dividend payments within nine months of the end of our fiscal year, unless otherwise authorized by a court order. Dividends not claimed within five years of the date of payment revert to the French State.

Our Board of Directors may, at any time and for any reason, propose to an extraordinary general meeting of shareholders the early dissolution of the Company and we may be placed in liquidation in compliance with the relevant provisions of the French company law. If the Company is liquidated, those of its assets remaining after

## **Table of Contents**

payment of our debts, liquidation expenses and all of our remaining obligations will be distributed first to repay in full the nominal value of the shares, and the surplus, if any, will be distributed among the shareholders in proportion to the nominal value of their shareholdings.

### ***Changes in Share Capital***

#### ***Increases in the Share Capital***

We may increase our share capital either:

by issuing additional shares (either ordinary or preferred shares) or securities giving access, immediately or in the future, to a portion of our share capital; or

by increasing the nominal value of our existing shares.

We may issue additional shares:

for cash;

for assets contributed in kind;

upon the conversion of preferred shares, debt securities or other debt instruments previously issued;

upon the conversion of ordinary shares into preferred shares;

as a result of a merger or a split;

by the capitalization of reserves, retained earnings or issuance premiums;

for cash credits payable by the Company; or

for any combination of the preceding items.

We may increase our share capital only with the approval of the shareholders at an extraordinary general meeting, following a report of the Board of Directors. However, when a capital increase takes place through capitalization of reserves, retained earnings or issuance premiums, the general meeting at which the decision to increase the capital is taken follows the quorum and majority requirements of ordinary general meetings. Increases effected by an increase in the nominal value of shares require unanimous approval of the shareholders, unless effected by capitalization of reserves, retained earnings or issuance premiums. See Attendance and Voting at Shareholders Meetings.

The shareholders may delegate to the Board of Directors (i) the decision to increase the share capital or (ii) after authorizing the increase in share capital, the right to carry out any such increase. The Board of Directors may further delegate this right to the chief executive officer. Each time the shareholders decide on a share capital increase or decide to delegate to the Board of Directors the decision to increase the share capital or the right to carry out a capital increase, they must also determine in a separate resolution whether or not to proceed with a capital increase reserved for employees of the Company and its subsidiaries or whether to delegate to the Board of Directors the right to carry out such reserved capital

increase.

At a meeting held on May 4, 2011 our shareholders renewed the existing authorization permitting the Board of Directors to increase our share capital, through one or more issuances of securities, by an additional aggregate nominal amount of up to 30,000,000. This authorization is effective for a period not to exceed 26 months. Our shareholders have preferential rights to subscribe for such additional securities. (see Item 7: Principal Shareholders - Identity of Person or Group ).

---

## **Table of Contents**

### *Decreases in Share Capital*

An extraordinary general meeting of shareholders also has the power to authorize and implement a reduction in share capital which may be effected either:

by decreasing the nominal value of our outstanding shares; or

by reducing the number of our outstanding shares.

The number of outstanding shares may be reduced either by an exchange of shares or by the repurchase and cancellation of shares.

According to French company law, any decrease in our share capital requires approval by the shareholders entitled to vote at an extraordinary general meeting. In the case of a capital reduction, other than a reduction to absorb losses and a reduction pursuant to a program of acquisition of shares, all holders of shares must be offered the possibility to participate in such a reduction. See *Acquisition of our own Shares*. All holders of shares in a given class of shares must be treated equally unless each affected shareholder agrees otherwise. Our creditors may oppose a capital reduction during the 20-day period following the registration with the Registry of Commerce of the minutes of the shareholders' meeting approving the capital reduction. Upon a creditor's request, the *Tribunal de Commerce* may order us to reimburse our creditors or guarantee our debt.

### *Preferential Rights to Subscribe*

According to French law, our current shareholders have preferential rights on a pro rata basis to subscribe (*droit préférentiel de souscription*) for any issue of additional shares to be subscribed in cash or by set-off of cash debts and to subscribe to any issue of other securities which may either directly or indirectly result in, or carry rights to subscribe for, additional shares issued by us. An extraordinary shareholders' meeting may decide to withdraw the shareholders' preferential right to subscribe, either in respect of any specific issue of securities, or more generally, with respect to an authorization by the extraordinary general meeting, to issue shares or other equity securities, for a duration not to exceed 26 months or 18 months in the case of an authorization given for an issue of securities to identified persons or categories of persons. Shareholders may also individually waive their preferential right to subscribe in respect of any offering. French law requires that the Board of Directors and our independent auditors present reports that specifically address any proposal to waive preferential subscription rights. In the event of a waiver, the issue of securities must be completed within the period prescribed by law. Preferential rights to subscribe, if not previously waived, are tradable during the subscription period relating to a particular offering of shares and may be quoted on Euronext Paris. In the event that the preferential rights of shareholders are withdrawn, the shareholders' meeting has the power to grant, or to authorize the Board of Directors to grant, existing shareholders a non-transferable priority right (*délai de priorité*) to subscribe for new shares issued during a minimum period of three trading days.

### *Attendance and Voting at Shareholders' Meetings*

#### *General*

In accordance with French law, general shareholders' meetings may be ordinary or extraordinary. Ordinary general meetings of shareholders are required for matters such as:

the election, replacement and removal of directors;

the appointment of statutory auditors;

the approval of annual accounts;

Edgar Filing: CGG VERITAS - Form 20-F

more generally, all decisions which do not require the approval of the extraordinary general meeting of the shareholders; and  
  
the declaration of dividends or the authorization for dividends to be paid in shares.

**Table of Contents**

Extraordinary general meetings of shareholders are required for approval of all matters and decisions involving:

changes in our *statuts* (including changing our corporate purposes);

increasing or reducing our share capital;

change of nationality of the Company, subject to certain conditions as described in article L.225-97 of the French Commercial Code;

extending or abridging the duration of the Company;

mergers and spin-offs;

creation of a new class of shares;

issuance of debt securities;

authorization of notes or other securities giving access, immediately or in the future, to a portion of our share capital;

transformation of our Company into another legal form; and

voluntary liquidation of our Company before the end of its statutory term.

*Annual Ordinary Meetings*

Our Board of Directors must convene the annual ordinary general meeting of shareholders each year for approval of the annual accounts. This meeting must be held within six months of the end of our fiscal year, unless such time is extended by an order of the President of the *Tribunal de Commerce* pursuant to a request. Other ordinary or extraordinary meetings may be called at any time during the year. Meetings of shareholders may be convened by the Board of Directors or, in the circumstances prescribed by law, if the Board of Directors fails to call such a meeting, by our statutory auditors or by an administrator appointed by the President of the *Tribunal de Commerce* or by a shareholder holding the majority of the share capital or voting rights following a public offer or the transfer of a block trade. Any of the following may request the President of the *Tribunal de Commerce* to appoint an administrator:

one or several shareholders holding in the aggregate at least 5% of our share capital;

any interested parties in cases of emergency;

the workers' committee in case of emergency; or

## Edgar Filing: CGG VERITAS - Form 20-F

an association of holders of shares who have held the shares in registered form held for at least two years and holding, in the aggregate, at least 1% of our voting rights.

### *Notice of Shareholders Meetings*

French law requires that a preliminary notice (*avis de réunion*) of a general meeting of a listed company be published in the *Bulletin des Annonces Légales Obligatoires* ( BALO ) at least 35 days before the date set for the meeting. Such preliminary notice, the text of the resolutions proposed by the Board of Directors, the resolutions or the points presented by the shareholders together with the aggregate number of voting rights and shares of the Company and certain documents useful for the meeting must be published on the Company's website at least 21 days (or 15 days in case of a takeover bid) before the date of the meeting. A copy of the preliminary notice can first be sent to the *Autorité des marchés financiers* (the AMF ), the self-regulatory organization that has general regulatory authority over the French regulated exchanges, with an indication of the date of its publication in the BALO. The preliminary notice of a general meeting must mainly state the details of the company and information about the voting process and the meeting, the matters to be discussed at the meeting and the draft of the resolutions to be discussed, but also describe how the shareholders can request the

---

## **Table of Contents**

inclusion of points or draft resolutions or questions on the agenda of the general meeting as well as information regarding the vote by proxy, the address of the Company website, the date of registration of the securities and how and when to consult the final text. The agenda of the meeting and the draft of the resolutions to be discussed, such as described in the preliminary notice, may only be modified between the date of publication of the preliminary notice and the 21<sup>st</sup> day preceding the general meeting. From the date of publication until 25 days before the date of the general meeting (or within 10 days from the date of the general meeting in case of a takeover bid), additional resolutions to be submitted for approval by the shareholders or points to be discussed at the meeting may be proposed to the Board of Directors by:

one or more shareholders holding, in the aggregate, a certain percentage of our share capital (0.5% to 4% determined on the basis of a statutory formula relating to capitalization); or

a duly authorized association of shareholders who have held their shares in registered form for at least two years and holding, in the aggregate, at least 1% of our voting rights.

The Board of Directors must submit these resolutions to a vote of the shareholders.

At least 15 days before the date set for any general meeting on first call, and at least 10 days before any second call, we must send a notice (*avis de convocation*) by mail, or by electronic mail if accepted by the holder of registered shares, to all holders of registered shares who have held such shares for more than one month prior to the date of the notice. Notice of the meeting must also be given by publication in a journal authorized to publish legal announcements in the local administrative department (*département*) in which we are registered as well as in the BALO, with prior notice having been given to the AMF. Such a notice must mainly include the details of the Company, as well as a description of the type, agenda, place, date and time of the meeting and other information about the voting process. With the sole exception of removal and replacement of Directors (which may be discussed at any meeting), any matter which does not appear on the agenda may not be discussed at the meeting.

### *Attendance and Voting at Shareholders Meetings*

Attendance and exercise of voting rights at both ordinary and extraordinary general meetings of shareholders are subject to certain conditions. A shareholder does not need to have a minimum number of shares in order to be able to attend or be represented at an extraordinary general meeting. Any statutory provision to the contrary is null and void. In order to participate in any general meeting, a holder of registered shares must have paid up its shares and have its shares registered in his name or in the name of the accredited financial intermediary referred to in article L. 228-1 of the French Commercial Code in a shareholder account maintained by us or on our behalf three business days prior to the meeting. Similarly, a holder of bearer shares must obtain from the accredited financial intermediary (*intermédiaire financier habilité*) with whom such holder has deposited its shares a statement of holdings and send it to the location specified in the notice of the meeting three business days before the meeting convenes.

### *Proxies and Votes by Mail*

Subject to the foregoing, all shareholders have the right to participate in general meetings, either in person, by a proxy or by mail and, subject only to any applicable laws, may vote according to the number of shares they hold. Proxies may be granted by a shareholder to:

another shareholder;

his or her spouse;

the person with whom the shareholder has entered into a civil solidarity pact ( PACS );

any other natural or legal person of his or her choice.



The shareholder must write and send us the proxy.

## **Table of Contents**

In case the proxy is given to someone else than the shareholder's spouse or the person with who a PACS has been concluded, the proxy must inform the shareholder of any conflict of interest by registered letter in accordance with article L.205-106-1 of the French Commercial Code.

Alternatively, the shareholder may send us a blank proxy without nominating any representative. In the last case, the chairman of the shareholders' meeting will vote the shares with respect to which such blank proxy has been given in favor of all resolutions proposed or approved by the Board of Directors and against all others. We will send proxy forms to any shareholder on request, provided such request is received by the Company at least six days before the date of the relevant general meeting. In order to be counted, we must receive proxy forms at our registered office or at such other address indicated in the notice convening the meeting prior to the date of the relevant general meeting. With respect to voting by mail, we must send our shareholders a form of such vote and we must receive the form at least three days prior to the date of the relevant general meeting.

### *Quorum*

Under French law, a quorum requires the presence in person or voting by mail or by proxy of shareholders representing, in the aggregate, not less than:

20% of the shares entitled to vote (in the case of an ordinary general meeting convened on first call, an extraordinary general meeting convened on second call or an extraordinary general meeting convened on first call, if deciding upon any capital increase by capitalization of reserves, retained earnings or share premium); or

25% of the shares entitled to vote (in the case of any other extraordinary general meeting convened on first call).

No quorum is required in the case of an ordinary general meeting convened on second call or an extraordinary general meeting convened on second call, if deciding upon any capital increase by capitalization of reserves, retained earnings or share premium.

If a quorum is not present at any meeting on first call, the meeting is adjourned and reconvened, and in the case of an extraordinary general meeting, for a date not more than two months later. When a general meeting is reconvened, only questions which were on the agenda of the adjourned meeting may be discussed and voted upon.

Any shareholder may also, if the Board of Directors or its Chairman allows at the time of the convocation to a general meeting, attend the meeting via video-conference or by means of electronic telecommunication or tele-transmission subject to, and in accordance with, the conditions laid down by the legislation or the regulations then in force. This shareholder is then considered to be present at the meeting when calculating the quorum and the majority.

### *Majority*

At an ordinary general meeting or an extraordinary general meeting deciding upon any capital increase by capitalization of reserves, retained earnings or share premium, a simple majority of votes cast by the shareholders present or represented at such meeting is required to pass a resolution. At any other extraordinary general meeting, a two-thirds majority of votes cast is required to pass a resolution. A unanimous vote, however, is required to increase the liabilities of shareholders. Abstention from voting by those present or represented by proxy or voting by mail is viewed as a vote against the resolutions submitted to a vote.

Our *statuts* provide that, as from May 22, 1997, each share that is fully paid and has been held in registered form by the same shareholder for a period of at least two consecutive years will entitle such shareholder to two votes. In the event of capital increases effected by an attribution of new shares, as a result of the incorporation of

---

## **Table of Contents**

reserves, retained earnings or issuance premiums, the shares attributed by reason of and proportionately to the ownership of shares holding double voting rights are immediately granted double voting rights as if they themselves had fulfilled the requirements therefore. Under French company law, shares that have to be transferred pursuant to laws and regulations applicable to cross-shareholdings, as well as shares held by entities controlled directly or indirectly by us, are not entitled to voting rights. In the latter case, the shares do not count for quorum or majority purposes.

### ***Acquisition of our own Shares***

Under French law, our Company may not issue shares to itself either directly or through a financial intermediary acting on our behalf. However, exceptionally, we may, either directly or through a financial intermediary acting on our behalf, purchase our shares:

- (1) to reduce our share capital (albeit not to absorb losses), canceling the shares we purchase, with our shareholders' approval at an extraordinary general meeting;
- (2) to provide shares to our employees under a profit sharing plan or stock option plan; or
- (3) in the context of a share repurchase program that allows us to acquire up to 10% of our share capital for a maximum period of 18 months. To acquire shares in the context of a share repurchase program, we must first obtain our shareholders' approval at an ordinary general meeting and make public a description of such program prior to its launch.

We may not repurchase under either (2) or (3) above an amount of shares that would result in our Company holding, directly or through a person acting on our behalf, more than 10% of our outstanding share capital, without canceling the said 10% first. In addition, we may not cancel more than 10% of our outstanding share capital over any 24-month period.

We must hold any shares we repurchase in registered form. These shares also must be fully paid up. Shares repurchased by us are deemed outstanding under French law but are not entitled to dividends or voting rights and we may not ourselves exercise preferential subscription rights. Such shares do not count for quorum or majority purposes. The shareholders, at an extraordinary general meeting, may decide not to take such shares into account in determining the preferential rights to subscribe attached to the other shares (if such a decision is not taken, these rights must be either sold on the market before the end of the subscription period or distributed to the other shareholders on a pro rata basis).

A direct subsidiary is generally prohibited by French law from holding shares in its parent and, in the event it becomes a holder of shares, such subsidiary must transfer such shares within one year following the date on which it becomes the holder thereof. An indirect subsidiary may only acquire shares if such subsidiary demonstrates a business purpose for holding the shares but in no event will it be entitled to vote such shares.

At the shareholders' meeting held on May 4, 2011, our shareholders renewed the existing authorization to acquire up to 10 percent of our share capital through purchases of shares and to resell shares so acquired for the 18 months following the date of such meeting.

Under such authorization, we are allowed to carry out transactions on our shares with the following objectives:

to support liquidity of our shares through a liquidity contract entered into with an investment service provider in compliance with the Code of Practice of the *Association Française des Marchés Financiers* (formerly known as the *Association Française des Entreprises d'Investissement*),

to deliver shares in the scope of securities giving access, immediately or in the future, to shares by redemption, conversion, exchange, presentation of a warrant or by any other means,

## **Table of Contents**

to deliver, immediately or in the future, shares in exchange in the scope of external growth, in accordance with the conditions to be defined by the AMF,

to allocate bonus shares to employees and officers of the Company or affiliated companies within the meaning of article L.225-180 of the French Commercial Code, especially in the scope of options to purchase shares of the Company,

to allocate free shares to employees or Executive Officers pursuant to articles L. 225-197-1 and seq. of the French Commercial Code, and

to cancel the shares through a capital reduction, subject to a decision of, or an authorization, by the extraordinary general meeting. The general meeting approved a maximum purchase price of 40. The maximum number of shares that we are entitled to hold is 10% of our share capital as at the time of the purchase, less any shares acquired under previous authorizations.

The shares may be acquired on one or several occasions, by any method, including by agreement, by stock market purchase, by purchasing blocks of shares or by an offer to buy, which may take place at any time, excluding during a take-over bid.

This authorization was granted for a period of 18 months from May 4, 2011 and cancelled and replaced the authorization granted to the Board of Directors by the general meeting held on May 5, 2010. This share repurchase plan was not implemented in 2011.

As of December 31, 2011, we still held 800,000 of our own shares.

### ***Trading in Our Own Shares***

Under European Commission Regulation Number 2273/2003 of December 22, 2003 applicable in France since October 13, 2004, trades by a company in its own shares are deemed valid when the following conditions are met:

each trade must not be made at a price higher than the higher of the price of the last trade and the highest current independent bid on Euronext Paris;

if we carry out the purchase of our own shares through derivative financial instruments, the exercise price of those derivative financial instruments must not be above the higher of the last independent trade and the highest current independent bid; and

the trade must not account for more than 25% of the average daily trading volume on Euronext Paris in the shares during the twenty trading days immediately preceding the trade.

However, there are two periods during which we are not permitted to trade in our own securities: the 15-day period before the date on which we make our consolidated annual accounts public, and the period beginning on the date on which we become aware of information that, if disclosed, would have a significant impact on the market price of our securities and ending on the date this information is made public.

We must file a report with the AMF every six months as well as at entry into force, amendment or termination of the liquidity arrangement containing the assessment of such arrangement. Such report is then posted on our website. In addition, we must also file with the AMF a monthly report containing details of all transactions relating to our shares that we may have carried out during the month.

### ***Form, Holding and Transfer of Shares***

*Form of Shares.* Our *statuts* provides that our fully paid shares may be held in either registered or bearer form at the option of the shareholder. We may avail ourselves of the procedure known as *titres au porteur*



---

## **Table of Contents**

*identifiables*, according to which we are entitled to request Euroclear France to disclose the name, nationality, address and the number of shares held by holders of those securities of ours which have, or which may in the future acquire, voting rights.

*Holding of Shares.* In accordance with French law concerning dematerialization of securities, the ownership rights of holders of shares are represented by book entries rather than by share certificate. According to our *statuts*, registered shares are entered into an account held by us or by a representative nominated by us, while shares in bearer form are placed in an account held by an accredited financial intermediary (*intermédiaire financier habilité*).

We maintain a share account with Euroclear France in respect of all shares in registered form, which, in France, is administered by BNP Paribas Securities Services, acting on our behalf as our agent. Shares held in registered form are inscribed in the name of each shareholder (either directly, or, at the shareholder's request, through such shareholder's accredited financial intermediary) in separate accounts maintained by BNP Paribas Securities Services on our behalf. Each shareholder account shows the name of the holder and the number of shares held and, in the case of shares inscribed through an accredited financial intermediary, shows that they are so held. BNP Paribas Securities Services, as a matter of course, issues confirmations to each registered shareholder as to holdings of shares inscribed in the shareholder's accounts, but these confirmations do not constitute documents of title.

Shares held in bearer form are held and inscribed on the shareholder's behalf in an account maintained by an accredited financial intermediary with Euroclear France separately from our share account with Euroclear France. Each accredited financial intermediary maintains a record of shares held through it and will issue certificates of inscription in respect thereof. Shares held in bearer form may only be transferred effected through accredited financial intermediaries and Euroclear France. As noted above, our *statuts* allow us to request from Euroclear France details concerning the identity of the holders of shares in bearer form at any time.

*Transfer of Shares.* Our *statuts* do not contain any restrictions relating to the transfer of shares. An owner of shares resident outside France may trade such shares on Euronext Paris. Should such owner (or the broker or other agent) require assistance in this connection, an accredited financial intermediary should be contacted.

Prior to any transfer of shares held in registered form on Euronext Paris, such shares must be converted into bearer form and, accordingly, must be registered in an account maintained by an accredited financial intermediary. A shareholder may initiate a transfer by giving instructions (through an agent if appropriate) to the relevant accredited financial intermediary.

### ***Requirements for Holdings Exceeding Certain Percentages***

French company law provides that any individual or entity, who acting alone or in concert with others, acquires more than 5%, 10%, 15%, 20%, 25%, 30%, 33 1/3%, 50%, 66 2/3%, 90% or 95% of our outstanding shares or voting rights thereof or whose shareholding falls below any such percentage must notify us at the latest by the closure of the fourth trading day following the date the threshold has been crossed of the number of shares it holds and of the voting rights attached thereto. Such individual or entity must also notify the AMF within the same period.

In order to permit holders of our shares to give the notice required by law, we must monthly, in accordance with article 221-3 of the *Règlement Général* of the AMF, post (including on the company website) information with respect to the total outstanding number of voting rights and shares if these have changed and provide the AMF with a written notice.

If any person fails to comply with the legal notification requirement, the shares or voting rights in excess of the relevant threshold will be deprived of voting rights for all shareholders' meeting until the end of a two-year

## **Table of Contents**

period following the date on which the owner thereof complies with the notification requirements. In addition, any shareholder who fails to comply with the above requirements may have all or part of its voting rights (and not only with respect to the shares in excess of the relevant threshold) suspended for up to five years by the *Tribunal de Commerce* at the request of our chairman, any shareholder or the AMF, and may be subject to criminal penalties.

French law imposes additional reporting requirements on persons who acquire more than 10%, 15%, 20% or 25% of our outstanding shares or voting rights. These persons must file a report with us and the AMF at the latest by the closure of the fifth trading day following the date they cross the threshold. In the report, the acquirer must specify his intentions for the following six-month period, including whether or not it intends to continue its purchases, to acquire control of our Company or to seek nomination to our Board of Directors. In addition, the acquirer must also provide information on its strategy, the means of financing its acquisition, any stock lending or stock borrowing agreement and regarding whether or not it is acting in concert with another party. The AMF makes the notice public. The acquirer can amend its stated intentions in case of changes and in such case, this latter must file a new report which opens a new six-month period. Failure to comply with the reporting requirements or to abide by the stated intentions may result in a sanction similar to that applicable to failure to comply with the legal notification requirement.

In addition to the provisions of French company law, our *statuts* provide that any shareholder who directly or indirectly acquires ownership or control of shares representing 1% or any multiple thereof of our share capital or voting rights, or whose shareholding falls below any such limit, must inform us within five trading days of the crossing of the relevant threshold, of the number of shares then owned by such shareholder. Failure to comply with these notification requirements may result, at the request, recorded in the minutes of the general meeting, of one or several shareholders holding at least 1% of the capital, in the shares in excess of the relevant threshold being deprived of voting rights for all shareholder meetings until the end of a two-year period following the date on which the owner thereof has complied with such notification requirements.

*Compulsory Tender.* The French Commercial Code provides that a shareholder, acting alone, or shareholders acting in concert, as these terms are defined in article L.233-10 of the French Commercial Code, who come to own directly or indirectly more than 30% of the voting rights or share capital of a French company listed on a regulated market in France must immediately notify the AMF, and submit a compulsory tender for all the shares of capital and all securities giving access to the share capital or voting rights of such company. The tender must be submitted on terms acceptable to the AMF. Any person acting alone or in concert is under the same obligation of notification and compulsory offer if, further to a merger or a contribution, he or she ends up to hold more than 30% of the shares or voting rights of a French company listed on a regulated market.

In addition, the same obligation applies to any shareholder acting alone or shareholders acting in concert who, owning directly or indirectly between 30% and 50% of the voting rights or share capital of a French company listed on a regulated market in France, increase their interest by more than 2% of the existing total number of shares or voting rights over a maximum period of twelve consecutive months.

The AMF is vested with the power to grant relief from the obligation to tender for all of the shares of the target company and may consider certain exemptions when petitioned for such relief by the acquiring shareholders. These exemptions primarily concern previous control of the target company or a commitment to divest within a given period.

---

## **Table of Contents**

### **Material Contracts**

The following contracts (not being contracts entered into in the ordinary course of business) have been entered into by us or our subsidiaries within the two years immediately preceding the date of this document and are, or may be, material:

***Third Amendments to the U.S.\$1.115 billion Credit Agreement and the U.S.\$200 million Revolving Credit Agreement, dated as of July 15, 2010 and November 4, 2010, respectively, among us, certain of our subsidiaries, the lenders party thereto, Credit Suisse as Administrative Agent and Collateral Agent and Natixis as Facility Agent.***

On July 15, 2010, our senior facilities were amended in order to extend the maturity of U.S.\$348 million (out of a total U.S.\$515 million outstanding on that date) from January 2014 to January 2016. The maturity of this tranche may be accelerated to February 2015 if, at that date, the 7 1/2% senior notes due 2015 have not been refinanced. The amendment also increased our flexibility under the financial covenants by modifying the interest coverage and leverage ratios. The interest margin applicable to the tranche due 2016 was consequently increased by 100 basis points

On November 4, 2010, the maturity of our French revolver facility was extended until February 2014 and the interest margin was increased by 25 basis points and will be further adjusted taking into account the corporate rating of CGGVeritas. The amendment also modified the interest coverage and leverage ratios, as was done for the senior facilities.

***Indenture in respect of our 6 1/2% senior notes due 2021, dated as of May 31, 2011, among us, certain of our subsidiaries acting as guarantors and The Bank of New York Mellon, as Trustee***

This agreement governs our 6 1/2% senior notes due 2021, issued on May 31, 2011.

***Registration Rights Agreement, dated May 31, 2011, among us, certain of our subsidiaries acting as guarantors, Credit Suisse Securities (Europe Limited), BNP Paribas, Merrill Lynch, Pierce, Fenner & Smith Incorporated, Natixis and RBC Capital Markets LLC.***

In accordance with this agreement and the Purchase Agreement dated May 25, 2011, we agreed to provide certain registration rights to holders of our 6 1/2% senior notes due 2021, issued on May 31, 2011.

***Fourth Amendments to the U.S.\$1.115 billion Credit Agreement and the U.S.\$200 million Revolving Credit Agreement, each dated as of December 15, 2011, among us, certain of our subsidiaries, the lenders party thereto, Credit Suisse as Administrative Agent and Collateral Agent and Natixis as Facility Agent.***

On December 15, 2011, we amended our U.S. senior facilities in order to extend the maturity of U.S.\$79 million out of the total U.S.\$140 million of available revolving commitments by two years, from January 2012 to January 2014. In addition, the amendment provided us with increased flexibility under our financial and other covenants.

On December 15, 2011, we amended our French revolving facility to provide additional flexibility under our non-financial covenants, adjust the calculation of capital expenditures that we are permitted to make each year, and cap the amount of total borrowings under the facility at U.S.\$100,000,000 at any one time.

### **Exchange Controls**

#### ***Ownership of ADSs or shares by Non-French Persons***

Other than as described above, under French law, there is no limitation on the right of non-resident or foreign shareholders to own or to exercise their voting rights attached to the securities they hold in a French company.



---

## **Table of Contents**

Pursuant to the French Monetary and Financial Code, administrative authorization is no longer required of non-European residents prior to acquiring a controlling interest in a French company, with exceptions regarding sensitive economic areas such as defense, public health, etc. However a notice (*déclaration administrative*) must be filed with the French Ministry of the Economy in certain circumstances and in particular for the acquisition of an interest in us by any person not residing in France or any foreign controlled resident if such acquisition would result in (i) the acquisition of a controlling interest of more than 33.33% of our share capital or voting rights or (ii) the increase of a controlling interest in us unless such person not residing in France or group of non-French residents already controls more than 50% of our share capital or voting rights prior to such increase. In certain circumstances (depending upon such factors as the percentage and value of the acquired part of our share capital), an additional declaration, for statistical purposes shall be filled with the *Banque de France*.

### ***Exchange Controls***

Under current French exchange control regulations, there are no limitations on the amount of payments that may be remitted by us to non-residents. Laws and regulations concerning foreign exchange control do require, however, that all payments or transfers of funds (including payments of dividends to foreign shareholders) made by a French resident to a non-resident be handled by an accredited intermediary. In France, all registered banks and substantially all credit establishments are accredited intermediaries.

### **Taxation**

The following summarizes the material French tax and U.S. federal income tax consequences to U.S. Holders (as defined below) of the ownership and disposal of ADSs.

For the purposes of this discussion, a U.S. Holder means a beneficial owner of ADSs that is:

an individual who is a citizen or resident of the United States for U.S. federal income tax purposes;

a corporation, or other entity treated as a corporation, created or organized in or under the laws of the United States or of any State thereof;

an estate the income of which is subject to United States federal income taxation regardless of its source; or

a trust if a court within the United States is able to exercise primary supervision over the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust, or the trust has elected to be treated as a domestic trust for U.S. federal income tax purposes.

This discussion is not a complete description of all of the tax consequences of the ownership or disposition of ADSs. The summary assumes that each obligation in the deposit agreement between The Bank of New York and us (the *Deposit Agreement*) and any related agreement will be performed in accordance with its terms and is based on the current tax laws of the Republic of France and the United States, including the U.S. Internal Revenue Code of 1986, as amended (the *Code*), its legislative history, existing and proposed Treasury Regulations, Internal Revenue Service (*IRS*) rulings and judicial opinions as well as the Convention between the United States and the Republic of France for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital dated August 31, 1994 (the *Treaty*), the 2004 Protocol amending the Treaty entered into force on December 21, 2006, and the 2009 Protocol amending the Treaty entered into force on December 23, 2009, all as currently in effect and all subject to change, possibly with retroactive effect.

Your individual circumstances may affect the tax consequences of the ownership or disposition of ADSs to you, and your particular facts or circumstances are not considered in the discussion below.

For purposes of the Treaty, French tax law and the Code, U.S. Holders of ADSs will be treated as owners of the corresponding number of our shares underlying those ADSs held by The Bank of New York as depositary (the *Depositary*).



**Table of Contents**

This discussion summary is not intended to apply to holders of ADSs in particular circumstances, such as:

investors that own (directly or indirectly) 10% or more of our voting stock;

banks;

dealers in securities or currencies;

traders in securities who elect to apply a mark-to-market method of accounting;

financial institutions;

regulated investment companies;

real estate investment trusts;

tax-exempt organizations;

insurance companies;

persons holding ADSs as part of a hedging, straddle, conversion or other integrated transaction;

U.S. Holders who hold ADSs other than as capital assets;

persons whose functional currency is not the U.S. dollar;

certain U.S. expatriates;

individual retirement accounts and other tax-deferred accounts;

partners in partnerships;

persons subject to the U.S. alternative minimum tax; and

persons who acquired ADSs pursuant to an employee stock option or otherwise as compensation.

You should consult your own tax advisor regarding the French and United States federal, state and local and other tax consequences of the purchase, ownership and disposition of ADSs in the light of your particular circumstances, including the effect of any state, local or other national laws. In particular, you should confirm whether you are eligible for the benefits of the Treaty with your advisor and should discuss any possible consequences of failing to be so eligible. You should also consult your tax advisor in the event that you become entitled to receive any dividend that is approved to be paid.

The U.S. federal income tax treatment of a partner in a partnership that holds ADSs will depend on the status of the partner and the activities of the partnership. Holders that are partnerships should consult their tax advisers concerning the U.S. federal income tax consequences to their partners of the ownership and disposition of ADSs by the partnership.

#### ***French Taxation***

The following describes the material French tax consequences of owning and disposing of ADSs relevant to U.S. Holders which do not hold their ADSs in connection with a permanent establishment or fixed base in France through which a holder carries on business or performs personal services in France. The statements relating to French tax laws set out below are based on the laws in force as at the date hereof, and are subject to any changes in applicable French tax laws or in any applicable double taxation conventions or treaties with France occurring after such date.

This discussion is intended only as a descriptive summary and does not purport to be a complete analysis or list of all potential tax effects of the purchase or ownership of ADSs.

---

## **Table of Contents**

### ***Taxation of Dividends***

France generally imposes a 30% withholding tax on dividends distributed in cash or in the form of shares by a French corporation (such as our Company) to shareholders who are residents of the United States. Furthermore, dividends paid outside of France in a non-cooperative state or territory (*Etat ou territoire non-coopératif*) as defined in Article 238-0 A of the French Tax Code (i.e. a state or territory included in a list to be updated and published each year by way of an order (*arrêté*) of the French Ministers in charge of the economy and the budget) are subject to French withholding tax at a rate of 55%. However, the Treaty generally reduces the withholding tax rate to 15% on dividends paid in cash or in the form of shares to an Eligible U.S. Holder (as defined below).

Under the Treaty, an Eligible U.S. Holder is a U.S. Holder whose ownership of ADSs is not attributable to a permanent establishment or fixed base in France and who is:

an individual or other non-corporate holder; or

a corporation that does not own, directly or indirectly, 10% or more of the capital of our Company, provided in each case that such holder;

is a resident of the United States under the Treaty;

is entitled to Treaty benefits under the limitation on benefits provisions in Article 30 of the Treaty; and

complies with the procedural rules to obtain Treaty benefits described below under **Taxation of Dividends Procedure to Obtain Treaty Benefits**.

### ***Taxation of Dividends Procedure to Obtain Treaty Benefits***

Eligible U.S. Holders must follow certain procedures in order to be eligible for the 15% dividend withholding tax under the Treaty.

An Eligible U.S. Holder who wishes to obtain a reduced withholding rate at source must complete and deliver to the U.S. financial institution that is in charge of the administration of the ADSs of that Eligible U.S. Holder a Treaty form establishing that such U.S. Holder is a U.S. resident for the purpose of the Treaty (Form 5000).

If Form 5000 is not filed prior to the dividend payment, we or the French paying agent will withhold tax from the dividend at the above rate of 25%, and the Eligible U.S. Holder will be entitled to claim a refund of the excess withholding tax by filing Form 5001 with the Depository or the French paying agent early enough to enable them to forward that application to the French tax authorities before December 31 of the second year following the calendar year in which the related dividend was paid.

The Depository will provide to all U.S. Holders of ADSs the applications or certificates, together with instructions, and will arrange for the filing with the French tax authorities of all applications and certificates completed by U.S. Holders of ADSs and returned to the Depository in sufficient time to effect the filing.

Form 5000 and Form 5001 and their respective instructions are available at the *trésorerie des non-résidents* (10, rue du Centre, 93160 Noisy-le-Grand, France). Copies of these forms may also be downloaded from the website of the French tax authorities ([www.impots.gouv.fr](http://www.impots.gouv.fr)).

### ***Taxation on Sale or Disposal of ADSs***

Subject to the provisions of any relevant double tax treaty, persons who are not French residents for the purpose of French taxation (as well as, under certain conditions, foreign states, international organizations and certain foreign public bodies), who are not established or domiciled in a non cooperative state and who have held



---

## **Table of Contents**

not more than 25%, directly or indirectly, of the dividend rights (*droits aux bénéfices sociaux*) of our Company at any time during the preceding five years, are not generally subject to any French income tax or capital gains tax on any sale or disposal of ADSs.

If a transfer of listed shares is evidenced by a written agreement, such share transfer agreement is, in principle, subject to registration formalities and therefore to a registration duty assessed on the higher of the purchase price or the market value of the shares, at the rate of (i) for sales performed between January 1, 2012, and July 31, 2012: 3% for the part of the sale price below 200,000; 0.5% for the part of the sale price included between 200,000 and 500,000,000; and 0.25% for the part of the sale price exceeding 500,000,000; and (ii) for sales performed as from August 1, 2012: 0.1%. Transfers subject to the French financial transaction tax are exempted from the 0.1% registration duty, where applicable.

As from August 1, 2012, transfers of listed shares and certain other equity-linked instruments that are admitted to trading on a French or foreign regulated or recognized market, issued by companies having their registered seat in France and whose market capitalization exceeds 1 billion as at January 1 of the relevant taxable year, will be subject to French financial transaction tax, at the rate of 0.1%. The French tax authorities have not yet clarified whether the acquisition of ADSs will fall within the scope of this tax.

### ***French Estate and Gift Taxes***

Pursuant to The Convention Between the United States of America and the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Estates, Inheritance and Gifts dated November 24, 1978 as amended by a protocol dated December 8, 2004, a transfer of ADSs by gift or by reason of the death of a U.S. Holder will not be subject to French gift or inheritance tax, unless (i) the donor or the transferor is domiciled in France at the time of making the gift or at the time of his or her death, or (ii) the ADSs were used in, or held for use in, the conduct of a business through a permanent establishment or fixed base in France. In such a case, the French gift or inheritance tax may be credited against the U.S. gift or inheritance tax. This tax credit is limited to the amount of the U.S. gift or inheritance tax due on the ADSs.

### ***French Wealth Tax***

The French wealth tax (*impôt de solidarité sur la fortune*) does not generally apply to a U.S. Holder who is a resident of the United States as defined in the provisions of the Treaty, unless the ADSs form part of the business property of a permanent establishment or fixed base in France.

### **United States Taxation**

The following summary assumes that we are not a passive foreign investment company (a PFIC) for U.S. federal income tax purposes, which we believe to be the case. Our possible status as a PFIC must be determined annually and therefore may be subject to change. If we were to be a PFIC in any year, materially adverse consequences could result for U.S. Holders.

**THE SUMMARY OF U.S. FEDERAL INCOME TAX CONSEQUENCES SET OUT BELOW IS FOR GENERAL INFORMATION ONLY. U.S. HOLDERS SHOULD CONSULT THEIR TAX ADVISERS AS TO THE PARTICULAR TAX CONSEQUENCES TO THEM OF OWNING THE ADSs, INCLUDING THEIR ELIGIBILITY FOR THE BENEFITS OF THE TREATY, THE APPLICABILITY AND EFFECT OF STATE, LOCAL, FOREIGN AND OTHER TAX LAWS AND POSSIBLE CHANGES IN TAX LAW.**

---

## **Table of Contents**

### ***Dividends***

*General.* Distributions paid on our shares out of current or accumulated earnings and profits (as determined for U.S. federal income tax purposes), before reduction for any French withholding tax paid by us with respect thereto, will generally be taxable to a U.S. Holder as foreign source dividend income in the year in which the distribution is received (which, in the case of a U.S. Holder of ADSs, will be the year of receipt by the Depositary), and will not be eligible for the dividends received deduction allowed to corporations. Distributions in excess of current and accumulated earnings and profits will be treated as a non-taxable return of capital to the extent of the U.S. Holder's basis in the ADSs and thereafter as capital gain. However, we do not maintain calculations of our earnings and profits in accordance with U.S. federal income tax accounting principles. U.S. Holders should therefore assume that any distribution by us with respect to our Ordinary Shares will constitute ordinary dividend income. U.S. Holders should consult their own tax advisors with respect to the appropriate U.S. federal income tax treatment of any distribution received from us.

For taxable years that begin before 2013, dividends paid by us will be taxable to a non-corporate U.S. Holder at the special reduced rate normally applicable to capital gains, provided either we qualify for the benefits of the Treaty or the ADSs are considered to be readily tradable on the NYSE. A U.S. Holder will be eligible for this reduced rate only if it has held the ADSs for more than 60 days during the 121-day period beginning 60 days before the ex-dividend date. A U.S. Holder will not be able to claim the reduced rate for any year in which we are treated as a PFIC. See *Passive Foreign Investment Company Status* below.

*Foreign Currency Dividends.* Dividends paid in euro will be included in income in a U.S. dollar amount calculated by reference to the exchange rate in effect on the day the dividends are received by the Depositary, regardless of whether the euro are converted into U.S. dollars at that time. If dividends received in euro are converted into U.S. dollars on the day they are received by the Depositary, the U.S. Holder generally will not be required to recognize foreign currency gain or loss in respect of the dividend income.

### ***Effect of French Withholding Taxes***

As discussed above under *Taxation – French Taxation – Taxation of Dividends*, under French domestic law, dividends paid by us to a United States resident shareholder are subject to a 30% withholding tax (55% in the case of dividends paid outside France in a non-cooperative state or territory). Please see *Taxation – French taxation – Taxation of Dividends*. Under the Treaty, however, the rate of withholding tax applicable to Eligible U.S. Holders is reduced to a maximum of 15%. Please see *Taxation – French Taxation – Taxation of Dividends – Procedure to Obtain Treaty Benefits* for the procedure to claim the reduced rate of withholding tax under the Treaty.

A U.S. Holder will generally be entitled, subject to certain limitations, to a credit against its U.S. federal income tax liability, or a deduction in computing its U.S. federal taxable income, for any French tax withheld from a dividend. Eligible U.S. Holders will not be entitled to a foreign tax credit for the amount of any French taxes withheld in excess of the 15% maximum rate, and with respect to which the holder can obtain a refund from the French taxing authorities. For purposes of the foreign tax credit limitation, foreign source income is classified in one of two baskets, and the credit for foreign taxes on income in any basket is limited to U.S. federal income tax allocable to that income. Dividends paid by us generally will constitute foreign source income in the passive income basket. If a U.S. Holder receives a dividend from us that qualifies for the reduced rate described above under *United States Taxation – Dividends – General*, the amount of the dividend taken into account in calculating the foreign tax credit limitation will in general be limited to the gross amount of the dividend, multiplied by the reduced rate divided by the highest rate of tax normally applicable to dividends. In certain circumstances, a U.S. Holder may be unable to claim foreign tax credits (and may instead be allowed deductions) for foreign taxes imposed on a dividend if the U.S. Holder has not held the ADSs for at least 16 days in the 31-day period beginning 15 days before the ex dividend date.



---

**Table of Contents**

U.S. Holders that are accrual basis taxpayers, and who do not otherwise elect, must translate French taxes into U.S. dollars at a rate equal to the average exchange rate for the taxable year in which the taxes accrue, while all U.S. Holders must translate taxable dividend income into U.S. dollars at the spot rate on the date received. This difference in exchange rates may reduce the U.S. dollar value of the credits for French taxes relative to the U.S. Holder's U.S. federal income tax liability attributable to a dividend. However, cash basis and electing accrual basis U.S. Holders may translate French taxes into U.S. dollars using the exchange rate in effect on the day the taxes were paid. Any such election by an accrual basis U.S. Holder will apply for the taxable year in which it is made and all subsequent taxable years, unless revoked with the consent of the IRS.

***Exchange of ADSs for Shares***

No gain or loss will be recognized upon the exchange of ADSs for the U.S. Holder's proportionate interest in our ordinary shares. A U.S. Holder's tax basis in the withdrawn shares will be the same as the U.S. Holder's tax basis in the ADSs surrendered, and the holding period of the shares will include the holding period of the ADSs.

***Sale or other Disposition***

Upon a sale or other disposition of ADSs (other than an exchange of ADSs for ordinary shares), a U.S. Holder generally will recognize capital gain or loss for U.S. federal income tax purposes equal to the difference, if any, between the amount realized on the sale or other disposition and the U.S. Holder's adjusted tax basis in the ADSs. This capital gain or loss will be long-term capital gain or loss if the U.S. Holder's holding period in the ADSs exceeds one year. Any gain or loss will generally be U.S. source.

***Passive Foreign Investment Company Status***

A foreign corporation will be a PFIC in any taxable year in which either (i) 75% or more of its gross income consists of certain specified types of passive income or (ii) the average percentage of its assets (by value) that produce or are held for the production of passive income is at least 50%. We do not expect that we will be a PFIC in 2012, but our possible status as a PFIC must be determined annually and therefore we might become a PFIC in future years.

If we were a PFIC in any taxable year during which a U.S. Holder owned ADSs and the U.S. Holder had not made a mark to market or qualified electing fund election, the U.S. Holder would generally be subject to special rules (regardless of whether we continued to be a PFIC) with respect to (i) any excess distribution (generally, any distributions received by the U.S. Holder on ADSs in a taxable year that are greater than 125% of the average annual distributions received by the U.S. Holder in the three preceding taxable years or, if shorter, the U.S. Holder's holding period for the ADSs) and (ii) any gain realized on the sale or other disposition of ADSs. Under these rules (a) the excess distribution or gain would be allocated ratably over the U.S. Holder's holding period, (b) the amount allocated to the current taxable year and any taxable year prior to the first taxable year in which we are a PFIC would be taxed as ordinary income, and (c) the amount allocated to each of the other taxable years would be subject to tax at the highest rate of tax in effect for the applicable class of taxpayer for that year and an interest charge for the deemed deferral benefit would be imposed with respect to the resulting tax attributable to each such other taxable year. If we were a PFIC, a U.S. Holder of ADSs would generally be subject to similar rules with respect to distributions to us by, and dispositions by us of the stock of, any direct or indirect subsidiaries of ours that were also PFICs. A U.S. Holder who beneficially owns an interest in a PFIC is generally required to file an annual information return on IRS Form 8621 describing the distributions received from and any gain realized upon the disposition of a beneficial interest in the PFIC. Additionally, dividends paid by us would not be eligible for the special reduced rate of tax described above under United States Taxation Dividends General. U.S. Holders should consult their tax advisers regarding the potential application of the PFIC regime.

## **Table of Contents**

### ***Backup Withholding and Information Reporting***

Payments of dividends and other proceeds with respect to ADSs by a U.S. paying agent or other U.S. intermediary will be reported to the IRS and to the U.S. Holder as may be required under applicable regulations. Backup withholding may apply to these payments if the U.S. Holder fails to provide an accurate taxpayer identification number or certification of exempt status or fails to report all interest and dividends required to be shown on its U.S. federal income tax returns. Certain U.S. Holders (including, among others, corporations) are not subject to backup withholding. U.S. Holders should consult their tax advisers as to their qualification for exemption from backup withholding and the procedure for obtaining an exemption.

### ***Foreign Financial Asset Reporting***

Recently enacted legislation imposes new reporting requirements on the holding of certain foreign financial assets, including equity of foreign entities, if the aggregate value of all of these assets exceeds \$50,000. Our ordinary shares are expected to constitute foreign financial assets subject to these requirements unless they are held in an account at a financial institution (in which case, the account may be reportable if maintained by a foreign financial institution). U.S. Holders should consult their tax advisors regarding the application of this legislation.

### **Dividends and Paying Agents**

Not applicable.

### **Statement by Experts**

Not applicable.

### **Documents on Display**

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the Exchange Act ) applicable to foreign private issuers. In accordance with the Exchange Act, we electronically file or submit reports, including annual reports on Form 20-F and interim reports on Form 6-K, and other information with the Securities and Exchange Commission. You may obtain these reports and other information by sending a written request to CGGVeritas, Tour Maine-Montparnasse, 33, avenue du Maine, BP 191, 75755 Paris cedex 15, France, Attention: Investor Relations Officer, Telephone: (33) 1 64 47 4500.

You can inspect and copy these reports, and other information, without charge, at the Public Reference Room of the Commission located at 100 F Street, N.E., Washington, D.C. 20549. You can also obtain copies of these materials at prescribed rates from the Public Reference Room of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549 or by calling the Commission at 1-800-SEC-0330. The Commission also maintains a web site at <http://www.sec.gov> that contains reports and other information regarding registrants that file electronically with the Commission.

In addition, you can inspect material filed by CGGVeritas at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005, on which American Depositary Shares representing shares of our common stock are listed. As a foreign private issuer, we are not subject to the proxy rules under Section 14 or the short-swing insider profit disclosure rules under Section 16 of the Exchange Act.

On January 12, 2007, following the completion of the merger with CGG, Veritas was delisted from the New York Stock Exchange and filed a Form 15 to terminate its registration and reporting obligations under the Exchange Act.

### **Subsidiary Information**

Not applicable.

## **Table of Contents**

### **Item 11: QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK**

Because we operate internationally, we are exposed to general risks linked to operating abroad. The table below provides information about our market sensitive financial instruments and constitutes a forward-looking statement. Our major market risk exposures are changing interest rates and currency fluctuations.

#### **Interest Rate Risk**

Our policy is to manage interest rates through maximization of the proportion of fixed rate debt. As of December 31, 2011, 96% of our debt consisted of fixed-rate bonds, along with some fixed-rate finance leases and fixed-rate medium-term bank credit facilities with variable maturities. This debt is not exposed to interest rate fluctuations. However, drawings under our credit facilities incur interest at variable rates that are reset at each interest period (generally between one and 60 months). As a result, a portion of our interest expenses vary in line with movements in short-term interest rates. We may use interest rate swaps to adjust interest rate exposure when appropriate based upon market conditions.

#### **Foreign Exchange Rate Risk**

As a company that derives a substantial amount of its revenue from sales internationally, we are subject to risks relating to fluctuations in currency exchange rates. Our revenues and expenses are mainly denominated in U.S. dollars and euros, and to a significantly lesser extent, in Canadian dollars, Brazilian reais, Australian dollars, Norwegian kroner and British pounds. Historically, a significant portion of our revenues that were invoiced in euros related to contracts that were effectively priced in U.S. dollars, as the U.S. dollar often serves as the reference currency when bidding for contracts to provide geophysical services.

We attempt to match foreign currency revenues and expenses in order to balance our net position of receivables and payables denominated in foreign currencies. We also seek to improve the balance of our net position of receivables and payables denominated in U.S. dollars by maintaining a portion of our financing in U.S. dollars. In addition, our policy generally is to hedge major foreign currency cash exposures through foreign exchange forward contracts or other foreign exchange currency hedging instruments. These contracts are entered into with major financial institutions, thereby minimizing the risk of credit loss. All instruments are entered into for non-trading purposes. See Item 5: Operating and Financial Review and Prospects Trend Information Currency Fluctuations above.

#### **Credit Risk and Counter-Party Risk**

We seek to minimize our counter-party risk by entering into hedging contracts only with highly rated commercial banks or financial institutions and by distributing the transactions among the selected institutions. Although our credit risk is the replacement cost at the then-estimated fair value of the instrument, we believe that the risk of incurring losses is remote and those losses, if any, would not be material. Our receivables and investments do not represent a significant concentration of credit risk due to the wide variety of customers and markets in which we sell our services and products and our presence in many geographic areas. In 2011, the Group's two most significant customers accounted for 13.0% and 3.0% of the Group's consolidated revenues compared with 6.9% and 6.0% in 2010 and 6.8% and 5.3% in 2009.

**Table of Contents**

The table below presents principal amounts and related weighted average interest rates by year of maturity for our debt obligations and our foreign exchange forward contracts, all of which mature in one year or less and their fair value as of December 31, 2011:

Carrying value	2012	2013	2014	2015	2016 (in million)	Thereafter	Total	Fair Value
<b>Debt</b>								
U.S. dollar	7.3	5.6	3.9	2.5	307.3	748.2	1,074.8	1,710.6
<i>Average fixed rate</i>	6.9%	6.4%	7.2%	7.7%	8.0%	8.5%	8.3%	
U.S. dollar	26.5	12.0	7.5	6.5	4.7		57.2	57.2
<i>Average variable rate</i>	2.9%	2.9%	3.1%	3.5%	3.5%		3.0%	
Euro	3.6	3.7	3.7	3.9	4.0	333.0	351.9	427.7
<i>Average fixed rate</i>	4.4%	4.4%	4.4%	4.4%	4.4%	7.8%	7.6%	
Euro								
<i>Average variable rate</i>								
Other currencies								
<i>Average fixed rate</i>								
Other currencies								
<i>Average variable rate</i>								
<b>Foreign Exchange Firm commitments</b>								
Forward sales (in U.S.\$)	157.8							(5.0)
U.S. dollars average rate/	1.3492							
Forward sales (in British pounds)	17.2							0.1
U.S. dollars average rate/GBP	1.5635							
Forward sales (in Renmin-bi Yuan)	21.5							0.0
RMB average rate/U.S.\$	6.3468							
Forward sales (in Singapore dollar)	2.3							0.0
SGD average rate/U.S.\$	1.2929							
Forward sales (in Swiss franc)	3.8							0.3
CHF average rate/U.S.\$	0.8713							

**Table of Contents****Item 12: DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES****American Depositary Shares**

Our ADSs are listed on the New York Stock Exchange under the symbol **CGV**. The Bank of New York Mellon is the depositary (the Depositary) issuing ADSs pursuant to an amended and restated deposit agreement dated January 11, 2007 among our company, the Depositary and the holders from time to time of ADSs (the Deposit Agreement). Each ADS represents the right to receive one share. The table below sets forth the fees payable, either directly or indirectly, by a holder of ADSs as of the date of this annual report.

<b>Category</b>	<b>Depositary Actions</b>	<b>Associated Fee/By Whom Paid</b>
(a) Depositing or substituting the underlying shares	Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property	\$5.00 (or less) per 100 ADSs (or portion thereof) charged to person depositing the shares
(b) Receiving or distributing dividends	Any cash distribution to ADS registered holders	\$0.02 (or less) per ADS
(c) Selling or exercising rights	Distribution of securities distributed to holders of deposited securities which are distributed by the depositary to ADS registered holders	A fee equivalent to the fee that would be payable if securities distributed had been shares and the shares had been deposited for issuance of ADSs
(d) Withdrawing an underlying security	Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates	\$5.00 (or less) per 100 ADSs (or portion thereof) charged to person withdrawing the shares
(e) Transferring, splitting or grouping receipts	Transfers, combining or grouping of depositary receipts	Not applicable
(f) General depositary services, particularly those charged on an annual basis	Other services performed by the Depositary in administering the ADSs	Not applicable
(g) Expenses of the Depositary	Expenses incurred on behalf of holders in connection with: <ul style="list-style-type: none"> <li>taxes and other governmental charges the Depositary or the custodian has to pay on any ADS or share underlying and ADS, for example, stock transfer taxes, stamp duty or withholding taxes;</li> <li>cable, telex and facsimile transmission (when expressly provided in the Deposit Agreement);</li> <li>registration or transfer fees for the registration of shares or other deposited securities on the share register and applicable to transfers of shares or other deposited securities to or from the name of the custodian; and</li> <li>expenses of the Depositary in connection with the conversion of foreign currency into U.S. dollars.</li> </ul>	

**Table of Contents**

The Depositary may remit to us all or a portion of the Depositary fees charged for the reimbursement of certain of the expenses we incur in respect of the ADS program established pursuant to the Deposit Agreement upon such terms and conditions as we may agree from time to time.

However, in the year ended December 31, 2011, the Depositary did not reimburse us for any fees or expenses.

---

**Table of Contents**

**PART II**

**Item 13: DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

Not applicable.

**Item 14: MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITYHOLDERS AND USE OF PROCEEDS**

Not applicable.

**Item 15: CONTROLS AND PROCEDURES**

(a) *Disclosure controls and procedures.* As of the end of the period covered by this report, we carried out an evaluation of the effectiveness of our disclosure controls and procedures (as defined in 17 CFR 240.13a-15(e) and 240.15d-15(e)), under the supervision of our management, including our Chief Executive Officer and our Chief Financial Officer. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that such controls and procedures are effective to ensure that information required to be disclosed in reports filed with or submitted to the SEC under the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in the Exchange Act and its rules and forms.

There has been no change in our internal control over financial reporting during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Pursuant to section L.225-37 of the French Commercial Code, as amended by a French financial law (the *Loi de Sécurité Financière*) enacted on August 1, 2003, our Chairman of the Board must deliver a report to the annual general meeting of our shareholders on the Board of Directors composition, preparation and organization of the Board of Directors work, internal control and risk management. This report for 2011 informed our shareholders of the internal control procedures that we have put in place in order to circumvent identified risks resulting from our activities and the risks of errors or fraud, particularly in accounting and finance. It describes the existing control environment, i.e. our values with respect to integrity and ethics, the organization of our corporate governance committees, the functions of our disclosure committee and the way we delegate powers and determine areas of responsibility. It also describes the procedures put in place to identify and assess our major risks, whether internal or external. It gives details on our control procedures, particularly those applied to financial information, so as to ensure reliability of financial reporting. A self-assessment process of internal control procedures currently existing within our Group has been implemented.

(b) *Management annual report on internal control over financial reporting.* We are responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities and Exchange Act of 1934) for CGGVeritas.

Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements, and can only provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

We assessed the effectiveness of our internal control over financial reporting as of December 31, 2011, and concluded that our internal control over financial reporting is effective. In making this assessment, we used the criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessment under these criteria, we concluded that, as of December 31, 2011, our internal control over financial reporting was effective to provide reasonable assurance

---

**Table of Contents**

regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and with IFRS as adopted by the European Union as of December 31, 2011.

The effectiveness of management's internal control over financial reporting has been audited by Ernst & Young and Mazars, our independent registered public accounting firms, as stated in their report, which is included herein.

*(c) Attestation Report of Independent Registered Public Accounting Firms.*

**Report of Independent Registered Public Accounting Firms**

To the Board of Directors and Shareholders of Compagnie Générale de Géophysique – Veritas SA:

We have audited Compagnie Générale de Géophysique – Veritas SA's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Compagnie Générale de Géophysique – Veritas SA's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management annual report on internal control over financial reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Compagnie Générale de Géophysique – Veritas SA maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Compagnie Générale de Géophysique – Veritas SA as of



**Table of Contents**

December 31, 2011, 2010 and 2009 and the related consolidated statements of operations, comprehensive income (loss), changes in equity and cash flows for each of the three years in the period ended December 31, 2011 of Compagnie Générale de Géophysique Veritas SA and our report dated April 17, 2012 expressed an unqualified opinion thereon.

Courbevoie and Paris La Défense, France

April 17, 2012.

	MAZARS		ERNST & YOUNG et Autres	
	Xavier Charton	Jean-Marc Deslandes	Philippe Diu	Nicolas Pfeuty
(d) <i>Changes in Internal Control Over Financial Reporting.</i>				

Not Applicable

**Item 16A: AUDIT COMMITTEE FINANCIAL EXPERT**

Pursuant to section 407 of the Sarbanes Oxley Act of 2002, Mr. Dunand was appointed Financial Expert of the Audit Committee by a Board resolution dated December 10, 2003, as reaffirmed by a board resolution on February 20, 2007. Mr. Dunand is independent, as that term is defined by the listing standards of the New York Stock Exchange.

**Item 16B: CODE OF ETHICS**

The Board of Directors has adopted a code of ethics that applies to our Chief Executive Officer, our Chief Financial Officer, other senior financial officers (including our principal accounting officer), the members of the Executive Committee and the Disclosure Committee to promote honest and ethical conduct, full, fair, accurate, timely and understandable disclosure in periodic reports required to be filed by us and compliance with applicable governmental rules and regulations. A copy of this code of ethics is filed as an exhibit to this annual report.

**Item 16C: PRINCIPAL ACCOUNTANT FEES AND SERVICES**

	December 31,			
	2011		2010	
	Ernst & Young	Mazars	Ernst & Young	Mazars
	(in thousands of euros)			
Audit Fees <sup>(a)</sup>	3,287	1,985	3,167	1,870
Audit-Related Fees <sup>(b)</sup>	620	397	287	178
Tax Fees <sup>(c)</sup>	116	47	73	95
All Other Fees <sup>(d)</sup>				
<b>Total</b>	<b>4,023</b>	<b>2,429</b>	<b>3,527</b>	<b>2,143</b>

<sup>(a)</sup> *Audit fees are the aggregate fees billed by our independent auditors for the audit of the individual and consolidated annual and semi-annual financial statements and the provision of services that are normally provided by our independent auditors in connection with statutory and regulatory filings or engagements.*

<sup>(b)</sup>

## Edgar Filing: CGG VERITAS - Form 20-F

*Audit-related fees are the aggregate fees billed by our independent auditors for services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under "audit fees". They include consultations relating to accounting principles and internal controls.*

---

**Table of Contents**

(c) *Tax fees are the aggregate fees billed by our independent auditors for services rendered by our auditors for tax compliance, tax advice, and tax planning. They include assistance when dealing with local authorities, advice regarding tax audit and litigation, expatriate taxation and tax advice relating to mergers and acquisitions.*

(d) *All other fees are the aggregate fees billed by our independent auditors other than the services reported in notes (a) through (c) of this table. They include training services as well as general and specific advice.*

In December 2003, the Board of Directors and the Audit Committee adopted an audit and non-audit services pre-approval policy. This policy requires the Audit Committee to pre-approve the audit and non-audit services performed by the independent auditors in order to assure that they do not impair the auditors' independence from us.

Pursuant to this policy, a list of proposed services is pre-approved, on an annual basis, without consideration of specific case-by-case services by the Audit Committee. Unless a type of service has received such general pre-approval, it will require specific pre-approval by the Audit Committee or by any person to whom the audit committee has delegated pre-approval authority. In addition, any proposed services exceeding pre-approved cost levels or budgeted amounts will also require specific pre-approval by the Audit Committee. The services list and the cost levels are reviewed annually by the Audit Committee.

The annual audit services engagement terms and fees as defined in note (a) of table above are subject to the specific pre-approval of the Audit Committee.

**Item 16D: EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES**

Not applicable.

**Item 16E: PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

Not applicable.

**Item 16F: CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT**

Not applicable.

**Item 16G: CORPORATE GOVERNANCE**

The corporate governance rules of the New York Stock Exchange differ from the regulations and recommendations applicable in France, especially those governing the definition of director independence and the role and operation of the Board's committees. As a non-U.S. listed company, we are exempted from many of these corporate governance rules, which are applicable to U.S. listed companies. For example, notwithstanding our conclusions as to independence under the AFEP-MEDEF Code, our Board has not formally determined which of our Directors meet NYSE independence standards, and non-management Directors do not meet regularly. Our Appointment-Remuneration Committee is not made up exclusively of independent Directors, and the Board's internal charter does not address committee purposes and responsibilities in the manner specified by the NYSE rules applicable to nominating, compensation and audit committees. However, our Audit Committee members meet the independence test for audit committee members established by the SEC, and we believe that they also meet the definition of independence under the NYSE rules.

**Item 16H: MINE SAFETY DISCLOSURE**

Not applicable.

**Table of Contents****PART III****Item 17: FINANCIAL STATEMENTS**

Not applicable.

**Item 18: FINANCIAL STATEMENTS**

The following audited financial statements of CGGVeritas and related schedules, together with the report of Ernst & Young & Autres and Mazars, are filed as part of this Annual Report:

<u>Report of Independent Auditors</u>	Page F-1
<u>Consolidated Financial Statements:</u>	
<u>Consolidated Balance Sheets as at December 31, 2011, 2010 and 2009</u>	F-2
<u>Consolidated Statements of Operations for the years ended December 31, 2011, 2010 and 2009</u>	F-3
<u>Consolidated Statements of Comprehensive Income (Loss) for the year ended December 31, 2011, 2010 and 2009</u>	F-4
<u>Consolidated Statements of Changes in Equity for the year ended December 31, 2011, 2010 and 2009</u>	F-5
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2011, 2010 and 2009</u>	F-6
<u>Notes to the Consolidated Financial Statements</u>	F-7

**Item 19: EXHIBITS**

The following instruments and documents are included as Exhibits to this Annual Report. Exhibits incorporated by reference are so indicated.

Exhibit No	Exhibit
1.1*	English translation of our Articles of Association ( <i>statuts</i> )
2.1	Indenture dated as of February 9, 2007 between us, certain of our subsidiaries acting as guarantors and The Bank of New York Trust Company, as Trustee, which includes the form of the 7 <sup>3/4</sup> % senior notes due 2017 as an exhibit thereto. (Exhibit 2.4 to the Registrant's Annual Report for the fiscal year ended December 31, 2006, dated May 7, 2007, is incorporated herein by reference).
2.2	Supplemental Indenture dated as of December 12, 2008 between us, our subsidiary CGGVeritas Services Holding B.V. and The Bank of New York Mellon Trust Company, as Trustee to add CGGVeritas Services Holding B.V. as a guarantor to the 7 <sup>3/4</sup> % senior notes due 2017. (Exhibit 2.6 to the Registrant's Annual Report for the fiscal year ended December 31, 2008, dated April 22, 2009, is incorporated herein by reference).
2.3	Indenture dated as of June 9, 2009 between us, certain of our subsidiaries acting as guarantors and The Bank of New York Mellon Trust Company, as Trustee, which includes the form of the 9 <sup>1/2</sup> % senior notes due 2016 as an exhibit thereto (Exhibit 4.13 to the Registrant's Registration Statement on Form F-4, dated September 21, 2009, as amended, is incorporated herein by reference).
2.4	Supplemental Indenture dated as of January 29, 2010 between us, our subsidiary CGGVeritas Services Holding (UK) B.V. and The Bank of New York Mellon Trust Company, as Trustee to add CGGVeritas Services Holding (UK) B.V. as a guarantor to the 7 <sup>3/4</sup> % senior notes due 2017. (Exhibit 2.9 to the Registrant's Annual Report for the fiscal year ended December 31, 2009, dated April 23, 2010, is incorporated herein by reference).
2.5	Supplemental Indenture dated as of January 29, 2010 between us, our subsidiary CGGVeritas Services Holding (UK) B.V. and The Bank of New York Mellon Trust Company, as Trustee to add CGGVeritas Services Holding (UK) B.V. as a guarantor to the 9 <sup>1/2</sup> % senior notes due 2016. (Exhibit 2.10 to the Registrant's Annual Report for the fiscal year ended December 31, 2009, dated April 23, 2010, is incorporated herein by reference).



**Table of Contents**

<b>Exhibit No</b>	<b>Exhibit</b>
2.6	Indenture dated as of May 31, 2011 between us, certain of our subsidiaries acting as guarantors and The Bank of New York Mellon, as Trustee, which includes the form of the 6 1/2% senior notes due 2021 as an exhibit thereto (Exhibit 4.19 to the Registrant's Registration Statement on Form F-4, dated September 27, 2011, is incorporated herein by reference).
4.1	Mixed Capital Company Contract dated November 26, 2003 by and among Sercel SA, the Committee of the Hebei JunFeng Prospecting Equipment Company, the Dongfang Geological Prospecting Limited Liability Company, and the Xian General Factory for Oil Prospecting Equipment (Exhibit 10.1 to the Report on Form 6-K, dated May 13, 2004, is incorporated herein by reference).
4.2	U.S.\$70 million Term Credit Facility, dated March 29, 2006, by and among Exploration Investment Resources II AS, DnB NOR Bank ASA and certain banks and financial institutions (Exhibit 4.22 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2005, dated May 9, 2006, is incorporated herein by reference).
4.3	Agreement between the Shareholders of CGG Ardiseis, dated June 23, 2006, between Industrialization & Energy Services Company (TAQA) and us (we have requested that the Commission grant confidential treatment for certain portions of this document) (Exhibit 4.22 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2006, dated May 7, 2007, is incorporated herein by reference).
4.4	Credit Agreement, dated as of January 12, 2007, among Volnay Acquisition Co. I, us, certain of our subsidiaries acting as guarantors, the lenders party thereto and Credit Suisse as Administrative Agent and Collateral Agent (Exhibit 4.25 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2006, dated May 7, 2007, is incorporated herein by reference).
4.5	Revolving Credit Agreement, dated as of February 7, 2007, among us, certain of our subsidiaries acting as guarantors, Natixis as Facility Agent, Credit Suisse as Collateral Agent and the lenders party thereto (Exhibit 4.27 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2006, dated May 7, 2007, is incorporated herein by reference).
4.6	Amendment No. 1 and Agreement, dated as of December 12, 2008, among CGGVeritas Services Holding (U.S.) Inc. (formerly Volnay Acquisition Co. I), us, the lenders party to the Credit Agreement dated January 12, 2007, and Credit Suisse, as Administrative Agent and Collateral Agent. (Exhibit 4.6 to the Registrant's Annual Report for the fiscal year ended December 31, 2008, dated April 22, 2009, is incorporated herein by reference).
4.7	Amendment No. 1, dated as of December 12, 2008, among us, the lenders party to the Revolving Credit Agreement dated February 7, 2007, Natixis, as Facility Agent, and Credit Suisse, as Collateral Agent. (Exhibit 4.7 to the Registrant's Annual Report for the fiscal year ended December 31, 2008, dated April 22, 2009, is incorporated herein by reference).
4.8	Amendment No. 2 and Agreement, dated as of May 21, 2009, among CGGVeritas Services Holding (U.S.) Inc. (formerly Volnay Acquisition Co. I), us, the lenders party to the Credit Agreement dated January 12, 2007, and Credit Suisse, as Administrative Agent and Collateral Agent (Exhibit 4.11 to the Registrant's Registration Statement on Form F-4, dated September 21, 2009, as amended, is incorporated herein by reference).
4.9	Amendment No. 2, dated as of May 28, 2009, among us, the lenders party to the Revolving Credit Agreement dated February 7, 2007, Natixis, as Facility Agent, and Credit Suisse, as Collateral Agent (Exhibit 4.12 to the Registrant's Registration Statement on Form F-4, dated September 21, 2009, as amended, is incorporated herein by reference).
4.10	Amendment and Restatement Agreement, dated as of July 15, 2010, among CGGVeritas Services Holding (U.S.) Inc. (formerly named Volnay Acquisition Co. I), us, the lenders party to the Credit Agreement dated January 12, 2007, and Credit Suisse, as Administrative Agent and Collateral Agent.

**Table of Contents**

<b>Exhibit No</b>	<b>Exhibit</b>
4.11	Amendment N°3, dated as of November 4, 2010, among us, the lenders party to the Revolving Credit Agreement dated February 7, 2007, Natixis, as Facility Agent, and Credit Suisse, as Collateral Agent.
4.12	Registration Rights Agreement, dated May 31, 2011, among us, certain of our subsidiaries acting as guarantors, Credit Suisse Securities (Europe Limited), BNP Paribas, Merrill Lynch, Pierce, Fenner & Smith Incorporated, Natixis and RBC Capital Markets LLC (Exhibit 4.20 to the Registrant's Registration Statement on Form F-4, dated September 27, 2011, is incorporated herein by reference).
4.13*	Amendment and Restatement Agreement, dated as of December 15, 2011, among CGGVeritas Services Holding (U.S.) Inc. (formerly named Volnay Acquisition Co. I), us, the lenders party to the Credit Agreement dated January 12, 2007, and Credit Suisse AG, as Administrative Agent and Collateral Agent.
4.14*	Amendment N°4, dated as of December 15, 2011, among us, the lenders party to the Revolving Credit Agreement dated February 7, 2007, Natixis, as Facility Agent, and Credit Suisse, as Collateral Agent.
8*	Our subsidiaries
11	Code of Ethics (Exhibit 11 to the Registrant's Annual Report on Form 20-F for the fiscal year ended December 31, 2003, dated June 1, 2004, is incorporated herein by reference).
12.1*	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes Oxley Act of 2002
12.2*	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes Oxley Act of 2002
13.1*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes Oxley Act of 2002 (10 U.S.C. § 1350)
13.2*	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes Oxley Act of 2002 (10 U.S.C. § 1350)
15*	Consent of Mazars and Ernst & Young

\* *Filed herewith.*

**Table of Contents**

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

COMPAGNIE GENERALE DE GEOPHYSIQUE-VERITAS

(Registrant)

/s/ JEAN-GEORGES MALCOR  
Jean-Georges Malcor

/s/ STEPHANE-PAUL FRYDMAN  
Stéphane-Paul Frydman

Chief Executive Officer  
Date: April 20, 2012

Chief Financial Officer



**Table of Contents**

**COMPAGNIE GENERALE DE GEOPHYSIQUE-VERITAS**

**ERNST & YOUNG**

1-2 place des Saisons, Paris La Défense 1  
92400 Courbevoie

**MAZARS**

Exaltis 61, rue Henri Regnault  
92400 Courbevoie

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Compagnie Générale de Géophysique Veritas SA:

We have audited the accompanying consolidated balance sheets of Compagnie Générale de Géophysique Veritas SA and subsidiaries (the Company ) as of December 31, 2011, 2010 and 2009, and the related consolidated statements of operations, comprehensive income (loss), changes in equity and cash flows for each of the three years in the period ended December 31, 2011. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2011, 2010 and 2009, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2011, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board ( IFRS as issued by the IASB ).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company s internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria) and our report dated April 17, 2012 expressed an unqualified opinion thereon.

Courbevoie and Paris La Défense, France

April 17, 2012.

MAZARS

ERNST & YOUNG et Autres

Xavier Charton

Jean-Marc Deslandes

Philippe Diu

Nicolas Pfeuty

**Table of Contents****COMPAGNIE GENERALE DE GEOPHYSIQUE-VERITAS, S.A.**

The consolidated financial statements were approved by the Board of Directors on February 29, 2012 and are subject to the approval of our General Shareholders Meeting expected to be held on May 10, 2012.

**CONSOLIDATED BALANCE SHEETS**

	Notes	December 31,		
		2011	2010	2009
		(amounts in millions of euros)		
<b>ASSETS</b>				
Cash and cash equivalents	28	410.7	335.9	480.3
Trade accounts and notes receivable, net	3	677.0	694.9	564.1
Inventories and work-in-progress, net	4	279.4	264.5	223.8
Income tax assets		92.3	85.1	66.3
Other current assets, net	5	121.4	121.1	89.5
Assets held for sale, net	5	49.8	72.5	13.3
<b>Total current assets</b>		<b>1,630.6</b>	<b>1,574.0</b>	<b>1,437.3</b>
Deferred tax assets	24	145.9	135.4	74.3
Investments and other financial assets, net	7	19.1	26.5	35.9
Investments in companies under equity method	8	100.2	73.4	99.0
Property, plant and equipment, net	9	913.9	781.7	677.7
Intangible assets, net	10	668.6	721.4	728.9
Goodwill, net	11	2,077.6	2,012.0	1,868.1
<b>Total non-current assets</b>		<b>3,925.3</b>	<b>3,750.4</b>	<b>3,483.9</b>
<b>TOTAL ASSETS</b>		<b>5,555.9</b>	<b>5,324.4</b>	<b>4,921.2</b>
<b>LIABILITIES AND EQUITY</b>				
Bank overdrafts	13	4.6	4.5	2.7
Current portion of financial debt	13	49.9	74.5	113.5
Trade accounts and notes payables		298.6	295.5	179.8
Accrued payroll costs		143.5	109.3	118.5
Income taxes payable		123.5	62.1	42.5
Advance billings to customers		39.4	24.8	23.8
Provisions - current portion	16	26.8	41.8	40.2
Other current liabilities	12	210.2	196.4	158.7
<b>Total current liabilities</b>		<b>896.5</b>	<b>808.9</b>	<b>679.7</b>
Deferred tax liabilities	24	85.5	116.7	120.7
Provisions - non-current portion	16	82.5	87.7	104.6
Financial debt	13	1,446.5	1,406.6	1,282.8
Other non-current liabilities	17	38.5	34.6	31.9
<b>Total non-current liabilities</b>		<b>1,653.0</b>	<b>1,645.6</b>	<b>1,540.0</b>
Common stock: 252,094,165 shares authorized and 151,861,932 shares with a 0.40 nominal value issued and outstanding at December 31, 2011	15	60.7	60.6	60.5
Additional paid-in capital		1,970.1	1,967.9	1,965.9

Edgar Filing: CGG VERITAS - Form 20-F

Retained earnings	894.1	880.5	1,136.0
Treasury shares	(13.8)	(13.8)	(13.5)
Net income (loss) for the period attributable to owners of CGGVeritas SA	(19.0)	(54.6)	(264.3)
Cumulative income and expense recognized directly in equity	(9.0)	(3.4)	0.9
Cumulative translation adjustment	55.8	(25.1)	(224.2)
<b>Equity attributable to owners of CGGVeritas SA</b>	<b>2,938.9</b>	<b>2,812.1</b>	<b>2,661.3</b>
Non-controlling interest	67.5	57.8	40.2
<b>Total equity</b>	<b>3,006.4</b>	<b>2,869.9</b>	<b>2,701.5</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>5,555.9</b>	<b>5,324.4</b>	<b>4,921.2</b>

The accompanying notes are an integral part of the consolidated financial statements

F-2

**Table of Contents****COMPAGNIE GENERALE DE GEOPHYSIQUE-VERITAS, S.A.****CONSOLIDATED STATEMENTS OF OPERATIONS**

	Notes	2011	December 31, 2010	2009
(In millions of euros, except per share data)				
Operating revenues	19	2,267.7	2,186.1	2,233.2
Other income from ordinary activities	19	2.3	3.3	7.5
<b>Total income from ordinary activities</b>		<b>2,270.0</b>	<b>2,189.4</b>	<b>2,240.7</b>
Cost of operations		(1,887.3)	(1,746.3)	(1,710.5)
<b>Gross profit</b>		<b>382.7</b>	<b>443.1</b>	<b>530.2</b>
Research and development expenses net	20	(54.9)	(57.0)	(62.1)
Marketing and selling expenses		(59.3)	(61.7)	(60.6)
General and administrative expenses		(145.1)	(168.4)	(182.7)
Other revenues (expenses) net	21	24.5	(88.8)	(167.8)
<b>Operating income before impairment of goodwill</b>	<b>19</b>	<b>147.9</b>	<b>67.2</b>	<b>57.0</b>
Impairment of goodwill	11			(217.6)
<b>Operating income</b>	<b>19</b>	<b>147.9</b>	<b>67.2</b>	<b>(160.6)</b>
Expenses related to financial debt		(126.4)	(107.9)	(107.7)
Income provided by cash and cash equivalents		2.0	2.4	2.5
<b>Cost of financial debt, net</b>	<b>22</b>	<b>(124.4)</b>	<b>(105.5)</b>	<b>(105.2)</b>
Other financial income (loss)	23	0.6	8.5	(11.2)
<b>Income (loss) of consolidated companies before income taxes</b>		<b>24.1</b>	<b>(29.8)</b>	<b>(277.0)</b>
Deferred taxes on currency translation		(3.3)	(6.6)	5.0
Other income taxes		(41.7)	(6.9)	4.8
<b>Total income taxes</b>	<b>24</b>	<b>(45.0)</b>	<b>(13.5)</b>	<b>9.8</b>
<b>Net income (loss) from consolidated companies</b>		<b>(20.9)</b>	<b>(43.3)</b>	<b>(267.2)</b>
Share of income (loss) in companies accounted for under equity method		11.7	(0.7)	8.3
<b>Net income (loss)</b>		<b>(9.2)</b>	<b>(44.0)</b>	<b>(258.9)</b>
Attributable to:				
Owners of CGGVeritas SA		(19.0)	(54.6)	(264.3)
Non-controlling interests		9.8	10.6	5.4
Weighted average number of shares outstanding	29	151,771,940	151,342,529	150,864,476
Dilutive potential shares from stock options <sup>(1)</sup>	29			
Dilutive potential shares from performance share plan <sup>(1)</sup>	29			
Dilutive potential shares from convertible bonds <sup>(1)</sup>	29			
Dilutive weighted average number of shares outstanding adjusted when dilutive		151,771,940	151,342,529	150,864,476
<b>Net income (loss) per share</b>				
Basic		(0.13)	(0.36)	(1.75)
Diluted <sup>(2)</sup>		(0.13)	(0.36)	(1.75)

Edgar Filing: CGG VERITAS - Form 20-F

<sup>(1)</sup> *As our net fiscal year result is a loss, stock-options, performance shares plans and convertible bonds have a relative effect (increase of our earning per share); as a consequence, potential shares linked to those instruments are not taken into account in the dilutive weighted average number of shares, nor in the calculation of diluted loss per share.*

The accompanying notes are an integral part of the consolidated financial statements

F-3

**Table of Contents****COMPAGNIE GENERALE DE GEOPHYSIQUE-VERITAS, S.A.****CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**

Amounts in millions of euros	December 31,		
	2011	2010	2009
<b>Net income (loss) from statements of operations</b>	<b>(9.2)</b>	<b>(44.0)</b>	<b>(258.9)</b>
Gain (loss) on cash flow hedges	(3.6)	(0.9)	5.2
Income taxes	1.3	0.3	(1.8)
<b>Net gain (loss) on cash flow hedges</b>	<b>(2.3)</b>	<b>(0.6)</b>	<b>3.4</b>
Gain (loss) on actuarial changes on pension plan	(1.3)		(4.3)
Income taxes	0.5		1.5
<b>Net gain (loss) on actuarial changes on pension plan</b>	<b>(0.8)</b>		<b>(2.8)</b>
<b>Exchange differences on translation of foreign operations</b>	<b>85.1</b>	<b>201.1</b>	<b>(48.9)</b>
<b>Other comprehensive income (loss) for the period, net of taxes, in companies accounted for under the equity method</b>	<b>(3.3)</b>	<b>(3.7)</b>	
<b>Total other comprehensive income (loss) for the period, net of taxes</b>	<b>78.7</b>	<b>196.8</b>	<b>(48.3)</b>
<b>Total comprehensive income (loss) for the period</b>	<b>69.5</b>	<b>152.8</b>	<b>(307.2)</b>
<i>Attributable to :</i>			
<i>Owners of CGGVeritas SA</i>	55.5	140.2	(311.5)
<i>Non-controlling interests</i>	14.0	12.6	4.3

The components recognized in other comprehensive income are not reclassified to profit or loss in subsequent periods.

The accompanying notes are an integral part of the consolidated financial statements

**Table of Contents****COMPAGNIE GENERALE DE GEOPHYSIQUE-VERITAS, S.A.****CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

	Number of Shares issued	Share capital	Additional paid-in capital	Retained earnings	Treasury shares	Income and expense recognized directly in equity	Cumulative Translation Adjustment	Equity attributable to owners of CGGVeritas SA	Non-controlling interests	Total equity
<b>Balance at January 1, 2009</b>	<b>150,617,709</b>	<b>60.2</b>	<b>1,964.7</b>	<b>1,132.2</b>	<b>(18.1)</b>	<b>(2.5)</b>	<b>(176.4)</b>	<b>2,960.1</b>	<b>38.5</b>	<b>2,998.6</b>
Capital increase	528,885	0.3	1.2					1.5		1.5
Net income				(264.3)				(264.3)	5.4	(258.9)
Cost of share-based payment				10.7				10.7	(2.6)	8.1
Operations on treasury shares					4.6			4.6		4.6
<i>Net gain (loss) on actuarial changes on pension plan<sup>(1)</sup></i>				(2.8)				(2.8)		(2.8)
<i>Net gain (loss) on cash flow hedges<sup>(2)</sup></i>						3.4		3.4		3.4
<i>Exchange differences on foreign currency translation<sup>(3)</sup></i>							(47.8)	(47.8)	(1.1)	(48.9)
Other comprehensive income <sup>(1)+(2)+(3)</sup>				(2.8)		3.4	(47.8)	(47.2)	(1.1)	(48.3)
Changes in consolidation scope and other				(4.1)				(4.1)		(4.1)
<b>Balance at December 31, 2009</b>	<b>151,146,594</b>	<b>60.5</b>	<b>1,965.9</b>	<b>871.7</b>	<b>(13.5)</b>	<b>0.9</b>	<b>(224.2)</b>	<b>2,661.3</b>	<b>40.2</b>	<b>2,701.5</b>

	Number of Shares issued	Share capital	Additional paid-in capital	Retained earnings	Treasury shares	Income and expense recognized directly in equity	Cumulative Translation Adjustment	Equity attributable to owners of CGGVeritas SA	Non-controlling interests	Total equity
<b>Balance at January 1, 2010</b>	<b>151,146,594</b>	<b>60.5</b>	<b>1,965.9</b>	<b>871.7</b>	<b>(13.5)</b>	<b>0.9</b>	<b>(224.2)</b>	<b>2,661.3</b>	<b>40.2</b>	<b>2,701.5</b>
Capital increase	359,515	0.1	2.0					2.1		2.1
Net income				(54.6)				(54.6)	10.6	(44.0)
Cost of share-based payment				14.8				14.8	(3.0)	11.8
Operations on treasury shares				(2.3)	(0.3)			(2.6)		(2.6)
<i>Net gain (loss) on actuarial changes on pension plan<sup>(1)</sup></i>										
<i>Net gain (loss) on cash flow hedges<sup>(2)</sup></i>						(4.3)		(4.3)		(4.3)
<i>Exchange differences on foreign currency translation<sup>(3)</sup></i>							199.1	199.1	2.0	201.1
Other comprehensive income <sup>(1)+(2)+(3)</sup>				(3.7)		(4.3)	199.1	194.8	2.0	196.8
								(3.7)	8.0	4.3

Edgar Filing: CGG VERITAS - Form 20-F

Changes in consolidation scope and other

	Number of Shares issued	Share capital	Additional paid-in capital	Retained earnings	Treasury shares	Income and expense recognized directly in equity	Cumulative Translation Adjustment	Equity attributable to owners of CGGVeritas SA	Non-controlling interests	Total equity
<b>Balance at December 31, 2010</b>	<b>151,506,109</b>	<b>60.6</b>	<b>1,967.9</b>	<b>825.9</b>	<b>(13.8)</b>	<b>(3.4)</b>	<b>(25.1)</b>	<b>2,812.1</b>	<b>57.8</b>	<b>2,869.9</b>
(amounts in millions of euros, except share data)										
<b>Balance at January 1, 2011</b>	<b>151,506,109</b>	<b>60.6</b>	<b>1,967.9</b>	<b>825.9</b>	<b>(13.8)</b>	<b>(3.4)</b>	<b>(25.1)</b>	<b>2,812.1</b>	<b>57.8</b>	<b>2,869.9</b>
Capital increase	355,823	0.1	2.2					2.3		2.3
Dividends									(2.7)	(2.7)
Net income				(19.0)				(19.0)	9.8	(9.2)
Cost of share-based payment				11.2				11.2		11.2
Operations on treasury shares										
<i>Net gain (loss) on actuarial changes on pension plan<sup>(1)</sup></i>				(0.8)				(0.8)		(0.8)
<i>Net gain (loss) on cash flow hedges<sup>(2)</sup></i>						(5.6)		(5.6)		(5.6)
<i>Exchange differences on foreign currency translation<sup>(3)</sup></i>							80.9	80.9	4.2	85.1
Other comprehensive income <sup>(1)+(2)+(3)</sup>				(0.8)		(5.6)	80.9	74.5	4.2	78.7
Issuance of convertible bonds, net of deferred taxes				58.2				58.2		58.2
Changes in consolidation scope and other				(0.4)				(0.4)	(1.6)	(2.0)
<b>Balance at December 31, 2011</b>	<b>151,861,932</b>	<b>60.7</b>	<b>1,970.1</b>	<b>875.1</b>	<b>(13.8)</b>	<b>(9.0)</b>	<b>55.8</b>	<b>2,938.9</b>	<b>67.5</b>	<b>3,006.4</b>

F-5



**Table of Contents****COMPAGNIE GENERALE DE GEOPHYSIQUE-VERITAS, S.A.****CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Notes	2011	Year 2010	2009
(in millions of euros)				
<b>OPERATING</b>				
Net income (loss)		(9.2)	(44.0)	(258.9)
Depreciation and amortization	28	244.9	238.0	523.0
Multi-client surveys depreciation and amortization	10, 28	203.3	276.2	289.3
Variance on provisions		(15.3)	(19.7)	27.2
Stock based compensation expenses		11.2	14.8	10.7
Net gain (loss) on disposal of fixed assets		(16.8)		(0.3)
Equity income (loss) of investees		(11.7)	0.7	(8.3)
Dividends received from affiliates		4.9	2.4	0.7
Other non-cash items		(14.7)	(13.3)	(4.0)
<b>Net cash including net cost of financial debt and income tax</b>		<b>396.6</b>	<b>455.1</b>	<b>579.4</b>
Less net cost of financial debt		124.4	105.5	105.2
Less income tax expense		45.0	13.5	(9.8)
<b>Net cash excluding net cost of financial debt and income tax</b>		<b>566.0</b>	<b>574.1</b>	<b>674.8</b>
Income tax paid		(67.4)	(73.2)	(74.2)
<b>Net cash before changes in working capital</b>		<b>498.6</b>	<b>500.9</b>	<b>600.6</b>
change in trade accounts and notes receivables		43.7	(69.0)	95.7
change in inventories and work-in-progress		(7.7)	(26.8)	59.4
change in other current assets		30.3	(18.9)	22.4
change in trade accounts and notes payable		(9.3)	84.2	(121.5)
change in other current liabilities		34.6	(9.5)	(33.5)
Impact of changes in exchange rate on financial items	28	(8.8)	(10.9)	(6.3)
<b>Net cash provided by operating activities</b>		<b>581.4</b>	<b>450.0</b>	<b>616.8</b>
<b>INVESTING</b>				
Total capital expenditures (including variation of fixed assets suppliers, excluding multi-client surveys)	9, 10	(260.7)	(210.4)	(170.1)
Investments in multi-client surveys	10	(163.3)	(219.3)	(229.3)
Proceeds from disposals of tangible & intangible assets		15.2	4.5	7.4
Total net proceeds from financial assets	28	9.3	4.5	
Acquisition of investments, net of cash & cash equivalents acquired	28	(7.6)	(0.5)	(84.2)
Impact of changes in consolidation scope			(1.7)	(1.7)
Variation in loans granted		3.3	1.9	(0.5)
Variation in subsidies for capital expenditures			0.1	(0.1)
Variation in other non-current financial assets	28	1.5	2.3	(1.2)
<b>Net cash used in investing activities</b>		<b>(402.3)</b>	<b>(418.6)</b>	<b>(479.7)</b>
<b>FINANCING</b>				
Repayment of long-term debt		(846.3)	(50.0)	(266.9)
Total issuance of long-term debt		849.0	2.2	244.9
Lease repayments		(27.1)	(56.6)	(36.2)
Change in short-term loans			1.5	(5.6)
Financial expenses paid	28	(90.5)	(101.4)	(106.7)
<i>Net proceeds from capital increase:</i>				
from shareholders		2.3	2.1	1.5
from non-controlling interests of integrated companies				
<i>Dividends paid and share capital reimbursements:</i>				
to shareholders				
to non-controlling interests of integrated companies		(2.7)	(3.0)	(2.6)
Acquisition/disposal from treasury shares			(2.6)	4.6
<b>Net cash provided by (used in) financing activities</b>		<b>(115.3)</b>	<b>(207.8)</b>	<b>(167.0)</b>

Edgar Filing: CGG VERITAS - Form 20-F

Effect of exchange rates on cash	11.0	32.0	(6.7)	
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>74.8</b>	<b>(144.4)</b>	<b>(36.6)</b>	
Cash and cash equivalents at beginning of year	28	335.9	480.3	516.9
<b>Cash and cash equivalents at end of period</b>	<b>28</b>	<b>410.7</b>	<b>335.9</b>	<b>480.3</b>

The accompanying notes are an integral part of the consolidated financial statements

F-6

**Table of Contents****COMPAGNIE GENERALE DE GEOPHYSIQUE-VERITAS, S.A.****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS****NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

Compagnie Générale de Géophysique Veritas, S.A. ( the Company ) and its subsidiaries (together, the Group ) is a global participant in the geophysical services industry, providing a wide range of seismic data acquisition, processing and interpretation services as well as related processing and interpretation software to clients in the oil and gas exploration and production business. It is also a global manufacturer of geophysical equipment.

Given that the Company is listed on a European Stock Exchange and pursuant to European regulation n(o)1606/2002 dated July 19, 2002, the accompanying consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ( IFRS ) and its interpretations as issued by the International Accounting Standards Board (IASB) and as adopted by the European Union at December 31, 2011.

The preparation of consolidated financial statements in accordance with IFRS requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates due to the change in economic conditions, changes in laws and regulations, changes in strategy and the inherent imprecision associated with the use of estimates.

Key judgments and estimates used in the financial statements are summarized in the following table:

<b>Note</b>	<b>Judgments and estimates</b>	<b>Key assumptions</b>
Note 2	Fair value of assets and liabilities acquired through purchase price allocation	Pattern used to determine the fair value of assets and liabilities
Note 3	Recoverability of client receivables	Assessment of clients credit default risk
Note 7 and 8	Valuation of investments	Financial assets fair value Equity method companies fair value
Note 10	Amortization and impairment of Multi-clients surveys	Expected margin rate for each category of surveys Expected useful life of Multi-Client Surveys
Note 10	Depreciation and Amortization of tangible and intangible assets	Assets useful lives
Note 11	Recoverable value of Goodwill and intangible assets	Expected geophysical market trends Discount rate (WACC)
Note 16	Post employment benefits	Discount rate Participation rate to post employment benefit plans Inflation rate Return rate on plan assets
Note 16	Provisions for risks, claims and litigations	Assessment of risks considering courts ruling and attorneys positions
Note 19	Revenue Recognition	Contracts completion rates Assessment of fair value of customers loyalty programs Assessment of fair value of contracts identifiable parts
Note 20	Development costs	Assessment of future benefits of each project
Note 24	Deferred tax assets	Hypothesis supporting the achievement of future taxable benefits

## **Table of Contents**

### **Critical Accounting Policies**

Our accounting policies, which we have applied consistently, are described below. However, the accounting policies related to the accounts impacted by the judgments and estimates described above are particularly important to reflect our financial position and results of operations. As we must exercise significant judgment when we apply these policies, their application is subject to an inherent degree of uncertainty.

Those accounting policies are consistent with those used to prepare our consolidated financial statements as at December 31, 2010, except for the first adoption of the following Standards and Interpretations:

Amendment to IAS32 Classification of Right Issues

IFRIC 19 Extinguishing Financial Liabilities with equity Instruments

IAS 24 (Revised) Related Party Disclosures

Amendment to IFRIC 14 Prepayments of a minimum Funding Requirement

2008-2010 annual improvements project (May 2010)

The adoption of these Standards and Interpretations had no significant impact on our consolidated financial statements.

The Group decided not to early adopt those Standards, Amendments and Interpretations that the European Union adopted but that were not effective as of December 31, 2011, namely:

Amendment to IFRS7 Disclosures Transfer of Financial Assets adopted by the European Union in November 2011 and applicable as of January 1, 2012

At the date of issuance of these consolidated financial statements, the following Standards and Interpretations were issued but not yet adopted by the European Union nor effective:

Amendment to IAS12 Deferred tax : Recovery of Underlying Assets

IFRS9 Financial Instruments classification and valuation of financial assets

IFRS10 Consolidated Financial Statements

IFRS11 Joint arrangements

IFRS12 Disclosures of Interests in other entities

## Edgar Filing: CGG VERITAS - Form 20-F

IFRS13 Fair value measurement

Amendment to IAS28 Investments in associates and joint ventures

Amendment to IAS19 Employee benefits

Amendment IAS1 Presentation of financial statements presentation of items of other comprehensive income

Amendment to IAS32 and IFRS7 Offsetting financial assets and financial liabilities

We are currently reviewing them to measure the potential impact on our consolidated financial statements.

In the financial statements presented, the application of Standards and Interpretations adopted by the European Union does not differ from the application of Standards and Interpretations as published by the IASB.

### ***1 Basis of consolidation***

Our consolidated financial statements include CGGVeritas and all its subsidiaries.

F-8

## **Table of Contents**

### **Basis of consolidation from January 1, 2010**

Subsidiaries are fully consolidated from the date of acquisition, being the date on which we obtain control, and continue to be consolidated until the date when such control ceases. The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies. All intra-group balances, transactions, unrealized gains and losses resulting from intra-group transactions and dividends are eliminated in full.

Losses within a subsidiary are attributed to the non-controlling interest even if that results in a deficit balance. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If we lose control over a subsidiary, we:

derecognize the assets (including goodwill) and liabilities of the subsidiary

derecognize the carrying amount of any non-controlling interest

derecognize the cumulative translation differences, recorded in equity

recognize the fair value of the consideration received

recognize the fair value of any investment retained

recognize any surplus or deficit in profit or loss

reclassify the parent's share of components previously recognized in other comprehensive income to profit or loss or retained earnings, as appropriate.

We use the equity method for investments in which we exercise significant influence over operating and financial policies.

We have interests in joint ventures which are jointly controlled entities, whereby the venturers have a contractual arrangement that establishes joint control over the economic activities of the entities. These agreements require unanimous agreement for financial and operating decisions among the venturers. We recognize our interests in joint ventures using the equity method.

### **Basis of consolidation prior to January 1, 2010**

Certain of the above-mentioned requirements were applied on a prospective basis. The following differences, however, are carried forward in certain instances from the previous basis of consolidation:

acquisitions of non-controlling interests, prior to January 1, 2010, were accounted for using the parent entity extension method, whereby, the difference between the consideration and the book value of the share of the net assets acquired were recognized in goodwill,

disposals of non-controlling interests, prior to January 1, 2010, were accounted for using the parent entity extension method, whereby, the difference between the consideration and the book value of the share of the net assets disposed were recognized through income statement,

upon loss of control, we accounted for the investment retained at its proportionate share of net asset value at the date control was lost. The carrying values of such investments at January 1, 2010 have not been restated. All inter-company transactions and accounts are eliminated in consolidation.

Our consolidated financial statements are reported in euros.

F-9

---

## **Table of Contents**

### **2 Foreign currency**

The financial statements of all of our French subsidiaries are maintained in euro, with the exception of the financial statements of certain subsidiaries for which the functional currency is the U.S. dollar, the currency in which they primarily conduct their business.

The financial statements of all of our foreign subsidiaries are maintained in the local currency, with the exception of the financial statements of subsidiaries for which the functional currency is different. In those subsidiaries, the functional currency is the U.S. dollar, the currency in which they primarily conduct their business. Goodwill attributable to foreign subsidiaries is accounted for in the functional currency of the applicable entities.

When translating the foreign currency financial statements of foreign subsidiaries to euro, year-end exchange rates are applied to balance sheet items, while average annual exchange rates are applied to income statement items. Adjustments resulting from this process are recorded in a separate component of shareholders' equity. With respect to foreign affiliates accounted for using the equity method, the effects of exchange rates changes on the net assets of the affiliate are recorded in a separate component of shareholders' equity.

Transactions denominated in currencies other than the functional currency of a given entity are recorded at the exchange rate prevailing on the date of the transaction. Monetary assets and liabilities denominated in foreign currencies other than the functional currency are revalued at year-end exchange rates and any resulting unrealized exchange gains and losses are included in income.

### **3 Business combinations**

#### **Business combinations from January 1, 2010**

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest in the acquiree. For each business combination, we measure the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed and included in administrative expenses.

If the business combination is achieved in stages, the acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss. Any contingent consideration to be transferred by us will be recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration which is deemed to be an asset or liability, will be recognized in accordance with IAS 39 either in profit or loss or as a change to other comprehensive income. If the contingent consideration is classified as equity, it should not be remeasured until it is finally settled within equity. Goodwill is initially measured at cost being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interest over the net identifiable assets acquired and liabilities assumed.

If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained.



---

## **Table of Contents**

### **Business combinations prior to January 1, 2010**

In comparison to the above-mentioned requirements, the following differences applied: Business combinations were accounted for using the purchase method. Transaction costs directly attributable to the acquisition formed part of the acquisition costs. The non-controlling interests (formerly known as minority interests) were measured at the proportionate share of the acquiree's identifiable net assets.

Business combinations achieved in stages were accounted for as separate steps. Any additional acquired share of interest did not affect previously recognized goodwill.

Contingent consideration was recognized if, and only if, we had a present obligation, the economic outflow was more likely than not and a reliable estimate was determinable. Subsequent adjustments to the contingent consideration were recognized as part of goodwill.

For business combinations where there was a requirement for a mandatory offer for any remaining non-controlling interests and where it was considered that a put option had been granted to the non-controlling interests, the put option is recognized as a financial liability at the fair value.

### **4 Operating revenues**

Operating revenues are recognized when they can be measured reliably, and when it is likely that the economic benefits associated with the transaction will flow to the entity, which is at the point that such revenues have been realized or are considered realizable.

#### *Multi-client surveys*

Revenues related to multi-client surveys result from (i) pre-commitments and (ii) licenses after completion of the surveys ( after-sales ).

*Pre-commitments* Generally, we obtain commitments from a limited number of customers before a seismic project is completed. These pre-commitments cover part or all of the survey area blocks. In return for the commitment, the customer typically gains the right to direct or influence the project specifications, advance access to data as it is being acquired, and favorable pricing. We record payments that it receives during periods of mobilization as advance billing in the balance sheet in the line item Advance billings to customers .

We recognize pre-commitments as revenue when production has started based on the physical progress of the project, as services are rendered.

*After sales* Generally, we grant a license entitling non-exclusive access to a complete and ready for use, specifically defined portion of our multi-client data library in exchange for a fixed and determinable payment. We recognize after sales revenue upon the client executing a valid license agreement and having been granted access to the data. Within thirty days of execution and access, the client may exercise our warranty that the medium on which the data is transmitted (a magnetic cartridge) is free from technical defects. If the warranty is exercised, the Company will provide the same data on a new magnetic cartridge. The cost of providing new magnetic cartridges is negligible.

In case after sales agreements contain multiple deliverable elements, the revenue is allocated to the various elements based on specific objective evidence of fair value, regardless of any separate allocations stated within the contract for each element. Each element is appropriately accounted for under the applicable accounting standard.

*After sales volume agreements* We enter into a customer arrangement in which we agree to grant licenses to the customer for access to a specified number of blocks of the multi-client library. These arrangements

## **Table of Contents**

typically enable the customer to select and access the specific blocks for a limited period of time. We recognize revenue when the blocks are selected and the client has been granted access to the data and if the corresponding revenue can be reliably estimated. Within thirty days of execution and access, the client may exercise our warranty that the medium on which the data is transmitted (a magnetic cartridge) is free from technical defects. If the warranty is exercised, the Company will provide the same data on a new magnetic cartridge. The cost of providing new magnetic cartridges is negligible.

### *Exclusive surveys*

In exclusive surveys, we perform seismic services (acquisition and processing) for a specific customer. We recognize proprietary/contract revenues as the services are rendered. We evaluate the progress to date, in a manner generally consistent with the physical progress of the project, and recognize revenues based on the ratio of the project cost incurred during that period to the total estimated project costs as far as they can reliably be assessed.

The billings and the costs related to the transit of seismic vessels at the beginning of the survey are deferred and recognized over the duration of the contract by reference to the technical stage of completion.

In some exclusive survey contracts and a limited number of multi-client survey contracts, we are required to meet certain milestones. We defer recognition of revenue on such contracts until all milestones that provide the customer a right of cancellation or refund of amounts paid have been met.

### *Equipment sales*

We recognize revenues on equipment sales upon delivery to the customer when risks and rewards are fully transferred. Any advance billings to customers are recorded in current liabilities.

### *Software and hardware sales*

We recognize revenues from the sale of software and hardware products following acceptance of the product by the customer at which time we have no further significant vendor obligations remaining. Any advance billings to customers are recorded in current liabilities.

If an arrangement to deliver software, either alone or together with other products or services, requires significant production, modification, or customization of software, the entire arrangement is accounted for as a production-type contract, i.e. using the percentage of completion method.

If the software arrangement provides for multiple deliverables (e.g. upgrades or enhancements, post-contract customer support such as maintenance, or services), the revenue is allocated to the various elements based on specific objective evidence of fair value, regardless of any separate allocations stated within the contract for each element. Each element is appropriately accounted for under the applicable accounting standard.

Maintenance revenues consist primarily of post contract customer support agreements and are recorded as advance billings to customers and recognized as revenue on a proportional performance basis over the contract period.

### *Other geophysical sales/services*

Revenues from our other geophysical sales/services are recognized as the services are performed and, when related to long-term contracts, using the proportional performance method of recognizing revenues.

**Table of Contents***Customer loyalty programs*

We may grant award credits to our main clients. These award credits are contractually based on cumulative services provided during the calendar year and attributable to future services.

These credits are considered as a separate component of the initial sale and measured at their fair value by reference to the contractual rates and the forecasted cumulative revenues for the calendar year. These proceeds are recognized as revenue only when the obligation has been fulfilled.

**5 Cost of net financial debt**

Cost of net financial debt includes expenses related to financial debt, composed of bonds, the debt component of convertible bonds, bank loans, capital-lease obligations and other financial borrowings, net of income provided by cash and cash equivalents.

Borrowing costs are capitalized for all eligible assets where construction was commenced on or after January 1, 2009.

**6 Income taxes and deferred taxes**

Income taxes includes all tax based on taxable profit.

Deferred taxes are recognized on all temporary differences between the carrying value and the tax value of assets and liabilities, as well as on carry-forward losses, using the liability method. Deferred tax assets are recognized only when the recovery is considered as probable.

Deferred tax liabilities are recognized on intangible assets identified and recognized as part of business combinations (technological assets, customer relationships).

Deferred tax assets and deferred tax liabilities are not discounted.

**7 Intangible and tangible assets**

In accordance with IAS 16 Property, Plant and equipment and IAS 38 Intangible assets only items for which cost can be reliably measured and for which the future economic benefits are likely to flow to us are recorded in our consolidated financial statements.

*Property, plant and equipment*

Property, plant and equipment are valued at historical cost less accumulated depreciation and impairment losses. Depreciation is generally calculated over the following useful lives:

equipments and tools	3 to 10 years
vehicles	3 to 5 years
seismic vessels	12 to 30 years
buildings for industrial use	20 years
buildings for administrative and commercial use	20 to 40 years

Depreciation expense is determined using the straight-line method.

We include residual value, if significant, when calculating the depreciable amount. We segregate tangible assets into their separate components if there is a significant difference in their expected useful lives, and depreciate them accordingly.

---

## **Table of Contents**

### *Lease agreements*

Assets under a finance lease agreement or a long-term lease agreement that transfers substantially all the risks and rewards incidental to ownership to the Group are accounted for as fixed assets at the commencement of the lease term, at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease. Minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability and the finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability. Assets under finance lease are depreciated over the shorter of its useful life and the lease term, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term.

Rent payments under operating leases are recognized as operating expenses on a straight-line basis over the lease term.

### *Goodwill*

Goodwill is determined according to IFRS 3 Revised Business Combinations starting January 1, 2010. Goodwill is not amortized but subject to an impairment test at least once a year at the balance sheet date.

Prior to January 1, 2010, goodwill was recognized using IFRS 3.

### *Multi-client surveys*

Multi-client surveys consist of seismic surveys to be licensed to customers on a non-exclusive basis. All costs directly incurred in acquiring, processing and otherwise completing seismic surveys are capitalized into the multi-client surveys (including transit costs when applicable). The value of our multi-client library is stated on our balance sheet at the aggregate of those costs less accumulated amortization or at fair value if lower. We review the library for potential impairment at each balance sheet date at the relevant level (independent surveys or groups of surveys).

We amortize the multi-client surveys over the period during which the data is expected to be marketed using an amortization rate applied to recognized revenues.

Multi-client surveys are classified into a same category when they are located in the same area with the same estimated sales ratio, such estimates generally relying on the historical patterns.

Depending on the category of the survey, we generally use amortization rates of 50%, 65%, 75%, 80% or 83.3% corresponding to the ratio of total estimated costs over total estimated sales, unless specific indications lead to apply a different rate.

For all categories of surveys and starting from data delivery, a minimum straight-line depreciation scheme is applied over a five-year period, if total accumulated depreciation from the applicable amortization rate is below this minimum level.

Multi-client surveys acquired as part of the business combination with Veritas and which have been valued for purchase price allocation purposes are amortized based on 65% of revenues and an impairment loss is recognized on a survey by survey basis in case of any indication of impairment.

### *Development costs*

Expenditures on research activities undertaken with the prospect of gaining new scientific or technological knowledge and understanding are recognized in the income statement as expenses as incurred and are presented

## **Table of Contents**

as Research and development expenses net . Expenditures on development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes, are capitalized if:

the project is clearly defined, and costs are separately identified and reliably measured,

the product or process is technically and commercially feasible,

we have sufficient resources to complete development, and

the intangible asset is likely to generate future economic benefits, either because it is useful to us or through an existing market for the intangible asset itself or for its products.

The expenditures capitalized include the cost of materials, direct labor and an appropriate proportion of overhead. Other development expenditures are recognized in the income statement as expenses as incurred and are presented as Research and development expenses net .

Capitalized development expenditures are stated at cost less accumulated amortization and impairment losses.

We amortize capitalized development costs over 5 years.

Research & development expenses in our income statement represent the net cost of development costs that are not capitalized, of research costs, offset by government grants acquired for research and development.

### *Other intangible assets*

Other intangible assets consist primarily of customer relationships, technology and trade name acquired in business combinations. Customer relationships are generally amortized over periods ranging from 10 to 20 years and acquired technology are generally amortized over periods ranging from 5 to 10 years.

### *Impairment*

In accordance with IAS 36 Impairment of assets , the carrying values of our assets (excluding inventories, deferred tax assets, assets arising from employee benefits and financial assets) are reviewed at each balance sheet date. If any indication exists that an asset may be impaired, we estimate the recoverable amount of this asset. Factors we consider important that could trigger an impairment review include the following:

significant underperformance relative to expected operating results based upon historical and/or projected data,

significant changes in the manner of our use of the acquired assets or the strategy for our overall business, and

significant negative industry or economic trends.

The recoverable amount of tangible and intangible assets is the greater of their net fair value less costs to sell and value in use.

Goodwill, assets that have an indefinite useful life and intangible assets are allocated to cash generating units. We estimate the recoverable amount of these cash generating units at each balance sheet closing date.

## Edgar Filing: CGG VERITAS - Form 20-F

We determine the recoverable amounts by estimating future cash flows expected from the assets or from the cash generating units, discounted to their present value using the sector weighted average cost of capital (WACC) estimated on a yearly basis by the Group.

F-15

---

## **Table of Contents**

We recognize an impairment loss whenever the carrying amount of an asset exceeds its recoverable amount. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Impairment losses are recognized in the income statement. Impairment losses recognized in respect of a group of non independent assets allocated to a cash-generating unit are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units (group of units) and then, to reduce the carrying amount of the other assets in the unit (group of units) on a pro rata basis.

A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the income statement unless the asset is carried at a revalued amount, in which case the reversal is treated as a revaluation increase.

Impairment losses recognized on goodwill cannot be reversed.

### *Assets held for sale*

Assets classified as assets held for sale correspond to non-current assets for which the net book value will be recovered by a sale rather than by their use in operations. Assets held for sale are valued at the lower of historical cost and fair value less cost to sell.

## **8 Investments and other financial assets**

Investments and other financial assets include investments in non-consolidated entities, loans and non-current receivables.

### *Investments in companies under equity method*

Under the equity method, the investments in our associates are carried in the balance sheet at cost plus post acquisition changes in our share of net assets of the associates. Goodwill relating to the associates is included in the carrying amount of the investment and is neither amortized nor individually tested for impairment.

After application of the equity method, we determine whether it is necessary to recognize an additional impairment loss on our investment in the associates. We determine at each reporting date whether there is any objective evidence that the investments in our associates are impaired. If this is the case we calculate the amount of impairment as the difference between the recoverable amount of the associates and their carrying value and recognize the amount in the share of profit of an associate in the income statement.

Upon loss of significant influence over the associate, we measure and recognize any retaining investment at its fair value. Any difference between the carrying amount of the associate upon loss of significant influence and the fair value of the retaining investment and proceeds from disposal is recognized in profit or loss.

### *Investments in non-consolidated entities*

In accordance with IAS 39 Financial instruments, we classify investments in non-consolidated entities as available-for-sale and therefore present them on the balance sheet at their fair value. The fair value for listed securities is their market price at the balance sheet date. If a reliable fair value cannot be established, securities are valued at historical cost. We account for changes in fair value directly in shareholders' equity, except in case of impairment (significant or prolonged decline in the fair value).

## **Table of Contents**

Gains or losses on disposal of impaired investments in non-consolidated entities classified as available for sale are not recognized through profit and loss.

### *Loans and non-current receivables*

Loans and non-current receivables are accounted for at amortized cost.

### *Impairment*

We examine available-for-sale securities and other financial assets at each balance sheet date to detect any objective evidence of impairment. Where this is the case, we record an impairment loss.

Where there is objective evidence of impairment of a financial asset (for instance in case of significant or prolonged decline of the value of the asset) we record an irreversible impairment loss.

## **9 Treasury shares**

We value treasury shares at their cost, as a reduction of shareholders' equity. Proceeds from the sale of treasury shares are included in shareholders' equity and have no impact on the income statement.

## **10 Inventories**

We value inventories at the lower of cost (including direct production costs where applicable) and net realizable value.

We calculate the cost of inventories on a weighted average price basis for our Equipment segment and on a first-in first-out basis for our Services segment.

## **11 Provisions**

We record a provision when the Group has a present obligation (legal or constructive) as a result of a past event for which it is probable that an outflow of resources embodying economic benefits (that can be reliably determined) will be required to settle the obligation.

### *Onerous contracts*

We record a provision for onerous contracts equal to the excess of the unavoidable costs of meeting the obligations under the contract over the economic benefits expected to be received under it, as estimated by the Group.

### *Pension, post-employment benefits and other post-employment benefits*

Defined contribution plans

We record obligations for contributions to defined contribution pension plans as an expense in the income statement as incurred. We do not record any provision for such plans as we have no further obligation.

Defined benefit plans

Our net obligation in respect of defined benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any plan assets is





## **Table of Contents**

deducted. We perform the calculation by using the projected unit credit method. When the benefits of a plan are increased, the portion of the increased benefit relating to past service by employees is recognized as an expense in the income statement on a straight-line basis over the average period until the benefits become vested. To the extent that the benefits vest immediately, the expense is recognized immediately in the income statement.

We record actuarial gains and losses on defined benefits plans directly in equity.

### ***12 Financial debt***

Financial debt is accounted for:

As at the date of issuance, at the fair value of the consideration received, less issuance fees and/or issuance premium;

subsequently, at amortized cost, corresponding to the fair value at which is initially recognized, less repayments at the nominal amount and increased or decreased for the amortization of all differences between this original fair value recognized and the amount at maturity; differences between the initial fair value recognized and the amount at maturity are amortized using the effective interest rate method.

### ***13 Convertible debt***

The Company recognizes separately the components of a convertible debt respectively a financial liability and an option to the holder of the instrument to convert it into an equity instrument of the company.

The Company first determines the carrying amount of the liability component by measuring the fair value of a similar liability (including any embedded non-equity derivative features) that does not have an associated equity component.

The carrying amount of the equity instrument represented by the option to convert the instrument into ordinary shares is then determined by deducting the fair value of the financial liability from the fair value of the compound financial instrument as a whole. The carrying amount is presented net of associated deferred taxes.

The sum of the carrying amounts assigned to the liability and equity components on initial recognition is always equal to the fair value that would be ascribed to the instrument as a whole.

### ***14 Derivative financial instruments***

We use derivative financial instruments to hedge our exposure to foreign exchange fluctuations from operational, financing and investment activities denominated in a currency different from the functional currency. In accordance with our treasury policy, we do not hold or issue derivative financial instruments for trading purposes. However, derivatives that do not qualify for hedge accounting are accounted for as trading instruments in Other financial income (loss) .

Exchange gains or losses on foreign currency financial instruments that represent the efficient portion of an economic hedge of a net investment in a foreign subsidiary are reported as translation adjustments in shareholder's equity under the line item Cumulative translation adjustments , the inefficient portion being recognized in the income statement. The cumulative value of foreign exchange gains and losses recognized directly in equity will be transferred to income statement when the net investment is sold.

Derivative financial instruments are stated at fair value.

The gain or loss on reassessment to fair value is recognized immediately in the income statement. However, where derivatives qualify for hedge accounting, recognition of any resulting gain or loss is as follows (cash flow hedges), we account for changes in the fair value of the effective hedged amount in shareholder's equity. The ineffective portion is recorded in Other financial income (loss) .



## **Table of Contents**

### **15 Cash-flow statement**

The cash flows of the period are presented in the cash flow statement within three activities: operating, investing and financing activities:

#### *Operating activities*

Operating activities are the principal revenue-producing activities of the entity and other activities that are not investing or financing activities.

#### *Investing activities*

Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents. When a subsidiary is acquired, a separate item, corresponding to the consideration paid net of cash and cash equivalents held by the subsidiary at the date of acquisition, provides the cash impact of the acquisition.

#### *Financing activities*

Financing activities are activities that result in changes in the size and composition of the contributed equity and borrowings of the entity. They include the cash impact of financial expenses.

#### *Cash and cash equivalents*

Cash and cash equivalents in the consolidated balance sheet comprise cash at banks and on hand and short-term deposits with a maturity of three months or less that are readily convertible to known amounts of cash.

### **16 Stock options**

We include stock options granted to employees in the financial statements using the following principles: the stock option's fair value is determined on the grant date and is recognized in personnel costs, with a corresponding increase in equity, on a straight-line basis over the period between the grant date and the end of the vesting period. We calculate stock option fair value using the Black-Scholes mathematical model.

### **17 Grants**

Government grants, including non-monetary grants at fair value, are not recognized until there is reasonable assurance that the entity will comply with the conditions of the grant and that the grants will be received.

Government grants are recognized as income over the periods necessary to match them with the related costs which they are intended to compensate. They are presented as a reduction of the corresponding expenses in the item Research and development expenses, net in the income statement.

Refundable grants are presented in the balance sheet as Other non-current liabilities .

### **18 Earnings per share**

Basic per share amounts are calculated by dividing net income for the year attributable to ordinary equity holders of the Company by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share amounts are calculated by dividing the net income attributable to ordinary equity holders of the Company and adjusted for the after-tax amounts of preference dividends, differences arising on the



**Table of Contents**

settlement of preference shares, and other similar effects of preference shares classified as equity, by the weighted average number of ordinary shares outstanding during the year plus the weighted average number of ordinary shares that would be issued on the conversion of convertible bonds, the exercise of stock options and shares from performance share plans.

**NOTE 2 ACQUISITIONS AND DIVESTITURES***during 2011**Norfield AS*

On January 13, 2011, the exchange of assets between certain subsidiaries of CGGVeritas and the Norwegian group Norfield was completed. As a result of this transaction, we acquired Voyager AS (renamed Exploration Vessel Resources II AS), the owner of the seismic vessel *Geowave Voyager*; and sold the seismic vessel *Venturer* to Norfield (see note 5). CGGVeritas is no longer a shareholder of Norfield AS.

CGGVeritas owns 100% of Exploration Vessel Resources II AS. This company has been fully consolidated in our financial statements since January 13, 2011.

We recorded a gain of 7.8 million in the line item Other revenues (expenses) in our statement of operations from the disposal of our assets in relation to this transaction (see note 21).

On the date we acquired it, Exploration Vessel Resources II AS entered into a U.S.\$45 million credit facility secured by a pledge over the *Geowave Voyager* and subject to substantially the same covenants as our US senior credit facilities.

*Petrodata Consulting LLC*

On March 17, 2011, we purchased for U.S.\$2.5 million Petrodata Consulting LLC, a Moscow-based company offering static and dynamic reservoir modeling, reserve estimation and risking, and field development services to the international oil and gas industry. CGGVeritas owns 100% of the company. Petrodata Consulting LLC is fully consolidated in our financial statements.

*PT Elnusa-CGGVeritas Seismic*

On April 7, 2011, an agreement was signed with PT Elnusa Tbk (Elnusa) to create a marine joint venture company in Indonesia. The newly established company, PT Elnusa-CGGVeritas Seismic, delivers 2D and 3D marine seismic acquisition services to oil and gas company clients mainly operating in Indonesia and operates the first Indonesian-owned and flagged seismic vessel, the *Elnusa Finder*. We assigned the time charter agreement for that vessel to PT Elnusa CGGVeritas Seismic on December 22, 2011.

PT Elnusa-CGGVeritas Seismic, under joint control, is 51% owned by Elnusa and 49% owned by CGGVeritas. This company has been accounted for under the equity method in our financial statements since July 5, 2011.

*PTSC CGGVeritas Geophysical Survey Company Limited*

On April 19, 2011, we entered into an agreement with PetroVietnam Technical Services Corporation (PTSC) to create a marine joint venture company. The newly established company PTSC CGGVeritas Geophysical Survey Company Limited will deliver 2D and 3D marine seismic acquisition services to oil and gas company clients mainly operating in Vietnamese waters and the region. We will contribute the *Amadeus*, a high-capacity 3D seismic vessel, to the joint venture and PTSC will contribute the *Binh Minh II*, a 2D seismic vessel.

---

**Table of Contents**

*CGGVeritas Eidesvik Ship Management AS*

On June 27, 2011, we signed a joint venture agreement with Eidesvik offshore to create a joint venture to manage ten high-capacity 3D vessels in the CGGVeritas fleet, including the two new X-BOW vessels, *Oceanic Vega* and *Oceanic Sirius*.

The joint venture, CGGVeritas Eidesvik Ship Management AS, is 51% owned by Eidesvik and 49% owned by CGGVeritas. This company has been accounted for under the equity method in our financial statements since June 27, 2011.

*Spectrum ASA*

On July 28, 2011, we signed a strategic agreement with Spectrum ASA, a Norwegian multi-client company, for the contribution of our 2D multi-client marine library for consideration in cash and a 25% equity stake in Spectrum ASA, which together amounted to U.S.\$40 million. The transaction was finalized on September 15, 2011. We recognized a 13.4 million gain presented in the line item other revenues (expenses) in our statement of operations (see note 21).

On October 3, 2011, in conjunction with this transaction, Spectrum ASA issued convertible bonds for an aggregate amount of 9.7 million (NOK77 million). The conditions of this issue are described in the prospectus issued by Spectrum ASA on September 14, 2011. In this scope, CGGVeritas was allocated 27,682,970 convertible bonds representing 3.5 million (NOK27.7 million). On December 30, 2011, we converted these bonds and received 1,977,355 shares of Spectrum.

As a result, we hold 10,840,181 shares of Spectrum ASA representing 29% of its share-capital. This company has been accounted for under the equity method in our financial statements since September 15, 2011. The investment amounts to 20.0 million (see note 8).

*Cybernetix*

During 2011, we sold all of our shareholding in Cybernetix. The gain of 3 million from this disposal was recorded in the line item Other revenues (expenses) in our statement of operations (see note 21).

*Seismic vessels*

On October 3, 2010, the Group took delivery of the seismic vessel *Oceanic Sirius*. Oceanic Seismic Vessel AS, the owner of the vessel, has been accounted for under the equity method since the delivery date.

***during 2010***

*Norfield AS*

On June 30, 2010, we entered into an agreement with Norfield AS to acquire full ownership of the seismic vessel *Geowave Voyager* in exchange for certain assets as part of the restructuring of Norfield AS. As a result of this agreement, 59.4 million of net assets to be transferred to Norfield AS were classified as Assets held for sale on our balance sheet as of December 31, 2010 (see also notes 21 and 30).

*Gardline*

On July 2, 2010, CGGVeritas Services Holding BV signed a Memorandum of Association with Gardline Geosurvey Limited to incorporate a new company in Singapore, Gardline CGGV Pte Ltd. to operate the seismic vessel *Duke* in the Indian Ocean. CGGVeritas owns 49% of Gardline CGGV Pte. Ltd. This ownership interest is accounted for under the equity method in our financial statements.

**Table of Contents***Xian Sercel Petroleum Exploration Instrument Co. Ltd. ( Xian Sercel )*

On November 4, 2010, our 51% owned subsidiary Hebei Sercel Junfeng Geophysical Prospecting Equipment Co. Ltd acquired full ownership of Xian Sercel through the contribution of Sercel Holding and BGP shares in Xian Sercel. Prior to that date, Xian Sercel was accounted for under equity method and has been, since then, fully consolidated in our financial statements.

*during 2009**Cybernetix*

On January 8, 2009, Cybernetix conducted a 4 million share capital increase that was entirely subscribed by Sercel Holding, bringing its stake to a total of 749,480 shares, representing 46.10% of Cybernetix's share capital and 43.07% of its voting rights. The French financial markets regulator (Autorité des Marchés Financiers) exempted Sercel Holding from the requirement to conduct a tender offer for all shares when its holding exceeded 33.33%. The consideration for the share capital increase was 2 million in cash and the incorporation of a 2 million cash advance granted by Sercel Holding to Cybernetix in November 2008. Following disposals in 2009, Sercel Holding owns 44.56% of Cybernetix's share capital and 42.98% of its voting rights as of December 31, 2009. Our remaining shareholding was sold in 2010. Cybernetix was accounted for under the equity method in our financial statements as we did not exercise significant influence over operating and financial policies.

*Wavefield Inseis ASA*

In February 2009, Wavefield shares subject to the mandatory offer and the squeeze-out were transferred to CGGVeritas, while compensation of 62 million for those shares was paid after the objection period expired. As a result, the minority interests recognized as a financial debt of 62 million on our balance sheet at December 31, 2008 have been cancelled.

The preliminary goodwill determined as of December 31, 2008 has been revised upwards for an additional amount of 87.7 million, leading to a total goodwill of 96.3 million (U.S.\$134 million) as of December 31, 2009. Main adjustments were related to fixed assets and unfavorable contracts and would have led to a consolidated goodwill of 2,142.8 million, fixed assets of 784.7 and non-current provision of 114.7 million as of December 31, 2008.

*Purchase price allocation*

At December 31, 2009, the purchase price has been definitively allocated to the net assets acquired based upon their estimated fair values as follows:

	(in millions of euros)
Intangible assets, net	41.3
Multi-client seismic library, net	27.2
Fixed assets, net	180.0
Current assets / (liabilities), net	38.7
Financial debt	(92.6)
Cash & cash equivalents	25.8
<b>Net book value of assets acquired</b>	<b>220.4</b>
<b>Fair Value Adjustments</b>	
Customer contracts (maximum life of 2 years)	2.0
Technology (useful life of 10 years)	(3.6)
Multi-client seismic library	(20.3)
Unfavorable contracts (weighted average remaining life of 5.6 years)	(32.3)
Fixed assets	(37.7)
Other financial & current assets	(16.4)
Contingent liabilities	(1.5)
Deferred taxes on fair value adjustments	0.2
<b>Goodwill</b>	<b>96.3</b>



**Purchase Price**

**207.1**

F-22

## **Table of Contents**

The amount allocated to goodwill represents the excess of the purchase price over the fair value of the net assets acquired.

### *Multi-client data library*

The fair value of the completed surveys was determined by projecting the expected future revenues net of selling costs over the estimated remaining life (5 years) of the surveys at the date of acquisition. The fair value is estimated at U.S.\$9.5 million.

### *Unfavorable contracts*

The fair values of Wavefield's unfavorable contracts correspond to the difference in economic terms between Wavefield's existing vessel charters conditions and their estimated market value at the date of the acquisition.

The impact of the 32.3 million (U.S.\$45 million) fair value adjustments resulted in a reduction of cost of U.S.\$8 million for the year ended December 31, 2009 and is expected to be 5 million (U.S.\$7 million) per year over the remaining life.

### *Fixed assets*

Certain items included in the fixed assets (rigging costs) were written-down, given their nature and fair market value. The impact of the 37.7 million (U.S.\$52.5 million) fair value adjustments resulted in a reduction of amortization expense of 13 million (U.S.\$18 million) for the year ended December 31, 2009.

### *Other financial & current assets*

The fair values of certain investments were determined by using comparable market data and certain current assets were discounted or written-down due to the uncertainty of their recoverability.

### *Contingent liabilities*

Due to the acquisition and the change of control of Wavefield, contractual obligations related to the stock-option plans have been recognized for an amount of 1.5 million (U.S.\$2.1 million).

### *Norfield AS*

Pursuant to the general meeting of Norfield AS's shareholders held on May 19, 2009, Wavefield subscribed to a capital increase in Norfield for 3.6 million (U.S.\$5 million) by capitalizing an outstanding long-term loan owed to it by Norfield. The capital increase was pro rata to the shareholders' existing interests in Norfield. As a result, Wavefield's interest in Norfield remained unchanged at 33%.

### *Multifield Geophysics AS ( Multifield )*

On May 29, 2009, Statoil Hydro Venture AS exercised its put option with our subsidiary Wavefield with respect to a 37% stake in Multifield for 2.9 million. As a result, our shareholding in Multifield increased to 80.97%. Multifield has been fully consolidated in our financial statements since June 30, 2009.

### *Eidesvik Seismic Vessel AS*

On December 10, 2009, Exploration Investment Resources II AS, a wholly-owned subsidiary of CGGVeritas, set up a joint venture with Eidesvik in order to share the ownership of the two X-BOW vessels that

**Table of Contents**

were currently under construction (and have since been delivered). As of December 31, 2009, the Group's interest in the joint venture Eidesvik Seismic Vessel AS is 49%. This company has been accounted for in our financial statements under the equity method since December 10, 2009.

**NOTE 3 TRADE ACCOUNTS AND NOTES RECEIVABLE**

Analysis of trade accounts and notes receivables by maturity is as follows:

	December 31		
	2011	2010	2009
(in millions of euros)			
Trade accounts and notes receivable gross – current portion	525.1	495.7	369.6
Less: allowance for doubtful accounts – current portion	(17.4)	(17.1)	(17.4)
<b>Trade accounts and notes receivables net – current portion</b>	<b>507.7</b>	<b>478.6</b>	<b>352.2</b>
Trade accounts and notes receivable gross – non-current portion	1.4	5.5	9.6
Less: allowance for doubtful accounts – non-current portion	(1.1)	(1.2)	
<b>Trade accounts and notes receivables net – non-current portion</b>	<b>0.3</b>	<b>4.3</b>	<b>9.6</b>
Recoverable costs and accrued profit, not billed	169.0	212.0	202.3
<b>Total accounts and notes receivables</b>	<b>677.0</b>	<b>694.9</b>	<b>564.1</b>

In the Geophysical Services segment, customers are generally large national or international oil and gas companies, which management believes reduces potential credit risk. In the Geophysical Equipment segment, a significant portion of sales is paid by irrevocable letters of credit.

The Group maintains an allowance for doubtful accounts based upon factors surrounding the credit risk of specific customers, historical trends and other information. Credit losses have not been material for the periods presented and have consistently been within management's expectations. Allowances for doubtful accounts only relate to overdue receivables as of December 31, 2011.

Recoverable costs and accrued profit not billed comprise amounts of revenue recognized under the percentage of completion method on contracts for which billings had not been presented to the contract owners. Such unbilled accounts receivable are generally billed over the 30 or 60 days following the project commencement.

The non current receivables relate to our geophysical equipment segment as of December 31, 2011, 2010 and 2009.

As of December 31, 2011 the ageing analysis of net trade accounts and notes receivables is as follows:

	Not past due	30 days	30 - 60 days	60 - 90 days	90 - 120 days	> 120 days	Total
<b>2011</b>	289.3	101.6	27.2	30.6	16.2	43.1	<b>508.0</b>
<b>2010</b>	323.6	78.2	23.3	12.0	14.7	31.1	<b>482.9</b>
<b>2009</b>	255.8	36.9	18.1	25.4	7.4	18.2	<b>361.8</b>

**Table of Contents****NOTE 4 INVENTORIES AND WORK IN PROGRESS**

Analysis of inventories and work-in-progress is as follows:

	December 31, 2011			December 31, 2010			December 31, 2009		
	Cost	Valuation Allowance	Net	Cost	Valuation Allowance	Net	Cost	Valuation Allowance	Net
(in millions of euros)									
<i>Geophysical services</i>									
Consumables and spares parts	37.0	(0.9)	36.1	35.4	(0.6)	34.8	33.1	(0.7)	32.4
Work in progress	9.0		9.0	20.6		20.6	22.1	(6.2)	15.9
<i>Geophysical equipment</i>									
Raw materials and sub-assemblies	71.4	(10.8)	60.6	79.9	(9.1)	70.8	61.3	(8.7)	52.6
Work in progress	130.0	(9.0)	121.0	82.5	(8.0)	74.5	71.1	(4.9)	66.2
Finished goods	57.0	(4.3)	52.7	67.2	(3.4)	63.8	59.6	(2.9)	56.7
<b>Inventories and work in progress</b>	<b>304.4</b>	<b>(25.0)</b>	<b>279.4</b>	<b>285.6</b>	<b>(21.1)</b>	<b>264.5</b>	<b>247.2</b>	<b>(23.4)</b>	<b>223.8</b>

The item « Work in progress » for Geophysical Services includes transit costs of seismic vessels that are deferred and recognized over the contract period according to the technical progress ratio.

The variation of inventories and work in progress is as follows:

Variation of the period	December 31,		
	2011	2010	2009
(in millions of euros)			
Balance at beginning of period	264.5	223.8	287.9
Variations	12.5	23.5	(51.1)
Movements in valuation allowance	(4.9)	3.3	(8.3)
Change in consolidation scope		1.7	
Change in exchange rates	6.5	8.5	(2.7)
Others	0.8	3.7	(2.0)
<b>Balance at end of period</b>	<b>279.4</b>	<b>264.5</b>	<b>223.8</b>

The additions and deductions in valuation allowances for inventories and work-in-progress are presented in the consolidated statements of operations as Cost of sales .

**NOTE 5 OTHER CURRENT ASSETS AND ASSETS HELD FOR SALE***Other current assets*

Detail of other current assets is as follows:

	December 31,		
	2011	2010	2009
(in millions of euros)			
Personnel and other tax assets	39.4	38.3	25.5
Fair value of financial instruments (see note 14)	2.7	1.2	1.4

Edgar Filing: CGG VERITAS - Form 20-F

Other miscellaneous receivables <sup>(a)</sup>	28.6	23.9	22.1
Supplier prepayments	30.2	23.0	13.9
Prepaid expenses <sup>(b)</sup>	20.5	34.7	26.6
<b>Other current assets</b>	<b>121.4</b>	<b>121.1</b>	<b>89.5</b>

<sup>(a)</sup> Includes restricted cash for 5 million in 2011.

<sup>(b)</sup> Includes principally prepaid rent, vessel charters.

**Table of Contents****Assets held for sale**

Detail of assets held for sale is as follows:

	2011	December 31, 2010	2009
	(in millions of euros)		
Massy headquarters land & building	8.0	8.0	8.0
Seismic vessels	37.3	5.1	5.1
Net assets related to Norfield AS agreement (See Note 2)		59.4	
Seismic equipments	4.5		
Others			0.2
<b>Assets held for sale</b>	<b>49.8</b>	<b>72.5</b>	<b>13.3</b>

The increase in seismic vessels classified as held for sale relates to the seismic vessel *Amadeus* to be contributed as part of the agreement with PetroVietnam Technical Services Corporation (PTSC) (see note 2).

**NOTE 6 ASSET VALUATION ALLOWANCE**

Details of valuation allowances recorded against assets are as follows:

	December 31, 2011					
	Balance at beginning of year	Additions	Deductions	Unused Deductions	Others <sup>(a)</sup>	Balance at end of period
	(in millions of euros)					
Trade accounts and notes receivables	18.3	5.8	(4.6)		(1.0)	18.5
Inventories and work-in-progress	21.1	5.9	(1.0)		(1.1)	24.9
Tax assets	0.4	0.4				0.8
Other current assets	1.3	5.3			1.6	8.2
Loans receivables and other investments	2.1		(0.4)		(0.7)	1.0
<b>Total assets valuation allowance</b>	<b>43.2</b>	<b>17.4</b>	<b>(6.0)</b>		<b>(1.2)</b>	<b>53.4</b>

<sup>(a)</sup> Includes the effects of exchange rate changes and changes in the scope of consolidation.

	December 31, 2010					
	Balance at beginning of year	Additions	Deductions	Unused Deductions	Others <sup>(a)</sup>	Balance at end of period
	(in millions of euros)					
Trade accounts and notes receivables	17.4	5.3	(1.6)	(4.5)	1.7	18.3
Inventories and work-in-progress	23.4	3.7	(7.0)		1.0	21.1
Tax assets	0.2	0.2				0.4

Edgar Filing: CGG VERITAS - Form 20-F

Other current assets	1.1	0.1			0.1	1.3
Loans receivables and other investments	1.7				0.4	2.1
<b>Total assets valuation allowance</b>	<b>43.8</b>	<b>9.3</b>	<b>(8.6)</b>	<b>(4.5)</b>	<b>3.2</b>	<b>43.2</b>

<sup>(a)</sup> Includes the effects of exchange rate changes and changes in the scope of consolidation.

F-26

**Table of Contents**

	Balance at beginning of year	December 31, 2009			Balance at end of period
		Additions	Deductions (in millions of euros)	Unused Deductions Others <sup>(a)</sup>	
Trade accounts and notes receivables	12.4	8.0	(2.3)	(0.7)	17.4
Inventories and work-in-progress	14.7	9.5	(1.2)	0.4	23.4
Tax assets		0.2			0.2
Other current assets	1.8	0.1	(0.8)		1.1
Loans receivables and other investments	1.1	0.7		(0.1)	1.7
<b>Total assets valuation allowance</b>	<b>30.0</b>	<b>18.5</b>	<b>(4.3)</b>	<b>(0.4)</b>	<b>43.8</b>

<sup>(a)</sup> Includes the effects of exchange rate changes and changes in the scope of consolidation.

**NOTE 7 INVESTMENTS AND OTHER FINANCIAL ASSETS**

Detail of investments and other financial assets is as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
Non-consolidated investments	5.2	4.8	5.3
Loans and advances	2.3	8.3	13.9
Deposits and Other	11.6	13.4	16.7
<b>Total</b>	<b>19.1</b>	<b>26.5</b>	<b>35.9</b>

Non-consolidated investments are as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
<i>Available for sale financial assets</i>			
Offshore Hydrocarbon Mapping <sup>(a)</sup>			0.5
<i>Other investments in non-consolidated companies</i>			
Tronic s Microsystems S.A. <sup>(b)</sup>	3.9	3.9	3.9
Other investments in non-consolidated companies	1.3	0.9	0.9
<b>Total non-consolidated investments</b>	<b>5.2</b>	<b>4.8</b>	<b>5.3</b>

<sup>(a)</sup> On November 22, 2010, we sold our remaining investments in Offshore Hydrocarbon Mapping.

<sup>(b)</sup> The Group's shareholding in Tronic s Microsystems S.A. is 16.07% at December 31, 2011, 2010 and 2009.

**Loans and advances**



## Edgar Filing: CGG VERITAS - Form 20-F

As of December 31, 2009 and December 31, 2010, loans and advances to companies accounted for under equity method included a 4.2 million (NOK38 million) loan granted by Exploration Investment Resources II AS to Eidesvik Seismic Vessel AS.

F-27

**Table of Contents****NOTE 8 INVESTMENTS IN COMPANIES UNDER EQUITY METHOD**

The variation of Investments in companies under equity method is as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
Balance at beginning of period	73.4	99.0	72.9
Change in consolidation scope	(6.4)	(5.4)	13.8
Investments made during the year	25.6	6.5	7.3
Equity in income	11.7	(0.7)	8.3
Dividends received during the period, reduction in share capital	(4.9)	(2.2)	(0.6)
Reclassification as held for sale		(27.0)	
Change in exchange rates	0.8	3.2	(2.7)
<b>Balance at end of period</b>	<b>100.2</b>	<b>73.4</b>	<b>99.0</b>

The changes in consolidation scope in 2011 correspond for 6.4 million to the disposal of 32.6% of our investment in Cybernetix (see note 2).

In 2010 it corresponded for 2.4 million to the disposal of 12% of our investment in Cybernetix, and for 3 million to the exit of Xian Sercel Petroleum Exploration Instrument Co. Ltd. which is fully consolidated in our financial statements since November 2010 (see note 2).

In 2009 the changes in consolidation scope corresponded to the acquisition of 49% of Eidesvik Seismic Vessel AS for 17.1 million, and to the fair value adjustments of the investments in companies under the equity method acquired as part of the Wavefield acquisition for (3.3) million.

The investments in 2011 correspond for 18.4 million to 28.96% investment in Spectrum ASA, and for the remaining amount to increases in the capital of Oceanic Seismic Vessel AS ( 3.4 million), of PT Elnusa CGGVeritas Seismic ( 3.4 million) and of CGGVeritas Eidesvik Ship Management AS (see note 2).

The investments in 2010 corresponded for 2 million to an increase in the capital of Eidesvik Seismic Vessel AS, and for 4.5 million to investment in our new joint venture Gardline CGGV Pte Ltd. (see note 2).

The investments in 2009 corresponded to the subscription of the capital increases in Cybernetix, and Norwegian Oilfield Services AS ( Norfield ).

The equity in income includes a 9.8 million contribution from Argas in 2011, nil in 2010 and 6.9 million in 2009.

In 2010, the investments in Norfield AS were reclassified as Assets held for sale as part of the Norfield AS agreement (see note 2).

**Table of Contents**

Investments in companies accounted for under equity method are comprised of:

	December 31, 2011      2010      2009 (in millions of euros)		
Argas	53.8	46.7	45.4
CGGVeritas Eidesvik Ship Management AS <sup>(a)</sup>	0.2		
Cybernetix <sup>(a)</sup>		6.4	8.7
Gardline	2.9	4.5	
Norfield AS			24.9
Eidesvik Seismic Vessel AS	8.4	5.5	17.1
Oceanic Seismic Vessel AS	13.4	11.0	
PT Elnusa-CGGVeritas Seismic <sup>(a)</sup>	2.7		
Spectrum ASA <sup>(a)</sup>	20.0		
Xian Sercel Petroleum Exploration Instrument Co. Ltd.			3.3
VS Fusion LLC	(1.2)	(0.7)	(0.4)
<b>Investments in companies under the equity method</b>	<b>100.2</b>	<b>73.4</b>	<b>99.0</b>

<sup>(a)</sup> See note 2.

The following tables illustrate summarized financial information of the main contributive entities accounted for under equity method as of December 31, 2011.

	Argas (in millions of euros)	Oceanic Seismic Vessel	Eidesvik Seismic Vessel	Spectrum
Current assets	74.3	5.4	11.0	32.7
Non-current assets	115.5	113.2	89.5	73.0
Current liabilities	59.3	91.2	11.0	29.7
Non-current liabilities	13.4		72.4	1.0
<b>Equity</b>	<b>117.1</b>	<b>27.4</b>	<b>17.1</b>	<b>75.0</b>
Revenue	215.7	2.7	10.4	19.4
Net income (loss)	20.0	1.9	6.1	3.9

**NOTE 9 PROPERTY, PLANT AND EQUIPMENT**

Analysis of Property, plant and equipment is as follows:

	2011		December 31		2010		2009
	Gross	Accumulated depreciation	Net	Gross	Accumulated depreciation	Net	Net
	(amounts in millions of euros)						
Land	15.4	(0.4)	15.0	7.4	(0.2)	7.2	6.7
Buildings	180.4	(62.0)	118.4	107.6	(56.0)	51.6	53.5
Machinery & equipment	1,047.5	(600.8)	446.7	1,063.1	(630.4)	432.7	426.4
Vehicles & vessels	426.6	(162.8)	263.8	324.2	(158.1)	166.1	157.1
Other tangible assets	76.5	(49.7)	26.8	61.5	(45.0)	16.5	14.8

Edgar Filing: CGG VERITAS - Form 20-F

Assets under constructions	43.2		43.2	108.4	(0.8)	107.6	19.2
<b>Total Property, plant and equipment</b>	<b>1,789.6</b>	<b>(875.7)</b>	<b>913.9</b>	<b>1,672.2</b>	<b>(890.5)</b>	<b>781.7</b>	<b>677.7</b>

F-29

**Table of Contents**

Land, buildings and geophysical equipment recorded under finance leases are as follows:

	December 31						2009 Net
	2011 Gross	2011 Accumulated depreciation	Net (amounts in millions of euros)	2010 Gross	2010 Accumulated depreciation	Net	
Geophysical equipment and vessels under finance leases	91.9	(46.0)	45.9	156.7	(72.0)	84.7	117.1
Land and buildings under finance leases	77.1	(1.4)	75.7	75.1		75.1	
Other tangible assets under finance leases	2.9	(1.7)	1.2				
<b>Total Property, plant and equipment under finance leases</b>	<b>171.9</b>	<b>(49.1)</b>	<b>122.8</b>	<b>231.8</b>	<b>(72.0)</b>	<b>159.8</b>	<b>117.1</b>

In 2011, the decrease in geophysical equipment and vessels under finance leases mainly relates to the Norfield AS transaction (see note 2).

In 2010, the decrease in geophysical equipment and vessels under finance leases is mainly related to the exercise of the purchase option on the seismic vessel *Geo Challenger*.

In 2009, the decrease in property, plant and equipment under finance lease related to the termination of leases and equipments write-down within the restructuring marine plan (note 21).

Depreciation of assets recorded under finance leases is determined on the same basis as owned-assets and is included in depreciation expense.

The variation of the period for tangible assets is as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
Balance at beginning of period	781.7	677.7	822.4
Acquisitions	240.1	177.5	149.9
Acquisitions through finance lease	20.7	87.6	22.2
Depreciation	(202.8)	(192.4)	(259.6)
Disposals	(23.9)	(6.3)	(11.3)
Change in exchange rates	23.4	51.3	(15.9)
Change in consolidation scope	114.1	(2.8)	(37.7)
Reclassification of tangible assets as Assets held for sale	(29.4)	(22.5)	(5.5)
Other	(10.0)	11.6	13.2
<b>Balance at end of period</b>	<b>913.9</b>	<b>781.7</b>	<b>677.7</b>

In 2011, acquisitions through finance lease relate to seismic equipment for the new seismic vessels *Elnusa Finder* and *Oceanic Sirius*. The change of consolidation scope relates to the acquisition of the company Exploration Vessel Resources II, owner of the seismic vessel *Geowave Voyager* (see note 2).

In 2010, acquisitions through finance lease mainly included our new headquarters in Massy (see note 18). This construction was delivered in October 2010, with a starting date in 2011 after additional building fittings.

The seismic vessel *Venturer* and some equipments were classified as Assets held for sale in relation to the Norfield AS transaction (see note 5).



**Table of Contents**

In 2009, depreciation included asset write-downs due the marine restructuring plan and the change in consolidation scope corresponds to the adjustment of the fair value of Wavefields's fixed assets (see note 2). Other variation related to the reclassification of *Geowave Master* (now *Oceanic Phoenix*) seismic equipments as Geophysical equipment and vessels under finance leases for an amount of 13.5 million. The seismic vessels *Search* and *Harmattan* were classified as Assets held for sale.

Reconciliation of acquisitions with the consolidated statements of cash flows and capital expenditures in note 19 is as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
Acquisitions of tangible assets (excluding finance lease) see above	240.1	177.5	149.9
Development costs capitalized see note 20	16.3	23.4	14.3
Additions in other tangible assets (excluding non-exclusive surveys) see note 10	5.8	12.4	5.4
Variance of fixed assets suppliers	(1.5)	(2.9)	0.5
<b>Total purchases of tangible and intangible assets according to cash-flow statement</b>	<b>260.7</b>	<b>210.4</b>	<b>170.1</b>
Net acquisitions through finance lease see above	20.7	87.6	22.2
Increase in multi-client surveys see note 10	163.3	219.3	229.3
Less variance of fixed assets	1.5	2.9	0.5
<b>Capital expenditures according to note 19</b>	<b>446.2</b>	<b>520.2</b>	<b>421.1</b>

**Repairs and maintenance expenses**

Repairs and maintenance expenses included in cost of operations amount to 87.5 million in 2011 due to upgrades and repairs on seismic vessels following crashes during the year. Repairs and maintenance expenses amounted to 57.0 million in 2010 and 50.6 million in 2009.

**NOTE 10 INTANGIBLE ASSETS**

Analysis of intangible assets is as follows:

	December 31,						
	2011			2010			2009
	Gross	Accumulated depreciation	Net	Gross	Accumulated depreciation	Net	Net
	(amounts in millions of euros)						
Multi-client surveys Marine	1,764.5	(1,461.8)	302.7	1,732.2	(1,381.9)	350.3	368.2
Multi-client surveys Land	538.2	(433.4)	104.8	429.7	(328.8)	100.9	100.9
Development costs capitalized	112.3	(45.4)	66.9	91.5	(32.5)	59.0	42.3
Software	52.5	(30.3)	22.2	54.0	(32.6)	21.4	11.0
Other intangible assets <sup>(a)</sup>	306.4	(134.4)	172.0	333.6	(143.8)	189.8	206.5
<b>Total intangible assets</b>	<b>2,773.9</b>	<b>(2,105.3)</b>	<b>668.6</b>	<b>2,641.0</b>	<b>(1,919.6)</b>	<b>721.4</b>	<b>728.9</b>

<sup>(a)</sup> Other intangible assets include customer relationships, technology and trade name acquired in business combinations.

**Table of Contents**

The variation of the period for intangible assets is as follows:

Variation of the period	December 31,		
	2011	2010	2009
	(in millions of euros)		
Balance at beginning of period	721.4	728.9	820.0
Increase in multi-client surveys	163.3	219.3	229.3
Development costs capitalized	16.4	23.4	14.3
Other acquisitions	5.8	12.4	5.4
Depreciation on multi-client surveys	(203.3)	(276.2)	(289.3)
Other depreciation	(42.1)	(45.6)	(45.8)
Disposals	(14.5)		(0.6)
Change in exchange rates	14.9	58.6	3.2
Change in consolidation scope			(7.6)
Other	6.7	0.6	
<b>Balance at end of period</b>	<b>668.6</b>	<b>721.4</b>	<b>728.9</b>

Disposals in 2011 mainly relate to the sale of our 2D multi-client marine library to Spectrum ASA (see note 2).

Depreciation on multi-client surveys in 2010 included a 70.4 million (U.S.\$93.6 million) impairment loss presented in the line item Other revenues (expenses) net of the Consolidated Statement of Operations (see note 21).

Depreciation on multi-client surveys in 2009 included a 63.8 million (U.S.\$88.9 million) impairment loss presented in the line item Other revenues (expenses) net of the Consolidated Statement of Operations (see note 21).

The change in consolidation scope in 2009 corresponded to the fair value adjustment on intangible assets acquired in December 2008 as part of the Wavefield acquisition.

**NOTE 11 GOODWILL**

Analysis of goodwill is as follows:

Variation of the period	December 31,		
	2011	2010	2009
	(In millions of euros)		
Balance at beginning of period	2,012.0	1,868.1	2,055.1
Additions	1.3	0.5	
Impairment			(217.6)
Adjustments		(1.2)	87.7
Change in exchange rates	64.3	144.0	(57.1)
Other		0.7	
<b>Balance at end of period</b>	<b>2,077.6</b>	<b>2,012.0</b>	<b>1,868.1</b>

In 2011, the additions correspond to the goodwill arising from the purchase of Petrodata Consulting LLC (see note 2).

In 2010, the additions corresponded to the goodwill arising on the contribution of Xian Sercel Petroleum Exploration Instrument Co. Ltd ( Xian Sercel ) to Hebei Sercel Junfeng Geophysical Prospecting Equipment Co. Ltd. and the fact that we obtained control in Xian Sercel (see note 2).





## **Table of Contents**

The adjustments in 2010 corresponded to the reversal of the earn-out clause on the acquisition of Quest.

In 2009, the impairment included impairment losses of 215.5 million (U.S.\$300 million) resulting from the annual impairment test and 2.1 million arising from the use of Veritas foreign carry-forward losses existing prior to the merger and not recognized as an asset. Total impairment losses, amounting to 217.6 million, are presented in the line Impairment of goodwill in the Consolidated Statement of Operations.

The adjustments for 87.7 million corresponded to the adjustment of the fair value of Wavefield's acquired assets and assumed liabilities, leading to a final goodwill of 96.3 million (see note 2).

### **Impairment review**

Group management undertakes at least an annual impairment test covering goodwill, intangible assets and indefinite lived assets allocated to the cash generated units to consider whether impairment is required.

The recoverable value retained by the Group corresponds to the discounted expected cash flows from the cash generating units or group of cash generating units.

The cash generating units are as follows:

Geophysical Equipment segment;

Geophysical Services segment Marine (including multi-client surveys);

Geophysical Services segment Processing, Imaging & Reservoir;

Geophysical Services segment Land (including multi-client surveys).

### **Key assumptions used in the determination of value in use**

In determining the asset recoverability, management makes estimates, judgments and assumptions on uncertain matters. For each cash generating unit, the recoverable amounts are determined based on economic assumptions and forecasted operating conditions as follows:

expected cash flows estimated in the 2012 budget and 2013-2014 outlook as presented to the Board of Directors on February 29, 2012,

use of normative cash flows beyond Year 3,

industrial outlook consisting in recovery starting mid-2012,

full effect in 2012 and beyond our performance plan launched end of 2010,

average exchange rate of U.S.\$1.30 for 1,

discount rates we consider reflecting the respective sector weighted average cost of capital (WACC):

10% for the Equipment segment (corresponding to a pre-tax rate of 13.7%);

9.0% for the Marine (corresponding to a pre-tax rate of 11.5%);

9.5% for the Processing, Imaging & Reservoir (corresponding to a pre-tax rate of 13.1%); and

8.5% for the Land (corresponding to a pre-tax rate of 11.4%),

No impairment loss was recorded for the year ended December 31, 2011 and December 31, 2010.

A 215.5 million impairment loss attributable to our Marine Acquisition activity was recorded for the year ended December 31 2009.

**Table of Contents****Sensitivity to changes in assumptions**

Changing the assumptions selected by Group management, in particular the discount rate and the normative cash flows (based on EBITDAS) could significantly affect the evaluation of the value in use of our cash generating units and, hence, Group's impairment result.

The following changes to the assumptions used in the impairment test lead to the following:

	Goodwill	Excess of the expected future discounted cash-flows over the carrying value of assets including goodwill	Sensitivity on normative cash flows		Sensitivity on discount rate (after tax)	
			Decrease by 10%	Increase by 10%	Decrease by 0.25%	Increase by 0.25%
(in millions of euros)						
Marine	1,314	41	(215)	+215	+94	(88)
Processing, Imaging & Reservoir	347	76	(46)	+46	+20	(19)
Land	306	22	(55)	+55	+26	(24)
Equipment	111	2,070	(178)	+178	+77	(72)
<b>Total</b>	<b>2,078</b>					

Changes to the assumptions used in the impairment test for which the recoverable value equals to the carrying value are as follows:

	Sensitivity on normative cash-flows	Sensitivity on discount rate (after tax)
Marine	(1.9)%	+0.11%
Processing, Imaging & Reservoir	(16.4)%	+1.14%
Land	(4.0)%	+0.23%
Equipment		Not relevant

**NOTE 12 OTHER CURRENT LIABILITIES**

The analysis of other current liabilities is as follows:

	December 31,		
	2011	2010	2009
(in millions of euros)			
Value added tax and other taxes payable	49.7	55.5	36.2
Deferred revenue	112.4	107.8	94.6
Fair value of financial instruments (see note 14)	7.3	0.6	1.6
Other liabilities	40.8	32.5	26.3
<b>Other current liabilities</b>	<b>210.2</b>	<b>196.4</b>	<b>158.7</b>

**Table of Contents****NOTE 13 FINANCIAL DEBT**

Analysis of financial debt by type is as follows:

	December 31,						2009 Total
	Current	2011 Non- current	Total (amounts in millions of euros)	Current	2010 Non- current	Total	
High yield bonds		1,037.7	1,037.7		933.5	933.5	863.2
Convertible bonds		280.6	280.6				
Bank loans	12.4	31.6	44.0	14.1	376.7	390.8	409.9
Finance lease debt	25.0	96.6	121.6	47.7	96.4	144.1	112.1
<b>Sub-total</b>	<b>37.4</b>	<b>1,446.5</b>	<b>1,483.9</b>	<b>61.8</b>	<b>1,406.6</b>	<b>1,468.4</b>	<b>1,385.2</b>
Accrued interests	12.5		12.5	12.7		12.7	11.1
<b>Financial debt</b>	<b>49.9</b>	<b>1,446.5</b>	<b>1,496.4</b>	<b>74.5</b>	<b>1,406.6</b>	<b>1,481.1</b>	<b>1,396.3</b>
Bank overdrafts	4.6		4.6	4.5		4.5	2.7
<b>Total</b>			<b>1,501.0</b>			<b>1,485.6</b>	<b>1,399.0</b>

Analysis of financial debt by currency is as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
U.S. dollar	1,131.9	1,394.0	1,343.4
Euro	352.0	74.4	35.0
Other currencies			6.8
<b>Total</b>	<b>1,483.9</b>	<b>1,468.4</b>	<b>1,385.2</b>

Analysis of financial debt by interest rate is as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
Variable rates (average effective rate December 31, 2011: 2.73%, 2010: 4.87%, 2009: 5.43%)	57.2	410.7	453.4
Fixed rates (average effective rate December 31, 2011: 8.16%, 2010: 8.28%, 2009: 8.50%)	1,426.7	1,057.7	931.8
<b>Total</b>	<b>1,483.9</b>	<b>1,468.4</b>	<b>1,385.2</b>

Variable interest rates are generally based on inter-bank offered rates of the related currency.



**High yield Bonds**

Since 2005, CGGVeritas issued several bonds in U.S. dollar, with maturities 2015, 2016, 2017 and 2021.

---

## **Table of Contents**

These notes are listed on the Euro MTF market of the Luxembourg Stock Exchange; and are guaranteed on a senior basis by certain of our subsidiaries.

Those bonds include certain restrictive covenants, including limitations on additional indebtedness subscriptions, pledges arrangements, sales and lease-back transactions, issuance and sale of equity instruments and dividends payments by certain subsidiaries of the Group. In addition, the Company is required to maintain a ratio of EBITDAS to gross interest expenses equal to or greater than 3.

EBITDAS is defined as earnings before interest, taxes, depreciation, amortization and share-based compensation cost. For the determination of ratios included in the covenants, EBITDAS is before non-recurring items. Share-based compensation includes both stock-options and shares issued under our share allocation plans. Gross interest expense corresponds to consolidated interest expense excluding amortization of deferred expenditures.

All those financial covenants were complied with at December 31, 2011, 2010 and 2009.

### ***High Yield bonds (U.S.\$530 million, 7 1/2% Senior Notes, maturity 2015)***

On March 1, 2011, we redeemed U.S.\$460 million aggregate principal amount of our U.S.\$530 million 7 1/2% Senior Notes due 2015 at a price of 103.75% plus accrued interest, and on June 30, 2011, we redeemed the remaining U.S.\$70 million aggregate principal amount of such notes at a price of 102.5% plus accrued interest. The redemptions were financed through the bond issuances described below.

On February 9, 2007, we issued an additional U.S.\$200 million in aggregate principal amount of 7 1/2% senior notes due 2015. We used the net proceeds from the notes to repay one part of U.S.\$700 million outstanding under the bridge loan facility used to finance Veritas acquisition.

On February 3, 2006, we issued an additional U.S.\$165 million principal amount of our dollar-denominated 7 1/2% Senior Notes due 2015 issued in April 2005 in a private placement with certain eligible investors. The notes were issued at a price of 103 1/4% of their principal amount, resulting in a Yield-to-Worst of 6.9%. The net proceeds from the notes were used on February 10, 2006 to repay the U.S.\$140.3 million remaining outstanding under our U.S.\$375 million bridge credit facility used to finance the acquisition of Exploration Resources. On August 17, 2006, U.S.\$164 million in principal amount of these notes were exchanged for identical notes registered with the SEC.

On April 28, 2005, we issued U.S.\$165 million of 7 1/2% Senior Notes due 2015. The net proceeds were used to redeem and pay accrued interest on all U.S.\$150 million outstanding aggregate principal of our existing 10 5/8% Senior Notes due 2007, on May 31, 2005 (see below).

### ***High Yield bonds (U.S.\$350 million, 9 1/2% Senior Notes, maturity 2016)***

On June 9, 2009, we issued U.S.\$350 million principal amount of 9 1/2% senior notes due 2016. The senior notes were issued at a price of 97.0% of their principal amount, resulting in a yield of 10 1/8%. The senior notes will mature on May 15, 2016.

We used the proceeds from the notes to replace cash used to repay U.S.\$100 million of our Term Loan B facility on May 21, 2009, and to fund the three quarterly U.S.\$27.5 million amortization payments due during the remainder of 2009 under our Term Loan B facility. The remaining amount enabled Norway subsidiaries CGG Marine Resources Norge and CGGVeritas Services (Norway) AS (ex Exploration Resources) to reimburse financial debts on seismic vessels amounting to U.S.\$50 million, and to fund ongoing operations.



---

**Table of Contents**

***High Yield bonds (U.S.\$400 million, 7<sup>3</sup>/<sub>4</sub>% Senior Notes, maturity 2017)***

On February 9, 2007, we issued U.S.\$400 million of 7<sup>3</sup>/<sub>4</sub>% Senior Notes due 2017. We used the net proceeds from the notes to repay one part of U.S.\$700 million outstanding under the bridge loan facility used to finance Veritas acquisition.

***High Yield bonds (U.S.\$650 million, 6<sup>1</sup>/<sub>2</sub>% Senior Notes, maturity 2021)***

On May 31, 2011, we issued U.S.\$650 million principal amount of 6<sup>1</sup>/<sub>2</sub>% Senior Notes due June 1, 2021. The senior notes were issued at a price of 96.45% of their principal amount, resulting in a yield of 7%. We used the net proceeds of the issuance to redeem the remainder of our U.S.\$530 million 7<sup>1</sup>/<sub>2</sub>% Senior Notes due May 2015 and to repay in full the U.S.\$508 million outstanding under our term loan B facility.

***Convertible bonds ( 360 million, 3<sup>1</sup>/<sub>4</sub>% Senior Notes, maturity 2016)***

On January 27, 2011, we issued 12,949,640 bonds convertible into and/or exchangeable for new or existing shares of our company to be redeemed on January 1, 2016 for a total nominal amount of 360 million. We used the net proceeds of the issuance to partially redeem our U.S.\$530 million 7<sup>1</sup>/<sub>2</sub>% Senior Notes due May 2015, allowing us to reduce our cash interest expense.

The bonds nominal value was set at 27.80 per bond, representing an issue premium of 25% of the CGGVeritas reference share price on the regulated market of NYSE Euronext in Paris. The bonds bear interest at a rate of 1.75% payable semi-annually in arrears on January 1 and July 1 of each year. The bonds entitle the holders to receive new and/or existing CGGVeritas shares at the ratio of one share per one bond, subject to adjustments. Under certain conditions, the bonds may be redeemed prior to maturity at our option.

As of January 27, 2011, the financial liability component was 270.0 million and the equity component was 90.0 million. The fair value of the financial liability was assessed using a 8.15% interest rate.

***Bank loans and credit facilities***

At December 31, 2011, 37.1 million of bank loans amounting to 44.0 million were secured by tangible assets and receivables.

***Term Loan B and US revolving Facilities***

On December 15, 2011, we amended our US senior facility agreement. This amendment extended the maturity of U.S.\$79 million out of the total U.S.\$140 million outstanding by two years, from January 2012 to January 2014.

In consideration of such amendments, covenants have been re-defined as follows:

a maximum ratio of total net financial debt to EBITDAS (2.50:1 for any relevant period expiring in the rolling 12-month period ending between March 31, 2012 and December 31, 2013).

and a minimum ratio of EBITDAS to total interest costs (3.00:1 for any relevant period expiring in the rolling 12-month periods ending between March 31, 2012 and December 31, 2013).

On June 2, 2011, we repaid in full the U.S.\$508 million outstanding under our term loan B facility with the proceeds of our issuance of senior bonds due 2021 described above.

On July 15, 2010, we amended our US senior facilities agreement. This amendment extended the maturity of U.S.\$348 million out of the total U.S.\$515 million outstanding as of June 30, 2010 from January 2014 to



**Table of Contents**

January 2016 and increased the Company's headroom under its financial covenants. In consideration of such amendment, the applicable margin for all borrowings under the US senior facilities increased by 1.0% for the amounts whose maturity was extended. The tranche whose maturity was extended to 2016 would have its maturity accelerate to February 2015 if our senior notes due May 2015 were not refinanced by February 2015.

On May 21 and 27, 2009, we amended our US senior facilities agreement and our French revolving facility agreement, respectively. These amendments, in line with our conservative financial policy, were aimed mainly at increasing the Company's headroom under its financial covenants. In consideration of such amendments, the applicable margin for all borrowings under the US senior facilities and French revolving facility increased by 1.0% and covenants have been re-defined.

An amendment to the credit agreements and the French revolver credit agreement was signed on December 12, 2008. Such amendments gave the Group a larger flexibility with respect to (i) the acquisition of companies through a tender offer process, (ii) share buyback and (iii) recapitalization of subsidiaries that are not Guarantors under the credit agreements. In consideration of such amendments, the Company:

- (i) repaid U.S.\$50 million on the signature date of such amendments on December 2008, and
- (ii) in 2009, repaid an additional U.S.\$100 million paid in four quarterly installments of U.S.\$25 million, in addition to the repayment initially scheduled amounting to U.S.\$2,5 million by quarters. Half of these additional payments (U.S.\$75 million) corresponded to early payment of compulsory reimbursements to be made in the first semester of 2010.

On January 12, 2007, the Group entered into a U.S.\$1.140 billion senior secured credit agreement with Credit Suisse, as administrative agent and collateral agent, and the lenders party thereto, pursuant to which credit agreement the Group borrowed a U.S.\$1.0 billion senior secured Term Loan B and obtained a U.S.\$140 million senior secured U.S. revolving facility (which revolving facility includes letter of credit and swingline subfacilities). We repaid U.S.\$100 million on June 29, 2007 of the Term Loan B early.

The obligations of CGGVeritas Services Holding (US) under the senior facilities are guaranteed by CGGVeritas and certain subsidiaries including the former Veritas group subsidiaries. Shares of CGGVeritas Services Holding (US) and of certain of its first-tier subsidiaries are pledged as well as those of other first-tier subsidiaries of CGGVeritas. In addition, certain guarantors have provided first-priority security interests in certain of their respective tangible and intangible assets, including (without limitation) certain vessels, real property, mineral rights, deposit accounts and intellectual property. In the case of certain of subsidiaries (most notably CGGVeritas Services Holding (US) and certain U.S. and Canadian subsidiaries), the collateral may comprise substantially all of their respective assets.

Pursuant to this agreement, the group was required to adhere to certain financial covenants. All financial covenants, calculated on a quarterly basis, were complied with at December 31, 2011. They were also complied with at December 31, 2010 and December 31, 2009.

***U.S.\$200 million Revolving Credit Agreement (French revolving facility)***

During the year 2011, 80 million were drawn and fully repaid on September 2011.

On December 15, 2011, we amended our French revolving facility agreement. This amendment, in line with our conservative financial policy, was aimed mainly at increasing the Company's headroom under its financial covenants. In consideration of such amendments, covenants have been re-defined as follows: Aggregate amount of Net Capital Expenditures made by the Group in any fiscal year shall not exceed the greater of U.S.\$600 million and 50% of EBITDA for such fiscal year. Net Capital Expenditures shall mean Capital Expenditures minus Multi-client Prefunding Sales.

---

**Table of Contents**

On November 4, 2010, we amended this facility, in order to align covenant levels with our amended senior U.S. facilities and extend the maturity by two years, from February 2012 to February 2014. Total Leverage Ratio covenant levels increased from 2.25 to 2.75 in 2010 declining thereafter to 2.0 in 2014; and EBITDAS to total interest cost covenant levels decreased from 4.00 to 3.50 in 2010 increasing thereafter to 4.50 in 2014. In consideration of the amendment, interest rates increased from Libor + 300bps to Libor + 325bps (initially), and will then be adjusted based on the CGGVeritas corporate ratings.

On May 21 and 27, 2009, and December 2008, we amended our French revolving facility agreement as described in the above paragraphs.

On February 7, 2007, CGGVeritas entered into a U.S.\$200 million revolving credit agreement with Natixis as administrative agent and Crédit Suisse as collateral agent. The proceeds of this revolving credit agreement may be drawn in U.S. dollars or in euros, and may be used for the general corporate purposes of the borrower.

***U.S.\$45 million Secured Term Loan Facility***

On January 13, 2011, Exploration Vessel Resources II AS entered into a U.S.\$45 million credit facility secured by a pledge over the seismic vessel *Voyager* and subject to substantially the same covenants as our U.S. senior credit facilities. The outstanding value at December 31, 2011, is U.S.\$38.4 million.

***U.S.\$25 million Secured Term Loan Facility***

On April 30, 2007, Geomar concluded a credit facility of U.S.\$25 million. The proceeds from this credit facility were used to refinance the seismic vessel *Alizé*. At December 31, 2007, this facility was fully drawn. The outstanding value at December 31, 2011 is U.S.\$9.0 million.

***Additional asset financing agreement***

On March 13, 2006, CGG Marine Resources Norge AS concluded an asset financing agreement for U.S.\$26.5 million with a bank. The purpose of this agreement was to finance the acquisition of newly-developed Sentinel streamers for the vessel *Symphony*. This financing agreement is guaranteed by a pledge on the streamers. At December 31, 2006, this facility was fully drawn, and fully reimbursed since December 31, 2009.

***Additional credit facility***

On March 29, 2006, Exploration Resources concluded a credit facility of U.S.\$70 million. The proceeds from this credit facility were used to finance the conversion of the *Geo-Challenger* from a cable laying vessel to a 3D seismic vessel and seismic equipment for the vessels *C-Orion* and *Geo-Challenger*. At December 31, 2006, this facility was fully drawn, and fully reimbursed at December 31, 2010.

**NOTE 14 FINANCIAL INSTRUMENTS**

Because we operate internationally, we are exposed to general risks linked to operating abroad. Our major market risk exposures are changing interest rates and currency fluctuations. We do not enter into or trade financial instruments including derivative financial instruments for speculative purposes.

**Foreign currency risk management**

As a company that derives a substantial amount of its revenue from sales internationally, we are subject to risks relating to fluctuations in currency exchange rates. Our revenues and expenses are mainly denominated in U.S. dollars and euros, and to a significantly lesser extent, in Canadian dollars, Brazilian reais, Australian dollars, Norwegian kroner and British pounds. Historically, a significant portion of our revenues that were invoiced in euros related to contracts that were effectively priced in U.S. dollars, as the U.S. dollar often serves as the reference currency when bidding for contracts to provide geophysical services.

**Table of Contents**

***Foreign currency sensitivity analysis***

The reporting currency for the Group's consolidated financial statements is the euro. As a result, the Group's sales and operating income are exposed to the effects of fluctuations in the exchange rate of the euro against such other currencies, particularly the U.S. dollar. A depreciation of the U.S. dollar against the euro will negatively affect our reported results of operations since U.S. dollar denominated earnings that are converted to euros are stated at a decreased value. Moreover, and in addition to the impact of the conversion of the U.S. dollar at a decreased value, since we participate in competitive bids for data acquisition contracts that are denominated in U.S. dollars, the depreciation of the U.S. dollar against the euro harms our competitive position against companies whose costs and expenses are denominated to a greater extent in U.S. dollars. Our annual fixed expenses in euros are equal to approximately 400 million and as a consequence, an unfavorable variation of U.S.\$0.1 in the average yearly exchange rate between the U.S. dollar and the euro would reduce our operating income and our shareholders' equity by approximately U.S.\$40 million.

To mitigate the exposure, we attempt to match foreign currency revenues and expenses in order to balance our net position of receivables and payables denominated in foreign currencies. Nevertheless, during the past five years such dollar-denominated expenses have not equaled dollar-denominated revenues principally to personnel costs payable in euros. In order to improve the balance of our net position of receivables and payables denominated in foreign currencies, we maintain our financing in U.S. dollars.

***Foreign forward exchange contracts***

In order to protect the Group against the reduction in the value of future foreign currency cash flows we follow a policy of selling U.S. dollars forward at average contract maturity dates that the Group attempts to match with future net U.S. dollar cash flows (revenues less costs in U.S. dollars) to be generated by firm contract commitments in its backlog generally over the ensuing six months. A similar policy, to a lesser extent, is carried out with respect to contracts denominated in British pounds. This foreign currency risk management strategy has enabled us to reduce, but not eliminate, the positive or negative effects of exchange movements with respect to these currencies.

**Table of Contents**

Details of forward exchange contracts are as follows:

	2011	December 31, 2010	2009
<b>Forward sales of U.S. dollars against euros</b>			
Notional amount (in millions of U.S.\$)	157.8	128.1	157.4
<i>of which forward sales qualifying as cash-flow hedges</i>	157.8	128.1	157.4
<i>of which forward sales not qualifying as cash-flow hedges</i>			
Weighted average maturity	57 days	51 days	43 days
Weighted average forward U.S.\$/Euro exchange rate	1.3492	1.3434	1.4273
<b>Forward sales of U.S. dollars against British pounds</b>			
Notional amount (in millions of U.S.\$)	17.2		8.9
<i>of which forward sales qualifying as cash-flow hedges</i>	17.2		8.9
<i>of which forward sales not qualifying as cash-flow hedges</i>			
Weighted average maturity	41 days		29 days
Weighted average forward U.S.\$/£ exchange rate	1.5635		1.6743
<b>Forward sales of U.S. dollars against Ren-min-bi Yuan</b>			
Notional amount (in millions of U.S.\$)	21.5	6.2	
<i>of which forward sales qualifying as cash-flow hedges</i>	21.5	6.2	
<i>of which forward sales not qualifying as cash-flow hedges</i>			
Weighted average maturity	20 days	56 days	
Weighted average forward RMB/U.S.\$ exchange rate	6.3468	6.6612	
<b>Forward sales of U.S. dollars against Singapore dollar</b>			
Notional amount (in millions of U.S.\$)	2.3		
<i>of which forward sales qualifying as cash-flow hedges</i>	2.3		
<i>of which forward sales not qualifying as cash-flow hedges</i>			
Weighted average maturity	50 days		
Weighted average forward SGD/U.S.\$ exchange rate	1.2929		
<b>Forward sales of U.S. dollars against Swiss Franc</b>			
Notional amount (in millions of U.S.\$)	3.8		
<i>of which forward sales qualifying as cash-flow hedges</i>	3.8		
<i>of which forward sales not qualifying as cash-flow hedges</i>			
Weighted average maturity	41 days		
Weighted average forward CHF/ U.S.\$ exchange rate	0.8713		

Effects of forward exchange contracts on financial statements are as follows:

	2011	December 31, 2010	2009
	(in millions of euros)		
Carrying value of forward exchange contracts (see notes 5 and 12)	(4.6)	0.6	(0.2)
Fair value of forward exchange contracts	(4.6)	0.6	(0.2)
Gains (losses) recognized in profit and loss (see note 21)	3.4	(2.7)	1.6
Gains (losses) recognized directly in equity	(3.6)	(0.9)	5.2
Net gains (loss) on cash-flow hedges in companies consolidated under the equity method are not included in the above table.			

Net gain (loss) recognized in profit and loss for these entities are included in the line item "Equity in income of investees" in the Consolidated Statement of Operations. Gains (losses) recognized directly in equity are presented in the line item "Other comprehensive income (loss)" for the period, net of taxes, in companies consolidated under the equity method in the consolidated statements of comprehensive income (loss).

---

**Table of Contents****Call contracts**

There were no call contracts outstanding as of December 31, 2011, 2010 and 2009.

**Interest rate risk management**

Our policy is to manage the interest rates risk through maximization of the proportion of fixed rate debt. As of December 31, 2011, 96% of our debt consists of fixed-rate bonds, along with some fixed-rate finance leases and fixed-rate medium-term bank credit facilities with variable maturities. This debt is not exposed to interest rate fluctuations. However, drawings under our credit facilities incur interest at variable rates that are reset at each interest period (generally between one and 60 months). As a result, our interest expenses vary in line with movements in short-term interest rates. We may use interest rate swaps to adjust interest rate exposure when appropriate based upon market conditions.

***Interest rate sensitivity analysis***

Our sources of liquidity include credit facilities and debt securities which are or may be subject to variable interest rates. As a result, our interest expenses could increase if interest rates increase. An increase of 1% in interest rates would increase our interest expenses by 0.6 million per year, while a decrease of 1% would decrease our interest expenses by 0.6 million.

***Interest rate swap contracts***

There were no interest rate swap contracts outstanding as of December 31, 2011, 2010 and 2009.

***Interest rate cap contracts***

There was no interest rate cap agreement as of December 31, 2011, 2010 and 2009.

**Credit risk management**

We seek to minimize our counter-party risk by entering into hedging contracts only with highly rated commercial banks or financial institutions and by distributing the transactions among the selected institutions. Although our credit risk is the replacement cost at the then-estimated fair value of the instrument, we believe that the risk of incurring losses is remote and those losses, if any, would not be material.

Our receivables and investments do not represent a significant concentration of credit risk due to the wide variety of customers and markets in which we sell our services and products and our presence in many geographic areas. In 2011, the Group's two most significant customers accounted 13.0% and 3.0% of the Group's consolidated revenues compared with 6.9% and 6.0% in 2010 and 6.8% and 5.3% in 2009.

**Liquidity risk management**

Our principal capital needs are for the funding of ongoing operations, capital expenditures (particularly repairs and improvements to our seismic vessels), investments in our multi-client data library and acquisitions.

We intend to fund ongoing operations and debt service requirements through cash generated by operations. Our ability to make scheduled payments of principal, or to pay the interest or additional interest, if any, on, or to refinance our indebtedness, or to fund planned capital expenditures will depend on our future performance, which, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. Based upon the current level of operations, we believe that cash flow from operations, available cash and cash equivalents, together with borrowings available under the U.S. revolving facility (U.S.\$79 million) and the French revolving facility (U.S.\$ 200 million) will be adequate to meet our future liquidity needs for the next twelve months (see note 13).

**Table of Contents****Financial instruments by categories in the Balance sheet**

The impact and the breakdown of the Group's financial instruments in the balance sheets as of December 31, 2011 are as follows:

	Risks category	Carrying Amount	Fair Value	December 31, 2011			Derivatives
				Fair value in income statement	Available-for-sale assets (in millions of euros)	Loans, receivables	
Non-consolidated investments	Level 3	5.2	5.2		5.2		
Financial and non-current assets	Level 3	13.9	13.9			13.9	
Notes receivables	Level 3	677.0	677.0			677.0	
Financial and current assets	Level 3	2.7	2.7				2.7
Cash equivalents	Level 3	76.9	76.9	76.9			
Cash	Level 3	333.8	333.8	333.8			
<b>Total assets</b>		<b>1,109.5</b>	<b>1,109.5</b>	<b>410.7</b>	<b>5.2</b>	<b>690.9</b>	<b>2.7</b>
Financial and non-current liabilities	Level 3	3.4	3.4			3.4	
Financial debts <sup>(a)</sup>	Level 1	1,501.0	2,212.6				1,501.0
Notes payables	Level 3	298.6	298.6			298.6	
Financial and current liabilities	Level 3	7.3	7.3				7.3
<b>Total liabilities</b>		<b>1,810.3</b>	<b>2,521.9</b>			<b>302.0</b>	<b>1,501.0</b>

<sup>(a)</sup> Financial debts include long term debt, bank overdraft facilities and accrued interest (see note 13)

**Fair value information**

The carrying amounts and fair values of the Group's financial instruments are as follows:

	2011		December 31, 2010		2009	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Cash and cash equivalents	410.7	410.7	335.9	335.9	480.3	480.3
Bank overdraft facilities	4.6	4.6	4.5	4.5	2.7	2.7
Bank loans, vendor equipment financing and shareholder loans:						
Variable rate	57.2	57.2	410.7	410.7	453.4	453.4
Fixed rate	1,426.7	2,138.3	1,057.7	1,591.4	931.8	1,452.3
Forward currency exchange contracts	(4.6)	(4.6)	0.6	0.6	(0.2)	(0.2)
Interest rate swaps						
Call contracts						



---

## **Table of Contents**

The Group considers the carrying value for loans receivable and other investments, trade accounts and notes receivable, other receivables, trade accounts and notes payable and other current liabilities to be the most representative estimate of fair value.

For bank loans with fixed interest rates, the fair values have been estimated using discounted cash flow (interest payments and reimbursements) analysis based on the Group's incremental borrowing rates for similar types of borrowing arrangements. At December 31, 2011, the rate of 7.1% (source: Thomson Reuters) is used to determine the fair value of high yield bonds and the rate of 6.5% (source: Bloomberg) is used to determine the fair value of convertible bond. For variable-rate bank loans, vendor equipment financing and the shareholder loans, fair values approximate carrying values.

The market value of forward sales is assessed based on forward rates, available on the financial markets for similar maturities.

### **NOTE 15 COMMON STOCK AND STOCK OPTION PLANS**

The Company's share capital at December 31, 2011 consisted of 151,861,932 shares, each with a nominal value of 0.40, 151,506,109 as of December 31, 2010 and 151,146,594 as of December 31, 2009.

CGGVeritas seeks to continuously enhance its financial structure through the equilibrium between its financial indebtedness and its equity as presented in our consolidated balance sheets. The group manages its financial structure and operates the adjustments deemed necessary considering the evolution of the financial environment. The managing objectives, policies and procedures have remained unchanged for many reporting periods. Excluding the legal requirements applicable in France, CGGVeritas SA is not bound to any requirement in terms of minimal amount of equity.

#### **Rights and privileges related to ordinary shares**

Ordinary shares give right to dividend. Dividends may be distributed from the statutory retained earnings, subject to the requirements of French law and the Company's articles of incorporation. Retained earnings available for distribution amounted to 2,435.0 million at December 31, 2011. We did not pay any dividend during the years ended December 31, 2011, 2010 and 2009.

Ordinary shares registered held for more than two years give a double voting right.

#### **Issued shares**

In 2011, CGGVeritas S.A. issued 355,823 fully paid shares related to the following operations:

318,823 ordinary shares corresponding to allocated stock options;

37,000 ordinary shares corresponding to allocated performance shares.

#### **Stock options**

Pursuant to various resolutions adopted by the Board of Directors, the Group has granted options to purchase Ordinary Shares to certain employees, executive officers and Directors of the Group.

Options granted under the May 2006 option plan, which expire eight years from the date of grant, are vested by one fourth each year from May 2006 and could not generally be exercised before May 2010. Moreover, for options to subscribe for 1,000 shares or more, the shares resulting from the exercise of those options could not be sold before May, 2010. Out of the 1,012,500 options granted in May 2006, 680,000 were granted to the executive managers of the Group.

---

**Table of Contents**

Options granted under the March 2007 option plan, which expire eight years from the date of grant, are vested by one third each year from March 2007 and, once vested, can be exercised at anytime. For the French tax residents, the shares resulting from the exercise of those options may not be sold before March 24, 2011. Out of the 1,308,750 options granted in March 2007, 675,000 were granted to the executive officers.

Options granted under the March 2008 option plan, which expires eight years from the date of grant, are vested by one third each year from March 2008 and, once vested, can be exercised at anytime. For the French tax residents, the shares resulting from the exercise of those options may not be sold before March 14, 2012. Out of the 1,188,500 options granted in March 2008, 584,742 were granted to the executive officers.

Options granted under March 16, 2009, have an eight-year duration subject to the requirement, for all French residents, to hold the resulting shares in registered form from their purchase date until March 16, 2013, inclusive, except in limited cases listed in the plan regulations. Rights to these options vest by one-third during each of the first three years of the plan. 1,002,000 stock options were allocated to 149 beneficiaries; 200,000 stock options to the Chairman and Chief Executive Officer and 125,000 stock options to the Chief Operating Officer.

On January 6, 2010, the Board of Directors allocated 220,000 stock options to one beneficiary pursuant to a shareholders' resolution. The exercise price of the stock options is 14.71. The stock options expire on January 6, 2018. 110,000 of these stock options vest immediately, 55,000 will vest as of January 7, 2011 and 55,000 will vest as of January 7, 2012.

On March 22, 2010, the Board of Directors allocated:

1,348,150 stock options to 338 beneficiaries pursuant to a shareholders' resolution. The exercise price of the stock options is 19.44. The stock options expire on March 22, 2018. Rights to these options vest by one-third during each of the first three years of the plan;

200,000 stock options to the Chairman and Chief Executive Officer. Their exercise price is 19.44. Rights to these options vest by one-third during each of the first three years of the plan. Such vesting is subject to performance conditions based on the fulfillment of one of the following objectives:

A share price performance objective relative to the share price considering the SBF 120 index;

A share price performance objective relative to the ADS price considering the PHLX Oil Services Sector<sup>SM</sup> (OSX<sup>SM</sup>) index;  
or

A financial indicator in the form of an EBITDAS objective expressed in U.S. dollars and related to the target for the annual variable part of compensation of the Chairman and Chief Executive Officer.

On October 21, 2010, the Board of Directors allocated 120,000 stock options to three beneficiaries pursuant to a shareholders' resolution. The exercise price of the stock options is 16.88. The plan expires on October 21, 2018. Rights to these options vest by one-third during each of the first three years of the plan.

On March 24, 2011, the Board of Directors allocated:

964,363 stock options to 364 beneficiaries pursuant to a shareholders' resolution. The exercise price of the stock options is 25.48. The stock options expire on March 24, 2019. Rights to these options vest by one-third during each of the first three years of the plan;

**Table of Contents**

200,000 stock options to the Chairman and Chief Executive Officer. Their exercise price is 25.48. Rights to these options vest by one-third during each of the first three years of the plan. Such vesting is subject to performance conditions based on the fulfillment of one of the following objectives:

A share price performance objective relative to the share price considering the SBF 120 index;

A share price performance objective relative to the ADS price considering the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>) index; or

A financial indicator in the form of an EBITDAS objective expressed in U.S. dollars and related to the target for the annual variable part of compensation of the Chairman and Chief Executive Officer.

The exercise price of each option is the average market value of the share during the twenty-day period ending the day before the date the option is allocated.

Information related to options outstanding at December 31, 2011 is summarized below:

Date of Board of Directors Resolution	Options outstanding at		Exercise price per share ( )	Expiration date	Remaining duration
	Options granted	Dec. 31, 2011			
May 11, 2006	1,012,500	951,095	26.26	May 10, 2014	28.3 months
March 23, 2007	1,308,750	1,164,000	30.40	March 23, 2015	38.7 months
March 14, 2008	1,188,500	1,079,340	32.57	March 14, 2016	50.5 months
March 16, 2009	1,327,000	982,610	8.82	March 16, 2017	62.5 months
January 06, 2010	220,000	220,000	14.71	January 06, 2018	72.3 months
March 22, 2010	1,548,150	1,442,385	19.44	March 22, 2018	74.7 months
October 21, 2010	120,000	120,000	16.88	October 21, 2018	81.7 months
March 24, 2011	1,164,363	1,102,890	25.48	March 24, 2019	86.8 months
<b>Total</b>	<b>7,889,263</b>	<b>7,062,320</b>			

A summary of the Company's stock option activity, and related information for the years ended December 31, 2011 follows:

	2011		2010		2009	
	Number of options	Weighted average exercise price ( )	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
Outstanding-beginning of year	6,428,504	22.17	4,958,740	22.35	4,181,985	25.43
Granted	1,164,363	25.48	1,888,150	18.73	1,327,000	8.82
Exercised	(318,823)	7.31	(339,377)	6.10	(184,135)	7.27
Forfeited	(211,724)	20.21	(79,009)	19.86	(366,110)	16.09
<b>Outstanding-end of year</b>	<b>7,062,320</b>	<b>23.16</b>	<b>6,428,504</b>	<b>22.17</b>	<b>4,958,740</b>	<b>22.35</b>
Exercisable-end of year	4,535,303	16.11	3,534,518	14.05	2,330,733	11.33
The average price of CGGVeritas share was	20.17 in 2011,	18.26 in 2010,	12.28 in 2009.			

**Performance shares**

*Allocation plan dated March 14, 2008*

On March 14, 2008, the Board of Directors decided to allocate a maximum amount of 459,250 performance shares to senior executives and certain other employees of the Group out of which 45,000 shares were allocated to the Chairman and Chief Executing Officer and the Chief Operating Officer. This allocation of shares was subject to the following performance conditions (i) the achievement of a minimum average consolidated net

F-47

## **Table of Contents**

earnings per share over fiscal years 2008 and 2009 and (ii) the achievement of an average operating income over fiscal years 2008 and 2009 of either the Group, the Services segment or the Equipment segment, depending upon the segment to which each beneficiary belongs. In addition, the beneficiary still had to be an employee or officer of the Group upon final allocation of the shares.

On February 24, 2010, the Board of Directors resolved that the performance conditions of the March 2008 Plan were only partially met. Therefore only 20,138 shares were allocated pursuant to this plan.

### ***Allocation plan dated March 16, 2009***

On March 16, 2009, the Board of Directors implemented a performance share allocation plan for the allocation of a maximum amount of 516,250 performance shares to senior executives and certain other employees of the Group, out of which 45,000 were allocated to the Chairman and Chief Executive Officer and the Chief Operating Officer. This allocation of shares was subject to the following performance conditions: (i) the achievement of a minimum average consolidated net earnings per share over fiscal years 2009 and 2010 and (ii) the achievement of an average operating income over fiscal years 2009 and 2010 of either the Group, the Services segment or the Equipment segment, depending upon the segment to which each beneficiary belongs. In addition, the beneficiary still had to be an employee or officer of the Group upon final allocation of the shares.

The Board of Directors held on February 24, 2011 confirmed that for the plan implemented on March 16, 2009, the performance conditions were only partially met. Therefore, only a maximum number of 37,000 shares were allocated on the day of the Shareholders Meeting to be held in order to approve the 2010 financial statements.

### ***Allocation plan dated March 22, 2010***

On March 22, 2010 the Board of Directors implemented a performance share allocation plan for a maximum amount of 509,925 performance shares out of which 27,500 were allocated to the Chairman and Chief Executive Officer. This allocation of shares is subject to the following performance conditions: (i) the achievement of a minimum average consolidated EBIT over fiscal years 2010 and 2011 and (ii) the achievement of an average EBITDAS over fiscal years 2010 and 2011 of either the Group, the Services segment or the Equipment segment, depending upon the segment to which each beneficiary belongs. In addition, the beneficiary still had to be an employee or officer of the Group upon final allocation of the shares.

The Board of Directors held on February 29, 2012 confirmed that the performance conditions for the plan implemented on March 22, 2010 were partially fulfilled and that a maximum of 76,842 shares will be allocated pursuant to this plan on May 10, 2012.

### ***Allocation plan dated March 24, 2011***

On March 24, 2011 the Board of Directors implemented a performance share allocation plan for a maximum amount of 488,886 performance shares out of which 13,750 were allocated to the Chairman and 27,500 were allocated to the Chief Executive Officer. This allocation of shares is subject to the following performance conditions: (i) the achievement of a minimum average consolidated EBIT over fiscal years 2011 and 2012 and (ii) the achievement of an average EBITDAS over fiscal years 2011 and 2012 of either the Group, the Services segment or the Equipment segment, depending upon the segment to which each beneficiary belongs. In addition, the beneficiary still had to be an employee or officer of the Group upon final allocation of the shares.

These shares will be allocated at the end of a two-year allocation period expiring on the later of March 24, 2013 or the date of the shareholders meeting convened to approve the 2012 financial statements. Such allocation will be final provided (i) the Board resolves that the performance conditions provided for by the plan regulations, and (ii) the beneficiary is still an employee or officer of the Group upon final allocation of the shares.

**Table of Contents****Compensation cost on stock options and performance shares**

The following table lists the assumptions used to value the 2009, 2010 and 2011 options plan and the 2009, 2010 and 2011 performance shares allocation plan according to IFRS 2:

	Options granted	Volatility	Risk-free rate	Exercise price per share (€)	Estimated Maturity (years)	Fair value per share at the grant date (€)	Dividends yields
2009 stock options plan	1,327,000	50%	2.88%	8.82	5.5	4.63	0.0%
2010 January stock options plan	220,000	52%	2.78%	14.71	5	8.23	0.0%
2010 March stock options plan	1,548,150	52%	2.44%	19.44	5.5	10.10	0.0%
2010 October stock options plan	120,000	52%	2.05%	16.88	5.5	9.66	0.0%
2011 stock options plan	1,164,363	37%	2.52%	25.48	4	8.48	0.0%

	Performance shares granted	Achievement of performance Conditions	Fair value per share at the grant date (€)	Dividends yields
2009 performance shares allocation plan	516,250	37,000	9.29 <sup>(a)</sup>	0.0%
2010 performance shares allocation plan	509,925	76,842	20.03 <sup>(a)</sup>	0.0%
2011 performance shares allocation plan	488,886	50% <sup>(b)</sup>	25.84 <sup>(a)</sup>	0.0%

<sup>(a)</sup> Corresponds to CGGVeritas share price at the date of allocation.

<sup>(b)</sup> Estimated.

According to IFRS 2, fair value of stock options and performance shares granted since November 7, 2002 must be recognized as an expense over the life of the plan. Detail of this expense is as follows:

	Year (in millions of euros)		
	2011	2010	2009
2006 stock options plan <sup>(a)</sup>		0.3	1.1
2007 stock options plan <sup>(b)</sup>		0.4	1.9
2008 stock options plan <sup>(c)</sup>	0.3	2.0	4.6
2009 stock options plan <sup>(d)</sup>	0.4	1.6	2.7
2010 stock options plan <sup>(e)</sup>	5.4	8.3	
2011 stock options plan <sup>(f)</sup>	4.0		
2006 performance shares plan <sup>(g)</sup>			
2007 performance shares plan <sup>(h)</sup>			4.0
2008 performance shares plan <sup>(i)</sup>			(3.8)
2009 performance shares plan <sup>(j)</sup>	0.1	0.3	0.2
2010 performance shares plan <sup>(k)</sup>	(1.3)	1.9	
2011 performance shares plan <sup>(l)</sup>	2.3		
<b>Total recognized expense according to IFRS 2</b>	<b>11.2</b>	<b>14.8</b>	<b>10.7</b>

<sup>(a)</sup> of which 0.2 million for the executive managers of the Group in 2010 and 0.6 million in 2009.

## Edgar Filing: CGG VERITAS - Form 20-F

- (b) *of which 0.2 million for the executive managers of the Group in 2010 and 1.0 million in 2009.*
- (c) *of which 0.2 million for the executive managers of the Group in 2011; 1.0 million in 2010 and 2.2 million in 2009.*
- (d) *of which 0.2 million for the executive managers of the Group in 2011, 0.8 million in 2010 and 1.2 million in 2009.*
- (e) *of which 2.7 million for the executive managers of the Group in 2011, 4.4 million in 2010.*
- (f) *of which 2.7 million for the executive managers of the Group in 2011.*
- (g) *none.*
- (h) *of which 0.7 million for the executive managers of the Group in 2009.*
- (i) *of which (0.4) million for the executive managers of the Group in 2009.*
- (j) *of which 0.04 million for the executive managers of the Group in 2009.*
- (k) *of which (0.2) million for the executive managers of the Group in 2011, 0.4 million in 2010.*
- (l) *of which 0.5 million for the executive managers of the Group in 2011.*

**Table of Contents****NOTE 16 PROVISIONS**

	Balance at 31 December, 2010	Additions	Deductions (used) (in millions of euros)	Deductions (unused)	Others <sup>(a)</sup>	Balance at 31 December, 2011
Provisions for restructuring costs	23.5		(15.4)	(2.0)	(0.8)	5.3
Provisions for onerous contracts	6.4	0.9	(2.6)		0.1	4.8
Provisions for litigations	2.2	9.2	(0.7)		0.4	11.1
Other provisions related to contracts	4.3	1.6	(1.6)			4.3
Provisions for demobilization costs	1.1	1.0	(0.9)		0.1	1.3
Other current provisions	4.3		(3.9)		(0.4)	
<b>Total current provisions</b>	<b>41.8</b>	<b>12.7</b>	<b>(25.1)</b>	<b>(2.0)</b>	<b>(0.6)</b>	<b>26.8</b>
Retirement indemnity provisions	27.4	6.0	(7.3)		1.2	27.3
Provisions for tax contingencies	14.4		(4.4)		(0.8)	9.2
Provisions for unfavorable contracts	10.4		(3.4)		0.1	7.1
Customers Guarantee provisions	21.2	8.7	(8.5)		(0.2)	21.2
Provisions for customs and other contingencies	13.8	7.9	(5.2)		0.9	17.4
Other non-current provisions	0.5		(0.2)			0.3
<b>Total non-current provisions</b>	<b>87.7</b>	<b>22.6</b>	<b>(29.0)</b>		<b>1.2</b>	<b>82.5</b>
<b>Total provisions</b>	<b>129.5</b>	<b>35.3</b>	<b>(54.1)</b>	<b>(2.0)</b>	<b>0.6</b>	<b>109.3</b>

<sup>(a)</sup> Includes the effects of exchange rates changes, variations in scope and reclassifications.

**Provision for restructuring costs**

In 2011, deductions relate to the 2010 performance plan. The costs of the year were offset by the use of the corresponding provision (see note 21).

**Provision for litigation**

On October 20, 2006, a complaint was filed against our subsidiary Sercel Inc. in the United States District Court for the Eastern District of Texas. The complaint alleged that several of Sercel Inc.'s seismic data acquisition products that included micro electromechanical systems (MEMS) infringed a U.S. patent allegedly owned by ION. On January 29, 2010, a Texarkana jury found that Sercel Inc. infringed United States Patent N° 5,852,242 and that ION was entitled to U.S.\$25.2 million in lost profits. Sercel Inc. asked the court to overturn the jury's finding on several grounds, including ION's failure to prove by a preponderance of the evidence that the patent was infringed by Sercel Inc. and the invalidity of the patent due to ION's failure to disclose in the patent the best way of making the invention.

On September 21, 2010, the court rejected the jury's verdict that faulted Sercel Inc. for infringing U.S. Patent N° 5,852,242 as claimed by ION. This court upheld the jury's verdict validating the patent, and confirming that the patent had been infringed on certain other grounds. The court concluded that ION's claim with respect to loss of profits (U.S.\$25.2 million) was not admissible and reduced the amount of damages to U.S.\$10.7 million.

On March 8, 2011, Sercel Inc. posted a U.S.\$12.8 million bond (corresponding to the total damages award plus 20% interest) and filed a notice of appeal.

On February 17, 2012, the United States Federal Circuit Court of Appeals affirmed the judgment of the United States District Court for the Eastern District of Texas dated February 16, 2011 with regards to the lawsuit





**Table of Contents**

between Sercel and Ion Geophysical (« ION ») on the US patent N°5 852 242. A provision amounting to 9.2 million (U.S.\$12.8 million) was recorded in the consolidated financial statements as of December 31, 2011 to cover the U.S.\$10.7 million amount plus pre- and post-judgment interest to be paid to ION. The parties will return to trial court to determine the amount of additional damages related to Sercel SeaRays systems manufactured in Houston.

**Customers Guarantee provisions**

Customers Guarantee provisions correspond to the warranty given by Sercel to external clients.

**Retirement indemnity provisions**

The Group records retirement indemnity provisions based on the following actuarial assumptions:

historical staff turnover and standard mortality schedule;

age of retirement between 60 and 65 years old in France and 67 years old in Norway; and

actuarial rate and average rate of increase in future compensation.

In addition, a supplemental pension and retirement plan was implemented in December 2004 for the members of the Group's Management Committee and members of the management board of Sercel Holding. A contribution amounting to 4.9 million was paid in 2011. No contribution was paid in 2010 and 2009.

In 2010, in France, the pension reform has increased the minimum age of retirement (increase of 4 months per year until 2018, the minimum age of retirement will then be 62). This increase was considered in the valuation of the defined benefit obligation, and the impact was accounted for as an actuarial variation.

In 2010, the retirement indemnity provision of some Norwegian companies was reversed as a result of a change in pension scheme. This is presented in the lines "Effects of curtailments/settlements" in the table below.

The status of the retirement indemnity plans is as follows:

	2011	December 31, 2010 2009		2008
		(in millions of euros)		
<b>Amount recognized in the balance sheet</b>				
Present value of the obligation <sup>(a)</sup>	89.2	87.4	85.1	68.4
Fair value of plan assets	(49.1)	(45.9)	(39.4)	(28.2)
Deficit (surplus) of funded plans	40.1	41.5	45.7	40.2
Unrecognized past service cost <sup>(b)</sup>	(13.2)	(14.4)	(15.4)	(15.0)
Payroll tax	0.4	0.3	0.3	0.3
<b>Net liability (asset) recognized in balance sheet</b>	<b>27.3</b>	<b>27.4</b>	<b>30.6</b>	<b>25.5</b>
<b>Amounts recognized in the income statement</b>				
Current service cost	3.5	3.0	3.1	2.9
Interest cost	4.0	4.1	4.1	4.1
Expected return on plan assets	(2.6)	(2.3)	(1.7)	(2.1)
Amortization of past service costs	1.2	1.2	1.2	1.2
Effects of curtailments/settlements	(0.2)	(0.7)		
Payroll tax	0.1		0.2	0.2
<b>Net periodic expense<sup>(c)</sup></b>	<b>6.0</b>	<b>5.3</b>	<b>6.9</b>	<b>6.3</b>



**Table of Contents**

	2011	December 31, (in millions of euros)		2008
		2010	2009	
<b>Movements in the net liability recognized in the balance sheet</b>				
Net liability at January 1	27.4	30.6	25.5	26.5
Expense as above	6.0	5.3	6.9	6.3
Actuarial gains (losses) recognized in other comprehensive income <sup>(d)</sup>	1.3		4.3	(1.4)
Contributions paid	(5.2)	(4.6)	(5.1)	(3.0)
Benefits paid by the company	(2.1)	(3.3)	(1.7)	(2.9)
Consolidation scope entries and changes in exchange rates	(0.1)	(0.6)	0.7	(0.3)
Other				0.3
<b>Net liability at December 31</b>	<b>27.3</b>	<b>27.4</b>	<b>30.6</b>	<b>25.5</b>
<b>Change in benefit obligation</b>				
Benefit obligation at January 1	87.4	85.1	68.4	79.9
Current service cost	3.5	3.0	3.1	2.9
Contributions paid	0.7	0.3	0.4	0.4
Interest cost	4.0	4.1	4.1	4.1
Past service cost			1.4	0.1
Benefits paid from plan	(10.6)	(3.6)	(2.2)	(5.6)
Actuarial (gains) losses recognized in other comprehensive income	3.2	2.1	6.7	(7.1)
Effects of curtailments/settlements	(0.4)	(4.3)		
Consolidation scope entries and changes in exchange rates	1.4	0.5	2.8	(6.2)
Other		0.2	0.4	(0.1)
<b>Benefit obligation at December 31</b>	<b>89.2</b>	<b>87.4</b>	<b>85.1</b>	<b>68.4</b>
<b>Change in plan assets</b>				
Fair value of plan assets at January 1	45.9	39.4	28.2	37.1
Expected return on plan assets	2.6	2.3	1.7	2.1
Contributions paid	6.0	4.9	5.4	3.4
Benefits paid from plan	(8.8)	(0.3)	(0.4)	(2.8)
Actuarial gains and losses recognized in other comprehensive income	1.9	2.1	2.4	(5.7)
Effects of curtailments/settlements	(0.2)	(3.6)		
Consolidation scope entries and changes in exchange rate	1.5	1.2	2.1	(7.5)
Other	0.2	(0.1)		1.6
<b>Fair value of plan assets at December 31<sup>(e)</sup></b>	<b>49.1</b>	<b>45.9</b>	<b>39.4</b>	<b>28.2</b>
Key assumptions used in estimating the Group's retirement obligations are:				
Discount rate <sup>(f)</sup>	4.75%	4.75%	5.25%	5.73%
Average rate of increase in future compensation <sup>(g)</sup>	2.93%	2.89%	3.16%	3.25%
Average expected return on assets <sup>(h)</sup>	4.74%	5.77%	5.77%	5.17%

<sup>(a)</sup> In 2011 the obligation amounts to 89.2 of which 28.7 million for defined benefit plans not covered ( 29.5 million in 2010, 30.2 million in 2009 and 27.4 million in 2008).

<sup>(b)</sup> Corresponds to the supplemental pension and retirement plan for the members of the Group's Management Committee and members of the management board of Sercel Holding.

<sup>(c)</sup> The presentation of this line item has been changed in 2008, in order to include the expected return on plan assets as part of the net periodic expense.

<sup>(d)</sup> Cumulative actuarial losses recognized in other comprehensive income amount to 8.8 million as of December 31, 2011.

<sup>(e)</sup> The major categories of plan assets as a percentage of the fair value of total plan assets are as follows:

	2011	December, 31		2008
		2010	2009	
Equity securities	35%	45%	32%	30%
Debt securities	29%	50%	59%	27%
Real estate	4%	4%	6%	7%
Other	32%	1%	3%	36%



**Table of Contents**

(f) *The discount rate for entities belonging to the euro zone is 4.75%. It has been defined by comparison to the following rates at December 31, 2011:*

*Bloomberg Corporate 15 years: 3.68%*

*IBOXX 10 + AA: 4.60%*

*IBOXX 10 + AA Financial: 5.43%*

*IBOXX 10+ AA Non Financial: 4.12%*

*For entities not included in the euro zone, the discount rates used are 4.75% for the United Kingdom, 4.25% for the United States and 3.3% for Norway.*

*An increase of 0.25% of the discount rate would decrease the DBO by 3.2 million, and a decrease of the discount rate of 0.25% would increase the DBO by 3.5 million.*

(g) *An increase of 0.25% of the average rate would increase the future compensation by 1.7 million, and a decrease of the average rate of 0.25% would decrease the future compensation by 1.6 million.*

(h) *Plan assets are located in the UK (95%), in Norway (4%) and in France (1%). The average expected return on assets is determined based on long term return by asset category assumptions at December 31, 2011. The average expected return on assets is 4.7%. For the UK, this return is given by asset category: 6.0% for stocks, 6.0% for real estate, 4.7% for bonds, and 3.0% other.*

*Plan assets are placed mainly in stocks, bonds and cash. Actuarial gains and losses on plan assets correspond to the difference between actual and expected return on plan assets ( 1.9 million in 2011, 2.1 million in 2010, 2.4 million in 2009 and (5.7) million in 2008). A decrease of 0.25% of the expected return on assets rate would decrease the expected return of assets in 2012 by 0.1 million. In 2011, the actual return on plan assets amounts to 4.5 million, corresponding to 2.6 million expected return and 1.9 million experience actuarial gains.*

Estimated contributions to plan assets in 2012 amount to 0.9 million.

**NOTE 17 OTHER NON-CURRENT LIABILITIES**

Detail of other non-current liabilities is as follows:

	2011	December 31, 2010 (in millions of euros)	2009
Deposit and guarantees	3.4	1.9	1.2
Research and development subsidies	5.2	5.3	5.2
Profit sharing scheme	29.9	27.4	25.5
<b>Other non-current liabilities</b>	<b>38.5</b>	<b>34.6</b>	<b>31.9</b>

**NOTE 18 CONTRACTUAL OBLIGATIONS, COMMITMENTS AND CONTINGENCIES****Status on contractual obligations**

December 31,

Edgar Filing: CGG VERITAS - Form 20-F

	2011	2010	2009
	(in millions of euros)		
Long-term debt obligations	2,014.8	1,818.3	1,804.0
Finance lease obligations	132.0	151.6	122.8
Operating leases obligations <sup>(a)</sup>	850.4	969.5	516.1
<b>Total obligations</b>	<b>2,997.2</b>	<b>2,939.4</b>	<b>2,442.9</b>

<sup>(a)</sup> In 2011 and 2010 including respectively 667.4 million and 631.7 million for seismic vessel bareboat agreements.

F-53

**Table of Contents**

The following table presents payments in future periods relating to contractual obligations as of December 31, 2011:

	Payments due by period				Total
	Less than 1 year	2-3 years	4-5 years	After 5 years	
<i>Long-term debt obligations:</i>					
Repayments : fixed rates	2.9	4.4	613.6	780.2	1,401.1
Repayments : variables rates <sup>(a)</sup>	9.5	16.1	11.3	0.0	36.9
Bonds and facilities interests	89.9	178.5	155.3	153.1	576.8
<b>Total Long-term debt obligations</b>	<b>102.3</b>	<b>199.0</b>	<b>780.2</b>	<b>933.3</b>	<b>2,014.8</b>
<i>Finance leases:</i>					
Finance lease Obligations : fixed rates	13.2	21.7	21.2	54.5	110.6
Finance lease Obligations : variables rates <sup>(a)</sup>	18.5	2.9	0.0	0.0	21.4
<b>Total Finance lease obligations</b>	<b>31.7</b>	<b>24.6</b>	<b>21.2</b>	<b>54.5</b>	<b>132.0</b>
<i>Operating leases<sup>(b)</sup></i>					
Bareboat agreements	91.9	166.9	161.1	247.5	667.4
Other operating lease agreements	34.5	51.5	39.0	58.0	183.0
<b>Total Operating lease obligations</b>	<b>126.4</b>	<b>218.4</b>	<b>200.1</b>	<b>305.5</b>	<b>850.4</b>
<b>Total Contractual Obligations<sup>(c)</sup></b>	<b>260.4</b>	<b>442.0</b>	<b>1,001.5</b>	<b>1,293.3</b>	<b>2,997.2</b>

<sup>(a)</sup> Payments are based on the variable rates applicable as of December 31, 2011.

<sup>(b)</sup> Includes the five-year marine charter agreement signed with Bourbon for six new support vessels.

<sup>(c)</sup> Payments in foreign currencies are converted in euros at December 31, 2011 exchange rates.

**Contractual obligations – finance leases**

The Group leases land, buildings and geophysical equipments under finance lease agreements expiring at various dates during the next five to twelve years.

On June 13, 2008, the Group entered into a twelve-year lease agreement with Genefim and Finamur to finance the construction of Services new headquarters in Massy. This construction was delivered by the lessors in October 2010, and was ready for use in July 2011 after building fittings. The total value of the lease contract was 103 million, including a 26.3 million purchase option exercisable from the end of the sixth year until the end of the lease agreement.

The following table presents reconciliation between finance lease obligations and finance lease debts as of December 31, 2011:

	Less than 1 year	1-5 years	After 5 years	Total
	(in millions of euros)			
<b>Finance lease Obligations</b>	<b>31.7</b>	<b>45.8</b>	<b>54.5</b>	<b>132.0</b>
Discounting	(6.7)	(16.5)	(13.5)	(36.7)



New headquarter purchase option			26.3	26.3
<b>Finance lease debt (see note 13)</b>	<b>25.0</b>	<b>29.3</b>	<b>67.3</b>	<b>121.6</b>

F-54

**Table of Contents****Contractual obligations – operating leases**

Operating lease agreements relate primarily to bareboat charter agreements for seismic vessels, geophysical equipments, offices and computer equipment.

Rental expenses were 454.3 million in 2011, 441.1 million in 2010 and 352.6 million in 2009.

**Credit agreements**

See note 13.

**Guarantees**

Guarantees issued include the following:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
<i>Operations</i>			
Guarantees issued in favor of clients <sup>(a)</sup>	446.0	303.8	297.2
Other guarantees and commitments issued <sup>(b)</sup>	170.4	135.1	468.8
<i>Financing</i>			
Guarantees issued in favor of banks <sup>(c)</sup>	2.6	18.0	52.5
<b>Total</b>	<b>619.0</b>	<b>456.9</b>	<b>818.5</b>

<sup>(a)</sup> Guarantees issued in favor of clients relate mainly to guarantees issued by the Company to support bids made at the subsidiaries level.

<sup>(b)</sup> Other guarantees relate primarily to guarantees issued by the Company on behalf of subsidiaries and affiliated companies in favor of customs or other governmental administrations.

<sup>(c)</sup> Guarantees issued in favor of banks related mainly to guarantees issued by the Company to support credit facilities made at the subsidiaries level.

On December 2011, the time charter related to the vessel *Elnusa Finder* was novated to the joint-venture PT Elnusa-CGGVeritas Seismic. In conjunction to this transaction, we issued a guarantee for the benefit of the owner of the vessel (Swire Pacific Offshore) corresponding to the commitment of this 8-year time charter agreement ( 62 million). This guarantee was subject to a co-guarantee given by PT Elnusa Tbk up to their interest in the joint-venture,

In 2009, CGGVeritas SA delivered a guarantee in favor of Eidesvik as security for the fulfillment of Exploration Investment Resources II obligations according to the time charter agreement signed in May 2009. This guarantee amounted to 371 million. The seismic vessel *Oceanic Vega* was delivered in July 2010. The seismic vessel *Oceanic Sirius* was delivered in October 2011.

The duration of the guarantees and commitments is as follows:

	Due date				
	Less than 1 year	2-3 years	4-5 years (in millions of euros)	After 5 years	Total
<i>Operations</i>					
Guarantees issued in favor of clients	263.9	181.5	0.6		446.0

Edgar Filing: CGG VERITAS - Form 20-F

Other guarantees and commitments	69.7	22.2	8.8	69.7	170.4
<i>Financing</i>					
Guarantees issued in favor of banks	1.0	0.0		1.6	2.6
<b>Total</b>	<b>334.6</b>	<b>203.7</b>	<b>9.4</b>	<b>71.3</b>	<b>619.0</b>

F-55

## Table of Contents

### Others

Time charter agreements were replaced by bareboat charters for which some of them were extended:

*Viking II*: signed on November 7, 2011 and extended until May 31, 2015, with a purchase option.

*Veritas Vantage*: signed on November 4, 2011 and extended until June 30, 2016, with a purchase option.

*Veritas Vision*: signed on October 24, 2011 and extended until July 31, 2017, with two additional extension options one of five years and the other of three years.

*Veritas Viking*: signed on October 3, 2011 and extended until December 31, 2015, with two additional three-year extension options and one additional 17-month extension option.

*Oceanic Sirius*: signed on October 3, 2011, delivery date of the vessel, for a twelve year duration, until October 2023.

*Oceanic Vega*: signed on July 1, 2010, delivery date of the vessel.

*Oceanic Phoenix*: signed in 2010 and extended until 2019.

*Geowave Commander*: signed in 2010 and extended until 2013 with ten 1 year additional extension options.

*Viking Vanquish*: signed and extended until November 2020, with two five-year-extension options and a purchase option.

*Oceanic Endeavour*: extended in 2010, until March 2018, with two additional five-year extension options.

On June 28, 2011, we entered into a five-year marine charter agreement with Bourbon for six new support vessels to assist our seismic operations. The new vessels will be delivered starting at the end of 2012. This represents an increase of 90 million of our off balance sheet commitments.

On March 26, 2011, we took delivery of the seismic vessel *Elnusa Finder* and transferred the time charter agreement to our joint-venture with PT Elnusa Tbk as described above. This vessel was subject to a Letter of Intent signed with Swire Pacific Offshore since 2008 to charter the vessel eight years. The contract value amounted to U.S.\$83 million

On January 13, 2011, the exchange of assets between certain subsidiaries of CGGVeritas and the Norwegian group Norfield was completed. As a result of this transaction:

the Group acquired the seismic vessel *Geowave Voyager*, previously operated by the Group under a time charter contract;

## Edgar Filing: CGG VERITAS - Form 20-F

the Group sold the seismic vessel *Venturer* to Norfield. A bareboat contract for this vessel was signed until December 2012;

we extended the contract for our seismic vessel *Geowave Champion* for 5 years until December 2019. The previous time charter contract was replaced by a bareboat contract;

we extended the time charter contract for our seismic vessel *Bergen Surveyor* until December 2012.

The Group has no off-balance sheet obligations under IFRS that are not described above.

### **Legal proceedings, claims and other contingencies**

The Group is a defendant in a number of legal proceedings arising in the ordinary course of business and has various unresolved claims pending. The outcome of these lawsuits and claims is not known at this time. The Group believes that the resulting liability, if any, net of amounts recoverable from insurance or other sources will not have a material adverse effect on its consolidated results of operations, financial position or cash flows.

---

## **Table of Contents**

### *Requests for information made by the U.S. Department of Commerce's Bureau of Industry and Security*

In order to provide complete and accurate responses to recent requests for information made by representatives of the U.S. Department of Commerce's Bureau of Industry and Security (BIS), we conducted an internal review of the facts surrounding shipments to our vessels operating in or near Cuba. During the course of our review, we discovered that, despite our precautions, some shipments may not have complied fully with our internal policies and possibly violated applicable export controls and sanctions laws. We have provided BIS with all of the information it has requested to date and are cooperating fully with it in this matter. We have also informed on a voluntary basis the U.S. Office of Foreign Assets Control.

The Company does not expect this matter to have any material impact on the Group's results of operation, financial position, or cash flows.

### **NOTE 19 ANALYSIS BY OPERATING SEGMENT AND GEOGRAPHIC AREA**

Financial information by operating segment is reported in accordance with the internal reporting system and shows internal segment information that is used by the chief operating decision maker to manage and measure the performance of CGGVeritas. We divide our business into two operating segments, geophysical services and geophysical equipment.

Beginning July 1, 2010, our Group has been organized in five divisions and currently operates in two industry segments:

Geophysical services segment, which aggregates:

Marine contract: seismic data acquisition offshore undertaken by us on behalf of a specific client;

Land contract: seismic data acquisition for land, transition zones and shallow water undertaken by us on behalf of a specific client;

Processing, Imaging and Reservoir: processing and imaging as well as interpretation of geophysical data, data management and reservoir studies for clients, and

Multi-client land and marine: seismic data acquisition undertaken by us and licensed to a number of clients on a non-exclusive basis;

Geophysical equipment segment, which we conduct through Sercel Holding S.A. and its subsidiaries, comprises our manufacturing and sales activities for seismic equipment used for data acquisition, both on land and offshore.

Inter-company sales between the two segments are made at prices approximating market prices and relate primarily to equipment sales made by the geophysical equipment segment to the geophysical services segment. These inter-segment sales and the related operating income recognized by the geophysical equipment segment are eliminated in consolidation and presented as follows in the tables that follow: (i) Operating income for our Services segment is presented after elimination of amortization expense corresponding to capital expenditures between our Equipment segment and Services segment; (ii) Capital expenditures for our Services segment are presented after elimination of inter-segment margin.

Operating income represents operating revenues and other operating income less expenses of the relevant industry segment. It includes non-recurring and unusual items, which are disclosed in the operating segment if material. General corporate expenses, which include Group management, financing, and legal activities, have been included in the column Eliminations and Adjustments in the tables that follow. The Group does not disclose financial expenses or revenues by operating segment because these items are not followed by the segment management and because financing and investment are mainly managed at the corporate level.



**Table of Contents**

Identifiable assets are those used in the operations of each industry segment. Unallocated and corporate assets consist primarily of financial assets, including cash and cash equivalents. Due to the constant changes in work locations, the group does not track its assets based on country of origin or ownership.

Identifiable liabilities are those used in the operations of each industry segment. Unallocated and corporate liabilities consist primarily of corporate financial debts.

In 2011, the Group's two most significant customers accounted for 13.0% and 3.0% of the Group's consolidated revenues compared with 6.9% and 6.0% in 2010 and 6.8% and 5.3% in 2009.

**Analysis by operating segment**

2011	Geophysical services	Geophysical equipment	Eliminations and Adjustments (in millions of euros)	Consolidated Total
<b>Revenues from unaffiliated customers</b>	<b>1,631.3</b>	<b>636.4</b>		<b>2,267.7</b>
Inter-segment revenues	1.1	179.4	(180.5)	
<b>Operating revenues</b>	<b>1,632.4</b>	<b>815.8</b>	<b>(180.5)</b>	<b>2,267.7</b>
Other income from ordinary activities		2.3		2.3
<b>Total income from ordinary activities</b>	<b>1,632.4</b>	<b>818.1</b>	<b>(180.5)</b>	<b>2,270.0</b>
<b>Operating income (loss)</b>	<b>6.2</b>	<b>253.7</b>	<b>(112.0)<sup>(a)</sup></b>	<b>147.9</b>
Equity income (loss) of investees	11.7			11.7
Capital expenditures <sup>(b)</sup>	426.6	19.5		446.1
Depreciation and amortization <sup>(c)</sup>	(413.0)	(36.2)	1.2	(448.0)
Assets write-downs				
Investments in companies accounted for under equity method	25.6			25.6
<b>Identifiable assets</b>	<b>4,415.0</b>	<b>1,141.0</b>	<b>(516.2)</b>	<b>5,039.8</b>
Unallocated and corporate assets				516.1
<b>Total assets</b>				<b>5,555.9</b>
of which companies accounted for under equity method				100.2
<b>Identifiable liabilities</b>	<b>1,413.1</b>	<b>307.8</b>	<b>(489.4)</b>	<b>1,231.5</b>
Unallocated and corporate liabilities				1,318.0
<b>Total liabilities</b>				<b>2,549.5</b>

<sup>(a)</sup> Includes general corporate expenses of 40.9 million for year ended December 31, 2011.

<sup>(b)</sup> Includes (i) investments in multi-client surveys of 163.3 million, (ii) equipment acquired under finance lease of 20.7 million, (iii) capitalized development costs in the Services segment of 12.8 million, and (iv) capitalized development costs in the Equipment segment of 3.5 million for year ended December 31, 2011.

<sup>(c)</sup> Includes multi-client surveys depreciation of 203.3 million for year ended December 31, 2011.





**Table of Contents**

2010	Geophysical services	Geophysical equipment	Eliminations and Adjustments (in millions of euros)	Consolidated Total
<b>Revenues from unaffiliated customers</b>	<b>1,566.9</b>	<b>619.2</b>		<b>2,186.1</b>
Inter-segment revenues	0.7	134.4	(135.1)	
<b>Operating revenues</b>	<b>1,567.6</b>	<b>753.6</b>	<b>(135.1)</b>	<b>2,186.1</b>
Other income from ordinary activities		3.3		3.3
<b>Total income from ordinary activities</b>	<b>1,567.6</b>	<b>756.9</b>	<b>(135.1)</b>	<b>2,189.4</b>
<b>Operating income (loss)</b>	<b>(68.6)</b>	<b>217.2</b>	<b>(81.4)<sup>(a)</sup></b>	<b>67.2</b>
Equity income (loss) of investees	(0.3)	(0.4)		(0.7)
Capital expenditures <sup>(b)</sup>	491.4	28.8		520.2
Depreciation and amortization <sup>(c)</sup>	(414.7)	(36.0)	(1.4)	(452.1)
Assets write-downs <sup>(d)</sup>	(62.1)			(62.1)
Investments in companies accounted for under equity method	1.2			1.2
<b>Identifiable assets</b>	<b>4,324.9</b>	<b>876.8</b>	<b>(291.5)</b>	<b>4,910.2</b>
Unallocated and corporate assets				414.1
<b>Total assets</b>				<b>5,324.3</b>
of which companies accounted for under equity method				73.4
<b>Identifiable liabilities</b>	<b>1,212.1</b>	<b>208.1</b>	<b>(269.4)</b>	<b>1,150.8</b>
Unallocated and corporate liabilities				1,303.6
<b>Total liabilities</b>				<b>2,454.4</b>

<sup>(a)</sup> Includes general corporate expenses of 35.9 million for year ended December 31, 2010.

<sup>(b)</sup> Includes (i) investments in multi-client surveys of 219.3 million, (ii) equipment acquired under finance lease of 87.6 million, (iii) capitalized development costs in the Services segment of 21.0 million, and (iv) capitalized development costs in the Equipment segment of 2.5 million for year ended December 31, 2010.

<sup>(c)</sup> Includes multi-client surveys depreciation of 205.8 million for year ended December 31, 2010.

<sup>(d)</sup> Includes multi-client surveys impairment of 70.4 (note 10) and vessel and seismic assets net impairment reversals of 8.3 million (note 21) for year ended December 31, 2010.

**Table of Contents**

2009	Geophysical Services <sup>(*)</sup>	Geophysical equipment	Eliminations and Adjustments <sup>(*)</sup>	Consolidated Total
	(in millions of euros)			
<b>Revenues from unaffiliated customers</b>	<b>1,708.5</b>	<b>524.7</b>		<b>2,233.2</b>
Inter-segment revenues	0.5	91.5	(92.0)	
<b>Operating revenues</b>	<b>1,709.0</b>	<b>616.2</b>	<b>(92.0)</b>	<b>2,233.2</b>
Other income from ordinary activities	4.3	3.2		7.5
<b>Total income from ordinary activities</b>	<b>1,713.3</b>	<b>619.4</b>	<b>(92.0)</b>	<b>2,240.7</b>
<b>Operating income (loss)</b>	<b>(236.7)</b>	<b>133.8</b>	<b>(57.7)<sup>(a)</sup></b>	<b>(160.6)</b>
Equity income (loss) of investees	7.4	0.9		8.3
Capital expenditures <sup>(b)</sup>	386.6	33.9	0.6	421.1
Depreciation and amortization <sup>(c)</sup>	(447.0)	(28.8)	(1.7)	(477.5)
Assets write-downs <sup>(d)</sup>	(334.8)			(334.8)
Investments in companies accounted for under equity method	17.1	4.0		21.1
<b>Identifiable assets</b>	<b>3,858.2</b>	<b>735.5</b>	<b>(257.1)</b>	<b>4,336.6</b>
Unallocated and corporate assets				584.6
<b>Total assets</b>				<b>4,921.2</b>
of which companies accounted for under equity method				99.0
<b>Identifiable liabilities</b>	<b>933.3</b>	<b>250.9</b>	<b>(230.6)</b>	<b>953.6</b>
Unallocated and corporate liabilities				1,266.1
<b>Total liabilities</b>				<b>2,219.7</b>

<sup>(\*)</sup> The segment information related to our Services segment for the year 2009 was restated to reflect the change in our internal financial reporting in 2010: (i) Operating income for our Services segment is presented after elimination of amortization expense corresponding to past inter-company capital expenditures between our Equipment segment and Services segment; (ii) Capital expenditures for our Services segment are presented after elimination of inter-segment margin. These eliminations were previously presented in Eliminations and Adjustments .

<sup>(a)</sup> Included general corporate expenses of 30.9 million for year ended December 31, 2009.

<sup>(b)</sup> Included (i) investments in multi-client surveys of 229.3 million, (ii) no equipment acquired under finance lease, (iii) capitalized development costs in the Services segment of 22.2 million, and (iv) capitalized development costs in the Equipment segment of 1.5 million for year ended December 31, 2009.

<sup>(c)</sup> Included multi-client surveys amortization of 225.5 million for year ended December 31, 2009.

<sup>(d)</sup> Included multi-client surveys impairment of 63.8 million (note 10), vessel and seismic assets write-down of 53.4 million (note 21) and goodwill impairment of 217.6 million for year ended December 31, 2009 (note 11).

**Analysis by geographic area***Analysis of operating revenues by location of customers*

	2011		2010		2009	
	(in millions of euros)					
North America	502.4	22.2%	584.5	26.7%	501.5	22.5%

Edgar Filing: CGG VERITAS - Form 20-F

Central and South Americas	457.0	20.1%	296.1	13.5%	156.8	7.0%
Europe, Africa and Middle East	808.9	35.7%	866.8	39.7%	982.1	44.0%
Asia Pacific	499.4	22.0%	438.7	20.1%	592.8	26.5%
<b>Consolidated total</b>	<b>2,267.7</b>	<b>100%</b>	<b>2,186.1</b>	<b>100%</b>	<b>2,233.2</b>	<b>100%</b>

F-60

**Table of Contents**

Operating revenue attributed to France is 2.3 million for the year ended December 31, 2011.

**Analysis of operating revenues by category**

	2011		2010		2009	
	(in millions of euros)					
Sales of goods	612.0	27.0%	587.2	26.8%	506.6	22.7%
Services rendered <sup>(a)</sup>	1,411.8	62.3%	1,376.5	63.0%	1,581.1	70.8%
After-sales on multi-client surveys	225.3	9.9%	203.5	9.3%	134.2	6.0%
Leases	18.6	0.8%	18.9	0.9%	11.3	0.5%
<b>Consolidated total</b>	<b>2,267.7</b>	<b>100%</b>	<b>2,186.1</b>	<b>100%</b>	<b>2,233.2</b>	<b>100%</b>

<sup>(a)</sup> Included services rendered and royalties

**NOTE 20 RESEARCH AND DEVELOPMENT EXPENSES**

Analysis of research and development expenses is as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
Research and development costs	(83.5)	(92.9)	(85.1)
Development costs capitalized	16.3	23.4	14.3
<b>Research and development expensed</b>	<b>(67.2)</b>	<b>(69.5)</b>	<b>(70.8)</b>
Government grants recognized in income	12.3	12.5	8.7
<b>Research and development costs net</b>	<b>(54.9)</b>	<b>(57.0)</b>	<b>(62.1)</b>

Research and development expenditures related primarily to:

for the geophysical services segment, projects concerning data processing services and marine acquisition; and

for the equipment segment, projects concerning seismic data recording equipment.

**NOTE 21 OTHER REVENUES AND EXPENSES**

	December 31,		
	2011	2010	2009
	(in millions of euros)		
(Impairment) /reversal of impairment of multi-client surveys		(70.4)	(63.8)
(Impairment) /reversal of impairment of assets		8.3	(53.4)
Restructuring costs	(15.5)	(25.4)	(27.2)
Change in restructuring reserves	17.4	5.9	(25.6)
Other non-recurring revenues (expenses)	2.4	(4.5)	0.3

<b>Non-recurring revenues (expenses) net</b>	<b>4.3</b>	<b>(86.1)</b>	<b>(169.7)</b>
Exchange gains (losses) on hedging contracts	3.4	(2.7)	1.6
Gains (losses) on sales of assets	16.8		0.3
<b>Other revenues (expenses) net</b>	<b>24.5</b>	<b>(88.8)</b>	<b>(167.8)</b>

F-61

## **Table of Contents**

### **Year ended December 31, 2011**

#### *2010 Performance plan*

In 2011, we paid 14.9 million related to our 2010 performance plan, which was offset by the use of the corresponding provisions.

#### *Gains (losses) on sales of assets*

Gains on assets include the gain arising from the disposal of our assets in relation with our transaction with Norfield AS amounting to 7.8 million. We also recognized a 13.4 million gain arising from the contribution of our 2D multi-client marine library to Spectrum, and a 3 million gain for the sale of our shares in the company Cybernetix (see note 2).

This line item also includes vessels and related equipments losses mainly relating to the crash of one seismic vessel ( 4.8 million). Related insurance indemnities amounting to 3 million (U.S.\$4.3 million) are included in the line item Other non-recurring revenues.

### **Year ended December 31, 2010**

#### *2010 Performance plan*

As announced on December 16, 2010 we implemented a performance plan that led to restructuring costs of 28.1 million (U.S.\$37.3 million) detailed as follows:

Vessel and related equipment write-downs amounted to 3.9 million (U.S.\$5.2 million);

De-rigging and other costs amounted to 15.1 million (U.S.\$19.9 million), including a 15.1 million reserve as of December 31, 2010;

Social measures costs amounted to 9.1 million (U.S.\$12.2 million), including a 7.3 million (U.S.\$9.8 million) reserve as of December 31, 2010.

We recognized a 70.4 million (U.S.\$93.6 million) impairment loss on multi-client surveys due to specific market conditions in Canada and in the Gulf of Mexico.

The total cost of the restructuring plan and impairment is 98.5 million (U.S.\$130.9 million).

#### *2009 Marine restructuring plan*

In 2010, we paid 23.0 million (U.S.\$30.5 million) related to our 2009 marine restructuring plan, which was offset by the use of the corresponding provisions.

#### *Others*

In 2010, other non-recurring revenues (expenses) mainly relate to the Norfield transaction (see note 30). Pursuant to this agreement, we reversed a previously recognized impairment loss on the seismic vessel *Venturer* for 9.3 million and we recognized additional costs for 3.4 million.

### **Year ended December 31, 2009**

#### *Marine restructuring plan*

Due to market conditions and marine overcapacity, we introduced measures in June 2009 to restructure our marine business line. This restructuring plan has led to the de-rigging of nine seismic vessels (of which three are scheduled for 2010) and to a redundancy plan covering

more than 300 persons. The total cost of the restructuring plan is 102.4 million (U.S.\$144.0 million).



**Table of Contents**

We recognized 53.4 million of vessel and related equipment write-downs, including those linked to our seismic vessels *Princess* and *Venturer*. De-rigging costs amounted to 30.2 million, including a 7.1 million reserve as of December 31, 2009. Redundancy plan costs amounted to 22.2 million, including a 20.0 million reserve as of December 31, 2009.

Gains on sales of seismic vessels amount to 3.4 million (U.S.\$4.8 million).

*Impairment of multi-client surveys*

As part of the impairment test of the multi-client surveys, we recognized an impairment loss of 63.8 million (U.S.\$88.9 million) on the Veritas data library acquired before 2007, being remembered that the book value of most of those surveys was written up as part of the purchase price allocation performed in 2007.

**NOTE 22 COST OF FINANCIAL DEBT**

Cost of financial debt includes expenses related to financial debt, composed of bonds, bank loans, capital-lease obligations and other financial borrowings, net of income provided by cash and cash equivalents.

Analysis of cost of financial debt is as follows:

	2011	December 31, 2010	2009
	(in millions of euros)		
Current interest expenses related to financial debt	(106.3)	(102.1)	(100.2)
Amortization of deferred expenditures on financial debts	(20.1)	(5.8)	(7.5)
Income provided by cash and cash equivalents	2.0	2.4	2.5
<b>Cost of financial debt, net</b>	<b>(124.4)</b>	<b>(105.5)</b>	<b>(105.2)</b>

On March 1, 2011, we redeemed U.S.\$460 million aggregate principal amount of our U.S.\$530 million 7 1/2% senior notes due 2015. On June 30, 2011, we redeemed the remaining U.S.\$70 million. Accelerated amortization of deferred expenditures was recorded for 4.4 million.

On June 2, 2011, we repaid in full the U.S.\$508 million outstanding under our term loan B facility with the proceeds of our issuance of senior bonds due 2021. Accelerated amortization of deferred expenditures was recorded for 11.0 million.

On October 30, 2009, we repaid U.S.\$100 million of our Term Loan B senior facility. Accelerated amortization of deferred expenditures was recorded for 2.1 million.

On May 21 and 27, 2009, we amended our US senior facilities agreement and our French revolving facility agreement, respectively. In consideration of these amendments, we repaid U.S.\$100 million of our Term Loan B senior facility and increased the applicable margin for all borrowings under the US senior facilities and French revolving facility by 1.0%. The unamortized portion of the deferred expenditures linked to these negotiations amounted to 2.7 million.

**NOTE 23 OTHER FINANCIAL INCOME (LOSS)**

Analysis of other financial income (loss) is as follows:

	2011	December 31, 2010	2009
	(in millions of euros)		
Exchange gains (losses) net	15.6	10.4	(7.7)
Other financial income (expenses)	(15.0)	(1.9)	(3.5)

<b>Other financial income (loss)</b>	<b>0.6</b>	<b>8.5</b>	<b>(11.2)</b>
--------------------------------------	------------	------------	---------------

F-63

**Table of Contents**

In 2011, other financial expenses include penalties for earlier reimbursement of our U.S.\$530 million 7 1/2% Senior Notes 2015, for 13.8 million expenses.

In 2009, other financial expenses included commitment fees and tax penalties for 2.2 million and 1.3 million net expenses relating to financial instruments.

**NOTE 24 INCOME TAXES****Income tax**

Income tax benefit (expense) consists of:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
<b>France</b>			
Current income tax expense	(9.4)		
Adjustments on income tax recognized in the period for prior periods <sup>(a)</sup>	(7.3)		(2.3)
Deferred taxes on temporary differences	(6.4)	12.8	18.1
Deferred taxes recognized in the period for prior periods <sup>(b)</sup>	47.1	28.5	
<b>Total France</b>	<b>24.0</b>	<b>41.3</b>	<b>15.8</b>
<b>Foreign countries</b>			
Current income tax expense <sup>(c)</sup>	(83.7)	(74.5)	(75.2)
Adjustments on income tax recognized in the period for prior periods <sup>(d)</sup>	(3.3)	(19.6)	8.7
Deferred taxes on temporary differences for the period	23.8	37.9	31.2
Deferred taxes recognized in the period for prior periods <sup>(e)</sup>	(4.1)	8.0	24.3
Deferred taxes on currency translation	(1.7)	(6.6)	5.0
<b>Total Foreign countries</b>	<b>(69.0)</b>	<b>(54.8)</b>	<b>(6.0)</b>
<b>Total income tax benefit (expense)</b>	<b>(45.0)</b>	<b>(13.5)</b>	<b>9.8</b>

<sup>(a)</sup> In 2011, corresponds to prior year tax adjustment on 2004-2007 R&D tax credit. In 2009, corresponded to the correction of 2008 carry-back.

<sup>(b)</sup> In 2011, includes 52.0 million of deferred tax asset related to the remaining French tax group loss carried forward based on a revised 2012-2015 tax planning. In 2010, included 41.6 million of deferred tax asset related to a portion of the French tax group loss carried forward based on a 2011-2013 tax planning.

<sup>(c)</sup> Includes withholding taxes.

<sup>(d)</sup> In 2011 and 2010, corresponds to prior year's tax adjustments, primarily related to Libyan income tax audit. In 2009, included prior year's tax adjustments amounting to 6.9 million and the positive impact of the application of the revised Norwegian tonnage tax for 1.8 million.

<sup>(e)</sup> In 2011, includes a negative prior year adjustment amounted to 4.7 million of the deferred tax asset recognized on losses carried forward in Norway. In 2010, included the deferred tax asset recognized on losses carried forward in Norway and Mexico. In 2009, included the deferred tax asset recognized on losses in the UK and amounting to 7.3 million.

The Company and its subsidiaries compute income taxes in accordance with the applicable tax rules and regulations of the numerous tax authorities where the Group operates. The tax regimes and income tax rates legislated by these taxing authorities vary substantially. In foreign countries, income taxes are often accrued based on deemed profits calculated as a percentage of sales as defined by local government tax authorities.

## Edgar Filing: CGG VERITAS - Form 20-F

Due to the mobile nature of seismic acquisition activities, current relationships between the French and foreign components of such tax items are not reliable indicators of such relationships in future periods.

F-64

**Table of Contents**

The reconciliation between income tax expense in the income statement and the theoretical tax charge is detailed below:

	2011	2010	2009
	(in millions of euros)		
<b>Net income (loss)</b>	<b>(9.2)</b>	<b>(44.0)</b>	<b>(258.9)</b>
<b>Income taxes</b>	<b>(45.0)</b>	<b>(13.5)</b>	<b>9.8</b>
<b>Net Income (loss) before taxes</b>	<b>35.8</b>	<b>(30.5)</b>	<b>(268.7)</b>
<i>Differences on tax basis:</i>			
Equity investment companies income	(11.7)	0.7	(8.3)
<b>Theoretical tax basis</b>	<b>24.1</b>	<b>(29.8)</b>	<b>(277.0)</b>
Enacted tax rate in France	36.10%	34.43%	34.43%
<b>Theoretical taxes</b>	<b>(8.7)</b>	<b>10.3</b>	<b>95.4</b>
<i>Differences on tax:</i>			
Differences in tax rates between France and foreign countries	0.7	18.6	(18.8)
Non-deductible part of dividends	(3.8)	(4.0)	(0.7)
Adjustments on the tax expense recognized in the period for prior periods	(10.6)	(19.6)	6.4
Adjustments on the deferred tax expense recognized in the period for prior periods <sup>(a)</sup>	42.6	36.5	15.8
Other permanent differences <sup>(b)</sup>	(36.1)	(46.0)	(89.0)
Deferred tax unrecognized on losses of the period on the French tax group <sup>(c)</sup>			(24.9)
Foreign deferred tax unrecognized on losses of the period <sup>(d)</sup>	(19.3)	(16.2)	(8.2)
Other unrecognized deferred tax in income statement on prior periods	7.1	10.9	8.5
Income tax and deferred tax on Argas net income (equity method company) <sup>(e)</sup>	(1.0)	(0.8)	(1.6)
Deferred tax on currency translation adjustments <sup>(f)</sup>	(3.3)	(6.6)	5.0
Current and deferred tax on income subject to Norwegian tonnage tax system and other countries where the tax rate is nil		1.0	2.5
Other <sup>(g)</sup>	(12.6)	2.4	19.4
<b>Income taxes</b>	<b>(45.0)</b>	<b>(13.5)</b>	<b>9.8</b>

<sup>(a)</sup> Includes deferred tax assets recognized on the French tax group for 52.0 million and 41.6 million in 2011 and 2009, respectively.

<sup>(b)</sup> In 2011 and 2010, permanent differences primarily include withholding taxes. In 2009, permanent differences included primarily the impact of the goodwill impairment that amounted to 60.3 million. In 2008, it resulted mainly from the losses on internal disposals of investments performed as part of the Services segment legal reorganization, and included a tax asset of 25 million corresponding to the 2007 carry back.

<sup>(c)</sup> In 2009, corresponded to the losses of the French tax group not recognized due to short and medium term uncertainties at that time.

<sup>(d)</sup> In 2011 and 2010, corresponds to the unrecognized deferred tax on losses for the period for various countries due to short and medium term uncertainties. In 2009, corresponded to the unrecognized deferred tax on losses for the period in Norwegian and Swiss subsidiaries regarding the marine restructuring plan.

<sup>(e)</sup> CGGVeritas, as shareholder of Argas, is directly required to pay income tax for Argas in Saudi Arabia for its share in Argas.

<sup>(f)</sup> Corresponds to the currency translation adjustment related to the translation in functional currency (U.S. dollar) of the local books of French and Norwegian entities.

<sup>(g)</sup> In 2011, includes the income tax impact of 10% of the net gain realized on internal disposal of investments. In 2009, included the impact of the Services segment legal reorganization.

**Table of Contents****Net operating loss carried forward**

In 2011, we recognized in France a 52.0 million deferred tax asset related to previous periods.

Net operating loss carried forward available and not recognized as deferred tax assets as of December 31, 2011, amounted to 100.8 million and are currently scheduled to expire as follows:

	France	Foreign countries (in millions of euros)
2012		0.7
2013 and thereafter		24.1
Available indefinitely		76.0
<b>Total</b>		<b>100.8</b>

The Group records valuation allowances on any deferred tax asset recognized on losses carried forward for entities that have a recent history of generating losses and low recovery perspectives or, for which there is a dispute with tax authorities.

**Deferred tax assets and liabilities**

Deferred tax assets and liabilities are as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
Tax losses carried forward	110.5	75.3	15.8
Deferred tax assets related to timing differences	35.4	60.1	58.5
<b>Total deferred tax assets</b>	<b>145.9</b>	<b>135.4</b>	<b>74.3</b>
Deferred tax liabilities related to timing differences	85.5	116.7	120.7
<b>Total deferred tax liabilities</b>	<b>85.5</b>	<b>116.7</b>	<b>120.7</b>
<b>Total deferred taxes, net</b>	<b>60.4</b>	<b>18.7</b>	<b>(46.4)</b>

The reconciliation of net deferred tax is as follows:

	December 31,		
	2011	2010	2009
	(in millions of euros)		
Non-deductible provisions (including pensions and profit sharing)	41.4	42.2	51.1
Tangible assets	52.8	45.9	35.3
Effect of currency translation adjustment not recognized in income statement	(4.1)	(2.7)	3.3
Multi-client surveys (including deferred revenues)	(38.8)	(61.5)	(44.1)
Assets reassessed in purchase price allocation of acquisitions	(60.5)	(60.3)	(80.7)
Development costs capitalized	(8.9)	(8.3)	(12.7)
Other deferred revenues	(11.0)	(10.0)	(9.3)
Convertible bonds and other financial instruments	(24.7)	(0.2)	0.8
Other	3.7	(1.7)	(5.9)

<b>Total deferred tax assets net of deferred tax (liabilities) related to timing differences</b>	<b>(50.1)</b>	<b>(56.6)</b>	<b>(62.2)</b>
Tax losses carried forward	110.5	75.3	15.8
<b>Total deferred tax assets net of deferred tax (liabilities)</b>	<b>60.4</b>	<b>18.7</b>	<b>(46.4)</b>

F-66

**Table of Contents**

As of December 31, 2011, deferred tax assets (liabilities) per tax group are as follows:

	France	Netherlands	Norway	US	Other	Total
Net deferred tax assets (liabilities) related to timing differences	(38.2)	39.5	1.8	(57.4)	4.2	(50.1)
Deferred tax assets on losses carried forward	90.7		6.4		13.4	110.5
<b>Total deferred tax assets (liabilities)</b>	<b>52.5</b>	<b>39.5</b>	<b>8.2</b>	<b>(57.4)</b>	<b>17.6</b>	<b>60.4</b>

The deferred taxes recognized on losses carried forward are recoverable without expiration date.

**Tax audit and litigation***France*

The tax audit of CGGVeritas SA by the French tax authorities covering the 2008 and 2009 fiscal years was completed, with no significant financial impact.

*U.S.*

The tax audit of Sercel US, Inc. for the fiscal years 2007 and 2008 has concluded with no material impact. A tax audit of Sercel US, Inc. for the year 2010 has started with no material effect expected.

The tax audit ongoing for CGGVeritas Services Holding (US) for the fiscal year 2007 has been extended to 2008 and 2009. The on-site verification was concluded and the Group is now waiting for an eventual reassessment notice. It is anticipated that no taxes will be due.

The Group is litigating the tax authorities' position related to the tax audit of CGG Americas covering fiscal years 2006 and 2007 in front of Civil Courts and does not expect material consequences. A hearing is scheduled in the first half of 2012.

CGGVeritas Services Holding (US) has received a redetermination notice for its Texas State tax for the years 2007 and 2008 for U.S.\$3.5 million. The Group will litigate the Texas Comptroller's position in front of Civil Courts and does not expect material impacts.

*Brazil*

The City of Rio has claimed 46 million (103 million Brazilian reals) against Veritas do Brazil and 28 million (63 million Brazilian reals) to CGG do Brazil concerning tax on services (ISS) relative to the years 2001 to 2008, which we contested.

In August 2011, the Civil Court decided in favor of Veritas do Brazil. In November 2011, the Administrative Court cancelled the reassessment against CGG do Brazil. The City of Rio appealed of both decisions.

*Middle-East*

In Egypt, the new tax authorities have claimed U.S.\$23 million tax on the revenues earned, without any deduction of costs incurred. The Group does not expect this claim to have any material impact on the Group's statements.

In Libya, the tax authorities have claimed U.S.\$6.4 million for which the assessment is still under discussion. A provision was booked. The Group is also in the process of receiving the 2009-2010 assessments.



**Table of Contents**

In 2010, a tax audit in Libya covering years 2007-2008 resulted in an adjustment of 7.4 million.

*India*

CGGVeritas has litigation with Indian Tax administration regarding the application of the specific regime dedicated to activities in connection with exploration of mineral oil (subject to 4.2% withholding tax) for years 2006 to 2009. Indian Tax Administration has changed its interpretation, by asking for a 10.0% withholding tax as Fees for Technical Services although no new text has been issued. The whole industry being concerned, this issue will be handled by the Indian Supreme Court.

In January 2012, Delhi Income Tax Appellate Tribunal issued an unfavorable decision, based on assumptions which do not fit with the Company's actual situation. The Group intends to challenge the ITAT order through a miscellaneous application and will appeal the same decision to the Nainital High Court. The Group does not expect this claim to have any material impact on the Group's statements.

**NOTE 25 PERSONNEL**

The analysis of personnel is as follows:

	Year ended December 31,		
	2011	2010	2009
Personnel employed under French contracts performing Geophysical services	961	955	962
Personnel employed under French contracts in the Equipment segment	867	830	843
Personnel employed under local contracts	5,370	5,479	5,695
<b>Total</b>	<b>7,198</b>	<b>7,264</b>	<b>7,500</b>
Including field staff of:	1,476	1,531	1,758

The total cost of personnel employed was 679.9 million in 2011, 630.5 million in 2010, 605.8 million in 2009.

**NOTE 26 DIRECTORS AND EXECUTIVE COMMITTEE MEMBERS REMUNERATION**

Directors and Executive Committee members (including the Chairman of the Board of Directors for 2011, 2010 and 2009, the Chief Executive Officer since July 1, 2010 and a Chief Operating Officer for 2009) remuneration was:

	Year ended December 31,		
	2011	2010	2009
		(in euros)	
Short-term employee benefit paid <sup>(a)</sup>	7,377,611	3,759,463	4,437,927
Directors' fees	730,000	640,000	640,000
Long-term employee benefit - pension <sup>(b)</sup>	56,564	103,341	135,124
Long-term employee benefit - supplemental pension <sup>(b)</sup>	1,185,924	1,478,569	1,270,460
Share-based payments <sup>(d)</sup>	4,869,510	6,879,573	5,708,145

<sup>(a)</sup> Excludes tax on salary.

<sup>(b)</sup> Cost of services rendered and interest cost.

<sup>(c)</sup> Cost of services rendered and interest cost and amortization of past service cost on the supplemental pension implemented by the end of 2004.

<sup>(d)</sup> Expense in the income statement related to the stock options and performance shares plans.

**Table of Contents****NOTE 27 RELATED PARTY TRANSACTIONS**

The Group enters into contracts with related parties concluded at arm's length.

	2011	2010	2009
	(in millions of euros)		
Sales of geophysical equipment to Argas	3.0	47.1	27.7
Equipment rentals and services rendered to Argas	10.8	8.3	46.3
Charter revenues received from LDA for the <i>Alizé</i>	9.8	10.8	10.0
Sales of geophysical equipment to Xian Sercel Petroleum Exploration Instrument Co. Ltd. <sup>(1)</sup>		7.3	5.9
Charter revenues received from Veri-Illuq Geophysical Ltd.			16.7
Equipment rentals and services rendered for PT Elnusa-CGGVeritas Seismic	12.3		
<b>Income</b>	<b>35.9</b>	<b>73.5</b>	<b>106.6</b>
Charter expenses and ship management from Norfield AS <sup>(1)</sup>		31.6	22.8
Equipment purchase and rentals from Argas	6.2	17.0	14.9
Charter expenses for <i>Alizé</i> paid to LDA	11.0	11.4	10.3
Charter expenses from Eidesvik Seismic Vessels AS	12.3	8.1	
Charter expenses from Oceanic Seismic Vessels AS	3.2		
Ship management expenses from CGGVeritas Eidesvik Ship Management AS	6.4		
Costs of services rendered by PT Elnusa-CGGVeritas Seismic	9.6		
Purchases of geophysical equipment from Tronic s	6.3	4.3	5.7
Cost of services rendered by Gardline CGGV Pte Ltd	1.0	1.6	
<b>Expenses</b>	<b>56.0</b>	<b>74.0</b>	<b>53.7</b>
Trade receivables from Argas	3.1	21.0	6.8
Trade receivables from Norfield AS <sup>(1)</sup>		7.6	8.0
Trade receivables from Gardline CGGV Pte Ltd.		0.8	
Trade receivables from PT Elnusa-CGGVeritas Seismic.	11.4		
Trade receivables from Veri-Illuq Geophysical Ltd.			1.4
Trade receivables from Spectrum ASA	2.2		
Trade receivables from LDA	5.5		
<b>Trade accounts and notes receivable</b>	<b>22.2</b>	<b>29.4</b>	<b>16.2</b>
Loan to Eidesvik Seismic Vessel AS		5.3	4.2
<b>Financial assets</b>		<b>5.3</b>	<b>4.2</b>

**Table of Contents**

	2011	2010	2009
	(in millions of euros)		
Accounts payable to Argas	2.3	4.8	2.5
Accounts payable to LDA	3.0	1.9	0.3
Accounts payable to Gardline CGGV Pte Ltd.	1.0	1.6	
Accounts payable to Eidesvik Seismic Vessels AS	1.3	1.0	
Accounts payable to Oceanic Seismic Vessels AS	2.2		
Accounts payable to Spectrum ASA	2.6		
Accounts payable to PT Elnusa-CGGVeritas Seismic	10.0		
<b>Trade accounts and notes payables</b>	<b>22.4</b>	<b>9.3</b>	<b>2.8</b>
Finance lease debt to Norfield AS <sup>(1)</sup>		29.9	37.4
Finance lease debt to Eidesvik Seismic Vessel AS	9.6	9.4	
Finance lease debt to Oceanic Seismic Vessels AS	7.9		
<b>Financial liabilities</b>	<b>17.5</b>	<b>39.3</b>	<b>37.4</b>
Future leases commitments to Oceanic Seismic Vessels AS	115.4	157.0	
Future leases commitments to Eidesvik Seismic Vessels AS	133.3	120.8	371.9
Future leases commitments to Norfield AS <sup>(1)</sup>		126.1	131.1
Future ship management costs to LDA net	6.3	8.8	10.7
Future ship management costs to CGGVeritas Eidesvik Ship Management AS	199.6		
<b>Contractual Obligations</b>	<b>454.6</b>	<b>412.7</b>	<b>513.7</b>

<sup>(1)</sup> *Cybernetix was accounted for under the equity method until November 2011, Norfield AS until January 2011 and Xian Sercel Petroleum Exploration Instrument Co. Ltd until November 2010 (see note 2).*

Louis Dreyfus Armateurs ( LDA ) provides ship management services for a portion of our fleet. In addition, LDA is the owner, together with the Group, of Geomar owner of the seismic vessel *Alizé* . Geomar provides vessel charter services to LDA.

Argas, Eidesvik Seismic Vessel AS, Oceanic Seismic Vessel AS, Gardline CGGV Pte Ltd, Spectrum ASA, CGGVeritas Eidesvik Ship Management AS, Veri-Illuq Geophysical Ltd. and PT Elnusa-CGGVeritas Seismic are companies accounted for under the equity method. Tronic s is 16% owned by the Group.

No credit facility or loan was granted to the Company by shareholders during the last three years.

Key management personnel includes the Chief Executive Officer, the executive committee members and executive officers ( *mandataires sociaux* ).

***Contractual indemnity in case of termination of Executive Officer functions***

The benefits granted to Mr. Malcor in case of termination of his functions as Executive Officer were approved by the Board of Directors meeting held on February 24, 2011 and ratified by the General Meeting of May 4, 2011, pursuant to article L.225-42-1 of the French Commercial Code. Mr. Malcor does not benefit from any contractual termination indemnity, except in case of a forced departure relating to a change of control or a change of strategy.

**NOTE 28 SUPPLEMENTARY CASH FLOW INFORMATION**

Multi-client surveys depreciation and amortization include 70.4 million impairment in 2010 and 63.8 million in 2009 (see note 10).

Depreciation and amortization included 217.6 impairment of goodwill in 2009.



**Table of Contents**

Acquisitions in 2011 include 3.6 million convertible bond in Spectrum ASA, 3.4 million convertible bond in Oceanic Seismic Vessel AS and 0.6 million investment in Petrodata Consulting LLC. Acquisitions in 2010 included 1.2 million investment in Gardline CGGV Pte. Ltd less 0.7 million Xian Sercel Petroleum Exploration Instruments Co. Ltd acquired cash. Acquisitions in 2009 included 30.1% of Wavefield shares subject to the mandatory offer at December 31, 2008 for 62.1 million, our 49% share in Eidesvik Seismic Vessel AS for 17.1 million and additional 37% shares of Multifield Geophysics AS acquired for 2.9 million.

In 2011, proceeds from disposal of tangible and intangible assets mainly correspond to the disposal of our 2D marine multi-client library paid in cash by Spectrum ASA.

Proceeds from disposal of financial assets correspond mainly to the disposal of 33% of our investment in Cybernetix in 2011. In 2010 they correspond to the sale of 12% of our investment in Cybernetix and to the disposal of our shares in Offshore Hydrocarbon Mapping.

The financial expenses paid for 2011, 2010 and 2009 included mainly fees and interest related to the Term Loan B senior facility, and the senior notes (see note 13).

The impact of changes in exchange rate on financial items corresponds notably to the elimination of the unrealized exchange gains (losses) resulting from the gross financial debt in U.S. dollars located in those subsidiaries whose functional currency is euro.

Non-cash investing and financing transactions that are excluded from the consolidated statements of cash flows consisted of the following:

	Year ended December 31,		
	2011	2010	2009
	(in millions of euros)		
Equipment acquired under finance leases	20.7	87.6	22.2

The cash and cash equivalents are composed as follows:

	Year ended December 31,		
	2011	2010	2009
	(in millions of euros)		
Cash	333.8	273.9	382.5
Cash equivalents	76.9	62.0	97.8
<b>Total cash and cash equivalents</b>	<b>410.7</b>	<b>335.9</b>	<b>480.3</b>

Cash and cash equivalents include trapped cash amounting to 51.2 million. Trapped cash means any cash and cash equivalents held by a subsidiary that operates in a country where exchange controls or other legal restrictions apply when the balances are not available for general use by the group (cash in subsidiaries not available at Group level).

**Table of Contents****NOTE 29 EARNINGS PER SHARE**

The following reflects the income and the share data used in the basic and diluted earnings per share computations:

	2011	Year 2010	2009
	(in millions of euros, excepted per share data)		
Net income attributable to shareholders <sup>(a)</sup>	(19.0)	(54.6)	(264.3)
Less financial expenses on convertible bond, net of tax	13.5		
Adjusted net income attributable to shareholders for diluted earning per shares <sup>(b)</sup>	(5.5)	(54.6)	(264.3)
<b>Effect of dilution</b>			
Ordinary shares outstanding at the beginning of the year <sup>(c)</sup>	151,506,109	151,146,594	150,617,709
Weighted average number of ordinary shares outstanding during the year <sup>(d)</sup>	265,831	195,935	246,767
Weighted average number of ordinary shares outstanding <sup>(e)=(c)+(d)</sup>	151,771,940	151,342,529	150,864,476
Dilutive potential shares from 2002 stock options			(2)
Dilutive potential shares from 2003 stock options		(2)	(2)
Dilutive potential shares from 2006 stock options	(1)	(1)	(1)
Dilutive potential shares from 2007 stock options	(1)	(1)	(1)
Dilutive potential shares from 2008 stock options	(1)	(1)	(1)
Dilutive potential shares from 2009 stock options	(2)	(2)	(1)
Dilutive potential shares from 2010 stock options	(2)	(2)	
Dilutive potential shares from 2011 stock options	(1)	(2)	
Total dilutive potential shares from stock options			
Dilutive potential shares from 2009 performance shares allocation	(2)	(2)	(2)
Dilutive potential shares from 2010 performance shares allocation	(2)	(2)	
Dilutive potential shares from 2011 performance shares allocation	(2)	(2)	
Total dilutive potential shares from performance shares allocation			
Dilutive potential shares from Convertible bonds	(2)		
Dilutive weighted average number of shares outstanding adjusted when dilutive <sup>(ff)</sup>	151,771,940	151,342,529	150,864,476
<b>Earnings per share</b>			
<b>Basic<sup>(a)/(e)</sup></b>	<b>(0.13)</b>	<b>(0.36)</b>	<b>(1.75)</b>
<b>Diluted<sup>(b)/(f)</sup></b>	<b>(0.13)</b>	<b>(0.36)</b>	<b>(1.75)</b>

<sup>(1)</sup> Exercise price of these stock options was higher than the average market price of the underlying shares.

<sup>(2)</sup> As our net fiscal year result is a loss, stock-options, performance shares plans and convertible bonds have a relative effect (increase of our earning per share); as a consequence, potential shares linked to those instruments are not taken into account in the dilutive weighted average number of shares, nor in the calculation of diluted loss per share.

**NOTE 30 SUBSEQUENT EVENTS****ION litigation**

On February 17, 2012, the United States Federal Circuit Court of Appeals affirmed the judgment of the United States District Court for the Eastern District of Texas dated February 16, 2011 with regards to the lawsuit between Sercel and Ion Geophysical (« ION ») on the US patent N°5 852 242. A provision amounting to 9.2 million (U.S.\$12.8 million) was recorded in the consolidated financial statements as of December 31, 2011



**Table of Contents**

to cover the U.S.\$10.7 million amount plus pre- and post-judgment interest to be paid to ION. The parties will return to trial court to determine the amount of additional damages related to Sercel SeaRays systems manufactured in Houston.

**Acquisition of GRC**

On January 17, 2012, Sercel acquired the assets of Geophysical Research Company, LLC ( GRC ). Headquartered in Tulsa, Oklahoma (USA), and established in 1925 by Amerada Petroleum Corporation, GRC is a leading provider of downhole sensors and gauges for the oil and gas industry. The purchase price amounts to U.S.\$67 million, including an earn-out of U.S.\$17 million.

**Indian tax litigation**

In January 2012, Delhi Income Tax Appellate Tribunal issued an unfavorable decision, based on assumptions which do not fit with the Company's actual situation. The Group intends to challenge the ITAT order through a miscellaneous application and will appeal the same decision to the Nainital High Court. The Group does not expect this claim to have any material impact on the Group's statements

**NOTE 31 LIST OF PRINCIPAL CONSOLIDATED SUBSIDIARIES AS OF DECEMBER 31, 2011**

Subsidiaries are fully consolidated from the date of their acquisition, being the date on which the Group obtains the control.

Certain dormant or small subsidiaries of the Group have not been included in the list below.

Percentage of interest generally corresponds to percentage of control in the company.

Siren Number <sup>(a)</sup>	Consolidated companies	Head Office	% of interest
	CGGVeritas Services Holding B.V.	Amsterdam, The Netherlands	100.0
	CGGVeritas Marine B.V.	Amsterdam, The Netherlands	100.0
	CGGVeritas Services Holding (Latin America) B.V.	Amsterdam, The Netherlands	100.0
403 256 944	CGGVeritas Services SA	Massy, France	100.0
410 072 110	CGG Explo SARL	Massy, France	100.0
413 926 320	Geomar SAS <sup>(1)</sup>	Paris, France	49.0
	CGGVeritas International SA	Geneva, Switzerland	100.0
	Wavefield Inseis AS	Oslo, Norway	100.0
	CGG Marine Resources Norge AS	Oslo, Norway	100.0
	Multifield Geophysics AS	Bergen, Norway	100.0
	CGGVeritas Services (Norway) AS	Bergen, Norway	100.0
	Exploration Vessel Resources AS	Bergen, Norway	100.0
	Exploration Investment Resources II AS	Bergen, Norway	100.0
	Exploration Vessel Resources II AS	Bergen, Norway	100.0
	CGGVeritas Services (UK) Ltd.	Crawley, United Kingdom	100.0
	Veritas DGC Limited	Crawley, United Kingdom	100.0
	Veritas Geophysical Limited	Crawley, United Kingdom	100.0
	Geoexplor	Almaty, Kazakhstan	100.0
	Veritas Caspian LLP <sup>(1)</sup>	Almaty, Kazakhstan	50.0
	CGG do Brasil Participações Ltda	Rio do Janeiro, Brazil	100.0
	Veritas do Brasil Ltda.	Rio do Janeiro, Brazil	100.0
	CGGVeritas Services de Mexico SA de CV	Mexico City, Mexico	100.0



**Table of Contents**

Siren Number <sup>(a)</sup>	Consolidated companies	Head Office	% of interest
	Exgeo CA	Caracas, Venezuela	100.0
	CGGVeritas Services Holding (U.S.) Inc	Delaware, United States	100.0
	CGGVeritas Services (U.S.) Inc.	Delaware, United States	100.0
	CGGVeritas Land (U.S.) Inc.	Delaware, United States	100.0
	Alitheia Resources Inc.	Delaware, United States	100.0
	Veritas Investments Inc.	Delaware, United States	100.0
	Viking Maritime Inc.	Delaware, United States	100.0
	CGG Canada Services Ltd.	Calgary, Canada	100.0
	CGGVeritas Services (Canada) Inc.	Alberta, Canada	100.0
	Veritas Geophysical (Canada) Corporation	Nova Scotia, Canada	100.0
	Hampson Russel Ltd.	Alberta, Canada	100.0
	Veritas MacKenzie Delta Ltd.	Alberta, Canada	100.0
	CGGVeritas Services (Canada) Partnership	Nova Scotia, Canada	100.0
	Veritas Geophysical III	Cayman Islands	100.0
	Veritas Geophysical IV	Cayman Islands	100.0
	CGGVeritas Services (Australia) Pty. Ltd.	Perth, Australia	100.0
	CGGVeritas Services (Singapore) Pte. Ltd.	Singapore	100.0
	CGGVeritas Services (Malaysia) Sdn. Bhd.	Kuala Lumpur, Malaysia	100.0
	PT CGG Indonesia <sup>(1)</sup>	Djakarta, Indonesia	95.0
	PT CGGVeritas Services Indonesia <sup>(1)</sup>	Djakarta, Indonesia	95.0
	CGGVeritas Services India Private Ltd.	New Delhi, India	100.0
	CGGVeritas Technology Services (Beijing) Co. Ltd.	Beijing, China	100.0
	Ardiseis FZCO	Dubai, United Arab Emirates	51.0
	CGGVeritas Services(B) Sdn. Bhd.	Brunei	100.0
	Veritas Geophysical (Nigeria) Limited	Lagos, Nigeria	100.0
	CGG (Nigeria) Ltd.	Lagos, Nigeria	100.0
866 800 154	Sercel Holding SA	Carquefou, France	100.0
378 040 497	Sercel SA	Carquefou, France	100.0
	Sercel England Ltd.	Somercotes, United Kingdom	100.0
	Quest Geo Solutions Limited	Hampshire, United Kingdom	100.0
	Optoplan AS	Trondheim, Norway	100.0
	Seismic Support Services	Moscow, Russia	100.0
	CGG Vostok	Moscow, Russia	100.0
	Petrodata Consulting LLC	Moscow, Russia	100.0
	Sercel Inc.	Tulsa, United States	100.0
	Sercel Canada Ltd.	Calgary, Canada	100.0
	Sercel Australia	Sydney, Australia	100.0
	Hebei Sercel JunFeng Geophysical Prospecting Equipment Co. Ltd. <sup>(1)</sup>	Hebei, China	51.0
	Xian Sercel Petroleum Exploration Instrument Co. Ltd. <sup>(1)</sup>	Xian, China	51.0
	Sercel Beijing Technology	Beijing, China	100.0
	Sercel Singapore Pte Ltd.	Singapore	100.0

<sup>(a)</sup> Siren number is an individual identification number for company registration purposes under French law.

<sup>(1)</sup> % of control for these subsidiaries amount to 100%.

**Table of Contents****NOTE 32 CONDENSED CONSOLIDATING INFORMATION FOR CERTAIN SUBSIDIARIES**

At December 31, 2011 the obligations to pay our outstanding Senior Notes are guaranteed by certain subsidiaries: CGG Canada Services Ltd, CGG Marine Resources Norge AS, CGGVeritas Services Holding (U.S.) Inc., Alitheia Resources Inc., CGGVeritas Land (U.S.) Inc., CGGVeritas Services (U.S.) Inc., Veritas Geophysical (Mexico) LLC, Veritas Investments Inc., Viking Maritime Inc., CGGVeritas Marine BV, CGGVeritas Services Holding BV as the Services guarantors, and Sercel Inc., Sercel Australia Pty Ltd and Sercel Canada Ltd as the Equipment guarantors.

The following table presents condensed consolidated financial information in IFRS for the year ended December 31, 2011 for the Company, the Guarantor subsidiaries, the Non-Guarantor subsidiaries and the Eliminations to arrive at CGGVeritas on a consolidated basis.

	CGG Veritas	Services Guarantors	Equipment Guarantors (in millions of euros)	Non Guarantors	Consolidation Adjustments	Group Consolidated
Goodwill		1,913.9	54.5	109.2		2,077.6
Intangible assets (including multi client surveys)	19.1	376.1	2.4	355.5	(84.5)	668.6
Property, plant and equipment	86.4	456.3	37.8	488.0	(154.6)	913.9
Investment in affiliates	3,556.7	1,137.3	4.1	181.1	(4,879.2)	
Other non-current assets	920.9	106.4	3.3	78.3	(843.7)	265.2
Current assets	382.9	507.3	138.3	2,093.7	(1,491.6)	1,630.6
<b>Total assets</b>	<b>4,966.0</b>	<b>4,497.3</b>	<b>240.4</b>	<b>3,305.8</b>	<b>(7,453.6)</b>	<b>5,555.9</b>
Financial debt (including bank overdrafts, current and non-current portion)	1,406.6	845.8	0.6	190.2	(942.2)	1,501.0
Other non-current liabilities (excluding financial debt)	19.9	73.1	13.9	121.5	(21.9)	206.5
Current liabilities (excluding current portion of debt)	533.1	426.5	40.6	1,252.8	(1,411.0)	842.0
<b>Total liabilities (excluding equity)</b>	<b>1,959.6</b>	<b>1,345.4</b>	<b>55.1</b>	<b>1,564.5</b>	<b>(2,375.1)</b>	<b>2,549.5</b>
<b>Equity</b>	<b>3,006.4</b>	<b>3,151.9</b>	<b>185.3</b>	<b>1,741.3</b>	<b>(5,078.5)</b>	<b>3,006.4</b>
Operating revenues	10.5	558.7	373.9	2,454.5	(1,129.9)	2,267.7
Depreciation and amortization	3.5	280.6	12.4	187.6	(35.9)	448.2
Operating income (loss)	(26.1)	89.6	107.3	418.8	(441.7)	147.9
Equity in income of affiliates	606.8	111.0		0.3	(496.1)	
<b>Net income (loss) group share</b>	<b>(9.2)</b>	<b>183.5</b>	<b>73.1</b>	<b>543.2</b>	<b>(799.8)</b>	<b>(9.2)</b>
Cash flow from operating activities	735.5	375.7	78.0	(15.8)	(592.0)	581.4
Cash flow from investing activities	(358.3)	(312.6)	(5.0)	42.9	316.5	(402.3)
Cash flow from financing activities	(325.1)	(5.8)	(82.8)	33.9	264.5	(115.3)
Effect of exchange rates on cash					11.0	11.0
<b>Cash at opening</b>	<b>211.3</b>	<b>11.9</b>	<b>16.2</b>	<b>96.5</b>		<b>335.9</b>
<b>Cash at closing</b>	<b>263.4</b>	<b>69.2</b>	<b>6.4</b>	<b>71.7</b>		<b>410.7</b>



**Table of Contents**

The following tables present condensed consolidated financial information in IFRS for the year ended December 31, 2010 and December 31, 2009.

	CGG Veritas	Services Guarantors	Equipment Guarantors (in millions of euros)	Non Guarantors	Consolidation Adjustments	Group Consolidated
Goodwill		1,838.0	52.9	121.1		2,012.0
Intangible assets (including multi client surveys)	8.2	389.6	3.4	363.6	(43.4)	721.4
Property, plant and equipment	85.5	388.6	44.5	370.4	(107.3)	781.7
Investment in affiliates	2,936.0	1,016.7	4.1	201.3	(4,158.1)	
Other non-current assets	940.1	263.3	3.3	104.6	(1,076.0)	235.3
Current assets	251.7	981.2	241.9	1,853.2	(1,754.0)	1,574.0
<b>Total assets</b>	<b>4,221.5</b>	<b>4,877.4</b>	<b>350.1</b>	<b>3,014.2</b>	<b>(7,138.8)</b>	<b>5,324.4</b>
Financial debt (including bank overdrafts, current and non-current portion)	1,024.9	1,468.7	0.8	146.4	(1,155.2)	1,485.6
Other non-current liabilities (excluding financial debt)	19.0	152.5	15.4	108.4	(56.3)	239.0
Current liabilities (excluding current portion of debt)	307.7	597.6	53.0	1,477.1	(1,705.5)	729.9
<b>Total liabilities (excluding equity)</b>	<b>1,351.6</b>	<b>2,218.8</b>	<b>69.2</b>	<b>1,731.9</b>	<b>(2,917.0)</b>	<b>2,454.5</b>
<b>Equity</b>	<b>2,869.9</b>	<b>2,658.6</b>	<b>280.9</b>	<b>1,282.3</b>	<b>4,221.8</b>	<b>2,869.9</b>
Operating revenues	9.6	594.2	389.2	2,309.9	(1,116.8)	2,186.1
Depreciation and amortization	2.0	331.1	11.4	198.1	(28.4)	514.2
Operating income (loss)	4.1	57.3	101.2	(50.4)	(45.0)	67.2
Equity in income of affiliates	(274.4)	8.6		69.0	196.8	
<b>Net income (loss) group share</b>	<b>(44.0)</b>	<b>713.0</b>	<b>74.8</b>	<b>(57.9)</b>	<b>(729.9)</b>	<b>(44.0)</b>
Cash flow from operating activities	265.8	55.4	106.8	686.8	(664.8)	450.0
Cash flow from investing activities	(202.2)	(289.0)	(15.5)	(140.0)	228.1	(418.6)
Cash flow from financing activities	(144.1)	216.1	(87.3)	(597.2)	404.7	(207.8)
Effect of exchange rates on cash					32.0	32.0
<b>Cash at opening</b>	<b>291.8</b>	<b>29.4</b>	<b>12.2</b>	<b>146.9</b>		<b>480.3</b>
<b>Cash at closing</b>	<b>211.3</b>	<b>11.9</b>	<b>16.2</b>	<b>96.5</b>		<b>335.9</b>

**Table of Contents**

	CGG Veritas	Services Guarantors	Equipment Guarantors (in millions of euros)	Non Guarantors	Consolidation Adjustments	Group Consolidated
Goodwill		1,705.5	48.0	114.6		1,868.1
Intangible assets (including multi client surveys)	0.4	429.9	3.6	343.5	(48.5)	728.9
Property, plant and equipment	3.1	369.7	36.5	318.8	(50.4)	677.7
Investment in affiliates	2,644.0	662.1	0.4	197.5	(3,504.0)	
Other non-current assets	559.2	23.9		153.3	(527.2)	209.2
Current assets	873.7	513.3	220.0	1,626.4	(1,796.1)	1,437.3
<b>Total assets</b>	<b>4,080.4</b>	<b>3,704.4</b>	<b>308.5</b>	<b>2,754.1</b>	<b>(5,926.2)</b>	<b>4,921.2</b>
Financial debt (including bank overdrafts, current and non-current portion)	915.5	912.6	1.0	174.6	(604.7)	1,399.0
Other non-current liabilities (excluding financial debt)		140.2	7.7	113.6	(4.3)	257.2
Current liabilities (excluding current portion of debt)	463.4	758.9	40.4	1,037.8	(1,737.0)	563.5
<b>Total liabilities (excluding equity)</b>	<b>1,378.9</b>	<b>1,811.7</b>	<b>49.1</b>	<b>1,326.0</b>	<b>(2,346.0)</b>	<b>2,219.7</b>
<b>Equity</b>	<b>2,701.5</b>	<b>1,892.7</b>	<b>259.4</b>	<b>1,428.1</b>	<b>(3,580.2)</b>	<b>2,701.5</b>
Operating revenues	11.7	376.7	232.2	2,263.3	(650.7)	2,233.2
Depreciation and amortization	1.2	326.9	8.6	496.6	(21.0)	812.3
Operating income (loss)	9.9	68.2	33.9	81.5	(354.1)	(160.6)
Equity in income of affiliates	(268.8)	(153.1)		28.0	393.9	
<b>Net income (loss) group share</b>	<b>(258.9)</b>	<b>(13.2)</b>	<b>26.9</b>	<b>121.1</b>	<b>(134.8)</b>	<b>(258.9)</b>
Cash flow from operating activities	1.8	516.3	32.1	102.9	(36.3)	616.8
Cash flow from investing activities	(189.3)	(431.1)	(11.9)	(2.3)	154.9	(479.7)
Cash flow from financing activities	246.6	(120.2)	(24.3)	(157.2)	(111.9)	(167.0)
Effect of exchange rates on cash					(6.7)	(6.7)
<b>Cash at opening</b>	<b>232.7</b>	<b>64.4</b>	<b>16.3</b>	<b>203.5</b>		<b>516.9</b>
<b>Cash at closing</b>	<b>291.8</b>	<b>29.4</b>	<b>12.2</b>	<b>146.9</b>		<b>480.3</b>