



MANAGEMENT REPORT OF THE BOARD OF DIRECTORS

COMPAGNIE GENERALE DE GEOPHYSIQUE – VERITAS

Fiscal year ended December 31, 2012

Compagnie Générale de Géophysique - Veritas
A French Public Limited Company with registered capital of €70,556,890
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1. MAIN BUSINESS OF THE GROUP IN 2012

In 2012, the geophysical operations of the CGG Group were organized into two main segments of activity: Geophysical Services and Geophysical Equipment.

The Geophysical Services segment covered four Divisions:

- Land: Land based, transition zone and seabed seismic contract data acquisition (“Contract Land acquisition” activity or the “Land Division”);
- Marine: Marine based seismic contract data acquisition (“Contract Marine acquisition” activity or the “Marine Division”);
- Processing, Imaging & Reservoir: A broad portfolio of advanced geosciences technology, products and solutions for seismic data processing, imaging and reservoir management (“Processing, Imaging and Reservoir activity” or the “Processing, Imaging and Reservoir Division”);
- Multi-Client: The investment and sale (License) of marine and land CGG proprietary seismic surveys to multiple customers (the “Multi-Client activity” or the “Multi-Client Division”).

The Geophysical Equipment segment corresponded to the “Equipment Division”, regrouping the activities of the subsidiaries of Sercel Holding SA, which covers the design, manufacture and marketing of land, marine and down-hole seismic data acquisition equipment.

As from February 1, 2013, following the acquisition of Fugro Geoscience Division, a new operational structure has been put in place in order to align the management structure with the Group’s new size and development strategy. The Group is now organized around three Divisions (Equipment, Acquisition and Geology, Geophysics & Reservoir) including ten Business Lines and with six Group Functions and five Corporate Departments. The three new Divisions cover better the exploration to production value chain which offers the Group many new opportunities to create value for its shareholders, clients, employees and partners. A more detailed description of this new organization is provided with in paragraph III.1.3.2 of the report of the Chairman on Board of Directors’ composition, preparation and organization of the Board of Directors’ work, on internal control and risk management.

Breakdown of consolidated revenues by activity (excluding intra-group sales) in million US dollars:

	2012		2011 (restated)		2010 (restated)	
	MUS\$	%	MUS\$	%	MUS\$	%
Contract Land acquisition	498.2	15%	372.8	12%	381.4	13%
Multi-client Land acquisition	142.6	4%	131.5	4%	145.9	5%
Total Land acquisition	640.8	19%	504.3	16%	527.3	18%
Contract Marine acquisition	1,008.9	30%	977.1	31%	778.1	27%
Multi-client Marine acquisition	329.1	10%	365.4	11%	388.4	14%
Total Marine acquisition	1,338.0	40%	1,342.5	42%	1,166.5	41%
Processing, Imaging & Reservoir	478.0	14%	442.7	14%	389.1	13%
Total Services	2,456.8	73%	2,289.5	72%	2,082.9	72%
Total Equipment	953.7	27%	890.9	28%	821.3	28%
Total	3,410.5	100%	3,180.4	100%	2,904.2	100%

Breakdown of the consolidated revenues by geographical area in millions US dollars:

	2012		2011 (restated)		2010 (restated)	
	MUS\$	%	MUS\$	%	MUS\$	%
North America	730.3	21%	704.9	22%	776.5	27%
Latin America	499.7	15%	641.2	20%	393.4	13%
Europe, Africa & Middle East	1,245.8	37%	1,133.7	36%	1,151.5	40%
Asia Pacific	934.7	27%	700.7	22%	582.8	20%
Total	3,140.5	100%	3,180.4	100%	2,904.2	100%

The Group's clients can be typically categorized as National Oil Companies, International Oil Companies (the "Majors") and Independent Companies. In 2012, the top two clients of the Group represented respectively 7.1% and 5.8% of the consolidated Group revenues.

Estimates relative to the geophysical market and to the competitive positioning of the Group within this Services and Equipment segments or within the activities of these segments come from internal Group data. There is currently no available external database.

1.1. Geophysical Services segment

1.1.1. Land Seismic Acquisition

Overview

Land acquisition offers integrated services, including the acquisition and the onsite processing of seismic data on land, transition zone or seabed areas. The Group performs land surveys through exclusive contract activity or non-exclusive multi-client activity.

The Group is one of the main land seismic acquisition worldwide contractors, especially in North America and Middle-East, and particularly in areas requiring specific technologies, Health, Safety and Environment excellence ("HSE") and operational expertise. The Group's positioning on Arctic areas, on seabed and transition zones and on the high-resolution crews market in North Africa and Middle-East illustrates this specific positioning.

In 2012, the Group operated an average of 24 active land crews performing 3D and 2D seismic surveys (19 crews dedicated to contract surveys and 5 dedicated to non-exclusive surveys).

Activity description

The 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 recording equipment location (except for "stackless" operations where the sources locations are indicated through integrated GPS capabilities rather than on location by field personnel). Recording crews produce acoustic impulses and record the seismic signals via geophones or hydrophones. The acoustic sources used are mainly vibratory onshore, and air guns at sea. 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.

Thanks to the improvement of equipment and acquisition technologies together with a growing demand for managing complex reservoirs, seabed acquisition has become a stand-alone and viable acquisition process. Seabed acquisition does not compete in general with the traditional towed streamer acquisition method, which typically is complementary. Indeed, the seismic seabed operations are performed most often in areas where the traditional towed streamer acquisition method is impossible, not adapted or too expensive because of physical access constraints (swallow waters, obstacles, etc...). Seabed technology can also be more performing for certain types of specific seismic works such as the monitoring of production in order to optimize the management of reserves especially in complex reservoirs. Seabed acquisition is operated through groups of discrete point receivers ("nodes") or cables ("OBC" and other submersible systems) laid out on the sea bed either permanently either temporarily to be re-used for other areas.

The Group is currently the only major seismic contractor in the industry that offers both methods with up to six crews (5 OBC crews and 1 nodes crew) active in 2012.

Recently, another dimension has been added to seabed seismic data acquisition by trenching cables into the seafloor for permanent reservoir monitoring. As an early mover in this area, The Group offers high-end electrical cables and fiber optic cables through Sercel. The Group provides a unique and complete seabed solution including equipment, installation, data collection, processing and reservoir characterization.

Land seismic crews are equipped with advanced equipment and software used for each step of the acquisition process, as an example: the Sercel 428XL seismic data recorders; the Sercel SeaRay seafloor cables and the Trilobite autonomous recording nodes for seabed operations; the Sercel Nomad 65 and Nomad 90 vibrators, the Sercel VE464 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 systems. The Group also deploys patented high-end vibroseis technologies such as HPVA and V1 which seek to increase significantly the productivity of a crew or EmphaSeis which seeks to enhance the resolution of the data through broadening the frequency content of the signal emitted. By combining specific acquisition geometries and processing technologies as well as on-site processing software for acquired data, the Group has a unique capability to offer fully integrated offers, improving both data quality and turn-around time, thus accelerating exploration cycle.

The Group believes that its technology and its experience enable the Group to offer high quality, fully integrated land seismic services. The Group has pioneered the 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 main challenges inherent in land seismic acquisition surveys is gathering data without disrupting the sensitive ecosystems in which surveys are located. The Group has developed a good reputation for operations in environmentally sensitive zones, such as mountainous regions, tropical forests and swamps as well as Arctic areas, by following a strict policy of preserving the natural environment to the extent possible. The Group also works in conjunction with the local community at site locations, hiring local employees and obtaining necessary local authorizations.

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 sea-bottom survey is highly variable and may range from a total of less than one hundred to a few thousand members (principally composed of local employees in the latter case), and the monthly 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.

The Group works closely with its clients to plan surveys in accordance with their technical specifications while optimizing the resources required. The Group regularly conducts land seismic acquisition surveys for national, international oil companies and independents. The contracts concluded to perform such surveys are awarded based on competitive bids or directly negotiated agreements with the clients.

Contract and multi-client land seismic data acquisition

In land acquisition, the Group operates with two different approaches, i.e. two different commercial business models:

- The first consists of working on an exclusive contractual basis with the client. The contract usually stipulates that the contractor will receive a fixed remuneration per acquired kilometer or square kilometers, on client specifications. The client owns the acquired data and pays the contractor for the total cost of the project, the price being fixed by the offer. Therefore the operating income for the contractor is the difference between the sales price and the final price of the survey.
- The second consists of operating under a non-exclusive or multi-client model, with multiple clients prefunding the acquisition. In areas of intense exploration such as the unconventional resources plays (“Shale Gas”, “Shale Oil”), CGG invests in large and contiguous multi-client surveys. The Group retains the ownership and rights to such data and has exclusive right to license the data to several clients during a period of time which varies in function of the local regulations.

The Group proposes a license to use the data to interested companies who in return benefit from quick access to “ready to be interpreted” data at reduced costs. Multi-client data are typically used to evaluate exploration opportunities prior to a bid round for instance, or to rapidly access at reduced costs to recent high quality data once the companies have obtained exploration rights in a given block. Strict confidentiality and transferability restriction govern the use of multi-client data. For instance, future partners in a block will be obliged to license the data to be able to access it.

The costs of the multi-client surveys are capitalized in the balance sheet. The surveys are then amortized as per the the Group’s accounting policies in compliance with the industry practices and the IFRS rules. Each survey is evaluated separately following the accounting principles described in the notes n°1 to 2012 period final consolidated accounts.

The Group’s land multi-client library in North Americas is composed of more than 60,540 square kilometers of completed 3D surveys located mainly along the US and Canadian Rocky Mountains, in Alaska, in Oklahoma, in South and East Texas, in the Shale Gas basins (Haynesville and Marcellus) as well as in the Bakken field (Shale Oil).

The Land multi-client market in North America is characterized by high level of prefunding, a long project life (more than 10 years) and very limited overlap of recent surveys by other geophysical contractors.

Activity of the Land Division in 2012

Competition and market

The land acquisition market is fragmented and extremely competitive with the presence of both international and local players. The Group has chosen a selective position in the high-end market, and, when the context is adequate, in partnerships with local players. The four main competitors in the land acquisition market are WesternGeco, Global Geophysical Services, Geokinetics and BGP.

In this market, CGG considers that technology, quality of the crews, services provided and prices are the main differentiators, while the relationship with local suppliers and the expertise of its personnel in complex areas are additional advantages.

The Group's offer is based on the technology and the geographical focus with high-end activities often operated through local partnerships. The Group has developed a unique expertise in North America's arctic regions (Canada and Alaska), in the Middle-Eastern and North African deserts and in shallow water / transition zone areas. Land activity benefited from (i) the rapid development of our shallow water, OBC and nodes offer to address a rapidly growing market, (ii) the continued growth of North America driven by a record winter season and (iii) a very active shale gas / shale oil market for which the Group successfully deployed the Unite wireless technology manufactured by Sercel.

Total land seismic activities – contract and multi-client surveys – accounted for US\$641 million i.e. 19% of the Group consolidated operating revenues and 26% of the Services operating revenues.

Contract land seismic acquisition activity

the Group had an average of 19 active land crews performing 3D and 2D seismic surveys on a contract basis. Contract land consolidated revenue was US\$ 498 million in 2012, i.e. more than 20% of the Services revenues.

In Saudi Arabia, the Group's land seismic acquisition activities are conducted through Arabian Geophysical & Surveying Co. ("Argas")¹, a joint venture owned 49% by the Group and 51% by TAQA, its local partner. The Group's operations in Middle-East (outside Saudi Arabia) are conducted through Ardiseis, a joint venture owned 51% by the Group and 49% by TAQA.

Land multi-client surveys

The location of the surveys and the quality of the data constitute important differentiators in the Land multi-client business.

In the US, the Group completed the acquisition of the Haynesville Shale Gas program in Louisiana. 5,360 square kilometers of modern high quality data are now available for license. The acquisition of the Marcellus Shale Gas multi-year program in Pennsylvania continued with 3 crews operating in parallel until the autumn season. The introduction of the Sercel wireless recording system (UNITE) allowed for record high productivity rates on the 3 crews. Upon completion in 2013, the Marcellus program will offer more than 4,220 square kilometers for licensing.

In Canada, the Group continued to expand its footprint in the Saskatchewan Shale Oil play with a new survey acquired.

In Alaska, CGG recorded the first multi-client high end 3D survey targeting a promising new Shale Oil play in the North Slope.

The Group invested in North America US\$117 million in new land multi-client surveys with an average cash prefunding ratio of 96%. The total revenue from land multi-client was US\$143 million or 6% of the Services revenue, corresponding to an increase of 8% year on year.

The multi-client after sales were US\$35 million in 2012.

The net book value of the Land multi-client library was US\$130 million at year end and the land multi-client library consisted of 60,540 square kilometers.

¹ A shareholders agreement has been entered into between CGG and TAQA organizing (amongst other items) the allocation of offices within the Board of Directors, as well as the transfers of both shareholders' interests to third parties. The implementation of this agreement is not likely to cause any change in financial flows or in the allocation of powers.

2013 perspectives

The Group's land seismic acquisition services are geographically and technologically well placed in the high-end market and through strong local partnerships. The Land strategy remains focused on differentiation and operational excellence rather than market share, avoiding as much as possible commoditized markets.

In North America, and after many years of largely commoditized seismic acquisition, especially in the United States, we believe that the demand for land seismic acquisition services, in particular with a higher technological content should accelerate for contract and multi-client activities, driven by the strong development of Shale plays and Oil Sands. This should represent a good opportunity for the Group's land activity, and for the development of its newly created monitoring solutions group proposing both passive (micro-seismic) and active (SeisMovie, a CGG's patented buried source / receiver technology) monitoring solutions, where the Group aims to play a predominant role.

National oil companies and in particular in the Middle East, are expected to increasingly request advanced technologies, either in desert areas with very large channel count crews and high vibroseis productivity, or complex shallow or deep water locations using either Ocean Bottom Cables such as the 4C Sercel SeaRay system, or nodes such as the Group's proprietary Trilobit technology. The Group's strategy for the land acquisition division is therefore to:

- focus its presence in certain geographic markets, where the Group believes it has a competitive advantage;
- serve the increasing demand for high-resolution land seismic acquisition and high-end technology, through expanded use of its UltraSeis broadband solutions, combining state of the art seismic equipment developed by Sercel, specific and fit for purpose wide azimuth geometries, patented high-productivity vibroseis technologies such as HPVA and V1 and its proprietary EmphaSeis broadband vibroseis technology combined with superior processing technologies as successfully implemented in the Middle East, North Africa and North America;
- accelerate, after initial technical successes obtained in 2012, the development of the Group's Land active and passive monitoring solutions addressing the needs as for fracturing monitoring and the production of shale gas reservoir;
- continue to improve reservoir characterization through the introduction of new technology that allows efficient high resolution acquisition on which CGG benefits from a high-end position;
- further optimize its presence in North America to better offset the seasonality effect by taking advantage of the strong dynamism of the shale plays, which will drive seismic demand and require more technology. The increased presence of major oil companies having a strong appetite for technology and stringent HSE requirements, the strong drive towards wireless and high-end vibroseis technologies as well as the development of the Group's integrated shale gas solution are real strengths for CGG in this market;
- continue to promote its 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;
- and continue to pursue its local partnership strategy.

1.1.2. Marine Seismic Acquisition

Overview

With a fleet of 16 vessels at the end of 2012, the Group provided a complete range of marine seismic 2D or 3D services, mostly in the Gulf of Mexico, in the North Sea, offshore West Africa and Brazil, as well as in the Asia Pacific region. The Group also delivered marine seismic contract data acquisition in “frontier” areas and is a pioneer in the Arctic basin, offshore Eastern Africa and in the Black Sea.

The Group provides both marine seismic contract data acquisition and multi-client surveys.

Activity description

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 vessel can perform surveys more rapidly and efficiently and acquire better resolution data.

Acquisition of marine seismic data in contract mode or in multi-client mode

In Marine acquisition, as in Land acquisition, the Group operates with two different approaches, i.e. two different commercial business models:

- The first consists of working on an exclusive contractual basis with the client. The contract generally stipulates that the contractor shall be paid according to a fixed rate such as a daily fee. The contract may protect the contractor against operational elements beyond its control, such as bad weather, or interferences with other activities carried out in the oil field. The client owns the acquired data and pays the contractor for the total cost of the project the price being fixed by the offer. Therefore, the operating income for the contractor is the difference between the sales price and the final price of the survey.
- The second consists of operating under a non-exclusive or multi-client model, with multiple clients prefunding the acquisition. In areas of intense exploration such as the Gulf of Mexico, Brazil or the North Sea, and when the local regulations are favorable, the Group invests in large and contiguous multi-client surveys. CGG has exclusive rights to license the data during a period of time which varies in function of the local regulations.

The Group proposes a license to use the data to interested companies who in return benefit from quick access to “ready to be interpreted” data at reduced costs. Multi-client data are typically used to evaluate exploration opportunities prior to a bid round for instance, or to access at reduced costs to recent high quality data once the companies have obtained exploration rights in a given block. Strict confidentiality and transferability restriction govern the use of multi-client data. For instance, future partners in a block will be obliged to license the data to be able to access it.

The costs of the multi-client surveys are capitalized in the balance sheet. The surveys are then amortized as per the the Group’s accounting policies in compliance with the industry practices and the IFRS rules. Each survey is evaluated separately following the accounting principles defined in note n°1 to 2012 final consolidated accounts.

The Group's marine multi-client library consists in 522,000 square kilometers primarily located in the Gulf of Mexico (deep water, central and western areas), in Brazil (deep water Santos basin, as well as in most of the equatorial basins up to the Amazon mouth), in the North Sea (central basin mainly) as well as in the deep waters of Angola.

The marine multi-client market is competitive with contractors frequently overlapping each other's libraries. The precise locations of the survey, the quality of the final data as well as the timing of delivery are key elements for differentiation.

Description of CGG fleet of seismic vessels

On December 31, 2012, the Group's fleet consisted of 16 vessels including 11 3D high capacity vessels (12 or more streamers), two 10 streamer 3D vessels, one 8 streamer 3D vessel and two 3D/2D vessels of lower capacity. *CGG Alizé, Oceanic Challenger, Symphony, Viking Vision, Viking Vanquish, Oceanic Endeavour, Geowave Voyager, Oceanic Champion, Oceanic Phoenix, Oceanic Vega* and *Oceanic Sirius* each of them can already deploy more than 12 streamers simultaneously.

All 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.

The fleet modernization plan is now completed and the Group has now the most up-to-date and versatile seismic vessels fleet in the industry. The *Oceanic Champion* left the shipyard as planned in the second quarter of 2012 and returned to operations where she successfully performed a BroadSeis survey in a 14 streamers configuration in the North Sea before further surveys in the North Sea as well as in the Black Sea.

In 2012, the Group continued the modernization of its fleet by implementing 2 additional complete solid seismic streamers systems as well as Nautilus streamer positioning and controlling devices onboard the *Oceanic Champion* and *Vantage* vessels. *Symphony* and *Geowave Voyager* were equipped with Sercel (SEAL 428) continuous data recording system.

At the end of her operations, the *Geowave Commander* was redelivered back to her owner in line with the objectives of a high end fleet positioning.

Maritime management of the operated fleet

As part of the performance plan, on June 27, 2011 a joint-venture agreement was signed with Eidesvik Offshore, the Norwegian shipowner, to set-up a joint company for the maritime management of ten of our 3D high capacity vessels, including the two new X-BOW vessels, *Oceanic Vega* and *Oceanic Sirius*. This joint-venture, named CGGVeritas Eidesvik Ship Management AS, is located in Bergen (Norway) and owned at 51% by Eidesvik and 49% by the Group. This joint-venture is now operating and managing shipmanagement agreements for ten ships. The incorporation of this joint-venture was accompanied by the set-up of a team of experts fully dedicated to the fleet maritime management in order to improve its performance.

Ownership status of the operated fleet

The Group owns 4 ships, co-owns 3 ships and operates the rest under the charter agreements. The Group fully owned the following 3D vessels: *Oceanic Challenger, Geowave Voyager* (since January 2011) and *Symphony*. The 2D vessel is the *Princess*.

As part of the Group's partnership strategy with local players, the *Amadeus* vessel was contributed to the "PTSC-CGGV Geophysical Survey Company Limited". She is now mostly dedicated to the Vietnamese market.

The *Pacific Finder* (formerly named *Elnusa Finder*) has been reintegrated into the Group's fleet at the end of the business activities of the joint-venture PT Elnusa-CGGVeritas Seismic.

The following table provides certain information concerning the seismic vessels operated by the Group as of December 31, 2012.

Vessel name	Building year	Upgrade year	Integration year	Ship management expiry	Extension options ⁽¹⁾	2D/3D	Maximum no. of streamers ⁽²⁾	Vessel length (m)
<i>CGG Alizé</i>	1999	n.a.	1999	March 2014	n.a.	3D	16	101
<i>Oceanic Challenger</i>	2000	2005	2005	Owned	n.a.	3D	12	91
<i>Princess</i>	1986	2001	2005	Owned	n.a.	2D	3	76
<i>Symphony</i>	1988	1999	2001	Owned	n.a.	3D	12	121
<i>Veritas Viking</i>	1998	2006	2007	December 2015	2 × 3 years + 1 × 17 months	3D	10	93
<i>Viking II</i>	1999	n.a.	2007	May 2015	n.a.	3D	8	93
<i>Viking Vanquish</i>	1999	2007	2007	November 2020	n.a.	3D	12	93
<i>Veritas Vantage</i>	2002	n.a.	2007	June 2016	n.a.	3D	10	93
<i>Viking Vision</i>	1993	2007	2007	July 2017	2 × 5 years	3D	14	105
<i>Oceanic Champion</i>	1994	2012	2009	December 2019	n.a.	3D	12/14	107
<i>Oceanic Phoenix</i>	2000	2011	2009	March 2019	10 × 1 year	3D	12/14	101
<i>Geowave Voyager</i>	2005	2009	2009	Owned	n.a.	3D	12	83
<i>Oceanic Endeavour</i>	2007	2011	2009	April 2018	2 × 5 years	3D	16	92
<i>Oceanic Vega</i>	2010	n.a.	2010	July 2022	4 × 5 years	3D	20	106
<i>Pacific Finder</i> ⁽³⁾	2011	n.a.	2011	March 2019	1 × 8 years	3D	4	68
<i>Oceanic Sirius</i>	2011	n.a.	2011	October 2023	4 × 5 years	3D	20	106

⁽¹⁾ Number of years.

⁽²⁾ Tow points.

⁽³⁾ The *Pacific Finder* (formerly named *Elnusa Finder*) has been reintegrated to CGG fleet at the end of the business activities of the joint-venture PT. Elnusa CGGVeritas Seismic. She remains under the Indonesian flag.

Notes:

* The *CGG Alizé* (in co-ownership with Louis Dreyfus Armateurs within Geomar), the *Pacific 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*, *Pacific Finder*, *Viking Vanquish*, *Veritas Vantage*, *Viking II*.

Activity of the Marine Division in 2012

Competition and market

There were 5 key actors in the marine market at the end of 2012: CGG, WesternGeco, PGS, Fugro and Polarcus. On December 31, 2012, they represented around 87% of the global supply. In 2013, as a result of the acquisition of Fugro Geoscience Division, 4 key actors will remain: CGG (including the former Fugro's fleet), WesternGeco, PGS and Polarcus.

The industry overcapacity between supply and demand which prevailed 2010 and 2011, is now starting to rebalance as only three new-built vessels of 12 streamers and plus joined the global industry fleet, bringing it to 62 vessels by end of 2012. On the other hand, demand was sustained by increasing exploration spending including a strong activity in the North Sea, in Africa and in Asia Pacific. This favourable environment translated into a substantial price increase in marine acquisition during summer 2012.

The total marine seismic activities – contract and multi-client surveys – represented US\$1,338 million representing 39% of the Group total revenue and 54% of the Services total revenue.

Contract marine seismic acquisition activity

The 3D fleet operated at 77% on exclusive marine acquisition contracts.

Total revenue of the contract marine acquisition business reached US\$ 1,009 million, up 4% year-on-year. This business represented 41% of the Services total revenue and 30% of the Group total revenue.

Marine multi-client surveys

In 2012, 23% of the utilization of the Group's 3D fleet was dedicated to acquiring multi-client surveys.

The Group focused its marine multi-client investments in its historical core areas (GOM, Brazil and the North Sea) and opened a new key position in the Angola deep waters.

In the Gulf of Mexico, the post-Macondo situation finally normalized in 2012 and the Group resumed its multi-client program with the introduction of StagSeis, the ultimate generation of Wide Azimuth technology combining multiple technical innovations. The acquisition of the IBALT survey will continue throughout 2013 and will add 13,000 square kilometers to the current Wide Azimuth coverage (52,000 square kilometers).

In Brazil the acquisition of the first BroadSeis survey was completed, adding 13,760 square kilometers of very high resolution data over under explored acreage bridging the Santos basin to the Campos basin. The current coverage in Brazil stands at more than 130,400 square kilometers.

The library in the North Sea continued to grow with the acquisition of 3,100 square kilometers targeting a new gas play in the south of the North Sea.

The Group positioned a new core area in the deep waters of Angola. A first BroadSeis survey of 4,300 square kilometers was acquired mid-2012 and a 3,000 square kilometers extension commenced early December.

The Group invested US\$302 million in marine multi-client surveys, with a prefunding level of 62%. The total revenue from marine multi-client sales was US\$329 million, corresponding to 13% of the CGG's Services segment total revenue, a 10% decrease year on year.

The marine multi-client after-sales were US\$173 million.

The net book value of the marine multi-client library at year end was US\$474 million.

Perspectives 2013

In 2012, in a more favourable environment compared to previous years, CGG maintained its market share in marine seismic acquisition while pursuing its significant investment program in order to better benefit from the buoyant market, especially for broadband surveys. On this market, the CGG Group holds a leadership position through its BroadSeis technology offering. BroadSource, its broadband marine source, launched early November 2012, is a natural complement for BroadSeis. It combines a synchronized multi-level source with processing algorithms that fit seamlessly into the BroadSeis workflow to fill the source ghost notch. This innovative approach generates the same low frequencies as a deep-towed conventional source and extends the spectrum to higher frequencies, providing better resolution and clearer images of the subsurface. Finally, CGG announced in September 2012 the acquisition of the Fugro Geoscience Division, and therefore confirmed its position as global leader in marine seismic acquisition.

Announced in 2010, the modernization program of the fleet has been achieved in 2012. The entire fleet is now equipped with the most recent data acquisition technologies and in particular with Sercel equipment.

In 2013, the Group will focus on:

- Equipment standardization for the entire fleet with BroadSeis technology. Fugro Geoteam fleet, recently acquired, is already equipped with Sercel solid sentinel streamers, thus facilitating the deployment of BroadSeis;
- The reduction of maritime maintenance contractors to 2 ship managers. Part of their remuneration is linked to availability and performance of the vessels. The rationalization process of the fleet maintenance has started in 2010 and will continue in 2013 by including Fugro's vessels, now part of CGG fleet;
- The delivery from Bourbon of the support vessel fleet to assist its seismic operations (support vessel providing seismic vessels with the requisite ancillary services including refuelling, crew change, food and equipment delivery, storage, assistance, and support during in-sea maintenance operations).

At last, in line with the objectives of high end fleet repositioning, a rationalization of the low capacity vessels from Fugro will be set up (disarmament or repositioning as source vessel).

Finally, the Group's fleet, significantly restructured and upgraded during the trough of the cycle, will be the largest and modernized within the seismic industry.

In parallel, in 2013, the Marine Business Line will strengthen its costs reductions initiatives and maximize its performance by:

- Improving support to operations to reduce maritime and seismic downtime,
- Reorganizing the supply chain,
- Increasing the vessels average speed and so their production capacity by capitalizing vessels improved propulsion capabilities.

Finally, the Group will continue implementing its strategy of commercial and technological differentiation by:

- Capitalizing on the superiority of its exclusive BroadSeis solution, especially by combining BroadSource and BroadSeis 4D technologies,
- Working closely together with the new Geology, Geophysics & Reservoir Division, to deliver clients global solutions with reduced turnaround time,
- Continuing to seek alliances with local players who are able to facilitate our access to markets that are currently closed.

In the field of offshore multi-client activities, the Group intends to capitalize upon its well positioned library of seismic data acquired recently in key areas. Investments in new multi-client programs will be increased in 2013.

Thanks to its renewed fleet, its large and recent multi-client data library, and its leading position in high technology content data processing, the Group is ideally positioned to reinforce and increase its leadership position in the industry.

1.1.3. Processing, Imaging and Reservoir

Overview

Seismic data processing operations transform seismic data acquired in the field into 2D cross-sections or 3D volumes of the earth's subsurface, which provides images and physical properties of the earth. Repeated acquisition and processing of seismic data in the same location over time, yields a time-lapse (4D) view of changes in the reservoir due to production activities. The images and rock properties generated with CGG's proprietary processing technologies, *geovation* and *Hampson-Russell* software are then interpreted by geophysicists and geologists for use by oil and gas companies in evaluating prospective areas, selecting drilling sites and better managing producing reservoirs.

The Group provides seismic data processing and reservoir services through its network of data processing centers and reservoir teams located around the world. On December 31, 2012, the Group operated 42 worldwide processing and imaging centers, including 30 international and regional centers open to all its customers, and 12 dedicated client centers.

Data Processing, Imaging & Reservoir activity

The Group processes seismic data acquired by its 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 have been a significant source of the growth in demand for the Group's data processing services. In addition, the Group reprocesses previously processed data using new techniques to improve the quality of seismic images. Demand for processing and imaging remained strong in 2012 and 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 the Group's activities, particularly for its own multi-client datasets.

The Group operates from 5 international processing centers, located in Houston, London, Singapore, Paris and Calgary, and an additional 25 regional centers open to all its customers. Therefore, The Group's customers benefit from a privileged access to the expertise of its teams around the world, as well as unequalled computing power. This is complimented by 12 dedicated centers, located within the clients' offices, which makes CGG the leader in this sector. The Group believes these dedicated centers are responsive to the trend among oil and gas companies to outsource processing work over which they want to retain intimate control. These dedicated centers enable the Group's experts to liaise directly and to work in close coordination with its clients, promoting the adoption of its processing technologies and aiding in their evolution to the specific needs of its clients.

The Group has defined a computer equipment policy that allows the Group to benefit rapidly from progress in information technology. Consequently, the quality and turnaround of product delivery is constantly increasing.

Beyond conventional processing and reprocessing, we are also increasingly involved in reservoir-applied geophysics, an activity that encompasses large integrated reservoir studies from rock property description to full reservoir simulation. This includes advanced technology studies in reservoir characterization such as stratigraphic inversion and stochastic reservoir modeling. A common project with Baker Hughes, which builds upon the strengths of each organization, will develop technologies and workflows specifically designed to address the challenges of exploiting shale reservoirs.

The Group operates visualization centers in its Houston, London and Singapore hubs which allow teams of its clients' 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 the Group to offer its expertise combined with the type of collaborative geophysical model building that enables oil companies to explore areas of complex geology such as the large sub-salt plays in the deep water Gulf of Mexico.

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

Additionally, the Group's licenses its proprietary Hampson-Russell and *geovation* processing software to companies desiring to do their own geophysical processing and interpretation. Research and Development within these commercialized technologies is continuously ongoing. Hampson-Russell's release of a much anticipated global software redesign to the market (HRS-9) along with an associated new program (LithoSI) was considered a technical success by their clients, and consequently a market success. Many elements of the second generation of *geovation* are in production mode, which is bringing the best capabilities of each of our processing systems to a common platform. Although commercialized, *geovation* retains newly developed technology for proprietary use, until market drivers favor release.

Activity of the Processing, Imaging & Reservoir Division in 2012

Competition and market

The data processing sector is dominated by CGG and WesternGeco. Market segmentation is characterized more by the level of technology and service than in the acquisition sectors, as illustrated by the existence of dedicated processing centers in the offices of some clients. The Group's computing capacities continued to increase significantly in 2012, due to the innovative use of advancements in compute technology. This progress contributed to the reduction of processing times while using more complex and more accurate algorithms, with the added benefit of reducing electrical power consumption.

The revenues relating to data Processing, Imaging and Réservoir were up at US\$478 million, a 8% increase year on year, illustrating an increased demand for high-end services and higher resolution surveys. Processing, Imaging & Reservoir accounted for 14% of total Group revenues and 19% of total Services revenues.

2013 Perspectives

The Group's position in data processing and imaging, along with the skills and reputation of its geoscientists, make us the industry benchmark in this segment, in particular after acquisition of the Fugro Geoscience Division.

The Group's strategy for the Processing, Imaging & Reservoir business is to:

- Enhance its particular competencies in advanced technologies such as depth imaging, 3D wide azimuth, broad band, multicomponent, 4D processing and reservoir characterization,
- Reinforce its close links with clients through both its open and dedicated centers,
- Leverage the natural synergies between seismic acquisition, multi-client data management and processing. An example of this is the BroadSeis technology for broadband marine seismic data, which requires the integration of Sercel recording equipment, unique acquisition technique and CGG proprietary processing techniques.

The acquisition of Fugro Geoscience Division, adding, in particular, Jason in the software area and Robertson in the area of geology and basins' knowledge, should strongly contribute to the implementation and success of the Group's strategy.

1.1.4. 2010 performance plan status

The performance plan launched at the end of 2010, aimed at significantly improving our commercial, operational and financial performance, in particular by further consolidating our excellence positions or our position as market leader in the following sectors:

- Top-of-the-range innovative onshore and offshore acquisition services and systems;
- Imaging and reservoir services; and
- Land, marine and sea-bottom data acquisition equipment.

Implementation of the 2010 performance plan: status as of December 31, 2012

Our performance plan aimed at generating a positive impact on the operating income up to US\$150 million on an annual basis. The plan was focused on:

- Cost reduction through the implementation of a new organization and the optimization of our procurement costs;
- The improvement of our operational performance especially in marine with the modernization plan of our 3D fleet;
- Commercial differentiation notably through the implementation of joint-ventures in certain key countries;
- Technological differentiation in particular through the commercialization of our new BroadSeis solution.

The plan has been fully implemented over 2011 and 2012, as scheduled:

a) Vessel upgrade plan is on schedule:

- The Oceanic Endeavour and Oceanic Phoenix vessels were upgraded in the first half of 2011 and have all returned to operations with an enhanced configuration of 12 Sentinel solid streamers and Nautilus navigation systems; the Oceanic Endeavour has subsequently successfully performed the first BroadSeis survey acquired in Wide Azimuth;
- The new X-BOW Oceanic Sirius, designed for 20 streamers, was delivered on October 3, 2011;
- The Oceanic Champion, the last of our vessels scheduled for performance upgrade, left the shipyard on March 31, 2012 and operated in the North Sea during summer 2012;
- Fleet utilization rates for 2012 were in line with our performance plan targets. The vessel availability rate for the full year 2012 was 90%, in line with expectations. This compares to 86% rate for the full year 2011. The vessel production rate was also 90% for the full year 2012, also in line with expectations. This compares to 86% rate for the full year 2011.

- b) Marine differentiation was strengthened (i) technically with more than 50 BroadSeis surveys acquired since the project was launched in 2010, including several in wide-azimuth; and (ii) commercially with the joint-venture agreement entered into with PetroVietnam Technical Services Corporation (PTSC), through the contribution of the Amadeus vessel to the joint-venture held at 51% by PTSC and 49% by our Group. In Russia, the Group entered into a commercial agreement for marine acquisition with JSC Sevmorneftegeofisika, the local seismic offshore company.
- c) The cost reduction plan was delivered.

1.2. Geophysical Equipment Segment

The Group conducts its equipment development and production operations through Sercel and its subsidiaries. Sercel is the market leader in the development and production of seismic equipment in the land and marine seismic markets. Sercel makes most of its sales to purchasers other than CGG. As of December 31, 2012, Sercel operated six seismic equipment manufacturing facilities, located in Nantes and Saint Gaudens in France, Houston and Tulsa in the United States of America, Singapore and Alfreton in England. In China, Sercel operates through Hebei Sercel-JunFeng Geophysical Prospecting Equipment Co. Ltd. ("Sercel-Junfeng"²), based in Hebei, in which Sercel has a 51% equity stake, and through Sercel-JunFeng's subsidiary Xian Sercel Petroleum Exploration Instrument Co. Ltd. ("Xian-Sercel")³. In addition, four sites in Toulouse, Les Ulis, Toulon and Brest (France) are dedicated to borehole tools (for the first two sites), marine sources and submarine acoustic instrumentation, respectively.

Description of the activity

Sercel sells its equipment and offers customer support services including training on a worldwide basis. It relates to a complete range of geophysical equipment for seismic data acquisition, including seismic recording equipment, software and seismic sources either for land (vibrators) or marine (air guns). Sercel also supplies its clients with integrated solutions.

With respect to Land equipment, the 428XL was launched on November 2005 as a successor to the 408UL system. This 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 multi-component and in high density, methods which are more and more required to obtain a high resolution image. To answer this demand, Sercel introduced the Giga Transverse technology that paves the way for one million channel count acquisition.

² *This company is governed by articles of association that detail the company's organization and the sharing of powers. In accordance with the Chinese law applicable to Hebei Sercel-JunFeng Geophysical Prospecting Equipment Co. Ltd. corporation form, the board of directors represents the supreme body. Hebei Sercel-JunFeng Geophysical Prospecting Equipment Co. Ltd. Board is composed of 9 members with 5 being appointed by Sercel, 2 by each of the shareholders holding respectively 29.04% and 19.96% of the capital. The chairman of the Board is elected among the Sercel representatives and the general manager in charge of implementing the Board decisions is elected among the Chinese partner holding a 19.96% stake in the capital. The articles of association stipulate that decisions related to modifications of the articles of association, capital increase or decrease and shares sales are subject to unanimity in accordance with Chinese law. Specific decisions as guarantee grant to banks, change of the manufacturing site or approval of annual accounts are taken with a 2/3 majority. Other decisions as approval of the annual budget, capital expenditures budget, dividend payment and appointment or dismissal of the general manager are voted at the simple majority. The articles of association do not provide for any specific provision that could have a direct impact on the financial flows within the Group.*

³ *The joint venture constituted at 60-40% respectively between BGP and Sercel has been transferred to Hebei Sercel-JunFeng Geophysical Prospecting Equipment Co. Ltd. which became the sole shareholder as from November 4, 2010.*

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. In 2012, Sercel launched a new and more compact version of the Unite to meet the increasing popularity of wireless systems.

Sercel is also a market leader for vibroseismic vehicles used as seismic source in land 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. The Nomad was designed to optimize reliability and maintenance in order to allow an intensive use on the field. Sercel also offers the Nomad 90 which is capable of exerting a peak force of 90,000 pounds and is believed to represent the heaviest vibrator on the market.

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. The acquisition of a 51% stake in Sercel-JunFeng, based in China, in 2004, reinforced the Group's manufacturing capabilities for geophone, cables and connectors, as well as its presence on the Chinese seismic market. In the fall of 2012, Sercel introduced the SG5 geophone featuring a low natural frequency.

In the down-hole domain, Sercel is offering its latest generation VSP tool, MaxiWave, which received good returns from clients. Sercel built on its diversification into the well environment and more specifically the artificial lift in acquiring Geophysical Research Corporation on January 2012.

With respect to marine equipment, the Seal system, capitalizes on the 408 architecture and electronics as well as on the latest streamer manufacturing methods. The Seal is currently the sole system with integrated electronics and now benefits from the 428 technological enhancements. In 2005, Sercel launched the Sentinel solid streamer that is the outcome of the technological synergies realized in acquisitions performed these last years. The Sentinel cables are a market standard and are used to equip a majority of new seismic vessels. The new Sentinel RD is the latest generation of the Sentinel solid streamer and offers a reduced diameter and a weight reduction.

The SeaRay is 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 allows multi-components recording owe to its DSU 3 components.

The marine range of products has been further improved with the launch of SeaProNav, a navigation software allowing the real-time positioning for streamers and Nautilus, a totally integrated system for positioning seismic streamers. These two products received a favorable reception from first users.

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

Throughout its recent history, Sercel significantly expanded its product range and increased its market share in the seismic equipment industry, by combining its strong organic growth with a dynamic strategy of external growth, focused on the acquisition of complementary businesses or lacking technology launched with the acquisitions of Geoscience Corporation in December 1999 and Mark Product in 2000. This strategy has been confirmed with the acquisition in October 2003, of Soderia S.A., a leading provider of air gun sources used mainly in marine seismic data acquisition and in 2004 with the acquisitions of a division of Thales Underwater Systems Pty Ltd. that developed and manufactured surface marine seismic acquisition

systems, particularly solid streamers, and seabed marine seismic acquisition systems, of Orca Instrumentation specialized in sub marine acoustics and of Createch in the borehole tools domain.

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. In January 2012, Sercel acquired the assets of Geophysical Research Corporation, a company specialized in downhole sensors and gauges for the oil and gas industry. On January 31, 2013, through the acquisition of Fugro Geoscience Division, De Regt, manufacturer of marine cables, also entered Sercel's business perimeter.

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 on the two Atlantic shores and in Asia-Pacific.

Activity of the Equipment Division in 2012

Sercel had a global revenue of US\$1,204 million, a 5 % increase in US dollar terms compared to 2011, representing an increase similar to the one of the equipment market.

Sercel external revenue amounted US\$954 million, an increase of 7% in US dollar terms compared to 2011, and representing 27 % of the Group's consolidated revenue in 2011.

Competition and market

Upon the Group's estimates, the worldwide demand for geophysical equipment increased by 5%. This growth was mainly driven by strong demand for land seismic equipment for high-channel count supercrews operating in the Middle East. Marine demand was decreasing with a lower number of new build vessels. Sercel's market share is estimated at around 60%.

The principal competitor for the manufacture of marine seismic equipment is Ion Geophysical Inc. For land products, main competitors are Inova (a joint venture between BGP and Ion Geophysical Inc) and Geospace Technologies Corporation. 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 customers' support services.

2013 outlook

Sercel plans to use continuous and intensive R&D efforts, combined with dedicated business acquisitions, to expand Sercel's range of seismic acquisition equipment with advanced technology. The Group estimates that the market should in 2013 remain stable with megacrews projects delays in the Middle-east impacting orders and the decrease of new-built seismic vessels, Sercel market share remaining globally stable. In addition thereto, the geophysical market has been characterized by an increasing demand for technology intensity both in land and in marine for high resolution imaging and we anticipate that this trend should continue over 2013. This should be favourable to Sercel due to its strong installed base. Therefore, based on the Group's internal assumptions related to the seismic equipment market, Sercel estimates that it should maintain its 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.

2. 2012 RESULTS: GROUP AND CGG VERITAS SA (MOTHER COMPANY)

2.1. Corporate financial statements of CGG Veritas SA

Operating revenues of CGG Veritas S.A. for the year ended December 31, 2012 were €78.1 million compared to €10.5 million for the year ended December 31, 2011. This increase is due to services provided by the Company to its subsidiaries of the Services segment.

Operating loss for the year ended December 31, 2012 amounted to €57.0 million compared to €37.2 million for the year ended December 31, 2011.

Financial income for the year ended December 31, 2012 amounted to €154.4 million compared to €569.6 million for the year ended December 31, 2011. This decrease was mainly attributable to dividends received for €153.4 million in 2012 compared to €589.4 million in 2011, of which €475 million was paid in CGGVeritas Services SA shares as part of an internal legal restructuring plan.

Extraordinary income for the year ended December 31, 2012 amounted to €13.3 million mainly due to the partial disposal of our investment in Spectrum. Extraordinary loss for the year ended December 31, 2011 amounted to €8 million was mainly due to a US\$19 million premium paid as a result of the early redemption of our US\$530 million 7½ % Senior notes due 2015.

Net income for the year ended December 31, 2012, after a tax credit of €38.9 million due to the French tax group effect, was €149.6 million compared to €557.2 million for the year ended December 31, 2011.

The shareholders' equity as of December 31, 2012 amounted to €3.0 billion compared to €2.5 billion as of December 31, 2011.

No dividends have been distributed in the last three fiscal years.

2.2. Consolidated results

Change in reporting currency

Effective January 1, 2012, we changed the presentation currency of our consolidated financial statements from the euro to the U.S. dollar to better reflect the profile of our revenues, costs and cash-flows, which are primarily generated in U.S. dollars, and hence, to better present the financial performance of the Group. As a change in presentation currency is a change of accounting policy, all comparative financial information has been restated into U.S. dollars.

The currency translation adjustment was set to nil as of January 1, 2004 on transition to IFRS and has been re-presented on the basis that the Group has reported in U.S. dollars since that date.

The functional currency of the parent company remains the euro. The currency translation adjustment resulting from the parent company is presented in other reserves.

Main restatements related to the change in the presentation currency from euro to U.S. dollar are as follows (in millions):

	Historical consolidated financial statements as of Dec. 31, 2011 in euros	Historical consolidated financial statements of Dec. 31, 2011 converted into U.S. dollars ⁽¹⁾	Restatements ⁽²⁾	Restated consolidated financial statements as of Dec. 31, 2011 in U.S. dollars
Common stock, additional paid-in capital, retained earnings and other	2,883.1	3,730.5	+102.4	3,832.9
Cumulative translation adjustment	55.8	72.2	(99.8)	(27.6)
Equity attributable to owners of CGGVeritas	2,938.9	3,802.7	+2.6	3,805.3

⁽¹⁾ Converted at the closing exchange rate of US\$ 1.2939 per euro

⁽²⁾ Differences between historical currency exchange rates and the closing rate of US\$ 1.2939 per 1 euro, including US\$(17) million translation adjustments from the parent company presented in other reserves.

Revenues

Our consolidated operating revenues for the year ended December 31, 2012 increased 7% to US\$3,410.5 million from US\$3,180.9 million for 2011.

Operating revenues for the Services segment increased 7% to US\$2,456.8 million for the year ended December 31, 2012 from US\$2,289.5 million for 2011.

Operating revenues for the Equipment segment, excluding intra-group sales, increased 7% to US\$953.7 million for the year ended December 31, 2012 from US\$891.4 million for 2011.

Operating Income (loss)

Operating income for the year ended December 31, 2012 was US\$329.1 million compared to US\$205.5 million for 2011, ie a 60% increase. Before the impact of costs related to the acquisition of the Fugro Geoscience Division and the change in trade name from CGGVeritas to CGG, operating income was US\$365.4 million for 2012.

Operating income from the Services segment for the year ended December 31, 2012 was US\$131.0 million compared to US\$8.5 million for 2011.

Operating income from the Equipments segment for the year ended December 31, 2011 was US\$380.4 million from US\$354.0 million for 2011.

Cost of financial debt

Cost of net financial debt amounted to US\$156.7 million for the year ended December 31, 2012 compared to US\$174.5 million for 2011. In 2011, we early repaid our US\$530 million 7½ % Senior Notes due 2015 and US\$508 million outstanding under our term loan B facility repaid generating the accelerated amortization of US\$22 million in issuing fees.

Other financial expenses

Other financial expenses amounted to US\$19.7 million for the year ended December 31, 2012 mainly due to a US\$12 million arrangement fee related to a commitment for bridge loan aiming at partially financing the acquisition of the Fugro Geoscience Division. Other financial income amounted to US\$0.8 million for the year ended December 31, 2011.

Income taxes

Income taxes increased to US\$98.7 million for the year ended December 31, 2012 from US\$62.5 million for 2011 mainly due to the significant increase of our profit before tax.

Equity in income of affiliates

Income from investments accounted for under the equity method amounted to US\$37.4 million for the year ended December 31, 2012 compared to US\$16.4 million for 2011. This increase was mainly attributable to Argas, our joint-venture in Saudi Arabia.

Net income

Net income for the year ended December 31, 2012 was US\$91.4 million compared to a US\$14.3 million loss for 2011.

Net income attributable to the shareholders of CGG Veritas SA was US\$74.2 million (€57.5 million) for the year ended December 31, 2012 compared to a US\$28.2 million (€20.1 million) loss for 2011.

3. COMMENTS ON THE FINANCIAL CONDITION OF THE COMPANY AND THE GROUP

Definition of EBITDAS

We define EBITDAS as earnings before interest, tax, depreciation, amortization and share-based compensation cost. Share-based compensation includes both stock options and performance shares.

EBITDAS was 1,004.9 million for the year ended December 31, 2012 compared to US\$824.4 million and US\$758.7 million for 2011 and 2010, respectively.

Liquidity and Capital Resources

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

We intend to fund our liquidity needs through cash generated by operations, senior notes and borrowings under our U.S. and French senior secured revolving credit facilities. Our U.S. revolving credit facility is for US\$79 million (undrawn as of December 31, 2012) maturing January 2014, and our French revolving credit facility is for US\$200 million (undrawn as of December 31, 2012) maturing February 2014. We have also raised funds through issuances of shares and convertible bonds and may do so in the future.

We believe that we are not subject to near-term liquidity constraints, given our liquidity available as of December 31, 2012, our cash flow generation capability and prospects, and our near-to mid-term debt repayment schedule.

Operations

Our net cash provided by operating activities was US\$920.9 million for the year ended December 31, 2012 compared to US\$789.9 million for 2011.

Before changes in working capital, net cash provided by operating activities for the year ended December 31, 2012 amounted to US\$859.6 million compared to US\$673.1 million for 2011.

Changes in working capital had a favorable impact on cash from operating activities of US\$61.3 million in 2012 compared to US\$116.8 million for 2011.

Investing Activities

Net cash used in investing activities was US\$744.6 million for the year ended December 31, 2012 compared to US\$538.5 million for 2011.

In 2012, we purchased tangible and intangible assets for US\$368.8 million, of which the upgrade of our seismic vessel *Champion*, compared to US\$365.6 million for 2011.

We also invested US\$363.8 million in non-exclusive surveys, primarily in offshore Brazil and Angola and onshore U.S. compared to US\$203.2 million in 2011. As of December 31, 2012, the net book value of our marine and land multi-client data library was US\$604.2 million compared to US\$527.3 million as of December 31, 2011.

On January 17, 2012, Sercel acquired the assets of Geophysical Research Company, LLC with a net investment of US\$52.5 million.

Financing Activities

Net cash provided by financing activities during the year ended December 31, 2012 was US\$794.8 million compared to net cash used for US\$161.9 million in 2011.

Rights offering/Share capital increase

A share capital increase through the distribution of preferential subscription rights to existing shareholders was launched on September 26, 2012 to partially fund the acquisition of the businesses of the Fugro Geoscience Division. Settlement and delivery of the new shares took place on October, 23 2012.

The final gross proceeds amounted to €413,609,320, corresponding to the issuance of 24,329,960 new shares.

Issue of bonds convertible into and/or exchangeable for new or existing shares

On November 20, 2012, we issued 11,200,995 bonds convertible into and/or exchangeable for new or existing shares of our company to be redeemed on January 1, 2019 for a total nominal amount of €360 million.

The bonds bear interest at an annual nominal rate of 1.25 %, payable semi-annually in arrears on January 1 and July 1 of each year.

We used the net proceeds of the issuance to partially fund the acquisition of the businesses of the Fugro Geoscience Division.

Net financial debt was US\$785.0 million as of December 31, 2012, US\$1,410.7 million as of December 31, 2011 and US\$1,536.3 million as of December 31, 2010. The ratio of net financial debt to equity was 17% as of December 31, 2012 (36% before impact of the Fugro transaction), 37% as of December 31, 2011 and 41% as of December 31, 2010.

“Gross financial debt” is the amount of bank overdrafts, plus current portion of financial debt, plus long-term debt, and “net financial debt” is gross financial debt less cash and cash equivalents. The following table presents a reconciliation of net financial debt to financing items of the balance sheet at end of fiscal year:

	December 31,		
	2012	2010	2009
	<i>(in millions of US dollars)</i>		
Bank overdrafts	4.2	6.0	6.1
Current portion of long-term debt	47.8	64.5	99.5
Long-term debt.....	2,253.2	1,871.6	1,879.5
Gross financial debt	2,305.2	1,942.1	1,985.1
Less cash and cash equivalents	(1,520.2)	(531.4)	(448.8)
Net financial debt.....	785.0	1,410.7	1,536.3

4. INFORMATION ON TERMS OF PAYMENT (ARTICLE D.441-4 OF THE FRENCH COMMERCIAL CODE)

As of December 31, 2012, the outstanding debt of the Company towards its suppliers amounted to €9.7 million.

The breakdown of this outstanding debt per maturity date was as follows:

- due date not exceeding 30 days : €3.4 million
- due date not exceeding 60 days: €4.5 million
- due date exceeding 60 days: €1.8 million

As of December 31, 2011, the outstanding debt of the Company towards its suppliers amounted to €5.1 million.

The breakdown of this outstanding debt per maturity date was as follows:

- due date not exceeding 30 days : €4.6 million
- due date not exceeding 60 days: €0.4 million
- due date exceeding 60 days: €0.1 million

5. RISK FACTORS

Risks factors are presented by order of importance in each category listed in paragraphs 5.1, 5.2, 5.3 and 5.4.

In accordance with article L. 823-19 of the Commercial Code, during fiscal year 2012, the Audit committee reviewed some of the significant risks of the Group.

5.1. Risks related to our business

5.1.1. *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 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 financial 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 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.

5.1.2. 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;
- 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 policy, or changes in policy, 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.

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.

5.1.3. *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, the acquisition of Wavefield in 2008 or the acquisition of Fugro Geoscience Division in 2013, 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 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.

5.1.4. *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 US\$2,415.5 million as of December 31, 2012. Goodwill is allocated to cash generating units ("CGUs") as described in note 11 to our consolidated financial statements for the year ended December 31, 2012. 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.

5.1.5. *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.

5.1.6. *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 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 US dollar against such other currencies, particularly the euro, have had in the past and will have in the future a significant effect upon our results of operations, which are now reported in US dollar. 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 December 31, 2012, we estimate our annual fixed expenses in euros to approximately €400 million and as a result, an unfavorable variation of US\$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 US\$40 million

5.1.7. *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.

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

Our marine acquisition business, with a fleet of 16 seismic vessels incurs significant fuel costs, which were approximately US\$198 million in 2012. Fuel costs can vary 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 could increase our fuel costs by approximately US\$ 25 million on our operating income.

5.1.9. 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 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.

5.1.10. 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. In addition, we 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. Although we do not have any current litigation - involving our intellectual property rights or the intellectual rights of others which may have an 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.

5.1.11. 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 reasonable 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 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.

5.1.12. 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.

5.1.13. Our failure to attract and retain qualified employees may 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.

5.1.14. 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 2009, 2010 and 2011, we recorded a net loss attributable to shareholders of €264.3 million, €54.6 million and €19 million, respectively. However, in 2007, 2008 and 2012, our net profit attributable to shareholders amounted to €245.5 million, €332.8 million and €57.5 million, respectively. There is therefore no assurance as to our profitability for the future.

5.2. Risks related to our industry

5.2.1. 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 and North Africa, 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 and market supply delays;
- Oil and gas inventory levels;
- 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 over a wide area.

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. In particular, with respect to the marine acquisition market, prices remain very dependent upon the balance between offer and demand. They can thus fluctuate slightly or negatively, even if demand increases if, at the same time, the available production capacity on the market increases with excess (which has been the case over the recent 2010-2011 period).

5.2.2. *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 terminated at the sole discretion of the client without payment of significant cancellation costs to the service 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 borne by us in connection with the contract would be covered in full pursuant to any cancellation clause.

5.2.3. *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.

5.2.4. We have taken significant measures to adapt our fleet to changes in the seismic market, and we may take adjustment measures depending on the seismic market 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 Endeavor*) and Oceanic Champion). All of these upgrades have been completed.

Further to the acquisition of Fugro Geoscience Division, we intend to keep only the four class-C vessels in line with its objective to reposition its 3D fleet towards the high-end segments. Adaptation measures should be implemented in 2013 for the Geo Barents and the Geo Atlantic vessels.

For the future, conditions in the seismic market could lead us to further adjust, if necessary, our marine acquisition capacity, which could trigger additional exceptional charges.

5.2.5. 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.

5.2.6. 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.

5.2.7. 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 2012, the U.S. government announced a five-year plan to auction new leases of mining blocks in the Gulf of Mexico, thus reassuring the oil players. After two blocks allocations in March and July 2012, the next allocation of blocks is planned for March 2013.

5.3. Risks related to our indebtedness

5.3.1. 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, 2012, our net financial debt (which we define as gross financial debt less cash and cash equivalents), total assets and shareholders' equity were US\$785.0 million (€595.0 million), US\$8,332.8 (€6,315.6 million) and US\$4,493.2 million (€3,405.5 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.

5.3.2. 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 (9½% Senior Notes due 2016, 7¼% Senior Notes due 2017 and 6½% 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 as of December 15, 2011 and December 21, 2012, 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 US\$750 million and 50% of EBITDA for such fiscal year.

Our U.S. revolving facility, as amended as of December 15, 2011 and December 11, 2012, 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

5.3.3. 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 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.

5.3.4. 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 revolving facilities and our other existing senior indebtedness limit, but do not prohibit, us and our subsidiaries from doing so. As of December 31, 2012, the US and French revolving credit facilities were undrawn, and we had long-term confirmed and undrawn credit lines amounting to US\$279 million. As of January 29, 2013, we drew €85 million under our French revolving facility.

On September 23, 2012, we signed a €700 million bridge credit facility agreement in relation with the acquisition of Fugro Geoscience Division. This credit facility was reduced to €300 million after the issue of convertible bonds in November 2012 and was not drawn on December 31, 2012, looking forward to the effective completion of the transaction. As we finally entered into a vendor loan with Fugro (as described below), the bridge credit facility agreement was cancelled on February 21, 2013.

On November 20, 2012, we issued 11,200,995 bonds convertible into and/or exchangeable for new or existing shares of our company to be redeemed on January 1, 2019 for a total nominal amount of €360 million.

On January 27, 2013, in order to accelerate the finalization of Geoscience division acquisition, Fugro NV accepted to convert a portion of the acquisition price in a vendor loan at a rate of 5.5% per annum. This vendor loan, with a maturity in 2018, will be half amortized on December 31, 2013 then for 12.5% on January 31, 2015, 2016, 2017 and 2018. It breaks down in the following terms:

- on the closing date of the Geoscience Division acquisition, January 31, 2013: an installment of €125 million was drawn;;
- on the Airborne closing Date, an installment of €100 million will be drawn.

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

5.3.5. *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.

5.3.6. *Liquidity risk*

As of December 31, 2012, we had US\$785 millions (€595 million) of net debt with US\$2,305 million (€1,747 million) financial debt (of which US\$21 million (€16 million) was bank overdrafts and accrued interest) and US\$ 1,520 million (€1,152 million) of cash and cash equivalents.

As of December 31, 2012, our financial debt consisted primarily of:

- US\$350 million outstanding principal amount of our 9½% Senior Notes due 2016, US\$400 million outstanding principal amount of our 7¾% Senior Notes due 2017 and US\$650 million of our 6½% Senior Notes due 2021;
- €360 million outstanding principal amount of our 1 ¼ convertible bonds due 2016;
- €360 million outstanding principal amount of our 1 ¼ convertible bonds due 2019;
- our US\$200 million French revolving facility not drawn as of December 31, 2012;
- our US\$79 million US revolving facility not drawn as of December 31, 2012;
- the bridge loan facility for a maximum amount of €300 million not used as of December 31, 2012;
- a total of US\$11 million (out of which US\$4 million are drawn) under various credit lines held by several of our subsidiaries.

Moreover, we launched a share capital increase through the distribution of preferential subscription rights to existing shareholders on September 26, 2012 to partially fund the acquisition of Fugro Geoscience Division. Settlement and delivery of the new shares took place on October 23, 2012. The final gross proceeds amounted to €414 million.

The amendments entered into in 2012 with respect to the French and US senior revolving facilities are described in paragraph 5.3.2.

In millions of US\$	12/31/ 2012	N+1		N+2 to N+4		N+5 and >		Total	
		Nominal	Interests	Nominal	Interests	Nominal	Interests	Nominal	Interests
Senior notes & Convertible bonds	2,172	0	118	747	342	1,425	172	2,172	632
Bank borrowings	41	15	4	26	1	0	0	41	6
Financial leases	131	16	7	26	16	89	18	131	41
Banks overdrafts	4	4	0	0	0	0	0	4	0
Derivative instruments	0	0	0	0	0	0	0	0	0
Cash	(1,520)	0	0	0	0	0	0	(1,520)	0
Total net financial liabilities	828	35	129	799	359	1,514	190	828	678

Accrued interests, IFRS adjustments and issuing premium are not included.

The Senior Notes, the French and US senior revolving facilities contain certain restrictive covenants, including covenants that require compliance with certain financial ratios. For the French and US senior revolving facilities, as of December 31, 2012, these financial ratios and tests were:

Ratio	US senior revolving facility	French senior revolving facility	12/31/2012
	Requirement	Requirement	
Total net debt to EBITDA	< or = 2.5	< or = 2.5	0.74x
EBITDA to total interest costs	> or = 3	> or = 3.50	6.90x
Net Capital Expenditures	N/A	< US\$750 million and < 50% of EBITDA	U.S.\$474 million and < 50% of EBITDA

Information related to our indebtedness and the restrictive covenants contained in our debt agreements is provided in note 13 to our consolidated financial statements for the year ended December 31, 2012.

As of December 31, 2012, our available financial resources amounted to US\$ 710 million (including cash, cash equivalents, and marketable securities). This amount did not include the bridge loan facility for a maximum amount of €300 million and US\$993 million net proceeds from financial operations dedicated to the acquisition of Fugro Geoscience Division. We consider that the risk of a default in our compliance with these covenants resulting in acceleration of our financial debt is unlikely.

We benefit from an outlook rating from Standard & Poor's and Moody's that assess the potential evolution (positive or negative) of our credit rating over time. In order to assign an outlook rating, rating agencies take into account the economic and operational evolution of the company and its industry.

Our current ratings are as follows:

- Standard & Poor's has given us a corporate rating of BB- (stable outlook since November 29, 2012) and a rating of BB for the US and French revolvers and BB- for the Senior Notes;
- Moody's has given us a corporate rating of Ba2 (under review for downgrade since September 25, 2012), and a rating of Baa3 for the US and French revolver and Ba3 for the Senior Notes.

5.3.7. Risk over Interest rates.

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.

The following table shows our variable interest rate exposure by maturity as of December 31, 2012.

<u>12/31/2012</u>	Financial assets (*)		Financial liabilities (*)		Net position before hedging		Off-balance sheet position		Net position after hedging	
	(a)	(b)	(c)=(a)-(b)	(d)	(e)=(c)+(d)					
<i>In million US dollars</i>	Fix rate	Variable rate	Fix rate	Variable rate	Fix rate	Variable rate	Fix rate	Variable rate	Fix rate	Variable rate
Overnight to 1 year	528	283	5	23	523	259	0	0	523	259
1 to 2 years	0	0	-3	29	3	-29	0	0	3	(29)
3 to 5 years	0	0	1,158	27	(1,158)	-27	0	0	(1,158)	(27)
More than 5 years	0	0	1,083	0	(1,083)	0	0	0	(1,083)	0
Total	528	283	2,243	80	(1,715)	203	0	0	(1,715)	203

(*) Excluding bank overdrafts and accrued interest but including employee profit-sharing

As of December 31, 2012, our variable-rate assets (net of liabilities) maturing in less than one year totalled US\$259 million.

The following table shows our variable interest rate exposure over our financial assets and liabilities:

<i>In million US dollars</i>	2012	
	Impact on result before tax	Impact on shareholders' equity before tax
Impact of an interest rate variation of +0.2 %	0.4	0.4
Impact of an interest rate variation of -0.2%	(0.4)	(0.4)

The sensitivity analysis is based on a net exposure of US\$203 million.

Our variable interest rate indebtedness carried an average interest rate of 3.3% in 2012, and our investments and other financial assets earned interest at an average rate of 0.2 %.

5.4. Other financial risks

5.4.1. *Foreign exchange rate exposure as of December 31, 2012*

The following table shows our exchange rate exposure as of December 31, 2012.

31/12/2012	Converted in millions of EUR⁽¹⁾
Assets.....	<u>1,159.1</u>
Liabilities.....	<u>1,142.1</u>
Net position before hedging.....	<u>17.0</u>
Off-balance sheet positions.....	<u>(19.9)</u>
Net position after hedging.....	<u>(2.9)</u>

⁽¹⁾ *US\$-denominated assets and liabilities in the entities whose functional currency is the euro*

31/12/2012	Converted in millions of US\$⁽²⁾
Assets.....	<u>486,1</u>
Liabilities.....	<u>489,0</u>
Net position before hedging.....	<u>(2,9)</u>
Off-balance sheet positions.....	<u>0,0</u>
Net position after hedging.....	<u>(2,9)</u>

⁽²⁾ *Euro-denominated assets and liabilities in the entities whose functional currency is the US\$-*

Our net foreign-exchange exposure is principally linked / related to the Euro. We seek to reduce our foreign-exchange position by selling our future receivables as soon as they enter the backlog and taking out dollar-denominated loans supported by long-term assets. Although we attempt to reduce the risks associated with exchange rate fluctuations, we cannot assure you that fluctuations in the values of the currencies in which we operate will not materially adversely affect our future results of operations. Our annual fixed expenses in euros are equal to approximately €400 million and as a consequence, an unfavorable variation of US\$0.1 in the average yearly exchange rate between the US dollar and the euro would reduce our operating income and our shareholders' equity by approximately US\$40 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 a non-cash asset is not the same as the currency used for taxation purposes.

5.4.2. Risks related to certain of our shareholdings and other financial instruments.

Our investment policy does not authorize investments in the shares of other companies. Any transactions involving our own shares are decided by management in accordance with the applicable regulations.

As of December 31, 2012, we owned 800,000 of our own shares, worth US\$20.6 million. A 10% fall in the price of these treasury shares would reduce shareholders' equity by US\$.2.1 million, but would have no impact on earnings

	<u>At fair value</u>	<u>Available for sales</u>	<u>Held to maturity</u>	<u>Derivatives</u>	<u>Total</u>
31/12/2012					
Shares	US\$20.6 million	—	—	—	US\$20.6 million
Total	US\$20.6 million	—	—	—	US\$20.6 million

	<u>Impact on result before taxes</u>		<u>Impact on shareholders' equity before taxes</u>	
31/12/2012	<u>Increase of 10 %</u>	<u>Decrease of 10 %</u>	<u>Increase of 10 %</u>	<u>Decrease of 10 %</u>
Shares	N/A	N/A	—	US\$2.1 million
Total	N/A	N/A	—	US\$2.1 million

Besides, as of December 31, 2012, we owned a 10 % minority interest in the share-capital of Spectrum ASA, a Norwegian company listed on the Oslo Stock Exchange, and recorded on our balance sheet as of December 31, 2012 for a value of US\$12.4 million. Based on the share market price as of December 31, 2012, the value of our interest in Spectrum ASA amounted to US\$23.9 million.

5.4.3. Risk relating to the current financial crisis

The current situation in the credit and capital markets is likely to have a significant adverse impact on industrial and commercial performance and the solvency of many companies in general, which may affect some of our customers and suppliers. As a result, the current economic climate may have an adverse impact on our business if customers cancel orders or delay or default on payment, or if suppliers fail to provide goods and services as agreed.

To deal with these risks as effectively as possible,

- We are limiting customer risk by taking a selective approach with our customers (including looking at their solvency) in our services business and by using letters of credit in our equipment business; and
- We, and Sercel in particular, have adopted a highly selective policy regarding suppliers, aimed at keeping exposure to any one supplier within prudent limits.

6. INFORMATION ON THE UTILIZATION OF FINANCIAL INSTRUMENTS

As mentioned in paragraph 5.1.6. above, as that the Group derives a substantial amount of its revenues from sales internationally, we are subject to risks relating to fluctuations in currency exchange rates.

In the years ended December 31, 2012 and December 31, 2011, more than 80 % of our operating revenues and, to a lesser extent, operating expenses were denominated in currencies other than euros. These included U.S. dollars and, to a limited portion, other non-Euro Western European currencies, principally British pounds and Norwegian kroner. In addition, a significant portion of our revenues that were invoiced in euros related to contracts that were effectively priced in US dollars, as the US 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. For example, charter costs for our seismic 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 France and Europe.

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. At December 31, 2012 and 2011, our total outstanding long-term debt denominated in US dollars was US\$1,431 million and US\$1,465 million, respectively, representing 63% and 76%, of our total financial debt outstanding at such dates.

In addition, to be protected against the reduction in value of future foreign currency cash flows, we follow a policy of selling US dollars forward at average contract maturity dates that we attempt to match with future net U.S. dollar cash flows (revenues less costs in US dollars) expected from firm contract commitments.

As of December 31, 2012 and 2011, we had US\$43 million and US\$158 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.

7. RESEARCH & DEVELOPMENT (« R&D »)

The consolidated R&D expenses for the Group amounted to US\$135 million in 2012, namely 4.0% of the Group's sales revenue. This investment, which has strongly increased from the level of 2011, demonstrates the ongoing intent of the Group to accentuate its difference with respect to the competition in our focus on high technology content in a widely diversified spectrum of services.

Innovation is not only embedded in the Group's Divisions but is also found in the technologically creative approaches that result in integrated solutions with a high level of added value, for both the Group and its clients. The implementation of this new policy is shown in the agreement signed at the North American convention in Las Vegas (Society of Exploration Geophysicists, SEG) in November 2012 with Saudi Aramco for the development of autonomous nodes (SpiceRack) designed to explore the sea bottom. In addition, a technical cooperation agreement was signed with Baker Hughes that reinforces the Group's activity in the field of well seismic.

Marine Acquisition

With approximately 50 BroadSeis seismic surveys already carried out, the Group is positioned as the clear leader for this broadband seismic technology.

An important step change has been marked in November 2012 with the official kick-off during the annual SEG convention of a complete broadband solution that includes a new seismic source. The combination of BroadSeis and BroadSource allows us to obtain subsurface images of an unequaled level of resolution over a six-octave frequency range. The most remarkable part of this achievement is the restitution of very low frequencies (less than 5 Hz) that provide essential information, not only for the illuminating of the deepest targets but also for characterizing hydrocarbon reservoirs based on seismic data. At the 2012 year end, three commercial projects using the BroadSource source were completed.

This technological success projects the Group to the next level in the broadband seismic market segment by increasing its lead on its direct competitors and rendering the segment inaccessible for those actors who do not have the capacity to develop such acquisition technology.

The vessel upgrade program was completed at the end of 2012. Thanks to this program, the entire Group's fleet is capable of performing BroadSeis seismic acquisition surveys.

Another noteworthy innovation in 2012 has placed CGG directly at the top as worldwide leader: the StagSeis acquisition method that allows for the acquiring of seismic data with very long offsets, of up to 20 km, with very dense azimuthal coverage. This technique is key to the prospection of extremely complex geological basins, and in particular, salt basins such as those in the Gulf of Mexico and offshore West Africa and Brazil. This technology allows access to high-potential zones for new hydrocarbon resources.

StagSeis can be combined with BroadSeis to offer imaging of the highest level of definition currently available on the market.

The investment strategy for sea bottom acquisition nodes was rewarded with the first commercial contract (for 1,000 nodes and signed the last quarter of 2012) in the North Sea for the Danish company Maersk.

The installation of a permanent monitoring system under the Ekofisk platform in the North Sea for the oil company, ConocoPhillips, met with immediate success when the final seismic data was delivered just three weeks after the end of the acquisition survey. Data was recorded with sensors using the Optoplan fiber optic technology; Optoplan is a Sercel company. The seismic data processing schedule that was initially estimated at three months was significantly shortened to a three-week period without compromising the data integrity or quality. Based on these initial results, ConocoPhillips decided to extend their contract for five additional years.

Land acquisition

With the deployment of EmphaSeis technology (wide frequency range) for all CGG land missions, in 2012 the Group reaped the benefits of research through the UltraSeis program and the signing of a four-year contract with Petroleum Development of Oman for a "super crew" of 25,000 seismic channels. The UltraSeis project capitalized on the preceding years' efforts and allowed the Company to fully deploy the broadband technology in the "super crew" missions. The last-generation vibrator trucks, Sercel Nomad T90, were deployed for the first time worldwide.

In response to the highly dynamic North American shale gas and oil market sector and the increasingly stringent environmental constraints, 30,000 Sercel Unite receivers were deployed. These cable-free, autonomous recording units allow for the recording of seismic waves in environmentally sensitive zones. Small-sized, impulsive sources were developed by the Group to reach those zones inaccessible to vibrator trucks. These new sources were successfully deployed and approved by the Group's clients who recognized the quality of the equipment, its environmental-friendliness, and the quality of the resulting seismic data.

Development work related to the active monitoring systems such as SeisMovie continued for the two ongoing projects. The Shell Schoonebeek project for a heavy oil field (entailing monitoring of the steam injection limit) allowed the project team to provide an explanation for the lack of production of one of the wells. As a result, the study was extended for a larger part of the field. In Saudi Arabia, a key project for the national company, Saudi Aramco, to investigate deep reservoirs in geologically complex carbonate reservoirs currently motivates development of new sources and receivers adapted to this geology.

In parallel with the active systems, two so-called "passive" studies were carried out in the U.S. to monitor the microseismic activity generated by hydraulic fracturation operations for non-conventional reservoirs.

Processing, Imaging & Reservoir

To provide even more detailed images from seismic data acquired in complex geological zones, new migration algorithms (Reverse Time Migration) take into account the anisotropic characteristics of rocks with enhanced precision (orthorhombic anisotropy). The resulting equations to solve now contain nine parameters where there were only five before!

This increased complexity, as well as an increased volume of seismic data and the continuous reduction of processing time, has led efforts to push even further computing center performance levels. Thanks to the immersion of graphic processors (GPUs) in cooling basins, it has been possible to increase the internal clock speed (over-clocking) while maintaining the reliability of the equipment, and reducing the energy costs for the cooling of the machine room by air conditioning systems. This solution provides both a financial savings in operating costs as well as a reduced carbon footprint for the Group.

Equipment

In the area of equipment, the need for Sercel to maintain high level research and development is justified by the high-tech equipment seismic incorporate many advanced technologies such as wireless technology, broad-band seismic, miniaturized electronics but also optical or acoustic. Mature industrial systems Nautilus Controller (lateral and depth streamers) and SeaProNav (Integrated Navigation System) are now the industry standard for the equipment of the Group's fleet. A new version of Sentinel solid streamers was launched. Called RD, for Reduced Diameter, this version reduces the drag of the listening device and thus reduces fuel consumption. There are a certain number of other benefits, such as a weight down by 15% compared to the "classic" and a smaller footprint on the rear deck boats with smaller diameter winches.

Sercel has also put on the market in 2012 the latest generation of products for land acquisition, including new geophones SG-5 (natural frequency of 5 Hz). This new sensor provides output sensitivity equivalent to an array of geophones while allowing signal recording frequency as low as 5 Hz. This is an excellent addition to the broad band acquisition chain and an element of choice for the micro-seismic studies which are increasingly conducted for shale gas development and reservoir monitoring.

Also in equipment related to land acquisition, we find the cable less sensors with integrated GPS and measuring the orientation of the 3-axis sensors (tilt omni-3C) and azimuthal orientation. Field operations are faster and less prone to human error (identification stakes, sensor planting, vertical and azimuthal orientation).

8. HEALTH, SAFETY, SECURITY, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

The Group is committed to Health, Safety, Security, Environment and Sustainable Development performance through a balanced approach to economic development, social progress and responsible environmental management. This allows the Group to contribute to society's access to energy today while preserving future generations' ability to meet their own needs.

8.1. Management system

The Group has a structured approach to Health, Safety, Security and Environment, built on our HSE management system. The HSE management system is consistent with the Oil & Gas Producers ("OGP") Guidelines for the Development and Application of Health, Safety and Environment management systems which has become a de facto industry standard. The HSE management system is implemented across our activities; it has a wide scope including the health, safety and security of our permanent employees, our seasonal employees and our sub-contractors in our prevailing influence working on our projects, as well as the environmental impact of all of our projects and facilities.

The Group's Senior Management plays a key role in establishing the environment in which the HSE management system works. Our leadership is visible on HSE, establishing the tone at the top, establishing clear expectations for HSE performance, communicating regularly on HSE, monitoring performance throughout the year and finally conducting periodic formal reviews, directing change where necessary.

Expectations in HSE are established by the Group's Chief Executive Officer in the HSE Policy, the Health & Wellness Policy, the Security Policy, the Environment Policy and the Sustainable Development Policy. These policies are available to all employees through the intranet and are widely communicated and displayed around the world at our facilities and operations. Policies are supported by annual objectives established by the Chief Executive Officer. These objectives are cascaded down through the organization to assure that at each level of the organization there is clarity of performance expectations.

At the core of the HSE management system is risk management. We take a structured approach to identifying, assessing and controlling risks based on a common methodology and a common risk matrix worldwide. Risk assessments are conducted for each project or each permanent facility. Risk assessments integrate our historical incident databases as well as industry data from the International Association of Geophysical Contractors ("IAGC") shared incident database going back several decades.

We believe that the management of health, safety, security and environmental risks requires rapid and transparent reporting. We have developed robust reporting systems to assure that incidents around the world are captured, made visible all the way up the management chain and recorded to help us analyze and improve our performance. With few exceptions, incidents around the world are reported and visible to management within 24 hours.

A strong audit program is in place to verify that our HSE policies and key processes are in place and being followed across our activities. Audits are supplemented by operational cross-audits and inspections at the project and facility level. In 2012, HSE audits were conducted in each Division as follows: Marine 26, Land 18, Processing, Imaging & Réservoir ("PIR") 7 and Equipment 94 for a total of 145 HSE audits. These were supplemented by over 110,000 local inspections.

As a final element in our HSE management system, management review is implemented at the Division, Executive Committee and Board of Directors levels to assure the good functioning of the system, to identify areas of improvement and corrective actions and finally to assure that adequate resources are available for good performance.

8.2. Issues critical to the Group's sustainable performance

To the Group, sustainability is first of all the ability to successfully deliver geophysical services and provide geophysical products to the market in the long-term while at the same time caring for and protecting our employees, the communities granting us the privilege to operate and the environment.

In 2012, the Group took a fresh look at what matters the most to achieve a sustainable performance. We have used both the Global Reporting Initiative ("GRI") and the French Grenelle II legislation as benchmarks to conduct an extensive survey - called a materiality analysis - identifying and prioritizing sustainability issues⁴. This analysis strived to determine what themes are meaningful to both the company and its stakeholders, enabling the Group to focus its efforts on the most salient sustainability issues. Given that CGG is a people company relying on technology developments, this analysis also identified which themes bear a significant potential for future innovation.

The methodology consisted of a broad-based internal and external stakeholder consultation. Thirty employees including the entire Executive Committee, elected employee representatives and representatives of the younger generation from all Divisions and geographical locations were interviewed. In addition to that, a consultancy gathered the perspective of a panel of external stakeholders including clients, investors, an NGO and the IAGC.

8.3. HSE

8.3.1. Safety

Our HSE management system integrates all of the necessary aspects of accident prevention and the protection of our personnel and sub-contractors; our HSE program is built around the conviction that all accidents are preventable.

Through the identification of high risk activities and through systematic risk assessments, we determine the controls necessary to manage these risks; these controls include procedures, work instructions, risk specific training, job safety analyses and daily HSE meetings in the field. We monitor the implementation of these controls through management supervision, inspections and task observations. We drive our safety program through a combination of these controls, monitoring activities and through a culture of line management and individual responsibility.

In order to continuously improve our performance, we focused particularly in 2012 on two of our major risks, road transport and helicopter operations, on behavior, on HSE training, and on rigorous audit and inspection.

Recognizing that road transport remains our highest risk area, we continued the transport program, focusing on driver competency. Through these efforts and the use of In Vehicle Monitoring systems (IVMS), Speed Limiting Devices (SLDs), Roll-over Protection and permanent on site defensive driver trainers on our crews, our Motor Vehicle Crash Rate continued to decline. In 2012, drivers on our operations drove over 35,000,000 kms.

⁴ The GRI provides a broad and detailed definition of sustainable development, encompassing governance, supply chain, product stewardship, environmental, social and community issues. The Grenelle 2 defines environmental and social reporting obligations. A total of 42 qualitative themes are expected to be reported unless the company can demonstrate that they do not apply to the nature and scope of its activities.

	MVC Rate ⁵
2010	0,92
2011	0,84
2012	0,45

We report with regret the death of two subcontracted personnel in the crash of a helicopter while operating over the Gabonese forest on a seismic project. Following the helicopter accident in Gabon, early 2012, we reviewed and updated our standards and procedures related to operations with helicopter support. Our helicopter audit and inspection program, managed by in-house aviation experts, further strengthened our program.

Individual risk awareness and individual responsibility are essential elements of our HSE Management System. Our behavioral program “Rules to Live By” and “Things We All Must Know” remains in force. This program, focused on our major safety risks, is deployed across all activities and various languages. These rules are supported by clear procedures, a consequence management program and visible signage for worksites.

HSE training programs are delivered across CGG at all sites, at CGG University facilities and in the field. Focused programs were launched in 2012 to strengthen risk management in the areas of support vessels management, offshore crane use, and manual lifting and handling. In 2012, over 128,000 hours of HSE training were delivered in the Group.

We measure safety performance through the frequency of accidents with injuries. These indicators include both the Group’s permanent and seasonal employees as well as sub-contractors in our prevailing influence.

	Lost Time Incident Frequency ⁶ (« LTIF »)	Total Recordable Case Frequency (« TRCF ») ⁷	Seriousness Rate	Partial or Permanent Disability Cases	Hours (Million)
2010	0.42	3.06	0.0133	2	76.6
2011	0.44	3.18	0.0102	1	79.9
2012	0.46	2.76	0.0112	0	72.1

In 2012, we experienced a decrease in the Total Recordable Case Frequency of our accidents while our Lost Time Incident Frequency remained essentially flat. The frequency of High Potential HSE incidents (potentially fatal incidents including near misses), which are followed on a global basis, showed a steady decrease for the second consecutive year.

The Group continues to play an active role in the IAGC HSE committee and participates in a number of OGP workgroups.

⁵ Number of motor vehicle crashes (according to OGP’s definitions in the 365 report) per million of kilometers driven.

⁶ Lost Time Incident Frequency: Number of Lost Time Injuries and Fatalities recorded per million exposure hours.

⁷ Total Recordable Case Frequency: Number of recordable cases (fatalities, lost time incident, restricted work case, medical treatment case) per million exposure hours.

8.3.2. Health

The Health sub-system in the the Group's HSE management system allows us to define health related performance criteria and analyze health risks in our operations. The Group has a robust health program worldwide for its personnel, backed up by local health insurance programs and cross-national programs for its expatriate and field personnel. We also must meet the challenge of providing emergency medical support to our operations, whether offshore or onshore, even in the most remote environments. A process is in place to assess risks and medical resources needed by our operations.

Emergency response is addressed in project plans and is built up as required from first aiders in the field to full medical clinics for large remote operations. Our vessels are staffed with doctors who benefit from remote specialist support. Our project plans also address medical evacuation (Medevac) and the required resources, often helicopter support. For serious injuries or illnesses which require repatriation, we are supported by a repatriation service provider which provides global service.

Each year we initiate projects to improve the understanding of health risks in our operations or to understand health exposure in communities in which we operate. In 2012, we were able to conduct an analysis of the first data set from the occupational health program put in place for our prospector staff and plan to continue to build our knowledge through this data over the next years. In collaboration with international experts, we developed in 2012 a malaria prevention program in Indonesia which focused on the impact and evaluation of exposure risk for both expatriate and local populations.

According to reporting requirements of the French regulatory framework for occupational diseases, we have recorded one occupational illness in 2012 in France, against zero cases in 2011.

8.3.3. Security

Our security system relies on prevention and deterrence. An intelligence system providing regular updates allows assessing the security risk in maritime piracy and potentially unstable areas onshore. Projects in these areas are reviewed at the highest level. Security experts provide the support for this evaluation.

Personnel receive security information tailored to their country of destination. When necessary, they are integrated in the local security plan. Audits and drills are conducted to measure the efficiency of such plans.

Events linked to the Arab Spring required the implementation of cautionary security measures in our operations in North Africa and Middle East through the update of our Security Plans set up in countries rated at high risk levels.

In 2012 we noticed a decrease of maritime piracy in the Indian Ocean that allowed a reduction in the extent of the High Risk area in that region; this is not yet the case for the Gulf of Guinea.

8.3.4. Environment

Environmental Management

The objective to conduct activities while at the same time preserving the natural environment is stated at highest level in the Group's environment policy. The environmental management specifics are detailed in a general instruction. Our environmental stewardship is more generally embedded in the Group's HSE management system. Line management is supported and advised by a community of 130 HSE managers and field advisors, dedicated Environmental Supervisors in Land and Marine and a Group Environmental Manager.

At project level, the concern for the environment starts at the tender stage. Clients often provide an Environmental Impact Assessment (“EIA”) for the area of work; we then work with the client to develop a corresponding Environmental Management Plan. Project risk assessments encompass an environmental section in which mitigation measures are set to alleviate or minimize the risk of environmental disturbance.

In 2012, the HSE field training delivered to employees and subcontractors put more emphasis on environmental management. Adjustments were also made to the 3 and 5 day HSE-MS training delivered to HSE Advisors, HSE Managers and line management at CGG University in Singapore, Bangkok, Houston, Calgary, Bergen, Nantes, Massy and Rio. The raised awareness and expertise relating to environmental issues was confirmed in the HSE-MS audit results analyzed throughout the year.

PIR centers in Crawley and Redhill (UK) confirmed ISO 14001 certification. Sercel Saint-Gaudens (France) was the Group’s third site to receive ISO 14001 certification. The value of these certified programs in improving performance will be evaluated to determine whether they should be expanded.

Footprint minimization of products

Footprint, in other words the impact on fauna, flora and soils, is the highest environmental concern to the Group. We believe that there is a high potential for continued innovation in this area.

Sercel takes environmental considerations into account from the Product Development Charter stage. This ecoconception approach defines the environmental objectives of the product, the impact of its use in the field and product composition and specifications. The most prominent and recent illustration is a new streamer generation called the Sentinel RD, which guarantees the same outstanding operational performance and quality of data of its predecessor (Sentinel, launched in 2006) with a reduced diameter. The Sentinel RD lowers cable drag by 7%, allowing seismic vessels to lessen fuel consumption during operations. The 15% weight reduction also lowers shipping costs and associated greenhouse gases. In conjunction with the all-in-one Nautilus streamer acoustics and positioning system, the Sercel marine seismic portfolio significantly reduces in-fill and thereby the overall survey time and energy intensity.

The Marine fleet modernization continued as per plan; this modernization makes the fleet more efficient. Following the *Oceanic Champion’s* upgrade in early 2012, the thrusters and shaft lines of the *Oceanic Endeavour* have been changed. The vessel’s new propulsion directly translates into reduced fuel consumption.

The Land Division introduced in 2012 five new vessels that were deployed in environmentally-sensitive operations in shallow water Alaska. Pollution prevention specifications had been agreed upon with the shipyard so as to guarantee a propulsion compliant with the US Environmental Protection Agency (“EPA”) Tier II standard as well as overflow and containment systems for oil and compressors. Hydraulic systems on these vessels were operated with biodegradable oil. Tailored waste management systems allowed the Group to operate through the season applying a zero discharge overboard policy. The *Resolution* - largest vessel among these shallow water new builds - received the Cleanship notation from BureauVeritas.

The PIR Division continues to reduce its carbon footprint by adopting breakthrough solutions such as evaporative cooling and oil cooling of its major data centers (further details in energy section below). The early adoption of the oil cooling technology by the Group has enhanced Original Equipment Manufacturers’ testing and development of adapted products which are less material and energy intensive.

Footprint minimization of services

In Land acquisition, our main footprint is caused by line clearing and the construction of helipads and drop zones. In areas presenting a risk of fauna disturbance, third-party biologists scout the survey area prior to operations and where necessary displace lines so as to avoid direct interaction with vulnerable species, among others protected birds, ungulates, elephants, turtles.

The width of seismic lines has greatly evolved over last 20 years, from 8 meters wide lines that were in the past to what is now commonly referred to as low impact seismic. Typical receiver lines are 1.75 meter wide while source lines range between 2.5 to 5.5 meters. In tropical environments where vibrators cannot be utilized, lines are cleared to a bare minimum for advance crews to safely pass through the dense vegetation.

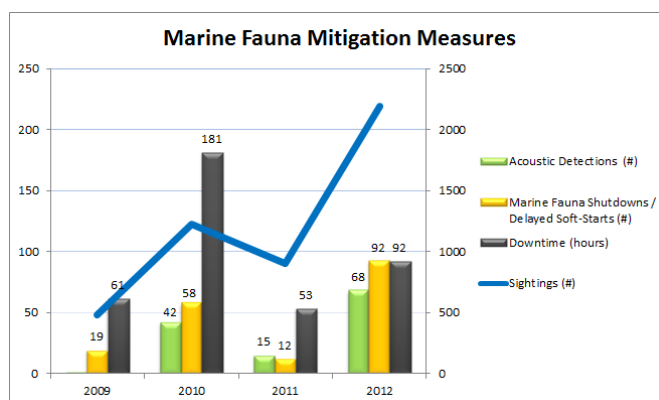
When surveys end, timber damage assessments and decommissioning reports inform client and authorities about the surface that had to be cut.

The concern over the potential impact of man-made sound on marine life keeps rising with ocean industrialization.

The geophysical industry’s longstanding commitment is that operations should not have a significant effect on marine fauna. Preventative and mitigation measures have been implemented for more than a decade on marine surveys. Onboard vessels, teams of marine mammal observers (“MMOs”) insure compliance with applicable regulations stipulated by the country in which we operate. In areas not governed by specific regulations, the Group follows IAGC’s recommended mitigation measures for cetaceans issued in June 2011.

Soft-starts are used as a standard mitigation measure to warn marine mammals and sea turtles of our presence before surveying begins, allowing the animal to leave the immediate vicinity of our operation prior to our vessels reaching full power. After a risk assessment and depending on the applicable regulation, MMOs monitor a 100 to 3,000 meters exclusion zone around the source array.

In 2012, single or groups of marine mammals and sea turtles were sighted about 2,200 times during our surveys, in 96% of the cases outside of the exclusion zone. 26 delayed soft-starts, 14 power downs and 52 shutdowns were observed, leading to 92 hours of downtime.



Fostering Research & Development on Sound and Marine Life

As a member of the IAGC, the Group supports the Joint Industry Project (“JIP”) *Sound and Marine Life* addressing priority knowledge gaps and research needs to better evaluate and mitigate the potential impact of man-made sound on marine animals. This ambitious program has awarded US\$28 million of research grants focusing on:

- Sound source characterization and propagation
- Physiological effects (auditory and non-auditory)
- Behavioral reactions and biologically-significant effects
- Mitigation and monitoring
- Research tools

Passive Acoustic Monitoring (“PAM”) was an early JIP product. As it holds promise to help industry better detect the presence of marine mammals in low visibility conditions, the Group is engaged in field testing to enhance this technology and better adapt it to operational constraints. A comprehensive trial was conducted onboard the Oceanic Phoenix in the Santos basin in Brazil from end of December 2011 to July 2012. Its results were communicated on an ongoing basis to the Brazilian Ministry of the Environment (“IBAMA”), which is looking forward to better understanding PAM capabilities before mandating it in future regulations.

The Group participates in international regulatory and scientific workshops⁸ and actively contributes to sound and marine life workgroups such as those of the IAGC and the Cluster Maritime Français (“CMF”).

Environmental Incidents

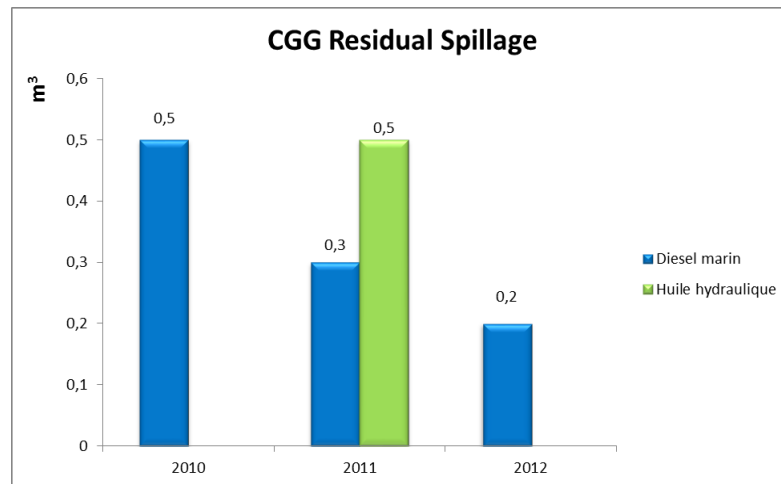
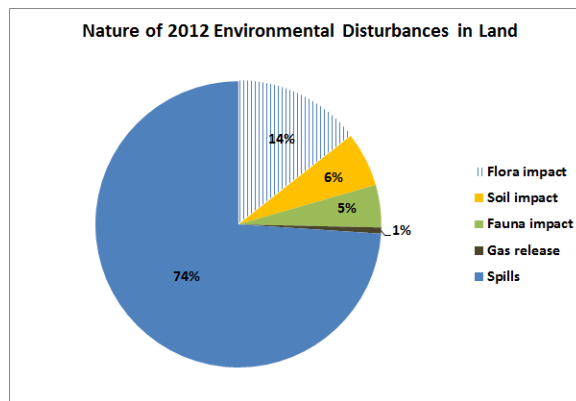
Site or project-specific Emergency Response Plans (“ERP”) are designed to deal with a wide range of possible emergency scenarios. Drills are conducted regularly. Every environmental incident or near miss is recorded and rated on its risk level, providing a basis for analysis and triggering corrective actions at field level and communication across other operations in HSE Weekly meetings.

The environmental disturbance frequency measures the number of recordable environmental incidents against a million exposure hours. Generally, environmental impacts in our operations are very limited; any spill exceeding 0.2 m³ and other types of harmful impacts on the natural environment (such as ruts, fires etc.) are considered as recordable.

In 2012, the PIR, Marine and Equipment Divisions achieved a zero environmental disturbance frequency. The Land Division experienced a frequency rate of 0.11 through the following incidents:

- A significant disturbance occurred with 5,000 Liters of diesel oil spilled to the snow and soil in the NorthWestern Territories (Canada) while being transported on sleighs to the camp. This High Potential Incident triggered a thorough investigation. Action points were reviewed by both Division and Group Management. The learning were immediately shared among the crews and taken into account in the preparation of the next season. As for mitigating the pollution, 250 m³ of contaminated snow and soil have been excavated and bioremediated locally over the course of nine months. In between, the hole was filled in with another locally bioremediated soil.
- A tank overflow during bunkering on an Ocean Bottom Cable (“OBC”) boat in Malaysia led to 200 liters of diesel spilled at sea.
- Creek bed and banks were damaged on a Land seismic project. The ruts on wetland were then filled in and seeded with wetland seed approved by local US environmental protection authorities.
- Motorized vegetation cutters entered by mistake a regulatory 100m buffer zone around a lake in Canada.
- A fire burned 0.2 square kilmoeters of privately-owned forest close to contract drillers operating in the USA. The Group’s ERP enabled helicopters to rapidly extinguish the fire with water buckets. The fire cause is still undetermined.

⁸ - Arctic Open Water Meeting organized by the US National Marine Fisheries Service (NMFS)
- Effects of Noise on Fish organized by the Bureau of Ocean Energy Management (BOEM)
- Sound and Marine Mammals, organized by the Cluster Maritime Français (CMF)
- Second Programme Review Meeting of the Joint Industry Programme E&P Sound and Marine Life
- Mitigation and Monitoring Workshop organized by the Bureau of Ocean Energy Management (BOEM)



Note: accounts for all Divisions' spills above 0,2 m³ that could not be contained or remediated

Energy consumption and emissions

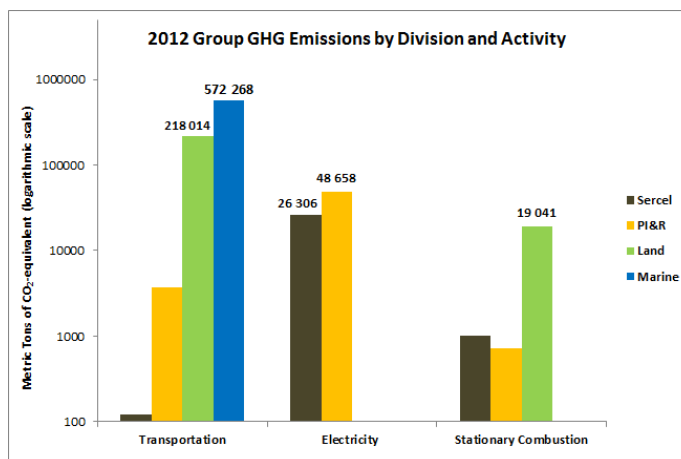
Meeting our high-intensity computing demand while effectively managing our overall power usage is an important challenge. The Power Usage Effectiveness (“PUE”), a measurement of the total energy of the data center divided by the IT energy consumption⁹, remains one of the key performance indicators in PIR Data Centers. In 2012, the average PUE for our major data centers was of 1.4 (against 1.5 in 2011) with some centers reaching a PUE of 1.1 and below thanks to breakthrough technologies dramatically reducing the energy needed to cool the systems (which can typically represent up to 40% of the infrastructure power needs). The PIR Division will continue in 2013 to research and deploy specific projects to improve data centers’ energy efficiency.

The Group’s fleet uses high-quality Marine Diesel Oil (“MDO”) bearing significant environmental advantages against the Heavy Fuel Oil (“HFO”) used in most of the ocean industry. In 2012, Marine’s fuel consumption was distributed between 94% of MDO and 6% of HFO. Given that a seismic mother vessel burns from 35 to 45 m³ of fuel per day, the Group’s Maritime Team as well as its joint-venture maritime partners analyze all parameters affecting fuel consumption in and around production (transit, mobilization) so as to optimize it.

⁹ CGG calculates the PUE using Energy Star, Recommendations For Measuring and Reporting Overall Data Center Efficiency Version 2 - Measuring PUE for Data Centers, May 2011.

Marine fuel consumption efficiency is measured taking into account the quantity of linear seismic data acquired per cubic meter of fuel consumed (CMP-km/m³). In 2011, the fleet had improved its fuel efficiency by attaining 44,6 CMP-km/m³ against 41,5 in 2010. In 2012, the fuel consumption efficiency stayed at a level of 44 CMP-km/m³. Taking advantage of the sophistication IT, we now are in a position to calculate this indicator taking out the time spent in transit, in the shipyard and at port calls. Other programs are being designed by our Maritime partners to improve fuel efficiency during transit.

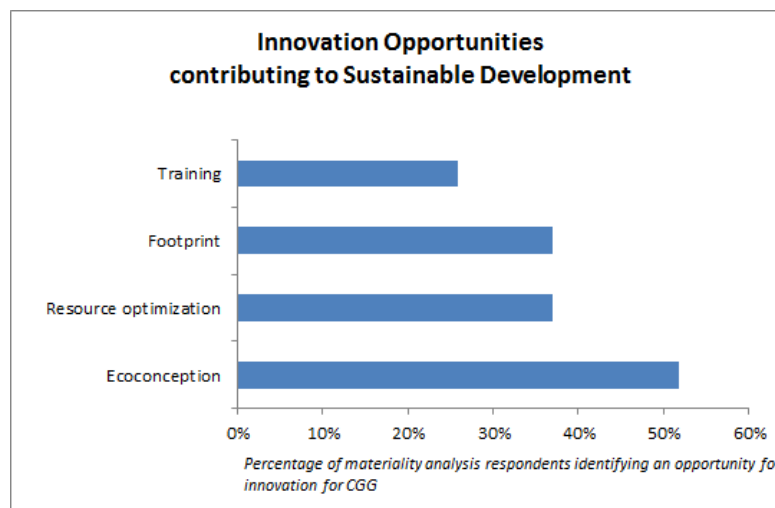
The Group's direct and indirect energy consumption resulted in 890 ktons of CO₂-equivalent emitted in 2012, a 6% decrease against 2011. The chart below shows that Marine surveys are the largest energy consumer.



Innovation Opportunities

Beyond the scope of its own environmental impacts, the Group helps clients to reduce the industrial effort required to explore, develop and produce oil and natural gas through advanced imaging of the subsurface. Seismic surveys are critical to raising the number of productive wells versus dry wells, consequently reducing the environmental impact of hydrocarbon exploration and production. Geophysical services such as permanent reservoir monitoring also directly contribute to enhanced oil recovery. In other words, the Group provides solutions that markedly extend the productivity and lifespan of hydrocarbon reservoirs, granting future generations a longer access to fossil fuels.

The internal and external stakeholder panel that ranked sustainability issues upon their level of importance to CGG (sustainability materiality analysis which results were presented above) was also asked to identify areas where through innovation CGG can have significant positive impacts going forward. The following chart shows the areas bearing the largest potential for internal innovation while fostering CGG's sustainability.



8.4. Social Responsibility

8.4.1. Ethics

The Code of Ethics and Business Code of Conduct define the behaviors expected from CGG teams with respect to integrity.

The Group's Ethics Committee has the responsibility to publish and ensure communication of CGG's Ethics and Code of Conduct and make recommendations and answer questions raised by Management and employees.

During 2012, the Ethics Committee focused its efforts on increasing visibility, communication, and appropriation of our standards across the Group through the following actions:

- A new presentation of Ethics and the Code of Conduct has been introduced in the induction sessions of new hires;
- The Business Code of Conduct is now available in eight languages with its recent publication in Arabic;
- A copy of the Business Code of Conduct as well as the major policies is systematically provided to new hires.

A compulsory e-learning on the Group's ethics has been launched in March 2012 targeting all Group employees; it is planned to be completed by end of June 2013. About 80% of Offices and PIR employees took this course so far. For the Acquisition and Equipment Divisions, the e-learning was launched in November and December 2012 and was, on December 31, 2012, in a deployment process.

The Ethics Committee is working to assure that the standards set in the Business Code of Conduct are clear and that practical applications of these standards are understood across our global operations. In 2012, work was done to communicate and educate our staff on child labor and on corruption. Through revised Human Resources Policy and supporting instructions, the Ethics Committee has clarified child labor risks and defined clearly the minimum age to work at CGG.

During 2012, another major training campaign has been initiated regarding anti-bribery regulations (including the FCPA and the UK Bribery Act 2010) and prevention of corruption. This campaign in the form of classroom sessions was conducted in 9 major countries of operations (United Kingdom, France, Singapore, China, India, Brazil, Mexico, Oman & Dubai) in 2012 and will be continued in 2013 in other countries. In parallel to this campaign, the Ethics Committee has issued guidelines on gifts and entertainment to help managers and employees to adopt appropriate conduct.

The Ethics Committee can be consulted with respect to any questions. Thus, during the past year, the Committee made recommendations and provided advice on discrimination, possible conflicts of interest, gifts and entertainment, ethics in the recruitment process, and confidentiality of personal information.

8.4.2. Social risk assessment, mitigation and monitoring

The Group Sustainable Development and Human Resources Policies clearly emphasize the Group's commitment to respect and promote the United Nations Universal Declaration of Human Rights and the International Labour Organization ("ILO") Declaration on Fundamental Rights and Principles at Work.

The Group's Sustainable Development Department designed a matrix supporting line management and country managers in their assessment of the social risks linked to operations. All countries of the world are ranked according to five risks including child labor, forced labor, absence of freedom of association and collective bargaining, non-recognition of the rights of indigenous, tribal, and native people and corruption. The assessment is reviewed yearly.

Medium and high risk countries trigger different sets of action. the Group is for example considering a return to Burma in Land acquisition. To ensure that business in this country can be conducted responsibly, an independent study and audit of potential local partners was realized by a risk compliance organization. As a next step, the Chief Executive Officer headed a delegation in July 2012 from MEDEF visiting the highest officials; the delegation also conferred with political opposition. This culminated in a Memorandum of Understanding being signed by the French and Burmese Chambers of Commerce promoting Corporate Social Responsibility in their industrial cooperation.

In order to verify our compliance with labour and human rights across our operations, HSE-MS audits encompass a social responsibility part focusing on themes such as child labor, forced labor, freedom of association and collective bargaining, discrimination, disciplinary practices, remuneration and working hours. Should an audit reveal several non-conformities that could not be addressed in the short term, a specific follow-up called a social responsibility process audit is planned to further investigate on the non-conformities and introduce an action plan for improvement.

8.4.3. Subcontractor management and Sustainable procurement

In addition to the strong HSE focus in subcontractor management mentioned in the safety section, a suppliers' code of conduct emphasizes the Group's commitments and expectations. This document is sent to contract suppliers so as to be returned signed.

The exposure to environmental and social responsibility risks in our supply chain is low. The Services segment of the Group buys 82% of its products and services in value from suppliers originating from OECD countries where environmental legislation is most often well enforced and where the principles of the International Labour Organisation ("ILO") are generally respected.

8.4.4. Local Content

Successfully maintaining relations with national partners over time is key to CGG's sustainable development. Prime examples are the Group's joint-ventures in Saudi Arabia, Malaysia and Indonesia in this regard, with respectively 46, 36 and 29 years of shared experience. Permanent sites principally employ national employees, as illustrated in our ten principal sites below.

Country	Percentage of national staff as of 31/12/2012
Brazil	63%
Mexico	83%
Egypt	90%
Singapore	52%
Norway	76%
UK	70%
France	95%
USA	88%
Canada	93%
China	99%

Joint-ventures with aboriginal communities have been striving for 13 years with the Uumarmuit in Canada and 8 years with the Inupiat of Alaska.

For short-term employment in Land acquisition, local staff is given preference whenever possible. In-house programs such as *Accelerated Seismic Management* in Canada offer a process for seasonal employees to stay into the world of land seismic and progressively become promoted into the role of observer and beyond. Even if less formalized, similar programs exist in countries where CGG has been delivering Land acquisition services for a long time, as for example in Thailand and Egypt.

The Group trains short-service employees and subcontractors in health, safety and environmental issues, exceeding by far local regulation requirements. 79,000 hours of HSE training were delivered in 2012 in the Land Division, representing two third of the Group HSE training effort.

In addition to local workforce, seismic acquisition typically sources diesel oil, local transportation services and the associated vehicle maintenance, housing, catering and sanitation services locally. In Oman and Egypt for example, 80% and 77% of the operational expenditures in value are spent locally.

8.4.5. Community relations

Developing and maintaining harmonious relations with local communities is paramount to the success of the Group, especially for geophysical acquisition. The evaluation of the risk and opportunities tied to our community relations is part of the Project Risk Assessment. In addition, a specific guidance document and toolbox called *Community Relations Management Plan* ("CRMP") can complement the project risk assessment in areas where geophysical acquisition encounters significant interactions with local communities. This is for example the case in marine surveys when vessels operate in waters close to shore with artisanal fisheries, or in land acquisition when crews operate close to urban areas or conversely in remote rural areas. In 2012, the emphasis has been placed on further introducing CRMP tools to operations management and HSE support community through formal training and presentations.

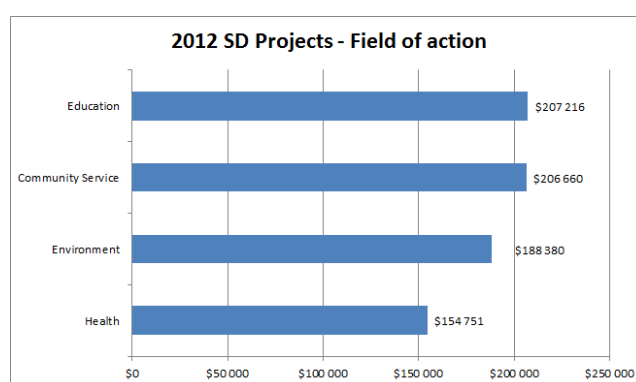
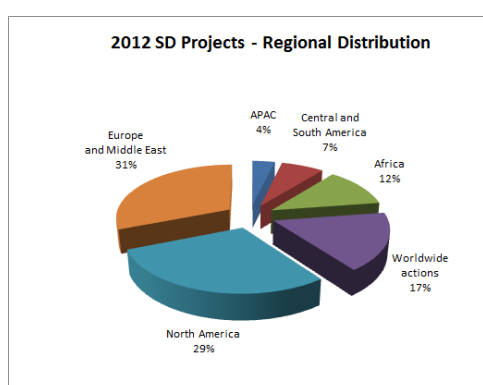
A CRMP has been implemented in 2012 in Brazil (Pernambuco), where a Marine Survey imaged 2,720 square kilometers of subsurface. Conducted at more than 21 kms from the coast, the survey had nevertheless coincided with small-scale fishing activities along the 200 meter isopleth. These artisanal fisheries being the main subsistence and income source for the population living along the coast, they were compensated for the lost activity. The Group and the Brazilian Environmental Ministry IBAMA set up a process which resulted in the election of representatives from each of the nine affected communities. These representatives, in coordination with the fishermen, discussed the communities' needs and validated projects valued by them as most beneficial with CGG's local community liaison officer and IBAMA. So far 3 projects have been agreed on and will be implemented in 2013. The fish market of Carmo will be built.

In Itamaraca, the fishermen’s association (“Fishing Colony”) house will be renovated. A series of training sessions will be delivered on sustainable fisheries as well as on fishing techniques in that same community.

Very often, clients expect us to participate in CRMPs that have been initiated earlier by them and hence stay under their full responsibility and guidance. Along these lines, we contributed to client projects in Indonesia and the UK for Land, and in Trinidad, Malaysia and Vietnam for Marine.

8.4.6. Corporate Citizenship

The Group commits to meaningful actions in the areas of education, with a focus on promoting earth sciences, community service, environmental protection and health. A network of Sustainable Development correspondents ensures the follow-up, promotion and reporting of local projects, coordinated by the Group’s Social Responsibility Manager. In 2012, we conducted initiatives in 20 countries amounting to about US\$760,000, increased by 59% our financial contribution compared to 2011.



In selecting projects, the Group favors initiatives in which employees take an active part. Half of the projects were personally supported by employees, an improvement over the 29% of direct employee involvement in the past year. 70% of the CGG’s employees feel proud to work in the Group¹⁰. We consider that our social projects help the Group to preserve its privilege to operate and maintain harmonious relationships with communities surrounding permanent and temporary sites worldwide.

Below are some illustrations of 2012 initiatives. All of them will be sustained through 2013:

Supporting micro-businesses with Babyloan (Worldwide)

About 150 Group’s employees from 19 nationalities lent money to micro-entrepreneurs in coastal areas of Indonesia, the Philippines, Vietnam and Peru during a two-week challenge. CGG matched all loans and kept re-lending as it was being reimbursed throughout the year. More than 100 micro-businesses have been supported with US\$40,000 of loans so far, with a focus on artisanal fisheries.

A. Neto University Reservoir Training Center (Luanda, Angola)

Students used to learn seismic with paper and pens in Luanda. The Group refurbished and equipped a training room and provided the Hampson-Russell software license for training. Junior PIR geophysicists provide two hours of mentorship to University students per week.

¹⁰ Source : 2011 Your Voice employee survey.

STEMfest (Crawley, UK)

The Group was the STEMfest's main sponsor gathering 2000 students and 200 teachers to inspire and engage them with Science, Technology, Engineering and Math. Crawley and Redhill employees promoted geosciences through a careers corner, a seismic competition, a showcase of Sercel equipment, and a presentation area where chocolate bars, marbles, sand, water and cooking oil were used to explain geology, rock properties and energy waves. Teaching aid on geosciences was also provided.

Game of Life (Houston, USA)

In partnership with *Skills for Living*, Houston employees taught 70 at-risk teenagers budget, career, college planning and job hunting during a two-day workshop. They interviewed 48 youngsters, hired new 'employees' and trained them to manage their new job at CGG as well as their private life (renting an apartment, buying a house, paying school and taxes).

City-to-Surf Run (Perth, Australia)

The Group's staff and family members have been participating in this famous run for many years. In 2012, about 40% of the staff ran along with family members, raising at the same time funds for health charities.

8.4.7. Social Responsibility Investment Ratings ("SRI")

SRI indexes select and rank companies against their sustainable development performance. In 2012, CGG has once again been the only geophysical services company to be included in the ASPI Eurozone, Ethibel Excellence and Dow Jones Sustainability Europe indexes, to which we added a first listing in the Dow Jones Sustainability World index and Vigeo Europe 120 index.

The Group also further reinforced its dialogue with SRI brokers in two roadshows and provided regular updates of its Environmental, Social and Governance ("ESG") profile to SRI extra-financial agencies.

8.5. Reporting method and scope

Protocol

HSE reporting procedures are based on the Group's Event Reporting, Classification and Recording Guideline.

Scope

Health, Safety and Environmental reporting covers all employees and subcontractors falling under the Group's prevailing influence, or 100% of our sites and acquisition activities owned 50% or more and consolidated by global integration included in the Registration Document.

As an exception to this rule, HSE reporting also covers operations of:

- Argas in Saudi Arabia;
- The *Amadeus* vessel, as she is operated by the Group under the PTSC CGGV Geophysical Survey Company Limited joint-venture in Vietnam;
- The Pacific Finder vessel, which was operated under the PT Elnusa-CGGVeritas Seismic Joint Venture in Indonesia until July of 2012 before joining the Group's fleet in Singapore.

All statistics disclosed in this report encompass this scope unless otherwise specified. In 2012, the Group HSE reporting scope covered 72 million hours worked.

Acquisitions are taken into account as soon as possible and at the latest on January 1st of the following year, and divestments are taken into account the month following their effective date of application. As of 2012, HSE and Sustainable Development data is published on a current perimeter.

Each site, crew or vessel from the Services Divisions records its HSE reporting into PRISM, which is the Group integrated HSE and Sustainable Development risk assessment and reporting tool. Sercel disposes of its own reporting tool.

Indicator selection and relevance

The data published intends to inform stakeholders in all transparency about HSE and Sustainable Development performance for the year in question. They are aligned with OGP and IAGC for Safety and Health information and with the GRI for environmental and social responsibility data.

The indicators have been selected in order to track:

- The Group's HSE and Sustainable Development commitments and policies embodied in the management systems;
- Performance relative to the Group's principal challenges and impacts;
- Regulatory obligations (French Code of Commerce, updated in 2012 by art.225 of the Grenelle II).

A number of categories of the Grenelle II either do not apply to the nature of our activities or are only of significance to a very small part of our global operations. This is the case for:

- *Measures taken to protect consumers' health and safety*

Sercel informs its clients about the products' components and trains them to their use. No adverse effect on consumers' health & safety is known to date.

- *Material use and measures taken to improve its efficiency*

Given the Group's principal activity (seismic acquisition services, processing and imaging of seismic data and geophysical equipment production), the Group makes use of few materials. Minimizing material use is part of Sercel's ecoconception approach. In addition, the Group started a process to assess whether conflict minerals are being used in the manufacturing of geophysical equipment.

- *Water consumption and sourcing depending on local constraints*

Given the Group's principal activity, CGG does not need much water to conduct its activities (total volume measured at around 850,000 m³ en 2011). Water sourcing and management is taken into account in our footprint minimization efforts. Environmental Risk Assessments established prior to any new operation entail a section looking at potential impacts on water and establishing corresponding mitigation measures.

- *Measures taken to prevent, recycle and eliminate waste*

Given the Group's principal activity, the Group does not produce much waste, and few hazardous waste. Waste management is part of our footprint minimization efforts. Permanent sites as well as seismic operations apply the waste hierarchy (prevent, reduce, reuse, recycle, remediate) and comply with national and international regulations such as MARPOL.

- *Soil use*

CGG does not require much soil to conduct its activities. As part of our footprint minimization, the Land Division always strives to reduce line clearing and applies industry standards so as to prevent soil's erosion.

- *Adaptation to climate change*

Climate change is not considered to have a future impact in the short or medium term on our activities. The Group however continuously looks forward to lessen its energy consumption.

- *Measures taken to develop the biodiversity*

The Group manages its footprint so as to preserve the biodiversity. Some of our corporate citizenship projects target biodiversity restoration, such as Mount Moco's reforestation initiative in Angola and the artificial reefs being promoted in Thailand.

- *Provisions for environmental risks*

This information is considered as confidential.

Consolidation and internal controls

HSE and Sustainable Development data is reviewed on a weekly basis by HSE and Sustainable Development support functions. The data is then consolidated every month at Division and Group level. Data pertaining to certain specific indicators are calculated directly by the businesses. These processes undergo regular internal audits.

External Verification

For the first year, the Group chose to have its HSE and Sustainable Development performance indicators audited. The scope of verification encompassed the 42 quantitative and/or qualitative information categories outlined in the decree of the article 225 of the Grenelle II law. The social and environmental information to be published have been selected by the HSE, SD and HR Departments and reviewed by the Ernst & Young Sustainable Development Department, one of the Statutory Auditors of the Group.

9. SIGNIFICANT TRANSACTIONS AND EVENTS OF 2012

Acquisition of Geophysical Research Company, LLC by Sercel

On January 17, 2012, Sercel acquired the assets of Geophysical Research Company, LLC ("GRC"). Headquartered in Tulsa, Oklahoma (USA), for a purchase price of US\$50 million plus US\$17 million to be paid within 3 years to an earn-out provision. Established in 1925 by Amerada Petroleum Corporation, GRC is a leading provider of down-hole sensors and gauges for the oil and gas industry. With approximately 120 employees, GRC is expecting 2011 revenues in the order of US\$22 million.

This acquisition builds upon Sercel's diversification into the well environment and more specifically the artificial lift market which shows promising growth for the coming years. GRC's memory gauge business complements Sercel's existing product offering and geographical coverage.

GRC products will benefit from Sercel's technology and know-how for new product industrialization as GRC will be launching a number of products within the next two years.

ION/Sercel litigation

On February 17, 2012, the United States Federal Circuit Court of Appeals simply 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.

An injunction that exclusively covers the Sercel digital sensor “DSU” technology and is limited to the territory of the United States will remain in effect until the patent expires in December 2015.

The injunction does not restrict the right of Sercel or its customers to use, manufacture, sell or deliver the DSU and SeaRay products anywhere else in the world. It also does not cover the Sercel 408UL and 428XL recording systems; these recording systems can continue to be made, sold, and used in the United States. In addition, under the injunction, Sercel can continue to offer for sale, promote and market DSUs and SeaRays as long as the manufacture, sale and delivery of the DSUs and SeaRays occur outside the United States. Sercel paid US\$13 million damages to ION.

The second trial relating to the amount of additional damages for the sale of Sercel SeaRays systems manufactured in Houston has been settled between the parties.

There are no longer any on-going legal proceedings against the Group in this respect.

Geowave Commander

On July 1, 2012, the Groupe terminated by anticipation the charter entered into with Master and Commander AS, owner of the *Geowave Commander* vessel.

Pacific Finder

On July 13, 2012, the charter agreement for the *Pacific Finder* vessel (then named *Elnusa Finder*) was transferred from the joint-venture PT Elnusa-CGGVeritas Seismic to Exploration Investment Ressources II, a fully consolidated subsidiary of the Group.

Strategic alliance with JSC SEVMORNEFTEGEOFIZIKA

On July 20, 2012, the Company entered into a framework agreement with JSC SEVMORNEFTEGEOFIZIKA (SMNG) to form a strategic alliance. Through this agreement, the Company and SMNG intend to jointly address the growing Russian and CIS high-end seismic vessels market and coordinate their complementary capacities worldwide.

SMNG is the largest marine geophysical company in Russia and the CIS and provides a wide range of marine geophysical services worldwide, including 2D/3D marine seismic acquisition, navigation and positioning services, seismic data processing and integrated interpretation of seismic data.

Acquisition of Fugro Geoscience division

Pursuant to the terms of a Sale and Purchase Agreement (the “SPA”) between the Company and Fugro NV (“Fugro”) dated September 24, 2012 to acquire (the “Acquisition”) most of the Geoscience division of Fugro, i.e.:

- Fugro-Geoteam (specializing in marine streamer seismic data acquisition);
- Fugro Seismic Imaging (specializing in seismic data processing services);
- Fugro Geophysical and Geological Services (specializing in geographical exploration services);
- De Regt Marine Cables (specializing in high-end cables and umbilicals),

- as well as all related entities and assets, but excluding Fugro's multi-client library and ocean bottom nodes ("OBN") activity (the acquired activities are referred to herein as the "Geoscience Division").

Pursuant to the terms of the SPA, the Parties have agreed to establish certain strategic partnerships with Fugro, in particular, to:

- Establish a joint venture with Fugro, to which Fugro will contribute its OBN activity and we will contribute our shallow water, ocean bottom cable ("OBC") and OBN activities (the "Seabed JV"); and
- Enter into certain commercial agreements with Fugro, including (i) a non-exclusive selling and marketing agreement with respect to Fugro's multi-client library, (ii) a technological and commercial agreement providing reciprocal preferred supplier status and (iii) a transitional services agreement (together, the "Commercial Agreements").

The total price for the Acquisition was set at €1.2 billion subject to further customary price adjustments (based in particular on the level on the working capital of the Geoscience Division). The transaction was subject to customary conditions precedent, in particular mandatory anti-trust clearances.

Closing of the Acquisition took place on January 31, 2013, with the exception of the airborne activity and certain minor assets which will be contributed later, once all operating licenses and administrative authorizations have been received.

Taking into account the estimate of the acquired Working Capital as of the Closing date and the amount due by Fugro to reach a 60% shareholding in the Seabed JV, the net cost of the transaction amounts to €975 million.

It is financed with the net proceeds of the €414 million capital increase with a Rights Issue we made in October 2012, with the net proceeds of the €360 million convertible bonds we issued in November 2012, and with a vendor loan from Fugro which was agreed upon to achieve a rapid closing. This vendor loan amounts to €125 million at the Closing date, to be extended to €225 million at the date of effective acquisition of the airborne activity.

Alliance agreement with Baker Hughes

On November 1, 2012, Baker Hughes Incorporated and the Company entered into an Alliance agreement to improve shale reservoir exploration.

Using reservoir models that integrate log-derived, near-wellbore geomechanical and petrophysical properties from Baker Hughes with calibrated seismic data from the Group, operators can optimize well placement and completion design earlier in the asset lifecycle for more efficient well construction and more productive wells.

Baker Hughes brings a broad portfolio of oilfield expertise and services to the collaborative relationship, most notably its reservoir and production engineering team and its Center of Reservoir Excellence ("CORE") team focused on unconventional resources. The company's proprietary geomechanical models and JewelSuite reservoir modeling software use data from Baker Hughes logging and subsurface imaging tools to deliver decision support capabilities.

While the long-range goal of the collaboration is to help operators optimize full-field development projects, the initial phase focuses on integrating near-wellbore log data with reservoir characteristics away from the well.

Rights offering

On September 26, 2012, the Company launched share capital increase through the distribution of preferential subscription rights to existing shareholders launched by the Company to fund the acquisition of the businesses of Fugro Geoscience division (excluding multi-clients library and OBN businesses). The terms and conditions of the offer are described in the Prospectus approved by the French Market Authority on September 25, 2012.

The final gross proceeds amount to €413,609,320, corresponding to the issuance of 24,329,960 new shares.

The global subscription request amounted to €807,039,691, corresponding to an approximate subscription rate of 195%. 23,908,864 new shares were subscribed by irrevocable right (à titre irréductible), representing approximately 98.3 % of the total number of new shares, while 23,564,059 new shares were requested subject to reduction (à titre réductible), and, as a result, only be satisfied in part, amounted to 421,096 new shares.

The net proceeds of the issuance have been used to pay a portion of the acquisition price for the Geoscience Division (the "Acquisition").

Settlement and delivery of the new shares as well as the listing of the new shares on the regulated market of NYSE Euronext in Paris (Segment A) on the same line as the existing shares took place on October 23, 2012.

Issue of bonds convertible into and/or exchangeable for new or existing shares

On November 20, 2012 the Company issued 11,200,995 bonds convertible into and/or exchangeable for new or existing shares of the Company to be redeemed on January 1, 2019 (the "Bonds") for a total nominal amount of €359,999,979,30.

The net proceeds of the issuance were used to finance part of the purchase price of Fugro Geoscience Acquisition.

The Bonds' nominal value has been set at €32.14 per Bond, representing an issue premium of 40% of the CGG reference share price¹¹ on the regulated market of NYSE Euronext in Paris.

The Bonds bear interest at a rate of 1.25 % payable semi-annually in arrear on January 1 and July 1 of each year (or on the following business day if either of these two dates is not a business day). The first interest payment made on July 1, 2013 (or on the following business day if such date is not a business day) will cover the period from November 20, 2012, the issue date of the Bonds, to June 30, 2013, inclusive, and will be calculated *pro rata temporis*; it will amount to approximately €0.25 per Bond.

The Bonds will entitle the holders to receive new and/or existing CGG 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 the option of the Company.

The detailed terms and conditions of the Bonds are described in the Prospectus which was approved by the *Autorités des Marchés Financiers* on November 13, 2012.

¹¹ The reference share price is equal to the volume-weighted average share price of the CGG shares on Euronext Paris from the opening of trading on November 13, 2012 until the determination of the final terms and conditions of the Bonds the same day.

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.

Amendments to the US and French revolving facilities:

On December 11, 2012, with regards to the US Facility Agreement, the Lenders agreed and gave their consent to the transactions and operations to be finalised and entered into by the Company in the context of the Fugro Operations and the set-up of the Seabed JV.

To this end, a formal letter jointly signed by the Company and the US Borrower has been delivered to the US Agent (the "US Letter").

On December 21, 2012, with regards to the French Facility Agreement, the Lenders agreed and gave their consent to the transactions and operations to be finalised and entered into by the Company in the context of the Fugro Operations and the set-up of the Seabed JV. The parties to the French Facility Agreement have formalized their agreement by entering into an amendment agreement evidencing the amendments requested pursuant to the French Letter (the "Amendment Agreement").

The Amendment Agreement also confirmed, amended or replaced the security interests granted by the Company and its subsidiaries pursuant to the Security Documents (as defined in the French Facility Agreement), entered into pursuant to the French Facility Agreement. It is however provided that the amendment or replacement of the existing security interests by new security interests will only be implemented in order to satisfy the applicable local law requirements and that no security interest will be granted over assets which are not already pledged under existing Security Documents.

10. PROSPECTS AND FORESEEABLE DEVELOPMENTS

Geophysics market environment

Both oil and gas market operators and major consumer countries are becoming increasingly aware of the growing imbalance between hydrocarbon supply and demand. This was reflected in a very significant and continuous increase in energy prices, coupled with a widely held conviction that there would be a need to produce oil and gas in a sustained manner over the long term in order to meet global demand. In the case in point, the diagnosis is that the rates at which oil reserves are being replenished fall short of being able to replace, year on year, the quantities of sub-surface hydrocarbons extracted and consumed or to compensate for the natural depletion of reserves in the ground. The need to discover new reserves and to seek to recover the quantities of oil and gas in place as carefully as possible led to several years of high levels of investment in Exploration & Production and, by extension, to favorable long-term prospects for the geophysics market.

In 2008, the economy slowed down as a consequence of the worldwide financial crisis. Numerous countries entered into an economical slow down which immediately impacted the oil price which significantly decreased from a top level of US\$150 mid 2008 to below US\$40 the barrel mid-December.

During 2009, seismic companies managed to be disciplined by removing from the market some old, low-capacity vessels and delaying new build, therefore reducing the overall capacity and breaking off the price drop.

In 2010, Exploration & Production investments have again increased significantly, leading to a strong growth of demand for seismic services. In parallel, a significant number of new vessels have entered marine seismic market. The “Deepwater Horizon” platform accident in April in Gulf of Mexico has severely reduced the demand for seismic studies in this part of the world and consequently maintained an unbalance on a worldwide basis between offer and demand all along the year. Conversely, seismic equipment market has experienced a substantial growth both for marine equipments (streamers for newbuilds and increased capacity of existing vessels) and for land equipments (denser acquisition grids).

In 2011, based on a survey of Barclays Capital, the Exploration and Production spending grew by 15%. 2011 was successful with new discoveries offshore French Guyana, offshore Norway and offshore Mozambique. In the mid-term, we believe that these recent successes along with the need to discover new reserves to replace depleting reserves and to cope with long-term growth in energy demand, will materialize by a continued increase of Exploration and Production spending, leading to solid growth perspectives for the seismic market. Nevertheless, 2011 was also characterized by few geopolitical events such as the “Arab Spring” or delays in governmental decisions in few countries such as Angola, Brazil and USA translated into exploration projects delays and shifts, especially offshore.

In 2012 and according to the Barclays Capital survey, the Exploration and Production spending grew by more than 9% up to US\$604 billion, after a 15% increase in 2011. Seismic spending grew above 10% sustained by a significant increase in international exploration across the world but also driven the US domestic market. The marine seismic market increased slightly above 10%. Seismic activity decreased nevertheless in few countries including Brazil where the announcement of new licensing rounds was postponed to 2013 but also North Africa where the aftermath of “Arab Spring” still impacted the overall decision process, keeping the seismic activity at a still low level.

Outlook for the activities of the Group in 2013

According to the Barclays surveys, Exploration and Production spending should moderate with a modest increase of 7% to reach US\$650 billion as a consequence of a slowing demand in the US domestic market and a reduced activity in the shale gas and oil. Following an expected reduction in the cash flow related to the shale gas and oil, US companies should reduce their exploration activity while outside the US, the exploration renaissance should continue to remain strong, driven by new frontiers areas such as south Latin America or South Africa.

Strong Exploration Activity expected to continue

Seismic being correlated to exploration activity should continue to benefit from a solid activity as strong exploration activity is expected from both Integrated and National Oil Companies (NOC’s) from nearly all regions of the world and a concentration of the strongest spending in the ultra deep water. This should translate into:

- New frontier exploration in new sedimentary basins such as South Africa, Uruguay, Namibia, South East Africa and a still solid activity in the Middle East and in Asia Pacific, including Australia;
- A strong demand for high end seismic to improve the recovery of existing fast maturing fields in Middle-East and in North Sea;
- The progressive opening of until recently non accessible countries to international seismic companies. In Russia or China, this could materialize through local partnerships or commercial agreements such as the one we signed early 2012 in Vietnam with PetroVietnam.

Exploration and Production activities are changing the role of Geophysics and Geoscience

Our clients are becoming more focused on development and completion strategies, which requires more engineering focus; therefore a clear understanding of the reservoir is critical. This should translate into:

- A growing interest of the oil and gas companies for the technological content of geophysical data. Clients want ahead of their development decision process to extract detailed reservoir properties, they also want to be able to predict stress and fractures and need to ensure safe and predictable drilling and completion operations while optimizing their return on investment.
- This will strongly influence key aspects of the seismic processing and seismic reservoir characterization technology market and definitely increase the geoscience content of the seismic market.

In contract marine, the increase in supply should remain moderate in the range of 5% facilitating an additional price increase in the range of 5 to 10% following the 10% last year. This summer, seismic activity in the North Sea could grow 10% year on year in volumes while the winter 2013 season should benefit from the progressive reopening of the seismic activity offshore Brazil.

Land contract activity should remain strong in Middle-East, and to a some extent in North America while North Africa should progressively recover. The Seabed and Shallow Waters activities, now part of our Joint Venture with Fugro, should be strong in 2013.

Marine multi-client marine should benefit from the announcement of the Brazil's reopening. On January 10, 2013, a press release from the National Brazilian Agency for Petroleum (ANP) announced that the Brazilian President officially approved the 11th licensing round for May 2013. The reopening of licensing rounds offshore Brazil and the progressive recovery of the demand in the Gulf of Mexico ahead of the March 2013 lease sale should sustain a good level of revenue from the the Group's multi-client library. Our new multi-client program offshore Gulf of Mexico, called Iballt, and based on a new acquisition geometry to illuminate the deep salt domes should generate a lot of interest from active oil companies in this region.

Land multi-client capex will be reduced after two years of strong activity in the Marcellus basin where our large program will come to the end in the first half. The Group is considering a new multi-client onshore program in a liquid shale basin during the second half of 2013.

Processing activity should, in line with 2012, remain strong mainly driven by an increasing level of volumes of data acquired offshore but also driven by the increasing complexity of the geology to illuminate which require additional sophisticated and high end algorithms, a domain where the Group is enjoying a unique leadership position.

In the characterization domain, the increasing demand from our clients to bring more value in the seismic data will benefit to the group which is one of the primary provider for reservoir characterization software and services. In 2013, CGG will leverage the relative strengths of Hampson-Russell and Jason, making them both stronger in respective markets and will also extend internal cross divisional strengths with external partners such as Baker Hughes International, announced last October, in oil and gas sectors such as shale in North America and Middle East.

In the Geology domain, the Group enjoys now a solid reputation with Robertson. In 2013, this business should benefit from the strong international demand for exploration in new frontiers areas.

Sercel revenue is expected to remain stable year on year at a historical high level. Marine equipment sales should be sustained, driven by increasing replacement market, whereas land equipment sales are expected to grow in an increasing competitive environment.

Furthering a commercial strategy based on technology differentiation

The Group believes that development of its portfolio of high end seismic services and equipment, via a clearer understanding of their exploration and production problems and requirements in geophysical, geological and reservoir characterization technologies, is a way of making sure that it stands out from its competitors. It also gives it an edge when it comes to identifying commercial opportunities, ensuring a good fit of the services proposed, and for upstream management of product and technology development in line with customer demand.

The Group believes that its strategy is allowing it to make the most of a context in which the oil industry will continue to increase the share of external services and to face more and more complex technological stakes.

The quality of the services and of the technologies provided, along with sustained research and development spending and sound management of health, safety and environmental factors, are pivotal when it comes to establishing a lasting relationship between client and service provider. The Group will continue to focus its strategy on improving and broadening the range of services to its customers.

The Group's customers increasingly seek integrated solutions in the geophysics, geology and reservoir characterization areas in order to enable more accurate assessment of known reserves and improvement of oil and gas recovery rates in producing fields. The Group will further develop solutions based on a cross-functional approach, making it possible to integrate all the cutting-edge technologies developed in each area of expertise and adapt or upgrade them to meet the clients' issues.

This is the case with on-site permanent seismic facility projects, for example, which call on a range of skills, involving all the Group's areas of expertise.

Improving shale reservoir exploration through a more comprehensive view of their reservoirs to accurately pinpoint sweet spots so they can make the most productive decisions is a priority for our clients. CGG and Baker Hughes International will pursue their collaborative relationships to provide our clients with a full solution for better interpretation of the reservoir attributes.

CGG believe that long term differentiation will come from high-end acquisition technologies combined with sophisticated processing solutions. This combination should significantly improve the quality of seismic images while maintaining a reasonable lead time fully aligned with the exploration and drilling decision process of Oil and Gas customers. This technological differentiation will further be improved by the addition of upstream technical and geological consulting expertise and downstream reservoir characterization software and services to provide our clients with static reservoir modeling solutions to develop future or existing reserves.

Outlook on technological developments at CGG

Furthering research programs based on improved imaging

On a technological level, the Group believes that by continuously improving acquisition methods and technologies and seismic data processing software developed by its teams, it will continue to be one of the leading suppliers of top-of-the-range seismic services on land and offshore. Its research and development work will continue to focus on improving imaging in complex zones for exploration and on production seismic as a technology to characterize and monitor reservoirs. Lithological prediction (identification of rocky layers surrounding an oil and gas accumulation) and applications linked to description of reservoirs and their content, in particular 3D prestack depth imaging; sub-salt depth imaging ("Full Azimuth"), frequency broadband "BroadSeis" imaging, multicomponents and 4D studies will continue to be developed.

The Group will also reinforce its research and development efforts through its technological centers located within its main clients premises. By creating a vertical integration towards the reservoir sciences, the acquisition of the Fugro Geoscience Division of activities reinforces the leader position of CGG in the Geophysical Services industry with its high-end technology portfolio of solutions and products.

Developing and improving land and offshore acquisition techniques

The Group believes that the growth in demand for geophysics services will continue to be linked to new technologies. The Group predicts that high-definition 3D studies, 3D frequency broadband "BroadSeis" studies, 3D full-azimuth, 4D (adding time as the fourth dimension) studies and multi-component studies (3C or 4C) will play a key role in Exploration & Production, especially in the offshore sector. With regards to the onshore sector, there is a stronger demand for ultra-high sensor density acquisitions that could lead to see several thousand channels crews on the field. This evolution would require a complete re-thinking of the land acquisition chain and developments are focusing on cheaper sensors, mechanized spread deployment and automated data quality control. In order to anticipate the exponential increasing flow of data (Big Data), considerable R&D efforts shall be made on seismic data processing, data storage and management as well as new computer architecture, highly parallelized to be able to process the data in a reasonable time frame without forgetting low energy consumption consideration.

Innovative solutions from Sercel, targeting emerging market segments based on maintaining sustained R&D efforts

In the area of equipment, the need for Sercel to maintain high level research and development is justified by the high-tech equipment seismic incorporate many advanced technologies such as wireless technology, broad-band seismic, miniaturized electronics but also optical or acoustic. Mature industrial systems Nautilus Controller (lateral and depth streamers) and SeaProNav (Integrated Navigation System) are now the industry standard for the equipment of the fleet of CGG. A new version of Sentinel solid streamers was launched. Called RD, for Reduced Diameter, this version reduces the drag of the listening device and thus reduces fuel consumption. There are a certain number of other benefits, such as a weight down by 15% compared to the "classic" and a smaller footprint on the rear deck boats with smaller diameter winches.

Sercel has also put on the market in 2012 the latest generation of products for land acquisition, which should benefit from an increasing success in 2013:

- New geophones SG-5 (natural frequency of 5 Hz), providing output sensitivity equivalent to an array of geophones while allowing signal recording frequency as low as 5 Hz. This is an excellent addition to the broad band acquisition chain and an element of choice for the micro-seismic studies which are increasingly conducted for shale gas development and reservoir monitoring.
- Cable less sensors with integrated GPS and measuring the orientation of the 3-axis sensors (tilt omni-3C) and azimuthal orientation. Field operations are faster and less prone to human error (identification stakes, sensor planting, vertical and azimuthal orientation).

2013 outlook

Commercial outlook

Total backlog (Services and Equipment) amounted to US\$1,234 million (US\$1,073 million for Services and US\$161 million for Equipment, excluding the Group's internal sales) as of January 1, 2013. This backlog for Services has been secured during the second semester of 2012 and does not include the backlog related to the Fugro Geoscience Division which is joining CGG on February 1, 2013.

Industrial outlook

Delivering the Transformation of the new Group

In 2013 to reinforce its growth and create value both for its clients and shareholders, the Group will focus on the three following strategic axes for delivering its transformation:

✓ **Building the new Group**

- With a new organization in place and an Integration Plan on tracks, the new Group should be fully operational by the end of the first semester. Operational performance especially in HSE and a strong focus on cost base remain key priorities.
- To improve visibility of the financial performance, to improve the understanding of our new business segments and to further externalize value, the Group will report at the three divisions level and at the EBIT level and as soon as Q1 2013 (including the contribution of our equity income).

✓ **Being the partner of choice**

- In 2013, the Group will further accelerate the development of new products, new solutions and technologies across all its business segments. In particular, Sercel will this year further strengthen its R&D efforts to launch the next generation of products and confirm the Group technological leadership.
- Focused on high-end solutions, services and products, the Group wants to become the partner of choice for its clients and further develop strategic partnerships to extend its local presence and portfolio of activities in new country or new markets with high growth potential.

✓ **Increasing Return on Capital Employed**

- This transformation will be conducted with the objective of managing the portfolio of assets and businesses of the Group to optimize the capital employed and their return.
- A strong focus will be put on the cash generation, on the reduction of the cost of debt and on the appropriate financial leverage.

The deployment in 2013 of these strategic actions should allow the Group to:

- ✓ Accelerate its growth with a wider portfolio of integrated activities and reinforced high-end expertise in key regions and markets.
- ✓ Create value for its shareholders through a better valuation of the three business segments and a streamlined financial profile.
- ✓ Create value for its clients and employees by continuing to operate safely and with integrity around the world to deliver a socially responsible and sustainable performance.

In 2013, multi-clients cash capex should be in the range of \$350-400 million with a prefunding rate above 75% and industrial capex are expected to be in the range of \$350-400 million.

Financial Outlook

By combining organic growth with the addition of Fugro activities over part of the year 2013 and the carve out of the Shallow Water/Ocean Botton System business, the Group revenues are expected to increase year on year by 25% in 2013 while further improving the associated EBIT margin and Return on Capital Employed.

11. SIGNIFICANT EVENTS BETWEEN 2012 CLOSING DATE AND THE DATE OF THIS REPORT

Closing of the acquisition of the Fugro Geoscience Division

See paragraph 9

Closing of the Seabed Joint-Venture with Fugro

The closing of the joint-venture Seabed Geosolutions BV between the CGG and the Fugro groups took place on February 16, 2013. The Fugro group holds 60% of the share-capital of Seabed Geosolutions BV.

Sale of the shareholding of the Company in Spectrum ASA's share capital

On July 28, 2011, a strategic agreement was signed with Spectrum ASA ("Spectrum"), a Norwegian company listed on the Norwegian Stock Exchange (Oslo) and specialized in the field of multi-client surveys. According to this agreement, the Company contributed most of its 2D multi-client library for a consideration partly in cash, partly in convertible bonds issued by Spectrum (the "Convertible Bonds") and partly in Spectrum shares. In December 2011, after conversion of the Convertible Bonds into Spectrum shares, the Company held a 29% shareholding interest in Spectrum, corresponding to 10,840,181 shares.

In 2012, on April 27 and September 24, the Company sold an aggregate of 6,875,000 shares on the market, for an average price of NOK 29.57 per share. As a result, at the end of 2012, our shareholding interest in Spectrum was reduced to 10%.

On February 20, 2013, the Company sold its residual shareholding interest in Spectrum, i.e. 3,965,181 shares for a price of NOK 47.50 per share.

12. CONSEQUENCES OF THE COMPANY'S BUSINESS ON LABOUR

12.1. Employment

12.1.1. International

To perform its duties and fulfill its contracts the Group employs permanent staff, seasonal staff (equivalent to site workers in France) and subcontracted staff. This report briefly mentions the number of seasonal employees but only permanent staff is reported in details, since we have all the reporting elements for this population and since it is the only one which reflects the sustainable growth of the Group. Seasonal employees are hired on Land data acquisition crews for the contract period on site. This is the seasonal nature of this workforce in North America (where data acquisition is done during the winter), which, by extension, is used to characterize these employees worldwide.

As of December 31, 2012, the Group accounted 7,560 permanent employees of more than 100 different nationalities in more than 70 locations worldwide. These numbers are to be compared with a total of 7,198 permanent employees as of December 31, 2011.

To these figures we could add at the end of 2012, 1,222 seasonal employees while they were 1,710 at the end of 2011. The difference is mainly due to the smaller number of employees hired on our Land crews in North America, in the USA and Canada, as well as the reclassification of 159 people in the permanent category. Seasonal staff, given the very specific nature of their job and the nature and number of crews (sites), can fluctuate widely during the year and from one year to another.

As of December 31, 2012, the distribution of the permanent staff by activity and geographical area was as follows:

	Équipement	Services	Geomarkets / Support Functions	Total 2012	Total 2011
Europe	1,002	1 186	393	2,581	2,787
Africa & Middle east	12	305	14	331	411
Asia - Pacific	585	467	56	1,108	1,070
North America	764	910	108	1,782	1,710
Latin America	4	194	60	258	281
Marine Seismic Crews	0	970	0	970	939
Land Seismic Crews	0	530	0	530	
TOTAL	2,367	4,562	631	7,560	7,198

As a reference the above table includes the staffing situation on December 31, 2011. In 2011, Land International crew staff was recorded in their region of assignment or region of contractual origin (in particular Europe, Africa, Middle East or North America). For the year 2012, they are grouped in a common section for a better monitoring.

As of December 31, 2012, the distribution of the permanent staff by contract type was as follows:

<i>Type of contract</i>	Total 2012	Total 2011
Expatriates	288	298
Field Crew Staff — Land	390	389
Field Crew Staff— Marine	970	943
Locals	5,912	5,568
GRAND TOTAL	7,560	7,198

Note: The Land Field Crew contract exists in this form only in the Eastern Hemisphere. In addition, some field staff may be temporarily assigned in offices or in support bases and not on crews or seismic vessels which explains the variance between contract type figures and assignment figures.

As of December 31, 2012, the distribution of the permanent staff by age category was as follows:

Age	< 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	>59
Functions Office	18	63	92	92	91	89	82	78	26
Equipment Office	58	174	338	404	395	325	297	245	131
Land Office	14	29	52	53	63	49	52	50	25
Marine Office	11	41	69	51	68	64	54	21	19
Processing, Imaging, Reservoir Office	81	359	490	302	235	230	197	195	109
Multi-client & New Ventures Office	2	8	7	13	7	10	13	6	13
Office Total	184	674	1 048	915	859	767	695	595	323
Land Field	13	84	85	81	63	53	64	73	14
Marine Field	9	121	236	178	163	120	96	35	12
Field Total	22	205	321	259	226	173	160	108	26
GRAND TOTAL	206	879	1 369	1 174	1 085	940	855	703	349

In 2012, worldwide, and as far as permanent employees are concerned, 1,238 movements In and 717 movements Out were recorded within the Group. Among the new entrants, as of December 31, 2012, there are 125 employees of Geophysical Research Corp. (GRC) in Tulsa, Oklahoma, which are linked to the integration of the company in the Sercel Group in 2012, and 159 reclassifications from "seasonal" to permanent. Excluding acquisitions and reclassifications (Seasonal – Permanent), we count 954 movements In. This number includes new hires and the reincorporation of people after a long absence. The movements Out include both voluntary departures (retirement, resignation...) and involuntary departures (layoffs, divestitures...). Excluding the « Equipment » scope, about one third of the departures are classified as involuntary.

The large number of departures is due to natural attrition inherent to the Group's businesses (especially the field staff) and a job market for geophysicists extremely competitive in several countries where the Group operates, in particular the USA, the UK and Norway.

In front of these departures and to ensure its growth, the Group implemented an ambitious recruitment program which included the hiring of office geophysicists, R&D scientists, managers and specialists of the maritime world in which the Group has to strengthen its competences. In addition, a program to recruit Marine field staff was established in order to replace the attrition and strengthen our skills especially in the field of navigation and geophysics.

The total level of entries in 2012 was up 23% compared to the 773 recorded in 2011.

The tables below show the distribution of movements In and movements Out by type of activity:

	Équipement	Services	Geomarkets / Support Functions	Total 2012	Total 2011
Movements In 2012					
Female	90	194	58	342	219
Male	257	584	55	896	554
TOTAL	347	778	113	1,238	773
Movements Out 2012					
Female	31	127	34	192	208
Male	121	365	39	525	631
TOTAL	152	492	73	717	839
Net Movements 2012					
Female	59	67	24	150	11
Male	136	219	16	371	-77
GRAND TOTAL	195	286	40	521	-66

As stated above these figures include entries associated with acquisitions, reclassifications (seasonal - permanent) and reincorporation after long absence. Effective net growth was 362 persons compared to 2011

12.1.2. France

The Group employs through its companies established in France 1,926 employees, including 1,911 with a permanent contract (CDI) and 15 fixed-term contracts (CDD). These people are employed by CGGVeritas SA, CGGVeritas Services SA or any subsidiary of the Sercel Group in France.

This number includes 81 people with an expatriate status and 174 people with a field staff status, Marine and Land. The parent company, CGGVeritas SA has 39 permanent employees. CGGVeritas Services SA has 970 permanent employees and 14 fixed-term employees. Sercel has 902 permanent employees and 1 fixed-term employee.

In France, the breakdown by professional category, all companies combined, is as follows:

	Employed as of December 31, 2012	
	Services	Équipement
Managers and Engineers	82.2 %	39.2 %
Technicians	5.8 %	32.5 %
Workers and semi-unskilled Staff	12.0 %	28.3 %

In France, 186 new employees were hired during the fiscal 2012 (13 by CGGVeritas SA, 103 by CGGVeritas Services SA and 70 by Sercel). These people were hired with a permanent contract. The use of fixed-term contracts and temporary work is strictly to compensate for long term absences of and occasional surge of activity.

The departures recorded in France at the end of 2012, amounted to 85 people (6 CGGVeritas SA, 44 CGGVeritas Services SA and 35 Sercel).

These numbers do not include internal transfers.

12.1.3. Recruitment

The Group keeps close connections with schools and universities where we can source our needed future talents. Our promotional lobbying near the students includes a strong participation in forums and educational programs, contributing to improve the knowledge of the Geosciences domain in the world of education, schools, and universities. Such programs are, amongst others, organized by professional associations, such as SEG (*Society of Exploration Geophysicists*) and EAGE (*European Association of Geoscientists & Engineers*).

In order to support durably the Group international growth, a specific effort has been made to recruit talented professionals originated from the various countries where we operate.

Together with this promotional effort near the students we add an extended offer for internship of various types; apprenticeship and professionalization contracts, CIFRE contracts, etc. In this context in France 22 “apprenticeship” contracts and 15 “professionalization” contracts were added to the 42 long term internship exceeding 4 months.

We are also careful to respecting diversity and non-discrimination when hiring. Our commitment is formalized in the Group Code of Ethics, the Code of Business Conduct, in the Sustainable Development policy and in the Human Resources policy. In order to publicize it a campaign aimed at raising awareness on the subject and providing training has also been implemented in each domain of activity. Hence the topic of non-discrimination has been included in the Human Resources Seminars and the “Governance and Performance” training provided by CGG University to the senior management. This campaign was strengthened in 2012 by online training programs on ethics and on prevention of discrimination.

In addition, the program of recruiting young high potentials was continued in 2012. It resulted in several new hires, especially in Land and Marine Divisions, who are included in our "GeoRise" program. It was supplemented by targeted recruitment to strengthen the Group's expertise in the Reservoir domain and in the cross-functional functions such as Finance or Human Resources.

12.1.4. Measures to promote employment and integration of disabled people

The Group, as stated in its Human Resources policy intends to reject any form of discrimination in hiring or during the careers of its employees. This applies in particular for discrimination against persons with disabilities. The Group does not publish statistics on the subject because of the nature of its activities and because of the restrictions about collecting and reporting information that may exist in some countries and which prevent us from recording this information in our databases.

12.2. Work conditions

In France, the Group is governed by a specific collective bargaining agreement agreed upon with the worker representatives. This agreement is common to CGGVeritas SA and CGGVeritas Services SA within the UES (*Unité économique et sociale*). This agreement does not include Sercel, which is ruled by the collective bargaining agreement of the steel industry.

Three types of work schedules are provided in this agreement:

- A first regime for people working in offices or workshops,
- A second regime for annualized field staff (number of working days per year defined) working in rotation,
- A third non-annualized regime for field staff who acquire off days according to the number of days worked in the field.

The field staff regimes allow employees to work on rotation patterns and by shifts of 12 hours per day. This is the case in Marine and in certain Land crews.

Duration of workdays is governed by an agreement to reduce working hours, signed on August 27, 1999, and implemented on an annual basis by the agreement of February 17, 2000.

A specific time-off account (CET or *compte épargne temps*) was simultaneously put in place in order to allow employees to save into such account the vacation days to which they are entitled as a result of the implementation of the 35-hour work week. Similar processes related to the reform of working hours were implemented in Sercel on its French sites.

A total of 33 persons work part-time, from 17.50 hours to 33.72 hours per week. It includes 21 people for the UES and 12 people for Sercel.

In 2011 absenteeism amounted to:

- 3.94% for the UES CGGVeritas SA and CGGVeritas Services SA, excluding maternity leaves and including 2.81% concerning absences longer than 100 days,
- 2.38% for Sercel, excluding maternity leaves and including 0.63% concerning absences longer than 100 days.

With regards to working time regimes outside France, employees are subject to legal labor regulations in force in their country of assignment. "Field Staffs" Contracts are contracts that cater for In-Off work rotations, eg, five weeks of work for five weeks of rest in Marine. Land rotations are more flexible depending on the nature and duration of the crews.

12.3. Distribution men-women

Out of a total 7,560 employees of the Group, 26% are women distributed varyingly in the different Divisions and Functions according to the nature of our activities; Equipment 31%, Land 10%, Marine 12%, Multi-Client & New Ventures 33%, Processing, Imaging & Reservoir 28%, Support Functions 52%.

The following table shows the distribution men / women, by type of business and by geographical area:

<i>Effectifs au 31/12/2012</i>	Équipement		Services		Geomarkets / Support Functions		Total		Total 2012	Total 2011 Female
	Female	Male	Female	Male	Female	Male	Female	Male		
Europe	220	782	294	892	213	180	727	1,854	2,581	683
Africa – Middle East	3	9	62	243	3	11	68	263	331	75
Asia - Pacific	252	333	135	332	34	22	421	687	1,108	404
North America	247	517	266	644	50	58	563	1,219	1,782	514
Latin America	1	3	52	142	26	34	79	179	258	80
Marine Seismic Crews	0	0	68	902	0	0	68	902	970	66
Land Seismic Crews	0	0	10	520	0	0	10	520	530	-
TOTAL	723	1,644	887	3,675	326	305	1,936	5,624	7,560	1,822

Note: In 2011, Land International crew staff was recorded in their region of assignment or region of contractual origin (in particular Europe, Africa, Middle East or North America). The ten women working on Land Seismic Crews, especially in North America, are therefore reported in 2011 in other regions.

In France, out of a total 1,926 employees, 24% are women. The distribution by company is as follows:

- CGGVeritas SA: 19 women out of 39 employees,
- CGGVeritas Services SA: 244 women out of 984 employees,
- Sercel: 198 women out of 903 employees.

We hold specific efforts to promote a better parity ratio within the management for the future, through promotions and targeted external recruitment.

12.4. Remuneration

The CGG compensation policy intends to associate closely remuneration and performance.

Salary Revision 2012

Within the scope of the UES CGGVeritas SA - CGGVeritas Services SA, wages negotiations with the trade unions in 2012 have not resulted in the signing of an agreement.

Excluding the contractual salary increase related to seniority for certain categories of employees, the salary increase in 2012 was 2.7% of total payroll, distributed on merit. To this amount a specific envelope covering 2.1% of the Processing, Imaging and Reservoir activity payroll, and a specific envelope covering 0.7% of the Land activity payroll were added to allow additional adjustments in these two areas. Finally a budget equivalent to 0.7% of the total payroll was devoted to financing promotions made during the year.

At Sercel, parallel wages negotiations led to an agreement protocol on February 29, 2012. Salary increase amounted to 4.5% of the total gross salary mass, including 3.9% of general / merit increase depending on the relevant population applicable as of January 1, 2012, plus a specific envelope of 0.6% dedicated to promotions.

It has to be noted also that for the seventh consecutive year a bonus linked to performance was paid to employees of the Services segment in March 2012. This variable part of the remuneration is deployed homogeneously within all the Group entities. It is implemented in two forms. One is a common program for all support functions and managerial entities (GPIP - "Global Performance Incentive Plan"), based for half on collective financial performance and half on individual performance against objectives. The other for the production entities is a program based on their own production objectives.

In France, the profit sharing agreement for a period of three years, signed on June 30, 2007 between the UES CGGVeritas SA & CGGVeritas Services SA and the social partners, being obsolete, was renewed on June 20, 2012 for a period of three years. A similar agreement was renewed in Sercel on June 6, 2012, also for a period of three years.

Within the same UES scope CGGVeritas SA & CGGVeritas Services SA the derogatory incentive agreement ("Participation" to the Company results) signed on June 30, 2007 has been terminated. Given the 2011 financial results, the legal part of the scheme has not delivered any contribution to be paid in 2012. Likewise no provision has been made for the year 2012.

At Sercel (France) in 2012, the agreements in force have continued to generate payments with respect to the profit-sharing and incentive ("Participation") agreement for the fiscal year 2011.

The additional company savings plan (“PEE”) and collective retirement savings plan (“PERCO”) implemented in 2006 and renewed for a similar period in January 2009 within the UES CGGVeritas SA and CGGVeritas Services SA and in 2005 within Sercel were normally enforced in 2011. These plans have been extended for another three years period starting from 2012.

At the end of 2012, within CGGVeritas SA and CGGVeritas Services SA, 457 employees subscribed to the PEE and 571 to the PERCO. At Sercel, 621 employees subscribed to the PEE and 493 employees to the PERCO.

Agreement on Men / Women “professional fairness”

Within the French UES scope regrouping CGGVeritas SA and CGGVeritas Services SA, the agreement regarding men and women professional fairness signed on January 17, 2007 expired on February 16, 2010. A new negotiation took place in 2011 resulting in the signature of a new agreement on December 21, 2011. This agreement included an envelope of 0.8% of the base payroll to operate a salary catch up in favor of women, applicable for the eligible people with an effective date on October 1, 2011. This salary catch up has been done as planned.

This agreement also included a follow up of the recruitment in the future and various educational programs for the staff, and particularly for managers, aimed at raising the awareness on the subject. A corresponding agreement on Men/Women “professional fairness” at Sercel has been negotiated and signed on October 23, 2012.

This type of agreement exists only within the French regulatory framework. To overcome this shortcoming at the global level, the Human Resources function has implemented a reporting on gender ratios in the various activities of the Group and in the main countries of activity. This reporting includes a comparison of salary levels by occupational category.

It should be noted that the text of the Group Human Resources policy, published in 2010 and amended in 2012, explicitly provides for non-discrimination in employment and equality of opportunity and treatment.

12.5. Social and professional relationships

Institutional Social Relationships

In order to foster dialogue and information exchanges, the UES CGGVeritas SA - CGGVeritas Services SA, as well as Sercel, have set in France representatives committees with which various formal meetings are held (enterprise committee, worker representative committee, HSE committee, various commissions), some of which having resulted in the signature of certain agreements. Within the UES CGGVeritas SA - CGGVeritas Services SA the rights of the employees are guaranteed by a collective bargaining agreement which was modified and signed on December 21, 2007.

Four ordinary meetings and four extraordinary meetings of the Hygiene, Safety and Work Conditions Committee (CHSCT) were organized in 2012 mainly dedicated to the follow up of the move to the Galileo and Newton buildings in Massy, and the move of the CGG University to the Carnot Plaza building. Among other topics discussed were the prevention of psychosocial risks, information about a helicopter crash in Gabon on a Land crew, review of the sanitary conditions on a crew in Algeria, presentation of the new format of the document about risk assessment and the impact analysis linked to the acquisition of the Fugro Geoscience Division.

Similar representative committees, organized in compliance with the local laws, are active in other entities of the Group (International staff in Switzerland, Norway, Singapore, etc.).

Ethics and Whistle-blowing

The Code of Business Conduct and the employee reporting line have been implemented in 2009. The employee reporting line, compliant with the SOX act (July 31, 2002, article 301-4) and compliant with the specifications of the U.S. Safe Harbor Act, was submitted for approval to the CNIL (*Commission Nationale de l'Informatique et des Libertés*). Only one call compliant with the scope was registered in 2012, among 29 calls. This case was instructed at the end of 2012 and was concerning a non-proven case of hiring discrimination in North America.

Welfare

The employee assistance program ("EAP") initially set up within the Group in partnership with Shepell-FGI has been re-tendered. The American company ComPsych was selected for a period of five years, covering the period from 2012 to 2017. This program, offered with full confidentiality by a third party and guaranteeing a total privacy for the employee is aimed at providing personal or individual assistance and advice in case of medical, social, professional or legal needs.

In France this program complements the conventional welfare tools or systems existing in the context of the labor regulations; social workers, CHSCT, action of the people representatives. It replaces such tools and systems in countries where the structure or the law does not cater for such tools and systems.

12.6. Training & Education

Our training policy, aimed at promoting individual and professional development, is a priority of the Group, which for that purpose has put in place for several years its own enterprise university : CGG University.

CGG University provides training to accelerate the development and integration of new employees in the Group's various activities. Within the scope of the people development and follow up program GeoRise, developed by the Human Resources function, the university educates young talents in our acquisition and processing and imaging activities during the first years of their career, by providing adapted programs. Since the launch of the program in 2006, many sessions have been organized in the three main university sites, in Massy, Houston, and Singapore.

CGG University organizes also technical training programs to the Group's employees and clients. This year a specific effort has been made toward the development and the implementation of new training modules supporting the deployment of the processing software *Geovation*, especially its version 2. Besides, for general education 83 geophysical lectures hosting 1261 participants, related to geophysics or management, were organized around the world.

CGG University also offers training programs in management. In 2012, these programs have evolved toward developing skills associated with the leadership model of the company. The offer of individual programs for personal development was also enriched. Awareness programs for purchasing and procurement, project management, and QHSE policy (Quality, Health, Safety and Environment) have been updated.

Finally, a training related to the promotion of ethics and understanding of the Code of Business Conduct, as well as a training related to the fight against discrimination and harassment have been developed. The e-learning version of the program to raise awareness of ethics was published in 2012 and is gradually released to the entire staff. At the end of 2012 the majority of the office personnel, excluding Sercel, had completed this training. Deployment to the Marine Field staff began in November 2012 and will continue in 2013. In 2013 we plan to generalize the access to the Land field staff and Sercel staff, with the goal of achieving 100% participation. The access for the employees of the Fugro Geosciences Division having joined or about to join the Group in 2013 is also planned, after the closing of the acquisition.

A version of the e-learning program against discrimination and harassment developed in partnership with the "Sustainable Development" Department is ready for publication in 2013

The concept of "Learning for Development" has been strengthened. It addresses the need for our organization and every of its employees to acquire continuously the knowledge and the know-how indispensable to cope with the evolution of the technologies and working methods. It also addresses the need to adapt to the organizational and internal processes changes. This requires a close partnership between the university and the operations, for which reason CGG University has adapted its structure and content.

CGG University has delivered 19,880 training days in 2012, including 3,995 to external customers and 15,885 to the Group's employees. The 3,995 days delivered to external customers focused on acquisition techniques and data processing. The 15,885 days delivered to our employees were distributed as follows: 4,139 days to introduce the fundamentals of our business and geosciences, 4,223 days dedicated to more thorough technical training, 1,140 days devoted to health, safety and the environment, and 6,383 days spent on managerial, leadership and personal development programs.

Outside the CGG corporate university, many training programs are also offered by third parties. External training dispensed by specialized training firms or equipment suppliers relates to the acquisition of specific technical skills, generic business skills; foreign languages, law, accounting, human resources, etc. They may deliver qualifying diploma. Training related to behaving and speaking in public, among others, are also provided. Finally trainings about Health, Safety and Environment (HSE) like survival at sea, first aid or firefighting are mandatory for our staff working on crews or for people visiting our seismic vessels. It is estimated that the costs of such external training is of the same order of magnitude as the cost of the training managed directly by the corporate university. Our reporting system does not allow us to count the number of days corresponding. However, it can be estimated to be in excess of 10,000 days.

Finally there is a third type of training provided on site by the operations themselves, which includes among others training for geophysicists or HSE and activity training for employees assigned on Land or Marines crews.

Outside of France our time logging systems and practices do not allow the recording of this onsite training which is considered as normal working time.

In France, including training provided by external suppliers, the annual socio-economic report (bilan social) cites 5,419 training days including 3,805 in the Services segment and 1,614 for Sercel.

12.7. Compliance with international conventions on labor

The Group adheres to the principles and rules laid down by the International Labor Organization ("ILO"). In addition, the Group adheres, since 2007, to the principles the United Nations Global Compact and undertakes also to respect and to promote the Universal Declaration of Human Rights of the United Nations.

This concerns in particular the freedom of association and the right for the employees to organize themselves to participate in collective bargaining, within the legal framework provided by the law of each country where the Group employs staff.

This also relates to the elimination of forced labor and management of child labor. In this respect the Group's Human Resources policy prohibits the employment of children under 16 years of age in its activities and the Group in 2012 published an instruction clarifying the terms of hiring and employment of young workers under 18 years of age.

Since 2012, HSE audits also include some social component to cover aspects of human rights and labor rights (child labor, forced labor, freedom of association, right to collective bargaining, discrimination, disciplinary practices, working hours and remuneration), applicable within the Group or within its Acquisition business subcontractors.

12.8. Reporting methodology and definitions

Methodology

The figures presented are mostly extracted from our Group Human Resources Information System (Oracle HRMS Database). This database is deployed in all Group entities, with the exception of the Sercel group of companies. In these companies a SAP database is being deployed. Sercel data are so far consolidated manually.

The selected indicators cover the scope of the consolidated Group. Employees of associated companies (Argas for example) are not included in the calculations. In case of acquisition / divestment the scope is adjusted at the actual time of the transaction and the variances explained (e.g. Geophysical Research Corp. in 2012).

Consolidation rules and adjustments are defined by a protocol followed for each reporting to ensure comparability and traceability of the information provided.

The data managed in the Group Oracle database does not yet contain all the data regarding time logging, which is recorded and stored in local databases related to payroll. It should be noted that these databases are outsourced in major countries except USA and Canada where the payroll computation is done internally. The Absence Management application is addressing this problem and is being deployed for office personnel. The configuration of this application differs from business group to business group depending on the legal constraints of the corresponding countries and does not provide the same level of detail for all countries.

Finally, the structure for the collection and storage of personal data varies from country to country depending on the existing regulatory constraints. Some information which is collected and subject to reporting in France may be illegal in other countries and vice versa, which explains why some information is not consolidated globally.

Data are stored in the Human Resources information system by local Human Resources administrative entities, or through a special structure set up for this purpose (Employee Service Center for North America).

These data are checked at three levels:

- A level of SOX compliance, via annual audits and setting up of control points for individual data such as gender, birth dates, seniority, wages, promotions, tax situations, type of contract, etc,
- A level of compliance via the pay slip or monthly time sheet, when the base is coupled to an HRMS payroll engine,
- A level of compliance regarding organizational reporting lines, belonging to a given business family, a Division, a Function, a Product Line (Business Line) etc. ... is done by checking made by operational and functional HR managers at the time of the monthly or quarterly reporting.

Finally, some global processes implemented through tools directly connected to the HRMS database, like the annual performance appraisal, the annual salary review, the calculation of annual bonuses also allow from time to time (at least once a year) to cross correlate the information, to analyze and validate it.

The data reported are based on the calendar year 2012. Given the fact that some publication requirement was made effective during the year, information on certain topics, including training hours and absenteeism data, could not be established across the full scope. The tools to respond to this need are being developed and implemented.

Definitions

The following section provides definitions of the various names used in the Human Resources part of this report.

- *The Group or CGG*: CGG Group, including all the activities in the various countries where the Group is present.
- *CGGVeritas SA*: Group's parent company incorporated in Paris, France. CGGVeritas SA Part of the UES.
- *CGGVeritas Services SA*: French Company of the Group, incorporated in Massy, France, specialized in the field of geophysical services. CGGVeritas Services SA is part of the UES.
- *UES*: "Unité Economique et Sociale" / "Social and Economical Entity", composed of the companies CGGVeritas SA and CGGVeritas Services SA.
- *Sercel*: Sercel Group, specialized in the manufacturing of equipment.
- *Sercel France*: All Sercel group companies established in France.
- *Equipment*: operational Division regrouping activities involving manufacturing of equipment. This coincides with the Sercel Group.
- *Land*: operational Division regrouping activities involving data acquisition in land. This Division is a Business Line in 2013.
- *Marine*: operational Division regrouping activities involving data acquisition in marine. This Division is a Business Line in 2013.
- *PIR*: operational Division regrouping activities involving data processing, seismic imaging and reservoir characterization. This Division is a Business Line in 2013.
- *GeoMarkets*: transverse Function aimed at structuring our products marketing and promotion approach to our customers in the various countries where the Group operates.
- *Office staff*: Staff working on a week base rhythm in offices or support bases and workshops.
- *Field staff*: Staff working in rotation over several weeks on land seismic crews (projects) or seismic vessels.
- *Permanent*: Staff employed either with a permanent contract or fixed-term contract by a Group's entity, full time or part time.
- *Seasonal*: Staff employed by a Group's entity for the duration of a land seismic crew (project).

External audit

For the first year, the Group has chosen to have its social performance indicators audited. The social information to be published was selected by HR departments and has been audited by the Department of Environment and Sustainable Development from Ernst & Young, one of the Auditors of the Group.

13. BOARD OF DIRECTORS AND GENERAL MANAGEMENT

13.1. Board of Directors

13.1.1. Members of the Board of Directors as of December 31, 2012

Name	Age	Positions	Initially appointed	Term expires^(**)
Robert BRUNCK⁽²⁾⁽⁴⁾ Nationality: French	63	Chairman of the Board of Directors	May 20, 1999 (Director since September 9, 1998)	2016 General Meeting
Jean-Georges MALCOR Nationality: French	56	Chief Executive Officer and Director	May 4, 2011	2015 General Meeting
Olivier APPERT^{(2)(3)(*)} Nationality: French	63	Director	May 15, 2003	2016 General Meeting
Loren CARROLL^{(1)(*)} <i>(independent Director)</i> Nationality: American	69	Director	January 12, 2007	2013 General Meeting
Rémi DORVAL⁽¹⁾⁽³⁾⁽⁴⁾ <i>(independent Director)</i> Nationality: French	61	Director	March 8, 2005	2014 General Meeting
Jean DUNAND⁽¹⁾ <i>(independent Director)</i> Nationality: French	72	Director	September 8, 1999	2013 General Meeting
Agnès LEMARCHAND^{(3)(5)(*)} <i>(independent director)</i> Nationality : French	58	Director	September 21, 2012	2013 General Meeting
Gilberte LOMBARD⁽¹⁾ <i>(independent Director)</i> Nationality: French	68	Director	May 4, 2011	2015 General Meeting
Hilde MYRBERG⁽³⁾⁽⁴⁾ <i>(independent Director)</i> Nationality: Norwegian	55	Director	May 4, 2011	2015 General Meeting
Robert F. SEMMENS⁽²⁾⁽³⁾ Nationality: American	55	Director	December 13, 1999	2015 General Meeting
Kathleen SENDALL⁽⁴⁾⁽⁵⁾ <i>(independent Director)</i> Nationality: Canadian	59	Director	May 5, 2010	2014 General Meeting
Daniel VALOT⁽¹⁾⁽²⁾⁽⁵⁾ <i>(independent Director)</i> Nationality: French	68	Director	March 14, 2001	2016 General Meeting
Terence YOUNG^{(4)(5)(*)} <i>(independent Director)</i> Nationality: American	66	Director	January 12, 2007	2013 General Meeting

⁽¹⁾ Member of the Audit Committee

⁽²⁾ Member of the Strategic Committee

⁽³⁾ Member of the Appointment & Remuneration Committee

⁽⁴⁾ Member of the Technology Committee

⁽⁵⁾ Member of the Health, Safety, Environment and Sustainable Development Committee

^(*) The renewal of this office will be submitted to the approval of general meeting of shareholders of May 3, 2013.

^(**) Since the General Meeting held to approve the 2007 financial statements, the Directors are appointed for four years. However, the terms of Directors that are currently in force remain as initially set until expiration of their term.

The conditions of preparation and organization of the meeting of the Board of Directors and its Committees are detailed in the report of the Chairman on Board of Directors' composition, preparation and organization of the Board of Directors' work, on internal control and risks management, appended to the present annual management report.

13.1.2. Other positions held by the Directors as of December 31, 2012

Mr. Robert Brunck (number of securities owned: 180,349 shares)
Chairman of the Board of Directors

Positions within the Group: None

Positions held in other companies:

French institutions and companies:

Centre Européen d'Education Permanente (CEDEP)	Director
Association pour la Recherche et le développement des Méthodes et Processus industriels (ARMINES)	Chairman
Ecole Nationale Supérieure de Géologie (ENSG)	Director
Bureau de Recherches Géologiques et Minières (BRGM)	Director
Groupement des Entreprises Parapétrolières et Paragazières - Association Française des Techniciens du Pétrole (GEP-AFTP)	Director
Nexans <i>(company listed on Euronext Paris)</i>	Director and Member of the Appointment and Remuneration Committee

Mr. Olivier Appert (number of securities owned: 2,407 shares)
Director

Positions within the Group: None

Positions held in other companies:

French institutions and companies:

IFP Energies Nouvelles	Chairman and Chief Executive Officer
Technip <i>(company listed on Euronext Paris)</i>	Director, Member of the Strategic Committee and of the Ethics & Governance Committee
Institut de Physique du Globe de Paris (IPGP)	Director
Storengy	Director, member of the Audit Committee

Mr. Rémi Dorval (number of securities owned: 500 shares)

Director

Positions within the Group: None

Positions held in other companies:

French companies:

Solétanche Freyssinet

Director

VINCI (*company listed on Euronext Paris*)

Executive Vice President

Mr. Jean Dunand (number of securities owned: 4,930 shares)

Director

Positions within the Group: None

Positions held in other companies: None

Mr. Robert F. Semmens (number of securities owned: 3,460 shares and 350 ADS)

Director

Positions within the Group: None

Positions held in other companies :

Foreign institutions and companies:

MicroPharma Limited (Canada)

Director

Bronco Holdings, LLC. (USA)

Director

Leonard N. Stern School of Business, New York University

Adjunct Professor of Finance

Mr. Daniel Valot (number of securities owned: 2,243 shares)

Director

Positions within the Group: None

Positions held in other companies:

French companies:

SCOR

(*company listed on Euronext Paris*)

Director, Member of the Strategy Committee, Audit Committee, Compensation and Nomination Committee and Risk Committee

Dietswell

Director

Mr. Loren Carroll (number of securities owned: 500 ADS)
Director

Positions within the Group: None

Positions held in other companies:

Foreign companies:

Forest Oil Corporation (USA) <i>(company listed on the New York Stock Exchange)</i>	Director, Member of the Compensation Committee, member of the Audit Committee and Chairman of the Nominating and Corporate Governance Committee
KBR Inc. (USA) <i>(company listed on the New York Stock Exchange)</i>	Lead Director, Chairman of the Nominating and Corporate Governance Committee and member of the Compensation Committee

Mr. Terence Young (number of securities owned: 500 ADS)
Director

Positions within the Group: None

Positions held in other companies: None

Mrs. Kathleen Sendall (number of securities owned: 500 ADS)
Director

Positions within the Group: None

Positions held in other companies:

Foreign institutions and companies:

Alberta Innovates – Energy & Environment Solutions (Canada)	Vice-Chairman and Director
ENMAX (Canada)	Director
Canadian Centre for Energy Information (Canada)	Director

Mrs. Gilberte Lombard (number of securities owned: 583 shares)
Director

Positions within the Group: None

Positions held in other companies:

French companies:

Zodiac Aéospace <i>(company listed on Euronext Paris)</i>	Member of the Supervisory Board, Chairman of the Audit Committee and Member of the Remuneration Committee
Robertet <i>(company listed on Euronext Paris)</i>	Director, Chairman of the Remuneration Committee and Member of the Audit Committee

Mrs. Hilde Myrberg (number of securities owned: 500 shares)

Director

Positions within the Group: None

Positions held in other companies:

Foreign companies:

Petoro AS (Norway)	Director and Vice Chairman of the Board of Directors
Gjensidige Forsikring ASA (Norway) <i>(company listed on the Oslo Stock Exchange)</i>	Member of the Supervisory Board
Det Norske Oljeselskap ASA (Norway) <i>(company listed on the Oslo Stock Exchange)</i>	Member of the Nomination Committee
NBT AS (Norway)	Member of the Nomination Committee

Mrs. Agnès Lemarchand (number of securities owned: 500 shares)

Director

Positions within the Group: None

Positions held in other companies:

French institutions and companies:

Areva <i>(company listed on Euronext Paris)</i>	Member of the Supervisory Board, Member of the Appointment-Remuneration Committee, Member of the Strategic Committee
Mersen (ex Carbone Lorraine) <i>(company listed on Euronext Paris)</i>	Member of the Supervisory Board, member of the Appointment-Remuneration Committee, member of the Strategic Committee
SICLAE	Member of the Supervisory Board, representative of the FSI, member of the Audit Committee, member of the Remuneration Committee
Conseil Economique et Social et Environnemental	Member

Foreign companies:

Steetley Dolomite Limited (UK)	Executive Chairman
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13.2. Chief Executive Officer

Nom	Age	Position	Date of appointment	Term expires
Jean-Georges MALCOR	56	Chief Executive Officer	June 30, 2010	After the 2014 General meeting
		Director	May 4, 2011	2015 General meeting

Other positions held by the Chief Executive Officer on December 31, 2012:

Mr. Jean-Georges MALCOR (number of securities owned: 9,413 shares)
Chief Executive Officer

Positions within the Group:

French companies:

Sercel Holding S.A.	Chairman of the Board of Directors
CGGVeritas Services SA	Director

Foreign companies :

Ardiséis FZCO (Dubai, United Arab Emirates)	Director
Arabian Geophysical & Surveying Company (Argas, Saudi Arabia)	Director

Positions held in other companies:

French institutions and companies :

Fonds de dotation Universcience Partenaires	Chairman
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Foreign companies :

STMicroelectronics (the Netherlands) <i>(company listed on the New York Stock Exchange, on Euronext Paris and on Borsa Italiana)</i>	Director and Member of the Audit Committee
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13.3. Corporate Officers

Mr. Stéphane-Paul Frydman (number of securities owned: 25,040 shares)

Positions within the Group:

French companies:

CGGVeritas Services SA	Director
Sercel Holding SA	Director
Sercel SA	Director

Foreign companies :

CGGVeritas Holding (U.S.) Inc. (USA)	Director
CGGVeritas Eidesvik Ship Management AS (Norway)	Director
CGGVeritas International SA (Switzerland)	Director and Chairman of the Board

Positions held in other companies: None

Mr. Pascal ROUILLER (number of securities owned: 18,944 shares)

Positions within the Group:

French companies:

Sercel SA	Chairman of the Board and Chief Executive Officer
Sercel Holding	Chief Executive Officer

Foreign companies :

Hebei Sercel JunFeng Geophysical Prospecting Equipment Co. Ltd (Chine)	Director
Sercel (Beijing) Technological Services Co. Ltd (Chine)	Chairman of the Board
Sercel Australia Pty (Australie)	Chairman of the Board
Sercel Inc. (USA)	Director and Chief Executive Officer
Sercel Canada Ltd. (Canada)	Chairman of the Board
Sercel Singapore Private Ltd. (Singapour)	Director
Sercel-GRC (USA)	Vice Chairman

Positions held in other companies: None

13.4. Directors' fees

In January 2013, the Company paid an aggregate amount of €723,387.98 to the members of the Board for fiscal year 2012. This amount is divided into a fixed and variable component on the basis of two-thirds of the basic amount for function and one-third for presence as described hereafter. The basic amount is set at €580,000 plus a lump sum, amounting to €150,000 allocated as described hereafter.

Allocation of the basic amount:

The fixed component is calculated on the basis of one share for each Director and an additional share as a committee member. The remuneration of any Director appointed in the course of the year is calculated on a pro-rata temporis basis.

The variable component linked to the participation in committees and Board meetings is calculated on the basis of one share for each meeting of the Board, its Committees or the Joint Committees attended, with a 1.5 share for Board or Committee Chairs (this rule will apply as well to a chairman attending a joint committee meeting of all committees). A Director who participates in a Board committee's meeting as a guest does not receive any fee.

Allocation of the lump sum:

In addition, a lump sum is allocated as follows:

- €20,000 for each Director residing abroad, i.e. a global amount of €120,000;
- €10,000 for the Chairman of the Audit Committee;
- €5,000 for each other Audit Committee's member, i.e. a global amount of €20,000.

The table below sets forth the gross amount paid to each Director by the Company and/or by its subsidiaries for the past two fiscal years. Mr. Jean-Georges MALCOR, Chief Executive Officer and Director, does not receive any Directors' fee.

<u>Directors</u>	<u>Amounts paid for fiscal year 2011</u>	<u>Amounts paid for fiscal year 2012</u>
Robert BRUNCK		
Director's fees	€ 49,997.56	N/A
Jean-Georges MALCOR		
Director's fees	N/A	N/A
Olivier APPERT		
Director's fees	€ 44,379.32	€ 51,013.79
Loren CARROLL		
Director's fees	€ 62,297.52	€ 64,085.30
Rémi DORVAL		
Director's fees	€ 58,302.40	€ 65,854.44
Jean DUNAND		
Director's fees	€ 52,254.78	€55,375.25
Agnès LEMARCHAND⁽¹⁾		
Director's fees	N/A	€12,847.76
Gilberte LOMBARD		
Director's fees	€ 26,557.11	€ 46,071.60
Hilde MYRBERG		
Director's fees	€ 30,624.74	€ 70,447.68
Denis RANQUE⁽²⁾		
Director's fees	€ 44,969.15	€ 38,424.62
Robert SEMMENS		
Director's fees	€ 70,989.01	€ 72,337.99

⁽¹⁾ Director as from September 21, 2012

⁽²⁾ Resigned from his duties as Director of the Company on October 27, 2012

<u>Directors</u>	<u>Amounts paid for fiscal year 2011</u>	<u>Amounts paid for fiscal year 2012</u>
Kathleen SENDALL		
Director's fees	€ 69,667.07	€ 73,662.19
Daniel VALOT		
Director's fees	€ 40,314.61	€ 49,289.36
David WORK⁽³⁾		
Director's fees	€ 78,974.70	€ 58,923.12
Terence YOUNG		
Director's fees	€ 63,718.36	€ 65,054.89

⁽³⁾ Resigned from his duties as Director of the Company on September 1, 2012.

Pursuant to applicable law, Directors, except the Chief Executive Officer, are not entitled to be allocated stock-options and/or performance shares of the Company. As from fiscal year 2012, Mr. Robert BRUNCK, Chairman of the Board of Directors, is not entitled to any stock-options or performance shares.

14. COMPENSATION OF THE EXECUTIVE OFFICERS

14.1. Compensation

The aggregate compensation of the Chief Executive Officer and the two Corporate Officers includes a fixed element and a bonus. The bonus for a given fiscal year is determined and paid during the first semester of the following fiscal year.

Since January 1, 2012, the Chairman of the Board of Directors is no longer receiving variable compensation, Director's fees, stock-options or performance shares. His compensation is composed of a fixed element only.

The Chairman of the Board of Directors, the Chief Executive Officer and the two Corporate Officers will be hereinafter referred to as the "Executive Officers".

14.1.1. Compensation of Mr. Robert BRUNCK, Chairman of the Board

The gross fixed and variable compensation earned by and paid by the Company and its subsidiaries to Mr. Robert BRUNCK, Chairman of the Board of Directors, for fiscal years 2011 and 2012 is set forth below:

	2011		2012	
	Amounts earned	Amounts paid	Amounts earned	Amounts paid
Robert BRUNCK <i>Chairman of the Board of Directors</i>				
Fixed compensation	€275,000.00	€275,000.00	€ 275,000.00	€275,000.00
Variable compensation	€103,125.00	€139,738.00 ⁽¹⁾	N/A ^(*)	€103,125.00 ⁽²⁾
Exceptional compensation	N/A	N/A	N/A	N/A
Retirement indemnity	N/A	€370,450.00	N/A	N/A
Director's fees	€49,997.56	€47,946.24 ⁽³⁾	N/A ^(*)	€49,997.56 ⁽⁴⁾
Benefits in kind (company car)	€6,840.00	€6,840.00	€10,412.00	€10,412.00
TOTAL	€434,962.56	€469,524.24	€285,412.00	€438,534.56

⁽¹⁾ Paid in March 2011 for fiscal year 2010

⁽²⁾ Paid in March 2012 for fiscal year 2011

⁽³⁾ Paid in January 2011 for fiscal year 2010

⁽⁴⁾ Paid in January 2012 for fiscal year 2011

^(*) As from January 1, 2012, Mr. Robert BRUNCK does not receive any variable compensation or Director's fees

14.1.2. Compensation of Jean-Georges MALCOR, Chief Executive Officer

For fiscal year 2012, the variable part of the Chief Executive Officer's compensation is based on the achievement of personal objectives (representing one third of the bonus) and financial objectives (representing two thirds of the bonus). The financial objectives are related to the Group revenues (weighted 30%), operating income (OPINC) (weighted 35%), EBITDAS less capital expenditures (weighted 20%) and Group free cash flow (weighted 15%). His target amount is set at 100% of his fixed remuneration.

The gross fixed and variable compensations paid by the Company and its subsidiaries to Mr. Jean-Georges MALCOR in fiscal years 2011 and 2012 are set forth below:

	2011		2012	
	Amounts earned	Amounts paid	Amounts earned	Amounts paid
Jean-Georges MALCOR <i>Chief Executive Officer</i>				
Fixed compensation	€600,000.00	€600,000.00	€600,000.00	€600,000.00
Variable compensation	€608,502.00	169 850,00 € ⁽¹⁾	€385,795.00	€608,502.00 ⁽²⁾
Indemnity paid upon termination of the employment agreement	N/A	N/A	N/A	N/A
Exceptional compensation	N/A	N/A	N/A	N/A
Directors' fees	N/A	N/A	N/A	N/A
Benefits in kind (company car)	€6,840.00	6 840,00 €	€12,050.00	€9,360.00
TOTAL	€1,215,342.00	€776,690.00	€997,845.00	€1,217,862.00

⁽¹⁾ Paid in March 2011 for fiscal year 2010

⁽²⁾ Paid in March 2012 for fiscal year 2011

14.1.3 Compensation of Mr. Stéphane-Paul FRYDMAN, Corporate officer

For fiscal year 2012, the variable part of Mr. Stéphane-Paul FRYDMAN's compensation is based on the achievement of personal objectives (representing half of the bonus) and financial objectives (representing half of the bonus). The financial objectives are related to the Group revenues (weighted 30%), operating income (OPINC) (weighted 35%), EBITDAS less capital expenditures (weighted 20%) and Group free cash flow (weighted 15%). His target amount is set at 60% of his fixed remuneration.

The gross fixed and variable compensations paid by the Company and its subsidiaries to Mr. Stéphane-Paul FRYDMAN, appointed Corporate Officer on February 29, 2012, in fiscal year 2012 are set forth below:

Stéphane-Paul FRYDMAN <i>Corporate Officer</i>	2012	
	Amounts earned	Amounts paid
Fixed compensation under employment agreement	€320,000.00	€320,000.00
Fixed compensation as executive officer	€80,000.00	€66,660.00
Variable compensation	€174,538.00	€194,952.00 ⁽¹⁾
Exceptional compensation	N/A	N/A
Directors' fees	N/A	N/A
Benefits in kind (company car)	€4,800.00	€4,800.00
TOTAL	€579,338.00	€586,412.00

⁽¹⁾ Paid in March 2012 for fiscal year 2011.

14.1.4 Compensation of Mr. Pascal ROUILLER, Corporate Officer

For fiscal year 2012, the variable part of Mr. Pascal ROUILLER's compensation is based on the achievement of personal objectives (representing half of the bonus) and financial objectives (representing half of the bonus). The financial objectives are related to the Group operating income (OPINC) (weighted 25%) and to the Equipment Division operating income (OPINC) (weighted 20%), Group EBITDAS less capital expenditures (weighted 10%) and Equipment Division EBITDAS less capital expenditures (weighted 10%), Group free cash flow (weighted 15%) and Equipment Division production (weighted 20%). His target amount is set at 60% of his fixed remuneration.

The gross fixed and variable compensations paid by the Company and its subsidiaries to Mr. Pascal ROUILLER, appointed Corporate Officer on February 29, 2012, in fiscal year 2012 are set forth below:

Pascal ROUILLER <i>Corporate Officer</i>	2012	
	Amounts earned	Amounts paid
Fixed compensation under employment agreement	€320,000.00	€320,000.00
Fixed compensation as executive officer	€80,000.00	€66,660.00
Fixed compensation as executive officer of Sercel SA	€12,000.00	€12,000.00
Variable compensation	€175,084.00	€251,013.00 ⁽¹⁾
Exceptional compensation	N/A	N/A
Directors' fees	N/A	N/A
Benefits in kind (company car)	€5,280.00	€5,280.00
TOTAL	€592,364.00	€654,953.00

⁽¹⁾ Paid in March 2012 for fiscal year 2011

14.2. Stock-options and performance shares allocated to Executive Officers

Pursuant to article L.225-102-1 of the French Commercial Code, the stock-options and performance shares allocated to the Executive Officers for the last two years are set forth below. Since 2012 fiscal year, stock-options and performance shares are generally granted each year, in June.

Since January 1, 2012, Mr. Robert BRUNCK, Chairman of the Board of Directors, is no longer being allocated stock-options or performance shares. Moreover, the tables below include stock-options and performance shares which have been allocated to Mr. Stéphane-Paul Frydman and Mr. Pascal Rouiller since their appointment as Corporate Officer only, i.e. February 29, 2012.

14.2.1. *Stock-options*

The stock options allocated to the Executive Officers under the plans implemented by the Company over the last two years are set forth in the table below¹².

¹² With respect to Messrs. Stéphane-Paul Frydman and Pascal Rouiller, this table provides with stock-options granted to them as from the date of their appointment as Corporate Officers only, i.e. February 29, 2012.

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 (€)	Subscription price ^{(1)(*)}	Exercise period
Robert BRUNCK <i>Chairman of the Board</i>	03/24/2011	70,165 ⁽²⁾	373,122	€ 24.21	From 03/25/2012 to 03/24/2019 inclusive
Jean-Georges MALCOR <i>Chief Executive Officer</i>	03/24/2011	140,329 ⁽²⁾	746,238	€ 24.21	From 25/03/2012 to 24/03/2019 inclusive
Jean-Georges MALCOR <i>Chief Executive Officer</i>	06/26/2012	210,484 ⁽²⁾	804,000	€ 17.84	From 06/27/2014 to 06/26/2020 inclusive
Stéphane-Paul FRYDMAN <i>Corporate Officer</i>	06/26/2012	105,243 ⁽²⁾	402,000	€ 17.84	From 06/27/2014 to 06/26/2020 inclusive
Pascal ROUILLER <i>Corporate Officer</i>	03/24/2011	105,243 ⁽²⁾	402,000	€ 24.21	From 25/03/2012 to 24/03/2019 inclusive

^(*) Number of options and subscription prices adjusted further to the capital increase of October 23, 2012.

⁽¹⁾ The subscription price corresponds to the average of the opening share prices of the share on the last twenty trading days prior to the meeting of the Board of Directors granting the options.

⁽²⁾ Subject to the performance conditions described below.

Stock-options are allocated without any possible discount.

The conditions of the plans applicable to the Executive officers are those of the general plans, plus those described below.

Performance conditions:

Stock option plan dated March 24, 2011¹³

The Board of Directors decided, in accordance with the provisions of the AFEP-MEDEF code that, for the first three years of the plan dated March 24, 2011, the acquisition of options would be 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 SectorSM (OSXSM);
- a financial indicator objective of EBITDAS denominated in US\$ and related to the target for the annual variable part of the compensation of the Executive Officers ("*mandataires sociaux*").

¹³ With respect to the plan dated March 24, 2011, this provision applies to Messrs. Robert BRUNCK and Jean-Georges MALCOR only, as they were the only Executive Officers of the Company when stock-options were allocated.

Stock option plan dated June 26, 2012

The Board of Directors decided, in accordance with the provisions of the AFEP-MEDEF code that the rights to the options would be acquired in three batches during the first four years of the plan dated June 26, 2012 (50% of the options allocated in June 2014, 25% of the options allocated in June 2015 and 25% of the options allocated in June 2016) and that the acquisition of options would be subject to the following performance conditions:

1. The average, over the sixty trading days preceding the date of allocation, of the ratio between the CGG ADS price over the PHLX Oil Service SectorSM (OSXSM) index shall equal at least two-third of the same average ratio over the same period of sixty trading days three years before the vesting date;
2. The average, over the sixty trading days preceding the date of allocation, of the ratio between the CGG share price over SBF 120 index shall equal at least two-third of the same average ratio over the same period of sixty trading days three years before the vesting date;
3. Over the vesting period, the market price of the CGG share shall have increased at least by 8% on an annual basis;
4. The Group results in average over a period of 3 years preceding the vesting date shall reach at least 90% of the average EBITDAS annual targets as determined by the Board of Directors.

Obligation to keep stock-options under the registered form:

Pursuant to 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 benefiting from these plans 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 24, 2011¹⁴ and June 26, 2012.

14.2.2. Performance shares

The shares finally allocated during the 2012 fiscal year to Executive Officers pursuant to the plan dated March 22, 2010 are set forth below:

Name of the Executive Officer (“mandataire social”)	Date of the Plan	Number of shares finally allocated during 2012 fiscal year	Final allocation Date	Date of availability	Performance conditions
Robert BRUNCK Chairman of the Board of Directors	03/22/2010	8,694	05/10/2012	05/11/2014	Operating income EBITDAS
Jean-Georges MALCOR Chief Executive Officer	03/22/2010 ⁽¹⁾	7,113	05/10/2012	05/11/2014	Operating income EBITDAS
Stéphane-Paul FRYDMAN Corporate Officer	03/22/2010 ⁽¹⁾	2,766	05/10/2012	05/11/2014	Operating income EBITDAS
Pascal ROUILLER Corporate Officer	03/22/2010 ⁽¹⁾	2,766	05/10/2012	05/11/2014	Operating income EBITDAS

⁽¹⁾ As of the date of this plan, Mr. Jean-Georges MALCOR, Stéphane-Paul FRYDMAN and Pascal ROUILLER were not yet Executive Officers of the Company.

¹⁴ With respect to the plan dated March 24, 2011, this provision applies to Messrs. Robert BRUNCK and Jean-Georges MALCOR only, as they were the only Executive Officers of the Company when stock-options were allocated.

The shares allocated to Executive Officers under the plans dated March 24, 2011 and June 26, 2012 respectively are set forth below:

Name of the Executive Officer (“ <i>mandataire social</i> ”)	Date of the Board of Directors’ meeting	Maximum number of shares allocated ^(*)	Valuation of shares (€)	Final allocation Date	Date of availability	Performance conditions
Robert BRUNCK <i>Chairman of the Board of Directors</i>	03/24/2011	14,446	355,300	03/24/2013	03/24/2015	Operating income EBITDAS
Jean-Georges MALCOR <i>Chief Executive Officer</i>	03/24/2011	28,892	710,600	03/24/2013	03/24/2015	Operating income EBITDAS
Jean-Georges MALCOR <i>Chief Executive Officer</i>	06/26/2012	28,892	498,575	06/26/2014	06/26/2016	EBIT EBITDAS
Stéphane-Paul FRYDMAN <i>Corporate Officer</i>	06/26/2012	11,819	203,963	06/26/2014	06/26/2016	EBIT EBITDAS
Pascal ROUILLER <i>Corporate Officer</i>	06/26/2012	11,819	203,963	06/26/2014	06/26/2016	EBIT EBITDAS

^(*) Adjusted further to the capital increase of October 23, 2012.

Plans dated March 24, 2011 and June 26, 2012:

Pursuant to article L.225-197-1 of the French Commercial Code, the Board of Directors decided that the number of performance shares thus allocated to the Executive Officers benefiting from the plans dated March 24, 2011¹⁵ and June 26, 2012 will be set at 10% of such allocation, which the Executive Officers will have to keep under the registered form until the end of their term.

In accordance with the AFEP-MEDEF code, the Board of Directors held on March 24, 2011¹⁶ and June 26, 2012 also decided 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 thus granted under the 2011 and 2012 plans at one (1) share for twenty (20) allocated shares.

Regarding the plan dated March 24, 2011, the Board of Directors held on February 27, 2013 determined that the performance condition based on EBITDA was fulfilled up to 85% for the Services segment, up to 108% for the Equipment segment and up to 92% at the Group level.

Therefore, Messrs. BRUNCK, MALCOR, FRYDMAN and ROUILLER will be allocated 12,423, 24,847, 7,634, and 8,166 shares respectively.

¹⁵ With respect to the plan dated March 24, 2011 this obligation applies to Messrs. Robert BRUNCK and Jean-Georges MALCOR only, as they were the only Executive Officers of the Company when stock-options were allocated.

¹⁶ With respect to the plan dated March 24, 2011 this obligation applies to Messrs. Robert BRUNCK and Jean-Georges MALCOR only, as they were the only Executive Officers of the Company when stock-options were allocated.

Plan dated March 22, 2010:

The Board of Directors held on February 29, 2012 acknowledged that, for the plan of 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 were respectively allocated 8,694 and 7,113 shares under this plan and Messrs. FRYDMAN and ROUILLER 2,766 shares each.

14.3. Contractual indemnity in case of termination of Executive Officer functions

14.3.1. Chief Executive Officer

The Board of Directors of May 10, 2012, having renewed the term of office of Mr. Jean-Georges MALCOR for a two-year period, i.e. until the General Meeting convened to approve the financial statements for the financial year ended December 31, 2013, also renewed for the duration of this office, the terms and conditions of the advantages granted to Mr. Jean-Georges MALCOR in case of termination of its term of office as they had been approved by the Board of Directors of February 24, 2011 and ratified by the General meeting of May 4, 2011. These benefits shall be subject to ratification by the General Assembly of May 3, 2013.

These advantages are the following:

Mr. Jean-Georges 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. Such indemnity shall be equal to the difference between:

(i) a gross amount of 200% of the gross fixed compensation paid by the Company to Mr. Jean-Georges 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. Jean-Georges MALCOR (i) over the thirty-six-month period preceding his departure date or (ii) over the full years of presence in the Company starting as from January 1, 2010, in case he leaves the Group less than thirty-six months after he joined the Company, (hereinafter “the Reference Annual Compensation”) and

(ii) any sum to which Mr. Jean-Georges 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.

The indemnity global amount shall not exceed 200% of the Reference Annual Compensation.

Pursuant to article L.225-42-1 of the Commercial Code, the payment of the special termination indemnity referred to hereinabove shall remain subject to the achievement of the following performance conditions, related to the Company’s performance:

- The average, over the sixty trading days preceding the departure date, of the ratio between the CGG ADS price over the PHLX Oil Service SectorSM (OSXSM) index shall equal at least two-third of the same average ratio over the same sixty-day period (i) four years before the date on which Mr. MALCOR leaves the Group or (ii) as of January 1, 2010 in case Mr. Jean-Georges MALCOR leaves the Group before reaching a four-year seniority;
- The average, over the sixty trading days preceding the departure date, of the ratio between the CGGshare price over SBF 120 index shall equal at least two-third of the same average ratio over the same sixty-day period (i) four years before the date on which Mr. MALCOR leaves the Group or (ii) as of January 1, 2010 in case Mr. Jean-Georges MALCOR leaves the Group before reaching a four-year seniority;

- The average margin rate of the Group EBITDAS (i) over the four years preceding the date on which Mr. MALCOR leaves the Group or (ii) over a period starting as from January 1, 2010 in case Mr. Jean-Georges MALCOR leaves the Group before reaching a four-year seniority, 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. Jean-Georges MALCOR will be entitled to receive only 50% of the said special termination indemnity.

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

14.3.2. Corporate Officers (*Directeurs Généraux Délégués*)

The benefits granted to Messrs. FRYDMAN and ROUILLER in case of their departure from the Group were approved by the Board of Directors on February 29, 2012 and ratified by the General meeting on May 10, 2012. They include the following:

Messrs. FRYDMAN and ROUILLER 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 CGG ADS price over the PHLX Oil Service SectorSM (OSXSM) 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 CGG 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.

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

14.4. Non-compete agreement

14.4.1. Chief Executive Officer

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. Jean-Georges MALCOR. This agreement was ratified by the General Meeting held on 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. Jean-Georges MALCOR has agreed that he will not contribute to projects or activities in the same field as those in which he was involved at CGG for period of eighteen months starting on the date on which he leaves the Group.

In consideration for this undertaking, Mr. Jean-Georges MALCOR will be entitled to receive compensation corresponding to 100% of his annual reference compensation as defined in the protection letters related to payment of the contractual indemnity in case of termination of his office.

14.4.2. Corporate Officers

On February 29, 2012, 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 Messrs. FRYDMAN and ROUILLER.

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 within the Group.

In consideration of this non-compete agreement, for a period of eighteen months starting on the day on which they leave the Group, Messrs. FRYDMAN or ROUILLER would receive compensation corresponding to 100% of their annual reference remuneration as defined in their protection letter. This agreement was ratified by the General Meeting on May 10, 2012.

14.5. General benefits plan

14.5.1. Chief Executive Officer

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 extension to Mr. Robert BRUNCK and Mr. Jean-Georges MALCOR of the benefit of the Group's general benefits plan applicable to all employees. This agreement was ratified by the General Meeting held on May 4, 2011.

14.5.2. Corporate Officers

On February 29, 2012, the Board of Directors, 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 application of the collective benefit plan applicable to all employees of the Group to Messrs. FRYDMAN and ROUILLER. This agreement was ratified by the General Meeting on May 10, 2012.

14.6. Individual benefits plan

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 execution of a supplementary individual benefits plan benefiting to Mr. Jean-Georges MALCOR. In this respect, the Board of Directors authorized the Company to pay an initial amount of €43,000. This agreement was ratified by the General Meeting held on May 4, 2011. This plan took effect in September 2011, for a period ending on December 31, 2014.

In addition, on November 30, 2011, and pursuant to the procedure applicable to related-parties agreement set forth by section L. 225-38 and seq. of the French Commercial, the Board of Directors authorized the final execution of this agreement as per the final conditions proposed by the insurer and authorized as well the Company to pay an additional amount of €40,000 for the whole duration of the agreement. This agreement was ratified by the General Meeting on May 10, 2012. This new agreement was concluded on December 20, 2011. It replaces the agreement that took effect in September 2011 and which had been authorized on June 30, 2010.

14.7. Individual insurance covering loss of employment

Pursuant to the procedure applicable to related-parties agreement set forth by section L. 225-38 and seq. of the French Commercial Code, 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. Jean-Georges MALCOR. The annual subscription fee payable by the Company amounts to €10,620 for 2012. This insurance provides for the payment of a maximum of 13% of his 2012 target compensation (corresponding to €162,941), for a duration of twelve months. This agreement was ratified by the General Meeting held on May 4, 2011.

14.8. 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 here as the "Beneficiaries") was implemented on January 1, 2005. The Chief Executive Officer and the Corporate Officers 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 twenty years.

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

- have liquidated their social security pension and all possible other rights to pensions,
- have at least 5 years of service as member of the Executive Committee of the Group and until they were 55 years of age, and
- end their professional career when leaving the Company.

As of December 31, 2012, the Company's commitment under the supplemental retirement plan corresponds for the Chief Executive Officer to an annual pension equal to 18% of his annual 2012 target compensation.

The aggregate present benefit value of this supplemental plan as of December 31, 2012 was €12,390,941 of which €1,263,250 has been recorded as an expense for fiscal year 2012. Of such present benefit value, the portions relating to the Chief Executive Officer are €895,543 and €186,113 respectively.

15. IDENTITY OF SHAREHOLDERS HOLDING MORE THAN 5% OF THE SHARES AND/OR VOTING RIGHTS OF THE COMPANY – CHANGES IN THE SHARE CAPITAL DURING 2012

15.1. Changes in the share capital during fiscal year 2012

<u>Transactions</u>	<u>Nominal value</u>	<u>Number of shares created</u>	<u>Amount of the share premium</u>	<u>Amount of the capital variation</u>	<u>Successive amounts of the share capital</u>
Capital increase on October 23, 2012	€0.40	24,329,960	€403,877,336	€9,731,984	€70,556,890
Exercise of stock options as of October 8, 2012	€0.40	30,392	€260,148.64	€12,156.80	€60,824.906
Exercise of stock options as of September 24, 2012	€0.40	53,166	€1,003,423.56	€21,266.40	€60,812.749
Exercise of stock options as of August 31, 2012	€0.40	6,634	€58,683.20	€2,653.60	€60,791,482
Exercise of stock options as of June 30, 2012	€0.40	2,500	€21,050.00	€1,000	€60,788,829
Performance shares allocation as of May 10, 2012	€0.40	67,575	N/A	€27,030,00	€60,787,829
Exercise of stock options as of May 10, 2012	€0.40	30,000	€252,600.00	€12,000.00	€60,760,799
Exercise of stock options as of March 31, 2012	€0.40	10,066	€84,755.72	€4,026.40	€60,748,799

As of December 31, 2012, the only dilutive instruments issued were stock-options, performance shares and bonds convertible into new or existing shares. As of this date, there was a respective balance of 8,711,012 outstanding stock-options, 1,007,864 performance shares and, not yet issued, 13,610,072 bonds convertible (2016 Oceane), 11,200,995 bonds convertible (Oceane 2019) into new or existing shares representing a dilution percentage of 4.94 % for stock-options, 0.57 % for performance shares, and 14.07% in aggregate for bonds convertible into new or existing shares.

15.2. Breakdown of the share capital – Identity of shareholders holding more than 5% of the shares or voting rights

	December 31, 2012		December 31, 2011		December 31, 2010	
	% of shares	% of voting rights	% of shares	% of voting rights	% of shares	% of voting rights
IFP Energies Nouvelles (formerly named « Institut Français du Pétrole »)	3.60	6.60	4.18	8.00	4.19	8.03
Fonds Stratégique d'Investissement (« FSI »)	7.06	11.21	6.50	6.22	6.00	5.75
Manning & Napier	4.30	3.94	4.99 ⁽¹⁾	4.77 ⁽¹⁾	6.17	5.91
Black Rock Inc.	4.28	3.93	4.93 ⁽²⁾	4.72 ⁽²⁾	5.40	5.17
FCPE "CGG Actionnariat"	0.04	0.08	0.05	0.10	0.05	0.10
Stock Treasury	0.45	0	0.53	0	0,53	0
Floating	80.27	74.24	78.82	76.19	77.66	75.04
Total	100%	100 %	100 %	100 %	100 %	100 %
Number of outstanding shares and voting rights	176,392,225	192,236,153	151,861,932	158,687,288	151,506,109	158,132,659

⁽¹⁾ Calculated on the basis of the number of shares owned by Manning & Napier as indicated in the notice of threshold crossing dated November 17, 2011.

⁽²⁾ Calculated on the basis of the number of shares owned by Black Rock, Inc. as indicated in the notice of threshold crossing dated August 30, 2012.

16. EMPLOYEES SHAREHOLDING

Pursuant to article L.225-102 of the French Commercial Code, we inform you that on December 31, 2012, the number of shares held by the employees of the Group, through the Group Employee Savings Plan instituted during fiscal 1997, amounted to 78,000 shares corresponding to 0.04 % of the share capital and 0.08% of the voting rights.

17. STOCK OPTIONS AND PERFORMANCE SHARES

In accordance with sections L. 225-184 and L. 225-197-4 of the French Commercial Code, the plans currently in force are described in separate special reports of the Board of Directors.

17.1. Stock-options plans

Individual information on stock-options allocated to the Executive Officers is set forth in paragraph 14.2.1.

The table below summarizes the evolution, during fiscal year 2011, of the stock-options plans put in place by virtue of the authorizations granted by the General Meetings of May 11, 2006, April 29, 2008 and May 4, 2011 respectively.

	2006 Plan	2007 Plan	2008 Plan	2009 Plan	2010 Plans			2011 plan	2012 plan	Total
Date of the Board of Directors' meeting	05/11/2006	03/23/2007	03/14/2008	03/16/2009	01/06/2010	03/22/2010	10/21/2010	03/24/2011	06/26/2012	
Number of beneficiaries	171	145	130	149	1	339	3	366	413	
Total number of shares ⁽¹⁾ that can be subscribed,	1,012,500	1,308,750	1,188,500	1,327,000	220,000	1,548,150	120,000	1,164,363	1,410,625	9,299,888
Out of which the number can be exercised by:										
<i>Executive Officers :</i>										
<i>Robert Brunck</i>	150,000	200,000	200,000	200,000	0	200,000	0	66,667	0	1,016,667
<i>Jean-Georges Malcor</i>	—	—	—	—	220,000	162,500	0	133,333	200,000	715,833
<i>Stéphane-Paul Frydman</i>	50,000	50,000	40,000	40,000	—	60,000	—	45,000	100,000	385,000
<i>Pascal Rouiller</i>	50,000	50,000	40,000	40,000	—	60,000	—	45,000	100,000	385,000
Start date of options exercise	05/12/2007	03/24/2008	03/15/2009	03/17/2010	01/07/2010	03/23/2011	10/22/2011	03/25/2012	06/26/2014	
Expiration date	05/15/2011	03/23/2015	03/14/2016	03/16/2017	01/06/2018	03/22/2018	10/21/2018	03/24/2019	06/26/2020	
Subscription price (in €) ^{(1)(2) (4)}	26.26	30.4	32.57	8.82	14.71	19.44	16.887	24,21	17,84	
Exercise rules (when the plan provides for several batches of options)	- Options accrue rights by fourth every year during the first four years; - prohibition to sell or transfer shares before May 12, 2010.	- Options accrue rights by third every year during the first three years; - prohibition to sell or transfer his shares before March 24, 2011 for French tax residents.	- Options accrue rights by third every year during the first three years; - prohibition to sell or transfer his shares before March 15, 2012 for French tax residents.	- Options accrue rights by third every year during the first three years; - prohibition to sell or transfer his shares before March 17, 2013 for French tax residents.	- Options accrue rights by half immediately and by fourth every year during the two following years; - prohibition to sell or transfer his shares before January 7, 2014.	- Options accrue rights by third every year during the first three years; - prohibition to sell or transfer his shares before March 23, 2014 for French tax residents.	- Options accrue rights by third every year during the first three years; - prohibition to sell or transfer his shares before October 21, 2014 for French tax residents.	- Options accrue rights by third every year during the first three years; - prohibition to sell or transfer his shares before March 24, 2011 for French tax residents.	- Options accrue rights in three batches (50% after 2 years, 25% after 3 years and 25% after 4 years) - prohibition to sell or transfer his shares before June 26, 2016 for French tax residents.	
Number of shares subscribed as at December 31, 2012 ⁽³⁾	2,500	2,000	0	330,81	0	37,961	0	0	0	373,271
Cumulated number of stock-options which were cancelled or lapsed ⁽³⁾	15,861	93,050	124,160	89,675	0	101,939	0	71,682	825	497,192
Remaining stock-options as at December 31, 2012 ⁽⁴⁾	1,001,048	1,221,425	1,120,226	950,179	231,538	1,426,654	126,291	1,150,227	1,483,484	8,711,012
Out of which the remaining number is held by:										
<i>Executive officers</i>										
<i>Robert Brunck</i>	157,864	210,490	210,489	189,429	—	210,493	—	70,165	0	1,048,930
<i>Jean-Georges Malcor</i>	—	—	—	—	231,538	171,026	—	140,329	210,484	753,377
<i>Stéphane-Paul Frydman</i>	52,622	52,623	42,098	37,072	—	63,149	—	47,361	105,243	400,168
<i>Pascal Rouiller</i>	52,622	52,623	42,098	42,096	—	63,149	—	47,361	105,243	405,192

⁽¹⁾ Considering the adjustments done further to the five-for-one stock split effective as of June 3, 2008.

⁽²⁾ The subscription price corresponds to the average of the opening share prices of the share on the last twenty trading days prior to the meeting of the Board of Directors granting the options.

⁽³⁾ Without taking into account the various adjustments that have occurred after the implementation of the plans.

⁽⁴⁾ Considering the adjustments done further to the capital increase of October 23, 2012.

Upon the date of this report, the exercise price for the plans implemented in 2006, 2007, 2008 and 2011 exceeds CGG share market price.

17.2. Performance shares plans

Individual information on performance shares allocated to the Executive Officers is set forth in paragraph 14.2.2.

For your information, the terms and conditions of the plans dated March 24, 2011 and June 26, 2012 are summarized in the chart below:

	<u>March 24, 2011</u>	<u>June 26, 2012</u>
Number of shares initially allocated*	488,586	516,550
Number of beneficiaries	365	413
Date of the shareholders' meeting having authorized the allocation	April 29, 2008	May 4, 2011
Allocation date	March 24, 2011	June 26, 2012
Number of shares finally allocated upon expiry of the acquisition period	399,853 ^(**)	N/A
Final allocation date	March 24, 2013	June 26, 2014
Retention period	March 24, 2015	June 26, 2016
Performance conditions	Operating income EBITDAS	EBI EBITDAS
Validation of achievement of performance conditions	Board of Directors	Board of Directors

^(*) These figures do not take into account the departures of certain beneficiaries and the adjustment made after the capital increase of October 23, 2012.

^(**) The Board of Directors held on February 27, 2013 confirmed that the performance conditions for the plan implemented on March 24, 2011 were partially met (see paragraph 14.2.2) and that a maximum of 399,853 shares will be allocated pursuant to this plan on May 3, 2013, i.e 80 % of the whole plan.

18. SHARE BUYBACK PROGRAM

The Ordinary General Meeting held on May 10, 2012 authorized the Board of Directors to carry out transactions on the Company shares for an eighteen-month period following the date of such meeting 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*,
- 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,
- to deliver, immediately or in the future, shares in exchange in the scope of external growth, within 5 % of capital,
- to allocate 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,
- cancel the shares through a capital reduction, subject to a decision of, or an authorization, by the extraordinary general meeting.

In accordance with such objectives, the treasury shares so acquired may either be retained, cancelled, sold or transferred. The shares may be acquired, sold or transferred on one or several occasions, by any means, including by agreement or stock market purchase, by offer to buy, to exchange or to sell, or by blocks of shares and by any option mechanism or derivative instruments, and at any moment, except during a take-over bid. The maximum amount of share capital that can be purchased or transferred as block of shares can reach the whole amount of this program.

The maximum purchase price per share approved by the General Meeting was € 40.

The maximum number of shares that the Company may hold shall not exceed 10% of the capital as of the date of the acquisition of shares, including the shares already held. Notwithstanding the above, pursuant to article L.225-209, paragraph 6 of the French Commercial Code, the number of shares to be acquired in order to be kept and delivered in the future in payment or exchange in the scope of a merger, demerger or contribution in kind should not exceed 5% of the share capital.

This authorization canceled and replaced the authorization granted to the Board of Directors by the General Meeting held on May 4, 2011.

As of December 31, 2012, the Company held 800,000 of its own shares.

19. TRANSACTIONS CARRIED OUT BY EXECUTIVES OR THEIR CLOSE RELATIVES ON THE COMPANY' SHARES

Pursuant to article L.621-18-2 of the French *Code monétaire et financier* and article 223-26 of the General Regulation of the French Market Authority, summary of the transactions carried out pursuant to the above mentioned article L. 621-18-2 are set out in Annex A.

Executive Officers, Directors and members of the Executive Committee are forbidden to carry out any transaction on the Company shares, whatever its nature, including the exercise of stock options:

- (i) during the thirty calendar days preceding the publication of quarterly, semi-annual or annual results (the transactions on the Company shares can be carried out the day after the date of publication of the results),
- (ii) In case they hold any information which could have a slight influence on the share value in case of public disclosure.

20. ITEMS LIKELY TO HAVE AN INFLUENCE IN THE EVENT OF A TAKE-OVER BID

Pursuant to article L.225-100-3 of the French Commercial Code, we inform you hereafter of the items likely to have an influence in the event of a take-over bid.

Capital structure of the Company:

Notice of crossing of a statutory threshold:

We remind you that pursuant to article 7.2 of the by-laws of the Company, any shareholder holding directly or indirectly a portion amounting to 1% of the stock capital or of the voting rights or a multiple of this percentage, within the meaning of article L. 233-7 of the French Commercial Code, shall give notice to the Company of the number of shares or voting rights he holds, within five trading days from the date on which one of these thresholds was exceeded.

In the event of failure to comply with this notification requirement, and upon request of one or several shareholders holding at least 1 percent of the capital, such request being recorded in the minutes of the General Meeting, those shares in excess of the fraction that should have been declared shall be deprived of their voting rights from the date of said General Meeting and for any other subsequent General Meeting to be held until the expiry of a two-year period following the date on which the required notification of the passing of the threshold will have been regularized.

Similarly, any shareholder whose shareholding is reduced below one of these thresholds shall give notice thereof to the Company within the same five-day period.

Double voting right:

As from May 22 1997, a double voting right is allocated to all registered and fully paid-up shares registered in the name of the same holder for at least two years.

Statutory restrictions concerning the exercise of voting rights and share transfers or clauses of agreements which the Company is aware of, in compliance with article L.233-11 of the French Commercial Code:

There is no statutory restriction to the exercise of voting right and share transfers. The Company is not aware of any agreement in compliance with article L.233-11 of the French Commercial Code.

Direct or indirect shareholding in the share capital of the Company notified pursuant to sections L.233-7 and L.233-12 of the French Commercial Code:

See chart paragraph 15.2.

List of holders of any security with special control rights and related description:

There is no holder of securities with special rights.

Control mechanism included in a potential system of employees share ownership, when control rights are not exercised by them:

Not applicable

Agreements between shareholders which the Company is aware of and which are likely to restrict share transfers and the exercise of voting rights:

The Company is not aware of any agreement between shareholders likely to restrict share transfers and the exercise voting rights.

Rules applicable to the appointment and replacement of members of the Board of Directors or Supervisory Board as well as the modification of bylaws:

The rules applicable to the appointment and replacement of Board of Directors' members are described in article 14 of the by-laws. The rules applicable to the modification of by-laws are described in article L.225-96 of the French Commercial Code.

None of these rules is likely to have an influence in the event of a take-over bid.

Powers of the Board of Directors, in particular the issuance or re-purchase of shares:

The Board of Directors does not have any specific power likely to have an influence in the event of a take-over bid. The delegations of competence currently in force cannot be used by the Board of Directors in the event of a take-over bid.

Agreements entered into by the Company and modified or terminated in the event of change of control over the Company:

The indentures governing our outstanding senior notes and certain of our credit facilities provide for an early redemption of the loans, at the option of the lenders, in the event of a change of control, pursuant to the terms specified in each agreement.

Agreements providing for severance payments to employees who resign or who are dismissed without cause or employees whose employment is terminated in the event of a take-over bid:

In addition to the agreements referred to in paragraph 14.3 with respect to the Company's Executive Officers, we inform you that certain executives of the Group benefit from a protection letter providing for the payment of a severance payment in the event of dismissal or change of control. The amount of such severance payment depends upon the positions and classifications of each concerned persons.

**SUMMARY OF THE FINANCIAL DELEGATIONS AND AUTHORIZATIONS SUBMITTED FOR SHAREHOLDERS' APPROVAL
AT THE ANNUAL GENERAL MEETING OF MAY 3, 2013 AND THE USE OF THOSE IN FORCE DURING 2012 FISCAL YEAR**

Share capital increases

	Authorizations in force during 2012 fiscal year				Authorizations submitted for shareholders' approval at the General Meeting of May 3, 2013		
	Resolution number - GM	Period	Maximum authorized amount	Use of the authorization in 2012	Resolution number	Period	Maximum amount
Increase of share capital through the issue of shares, or any other securities giving access to the share capital, with preferential subscription rights in favor of holders of existing shares	13 th - 2011 ⁽²⁾	26 months	€ 30 million ⁽¹⁾	Oct. 23, 2012: Capital increase amounting to €9,731,984 by issuance of 24,329,960 shares.	18 th	26 months	€ 35 million ⁽¹⁾
Increase of share capital through the issue of shares, or other securities, without preferential subscription rights in favor of the holders of existing shares through a public offer	14 th - 2011 ⁽²⁾	26 months	€ 9 million ⁽³⁾	None	19 th	26 months	€ 9 million ⁽⁴⁾
Increase of share capital through the issue of shares, or other securities, without preferential subscription rights in favor of the holders of existing shares made by private placement	15 th - 2011	26 months	€ 9 million ⁽³⁾	Nov. 20, 2012: Issuance of 11,200,995 bonds convertible into and/or exchangeable for new or existing shares for a global amount of €259,999,979.30. The maturity date of the loan is January 1, 2019.	20 th	26 months	€ 9 million ⁽⁴⁾
Increase of the number of shares issued pursuant to the three resolutions listed above	17 th - 2011 ⁽²⁾	26 months	15% of the initial issue	None	22 nd	26 months	12.5% of the initial issue
Increase of share capital by incorporation of reserves, profits or premiums	18 th - 2011 ⁽²⁾	26 months	€ 10 million ⁽³⁾	None	23 rd	26 months	€ 10 million ⁽⁴⁾
Increase of capital in order to compensate for contributions in kind	19 th - 2011 ⁽²⁾	26 months	10% of the share capital as of the date of the Board of Directors' decision	None	24 th	26 months	10% of the share capital as of the date of the Board of Directors' decision
Issuance of securities giving right to debt securities	26 th - 2011 ⁽²⁾	26 months	€ 1,2 billion	None	29 th	26 months	€ 1,2 billion
Increase of capital, reserving the subscription of the shares to be issued to members of a Company Savings Plan ("Plan d'Épargne Entreprise")	20 th - 2011 ⁽²⁾	26 months	€ 2.5 million ⁽³⁾	None	25 th	26 months	€ 2.5 million ⁽⁴⁾

⁽¹⁾ Aggregate ceiling for share capital increases, any operations considered, to the exception of stock-options and performance shares allocations

⁽²⁾ Cancels and replaces, for the non used portion, the resolutions voted in this respect during the previous General Meetings

⁽³⁾ Within the limit of the aggregate ceiling of € 30 million

⁽⁴⁾ Within the limit of the aggregate ceiling of € 35 million

Stock-options, performance shares and free shares

	Authorizations in force during 2012 fiscal year				Authorizations submitted for shareholders' approval at the General Meeting of May 3, 2013		
	Resolution number - GM	Period	Maximum authorized amount	Use of the authorization in 2012	Resolution number	Period	Maximum amount
Stock-options	21 ^{st(2)} - 2011 / Allocation to the employees (excluding the Chief Executive Officer and the members of the Executive Committee)	26 months	0.81% of the share capital as of the date the Board of Directors' decision. No discount.	June 26, 2012: Allocation of 590,625 options ⁽³⁾	26 th / Allocation to the employees (excluding the Chief Executive Officer and the other members of the Corporate Committee)	26 months	0.81% of the share capital as of the date the Board of Directors' decision. No discount.
	22 ^{nd(2)} - 2011 / Allocation to the Chief Executive Officer and the members of the Executive Committee	26 months	1.2% of the share capital as of the date the Board of Directors' decision. No discount.	June 26, 2012: Allocation of 820,000 options ⁽³⁾	27 th / Allocation to the Chief Executive Officer and the other members of the Corporate Committee	26 months	1.2% of the share capital as of the date the Board of Directors' decision. No discount.
Performance shares	23 ^{rd(2)} - 2011 / Allocation to the employees (excluding the Chief Executive Officer and the members of the Executive Committee)	26 months	0.53% of the share capital as of the date the Board of Directors' decision. No discount.	June 26, 2012: Allocation of 409,550 performance shares ⁽³⁾	N/A	N/A	N/A
	24 ^{th(2)} - 2011 / Allocation to the Chief Executive Officer and the members of the Executive Committee	26 months	0.14% of the share capital as of the date the Board of Directors' decision. No discount.	June 26, 2012: Allocation of 107,000 performance shares ⁽³⁾	N/A	N/A	N/A
Free shares	20 th - 2010	38 months	0,5% of the share capital as of the date the Board of Directors' decision.	None	N/A	N/A	N/A

⁽²⁾ Cancels and replaces, for the non used portion, the resolutions voted in this respect during the previous General Meetings

⁽³⁾ Before adjustments relating to the share capital increase dated October 23, 2012

Share buy-back program

	Authorization in force during 2012 fiscal year				Authorization submitted for shareholders' approval at the General Meeting of May 3, 2013		
	Resolution number - GM	Period	Maximum authorized amount	Use of the authorization in 2012	Resolution number	Period	Maximum amount
Share repurchase	9 th - 2011 ⁽²⁾	18 months	Limit provided by law. Maximum purchase price : € 40	None	13 th	18 months	Limit provided by law. Maximum purchase price : € 40

⁽²⁾ Cancels and replaces, for the non used portion, the resolutions voted in this respect during the previous General Meetings

Capital reduction by canceling shares

	Authorization in force during 2012 fiscal year				Authorization submitted for shareholders' approval at the General Meeting of May 3, 2013		
	Resolution number - GM	Period	Maximum authorized amount	Use of the authorization in 2012	Resolution number	Period	Maximum amount
Share cancellation	25 th - 2011 ⁽²⁾	18 months	10% of the share capital	None	28 th	26 months	10% of the share capital

⁽²⁾ Cancels and replaces, for the non used portion, the resolutions voted in this respect during the previous General Meetings

**TRANSACTIONS CARRIED OUT ON THE COMPANY'S SHARES BY EXECUTIVES
AND THEIR CLOSE RELATIVES IN 2012**

Name	Type of transaction	Date	Unit price	Amount of the transaction
G�rard CHAMBOVET Executive Vice President General Secretary	Transfer of shares	January 13, 2012	� 20.0432	� 100,216
Colin MURDOCH Executive Vice President Processing, Imaging & Reservoir Division	Stock option exercise	March 19, 2012	� 8.82 �	� 74,088
	Transfer of shares	March 19, 2012	� 22.9695	� 192, 943.80
Olivier APPERT Director	Share purchase	March 30, 2012	� 22	� 5, 065.92
	Share purchase	October 1, 2012	� 17	� 5,644
Denis RANQUE Director	Share purchase	October 2, 2012	� 17 �	� 1, 360
Daniel VALOT Director	Share purchase	October 1, 2012	� 17 �	� 5, 236
	Transfer of 5 preferential subscription rights	October 2, 2012	� 1,274	� 6.37
Jean-Georges MALCOR Chief Executive Officer and Director	Share purchase	September 27, 2012	� 25,153	� 12,576.50
	Share purchase	October 4, 2012	� 17	� 22,100
	Purchase of 12 preferential subscription rights	October 4, 2012	� 1,166	� 13.99
Thierry LE ROUX Executive Vice President Business Development	Transfer of 84,422 preferential subscription rights	September 28, 2012	� 1,256	� 106,034
Jean DUNAND Director	Share purchase	October 4, 2012	� 17	� 11,560
Robert BRUNCK Chairman of the Board	Stock option exercise	October 4, 2012	� 8.82	� 176,400
	Transfer of 154,809 preferential subscription rights	October 5, 2012	� 1,2140	� 187,938.12
	Transfer of 25,540 preferential subscription rights	October 8,2012	� 1.244	� 31,771.76

Name	Type of transaction	Date	Unit price	Amount of the transaction
Stéphane-Paul FRYDMAN Senior Executive Vice President, Executive Vice President Finance	Stock option exercise	October 4, 2012	€ 8.82	€ 42,106.68
	Transfer of 12,766 preferential subscription rights	October 4, 2012	€ 1.1425	€ 14,585.15
	Transfer of 7,500 preferential subscription rights	October 5, 2012	€ 1.14	€ 8,550
	Transfer of 4,774 preferential subscription rights	October 5, 2012	€ 1.219	€ 5,819.50
Pascal ROUILLER Senior Executive Vice President, Executive Vice President Equipment	Transfer of 18,944 preferential subscription rights	October 5, 2012	€ 1.2321	€ 23,340.90
Luc SCHLUMBERGER Executive Vice President Multi Client and New Ventures	Transfer of 4,655 preferential subscription rights	October 10, 2012	€ 1.386	€ 6,451.83
Pascal ROSSET Executive Vice President Human Resources	Share purchase	October 10, 2012	€ 17	€ 14,212
	Purchase of 16 preferential subscription rights	October 10, 2012	€ 1.419	€ 22.70
Agnès LEMARCHAND Director	Share purchase	October 12, 2012	€ 24.92	€ 2,367.40
	Share purchase	October 15, 2012	€ 25.30	€ 10,246.50