

# 2013 Additional Information

Passion for Geoscience  
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## **EXPLANATORY NOTE**

The information contained in this document, together with that set forth in the 2013 Annual report on Form 20-F filed with the U.S. Securities and Exchange Commission, both of which documents are in English, is equivalent to the information provided in French in the *Document de Référence* filed with the *Autorité des Marchés Financiers* on April 10, 2014.

This document is a free translation from French into English of the information from the *Document de Référence* that is not included in the 2013 Annual report on Form 20-F. Should there be any difference between the French and the English versions, only the text in French language shall be deemed authentic and considered as expressing the exact information published by CGG.

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# 1. FINANCIAL RESULTS OF CGG SA (GROUP MOTHER COMPANY) OVER THE LAST 5 YEARS

<b>FIVE YEAR PARENT COMPANY FINANCIAL SUMMARY</b>					
(Articles 133, 135 and 148 of the executive order n° 67-236 dated March 23, 1967)					
In Euros					
	2009	2010	2011	2012	2013
<b>I - Financial position at year-end</b>					
a) Capital stock	60 458 638	60 602 443	60 744 773	70 556 890	70 756 346
b) Number of shares outstanding	151 146 594	151 506 109	15 186 1932	176 392 225	176 890 866
c) Maximal number of shares resulting from convertible bonds	None	None	None	None	None
d) Equity	1713 508 494	1941004 513	2 500 504 944	3 055 018 985	2 392 170 912
<b>II - Earnings</b>					
a) Sales net of sales tax	11 563 187	10 901 400	10 532 594	78 050 986	83 453 121
b) Earnings before taxes, employee profit sharing, depreciation & reserves	52 600 749	170 640 435	552 459 666	63 067 618	92 708 863
c) Employee profit sharing	-	-	-	-	-
d) Income taxes	6 119 465	(17 302 801)	(32 673 568)	(38 921 264)	(19 662 650)
e) Income after taxes, employee profit sharing, depreciation & reserves	(220 452 643)	225 424 526	557 170 625	149 612 368	(663 879 383)
f) Dividends	-	-	-	-	-
<b>III - Earnings per share</b>					
a) Earnings after taxes and profit sharing but before depreciation and provisions	0,31	1,24	3,85	0,58	0,64
b) Earnings after taxes, depreciation and provisions	(1,46)	1,49	3,67	0,85	(3,75)
c) Net dividend per share	-	-	-	-	-
<b>IV - Personnel</b>					
a) Average number of employees	40	39	36	36	40
b) Total Payroll	4 926 323	6 539 847	10 132 120	6 651 660	6 488 564
c) Employee benefits (social security, etc)	1 862 205	3 129 785	4 486 883	2 799 497	3 089 229

## 2. CONSOLIDATES FINANCIAL RESULTS OF THE GROUP OVER THE LAST 5 YEARS

<b>GROUP FIVE YEAR FINANCIAL SUMMARY</b>					
(Articles 133, 135 and 148 of the executive order n° 67-236 dated March 23, 1967)					
In millions of U.S.\$					
	2009	2010	2011	2012	2013
<b>I - Financial position at year-end</b>					
a) Capital stock	79,4	79,6	79,8	92,4	92,7
b) Number of shares outstanding	151 146 594	151 506 109	151 861 932	176 392 225	176 890 866
c) Maximal number of shares resulting from convertible bonds	None	None	None	None	None
<b>II - Earnings</b>					
a) Sales net of sales tax	3 109,1	2 904,3	3 180,9	3 410,5	3 765,8
b) Earnings before taxes, depreciation & reserves	794,0	614,8	656,3	880,4	1 043,0
d) Income taxes	13,6	(18,50)	(63,10)	(99,20)	(82,90)
e) Income after taxes, depreciation & reserves	(361,10)	(59,40)	(13,20)	92,4	(691,20)
f) Dividends	-	-	-	-	-
<b>III - Earnings per share</b>					
a) Earnings after taxes but before depreciation and provisions	5,34	3,94	3,91	4,43	5,43
b) Earnings after taxes, depreciation and provisions	(2,39)	(0,39)	(0,09)	0,52	(3,91)
c) Net dividend per share	-	-	-	-	-
<b>IV - Personnel</b>					
a) Average number of employees	7 500	7 264	7 198	7 560	9 688

### 3. POST CLOSING EVENTS

There was no post-closing event to be reported.

### 4. INFORMATION ON TERMS OF PAYMENT

As of December 31, 2013, the outstanding debt of the Company towards its suppliers amounted to €6.0 million. The breakdown of this outstanding debt per maturity date was as follows:

- due date not exceeding 30 days : €2.1 million
- due date not exceeding 60 days: €2.1 million
- due date exceeding 60 days: €1.8 million

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

### 5. INFORMATION ON THE UTILIZATION OF FINANCIAL INSTRUMENTS

As mentioned in Item 3 of our report on Form 20-F (“Risk factors”), 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.

Most of our turnover is denominated in US dollars, more than 75% in 2013 and 2012. To a limited portion, the other Western European currencies are principally Euro, British pounds and Norwegian kroner.

More than 80% of our expenses in 2013 are paid in US dollars. The remaining part being mainly expressed in Euro, British pounds and Norwegian kroner.

We attempt to match foreign currency revenues and expenses in order to balance our net position of receivables and payables denominated in foreign currencies. For example, charter costs for our 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 primarily in U.S. dollars. At December 31, 2013 and 2012, our total outstanding long-term debt denominated in US dollars was US\$1,493 million and US\$1,431 million and, respectively, representing 55% and 63% 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, 2013 and 2012, we had US\$5 million and US\$35 million, respectively, of notional amounts outstanding under U.S. dollars against euro forward exchange contracts.

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

## 6. PROSPECTS

### 6.1. 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. Rates at which oil reserves are being replenished have fallen 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, except in 2009, to several years of high levels of investment in Exploration & Production and, by extension, to favorable long-term prospects for the geophysics market.

Since 2010, Exploration & Production investments have grown annually on a double-digit basis, despite the manifestation over the period of certain major risks to which these activities are exposed, in particular:

- the technological risk associated with the Deepwater Horizon platform accident in the Gulf of Mexico;
- the geopolitical risk associated with the “Arab spring” uprising in North Africa in 2011, and the subsequent political changes in Libya and Egypt;
- risks related the rapid growth of unconventional shale hydrocarbons production in North America since 2011, which significantly modifies the worldwide equation of supply and demand given the current weight of the North American consumption;
- general economic risks associated with slower growth in 2013 of certain key consumer countries as Brazil and China.

2013 has been a contrasted year with growth in both the oil services segment and, consequently, the seismic sector, which then significantly slowed down during the year mostly because major oil companies decided not to pursue certain exploration-production projects and more generally to cut investments in Exploration-Production to improve their cash generation on a short-term basis. This trend must be assessed more generally in an environment where exploration-production projects have become more costly because of their complexity, while the oil and gas prices have remained relatively stable and the oil and gas companies are under continuous pressure to keep a sustained level of dividends for their shareholders.

This environment should continue to prevail in 2014 in a seismic market that should be stable, with a slight increase of Exploration-Production expenses by oil companies over the year.

### 6.2. Outlook for the activities of the Group in 2014

#### Exploration Activity expected to be flat

Seismic, being correlated to exploration activity, will most likely be flat year-on-year in 2014 across the world, with exception of the Russian Arctic waters where no seismic has ever been shot. In this context Oil and Gas companies should be more focused on improving the recovery of existing reservoirs. This should translate into:

- A reduction of activity in New frontier exploration areas;
- A strong demand for high end seismic to improve the recovery of the existing fast-maturing field, especially in the Middle East;
- Until recently, the progressive opening of 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 require 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 in the technological content of geophysical data. Clients want to extract detailed reservoir properties ahead of their development decision process. 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%) but lower demand in exploration should keep prices flat. This summer, seismic activity in the North Atlantic could remain stable at high level as Russian activity is expected to compensate lower activity in Norway.

Land contract activity should remain moderate outside the Middle East. In North America, the business has been slowing down significantly since last autumn. North Africa remains exposed to serious geopolitical changes. The Seabed and Shallow Waters activities, now operated through our Seabed GeoSolutions BV Joint Venture, should grow significantly in 2014 after weak activity in 2013.

Marine multi-client capital expenditures will increase in 2014 as CGG has been awarded highly prefunded programs offshore Brazil and will continue the Ibalt program in the Gulf of Mexico. Over 2015-2017, this Ibalt program based on a new acquisition geometry to illuminate the deep salt domes should generate a lot of interest from active oil companies in the region. Increasing sales of IBALT are expected due to an extended period of lease turnover in the Gulf of Mexico.

Land multi-client capital expenditures will be reduced after three years of strong activity and the completion of our program in the Marcellus basin.

The December 2013 ending backlog of Seismic Imaging was at high level. Imaging activity in 2014 should remain sustained mainly driven by an increasing level of volumes of data acquired offshore and by the increasing complexity of the geology to be illuminated, which requires additional sophisticated and high end algorithms, a domain where the Group is enjoying a unique leadership position. In the Geology domain, the Group enjoys a now-solid reputation with Robertson. The creation of GeoConsulting should trigger the growth of this business line as clients give priority to spending that improves cash flow in near term, including EOR (Enhancement Oil Recovery) projects which benefits from the strong international demand for exploration in new frontiers areas.

In the characterization domain, our services are now gathered within the GeoSoftware business line, including the Jason, Hampson-Russel and Geovation softwares. These services should benefit from the increasing demand for integrated software from seismic to reservoir simulation and the leverage of external partners such as Baker Hughes International.

Sercel revenue is expected to remain stable year on year at a historical high level. Marine equipment sales should be down year-on-year driven by fewer new builds and despite a solid replacement market. Land equipment sales are expected to grow in an increasingly competitive environment and benefit in particular, from the award of large mega crews projects in the Middle East.

### **6.3. Furthering a commercial strategy based on technology differentiation**

The Group believes that development of its portfolio of high end seismic services and equipment, through a clearer understanding of its clients exploration and production problems and requirements in geophysical, geological and reservoir characterization technologies, will help to ensure that it stands out from its competitors.

The Group believes that its strategy allows it to make the most of a market in which the oil industry will continue to increase the share of external services and 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 keeping in mind that the Group's customers are increasingly seeking 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 of the cutting-edge technologies developed in each area of expertise and adapt or upgrade them to meet the clients' needs.

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

CGG believes 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 that is fully aligned with the exploration and drilling decision process our 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.

### **6.4. 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 —**BradSeis**" 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. The acquisition of the Fugro Geoscience Division of activities reinforces CGG's position as a leader in the geophysical services industry with its high-end technology portfolio of solutions and products and by creating vertical integration in reservoir sciences.

#### **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 —**BradSeis**" 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 regard to the onshore sector, there is a stronger demand for ultra-high sensor density acquisitions that should result in several thousand channels crews appearing 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.



Development of Integrated solutions from Seismic to Reservoir simulation

Following the integration of Fugro Geosciences within CGG and the creation of two dedicated business lines GeoSoftware and GeoConsulting, effective January 1, 2014, CGG will accelerate the development of new integrated solutions from seismic to reservoir simulation. This should contribute to reinforce CGG's position as the worldwide high-end technological geoscience leading company.

Innovative solutions from Sercel, targeting emerging market segments based on maintaining sustained Research and development efforts

In the area of equipment, Sercel's need to maintain high level research and development is justified by the high-tech seismic equipment that incorporates many advanced technologies such as wireless technology, broad-band seismic, miniaturized electronics as well as optical and acoustic technologies.

In 2013, Sercel put on the market the 508XT, the latest generation of land acquisition systems, which should benefit from an increasing success in 2014. The 508XT is the first member of Sercel's new generation of state-of-the-art land seismic acquisition systems designed to drive crew productivity, operating flexibility and data quality to a new level. Powered by a new step-changing cross-technology architecture, branded as X-Tech or XT for short, the 508XT system combines the best of cabled and wireless system technologies. X-Tech allows access to data with zero downtime and in real time thanks to a new generation of intelligent networking technology.

Sercel also launched a new version of Sentinel solid streamers. Called MS for multi-sensors, this version builds on the success of the Sentinel solid streamer. In addition to the high-quality pressure measurement provided by its hydrophone sensor, the new Sentinel MS features two additional acceleration components offering directional measurements for both cross-line and vertical wave fronts, to deliver multi-sensor data sets for enhanced broadband imaging.

## 6.5. 2014 outlook for CGG

Commercial outlook

Total backlog (Acquisition, GGR and Equipment) amounted to US\$1,350 million as of January 1, 2014.

Industrial outlook

In 2014 to adjust to the difficult market conditions and create value for both its clients and shareholders, the Group will focus on the following strategic axes:

✓ **Down Sizing our acquisition activity**

- Looking ahead to 2016, the roadmap for our Marine Acquisition business is to continue the repositioning and reformatting of our fleet on our core high-end vessels, which include the four modern C-class vessels recently acquired, and on the high-technology market segments. As of early 2014, the CGG Symphony has already been stopped reducing the number of operated vessels to 17. CGG will implement a plan to reduce its operated fleet from 18 large 3D high-end vessels at the end of 2013 to 13 high-end vessels at the end of 2016. This fleet reduction will lead to a significant reduction in fixed costs and in investments and hence reduce the volatility of Marine earnings to improve cash generation throughout the cycle. We will maintain the critical size to retain a world-leading position, address the global regional markets and consolidate CGG's leadership in the high-end broadband and global solution marine market. Different avenues are being explored for the timely delivery of such a reformatting and repositioning initiative, and the prevailing scenarios will be those optimizing cash generation and assets valuation.
- In Land Acquisition, CGG is pursuing its strategic roadmap based on a focalization on niche and "techno" markets and on long term partnerships in key regions. In North America, CGG will restructure its land acquisition activity in the region. In the Middle East, CGG has also recently reinforced its strategic presence in the region to benefit from the growing mega-crews trend with a Framework Agreement with Industrialization & Energy Services Company (TAQA) our historical and long-term partnership in the Middle East.

✓ **Focusing on GeoScience core business**

- In line with the strategic rationale behind the 2013 move to integrate Fugro's Geoscience activities, the creation last year of the Geology Geophysics and Reservoir division has enlarged CGG's scope of activities towards geology and reservoir. The creation of the Geoconsulting and GeoSoftware business lines, should allow us to implement this strategy by developing dedicated and tailor-made offers for our clients in these areas.
- CGG's priorities remain focused on the development and promotion of high-end solutions, upstream with our equipment offer and downstream with services linked to the use of geological and geophysical data. However, a strong presence in the acquisition business is still essential in order to keep a strong and global relationship with the majors actors of the oil and gas industry
- These rebalancing initiatives will lead to a significant reduction in Acquisition revenue which should be offset by organic growth in GGR and by a resumed growth in Equipment. At the end of 2016, the new CGG portfolio should thus be significantly rebalanced.

Financial Outlook

Looking at 2014, we anticipate market conditions to remain stable over the year with a low first quarter. In this context, our priorities will stay focused on tight cash management, cost reduction, operational and commercial efficiency and dynamic debt management. Industrial capital expenditures should decrease to from US\$ 275 to 300 million. Multi-clients cash capital expenditures should be in the range of \$ 500-550 million with a prefunding rate over 70%.

## 7. RESEARCH & DEVELOPMENT

### 7.1. Technological Innovation and Research and Development Policy

CGG's ability to effectively measure competition and maintain a strong market position heavily relies on its continuous technological innovation capabilities. The Group believes that the future of the seismic industry relies on seismic equipment and services with high technological content. As the market for products and services is subject to continuous and rapid technological developments, development cycles, from initial design to market launch, can extend over several years.

CGG focuses on the entire exploration to production chain, including reservoir characterization, development of seismic data multi-component processing techniques, structural imaging, and improved operational performance of geophysical target illumination during acquisition, to increase efficiency and safety. Approximately 944 employees belong to our various R&D teams across the world.

Innovation is not confined to CGG Divisions, innovative schemes leading to integrated solutions with high added value for both the Company and its customers are also being developed.

This new policy has been achieved through the Technical Cooperation Agreement signed with Baker Hughes in 2012, reinforced in 2013 by the integration of borehole seismic surveying activities in the joint-venture now named Magnitude. Its activity focuses on source rock reservoirs, particularly for shale gas and oil.

CGG also has access to new technologies through strategic alliances with equipment manufacturers, oil and gas companies, universities, and by acquiring technology under licenses. CGG also continues to undertake joint research programs with partners such as IFP Energies Nouvelles and IFREMER.

R&D gross expenditure trends over the past three years, including capitalized development costs, is as follows:

	2013		2012		2011	
	In MUS\$	In % of the ex-tax amount of TO	In MUS\$	In % of the ex-tax amount of TO	In MUS\$	In % of the ex-tax amount of TO
Gross research and development expenditure .....	181	4.8%	135	4.0%	117	3.7%

### 7.2. Key Technological Innovation and Research and Development events in 2013

The Group's expenditure on R&D (including capitalized development costs) reached US\$181 million in 2013, or about 4.8% of turnover.

This investment, which sharply increased compared to 2012, is partly the mechanical consequence of increased scope following the acquisition and integration of Fugro Geosciences, it also reflects CGG's continued determination to differentiate itself from competition through high technology content in its various and diverse offerings.

With over 40% of seismic surveys conducted to date, BroadSeis became the de facto seismic "broad frequency content" standard. The official launch of the new seismic BroadSource during the SEG convention in Las Vegas in November 2012 was a major step ahead in the ability to deliver seismic images free of any interference from receiver and source devices.

The BroadSeis and BroadSource couple provides subsurface images of unparalleled resolution, offering more than six octaves of frequency (2 to 200 Hz). The most remarkable part of this acquisition and processing couple is the return of very low frequencies (under 5 Hz) which provides essential information not only for imaging deeper targets but also to characterize hydrocarbon reservoirs using seismic data.

This technological achievement has put CGG on another level on the "broad frequency content" seismic market segment, widening the gap with its direct competitors and putting this market out of the reach of businesses with less R&D resources.

At the end of 2012, CGG completed its program to modernize and streamline its fleet. It then implemented a similar program for the 4 C-class vessels acquired through the acquisition of Fugro Geosciences Division. The new vessels were ready to be used in BroadSeis acquisition programs in just six months.

Launched in 2012, the StagSeis acquisition method, which allows seismic data to be acquired over long distances of up to 20 km, with very dense azimuthal sampling, is currently the program that provides the widest geographic coverage of the Gulf of Mexico with a quality of acquired data that could help identify the potential of geologically complex basins, especially salt structures. This technique could also be used offshore of West Africa and Brazil which have very similar geological environments.

The acquisition agreement for Fugro Geosciences included the creation of a joint venture, SeaBed GeoSolutions BV, to which all seabed activities of the two signatory companies were transferred. Trilobit recoverable seabed seismic sensor (or node) and innovative and unique SpiceRack system technologies from CGG, based on a fleet of thousands of small unmanned underwater vehicles (under development), coexist and complement Fugro products.

Based on the experience of land acquisition systems implementing a large number of channels and the EmphaSeis vibrator operation technology using a wide frequency band, the UltraSeis solution allows us now to use broadband technology to major "Very large Number of Channels" acquisition projects, starting with systems with 200,000 channels in 2014-2015, rising to 600,000 in 2016, and to go to one million active channels in 2017-2018. This trend will become possible thanks to Sercel's new 508XT acquisition system allowing the simultaneous acquisition of one million channels.

In parallel, the Sercel Unite cable-less system in the U.S. and Europe is more and more frequently used to meet the difficulties of access to seismic surveys in obstructed areas. This system can significantly increase productivity but the data is not streamed. This year's work assessed the various methods and equipment (WiFi, Mesh, drones ...) to improve data collection.

The use of SeisMovie active surveillance systems has opened up new markets and extended geographical influence with new contracts in Canada in Shell's heavy oil fields. This system is designed to monitor the spread of the water vapor front improving hydrocarbon recovery.

The value of this technology was confirmed for the Saudi Arabian company, Saudi Aramco, regarding deep reservoirs in complex geological environments of carbonate reservoirs. This resulted in a development program related to sources and sensors adapted to this particularly challenging environment.

In parallel to active systems, so-called passive surveys conducted in the United States to monitor micro seismic activity generated by hydraulic fracturing operations on unconventional reservoirs have proved their interest. Following the cooperation agreement signed between CGG and Baker Hughes International, the Magnitude joint venture was created to host passive micro-seismic activities and integrate them into drilling operations.

Regarding depth imaging, CGG continued its development efforts to provide more accurate seismic images acquired in complex geology zones. R&D programs focused on migration algorithms (Reverse Time Migration) and the rapidly advancing Full Waveform Inversion technology. The latter provides very high resolution seismic velocity models which are essential to produce high precision images.

In 2013, results, recognized as being promising by the industry, were produced by a combination of seismic, electrical and gravity data to better characterize the near subsurface. Use of this combined multi-physical data in unified processing is one of CGG's major areas of research.

In the area of equipment, Sercel's need to maintain a high level of research and development is justified by the high technological content of its seismic equipment for land and marine acquisition. This intense research and development activity has put Sercel at the forefront of technology for wireless data transmission, the design and manufacture of sensors with low noise levels, and the design of miniaturized electronics that withstand extreme environmental conditions. Sercel's research also applies to optics and acoustics. Nautilus (lateral and vertical streamer positioning controller) and SeaProNav systems (Integrated Navigation System) have reached industrial maturity and are now the industry standard used to equip CGG's fleet.

After the launch of the RD (Reduced Diameter) version in 2012, the Sentinel streamer with reduced drag and easier winch winding, Sercel presented their latest Sentinel Multi-Sensors (MS) streamer, which provides an acoustic vector sensor composed of a group of geophones arranged around a hydrophone, at the EAGE Convention in London in June 2013 and Sercel created a major media buzz by launching its new 508 XT land acquisition system (XT for 'cross technology') during the SEG convention in Houston in September 2013.

This system is the epitome of what is done best in seismic data acquisition with a simultaneous recording capacity of one million channels. This system also includes new features facilitating increasingly complex land seismic exploration operations.

Sercel also marketed state-of the art land acquisition products in 2013 including the new QuietSeis sensor which provides a signal to noise ratio that has been improved by 10 dB.

### **7.3. Prospects for Technological Innovation and Research & Development**

Recent major technological developments help provide increasingly accurate data at a reasonable price. These developments are critical for our oil and gas customers.

Regarding production, improvements in monitoring techniques, both in acquisition equipment and seismic data processing, optimize production, improve recovery, and extend the life of fields through appropriate management. In major oil-producing regions, such as the North Sea and the Middle East, these issues are of crucial importance for operators.

In the field of exploration, R&D seismic achievements help identify increasingly difficult prospects and reduce the risks associated with drilling. Accordingly, the success rate of exploration wells tends to increase even though the easy targets were drilled first. The contribution of new technologies justifies the regular reprocessing of previously acquired data and, increasingly, to reacquire new seismic data on surfaces that have already been covered. Therefore, technical progress directly affects activities and, in particular, multi-client activity.

Meanwhile, the need to renew drilling areas has led oil and gas companies to take an interest in regions that are increasingly difficult and complex, whether geologically or due to access constraints and/or environmental fragility (transition, jungle, Arctic, foothills, etc.). These new requirements represent new challenges for the R&D teams of major seismic companies.

In this context, several areas for improvement have been identified, including:

- Improving data quality including expanding the range of recorded frequencies (high frequencies for better resolution and therefore better geological characterization of reservoirs, low frequencies ensuring better penetration to track increasingly deeper targets);
- Increasing the amount of data through greater density of acquisition and increased azimuthal coverage to explore the geological target from all possible angles;
- Associating increasingly diverse data (secondary waves, well data, electromagnetic and gravity data in particular) to obtain the most accurate picture of the subsurface possible, as well as its porosity and permeability, and fluid content (water and hydrocarbons).

Total research and development spending should continue to increase in 2014, in order to support Group innovation in both geophysical services and equipment.

## 8. ENVIRONMENT & SUSTAINABLE DEVELOPMENT

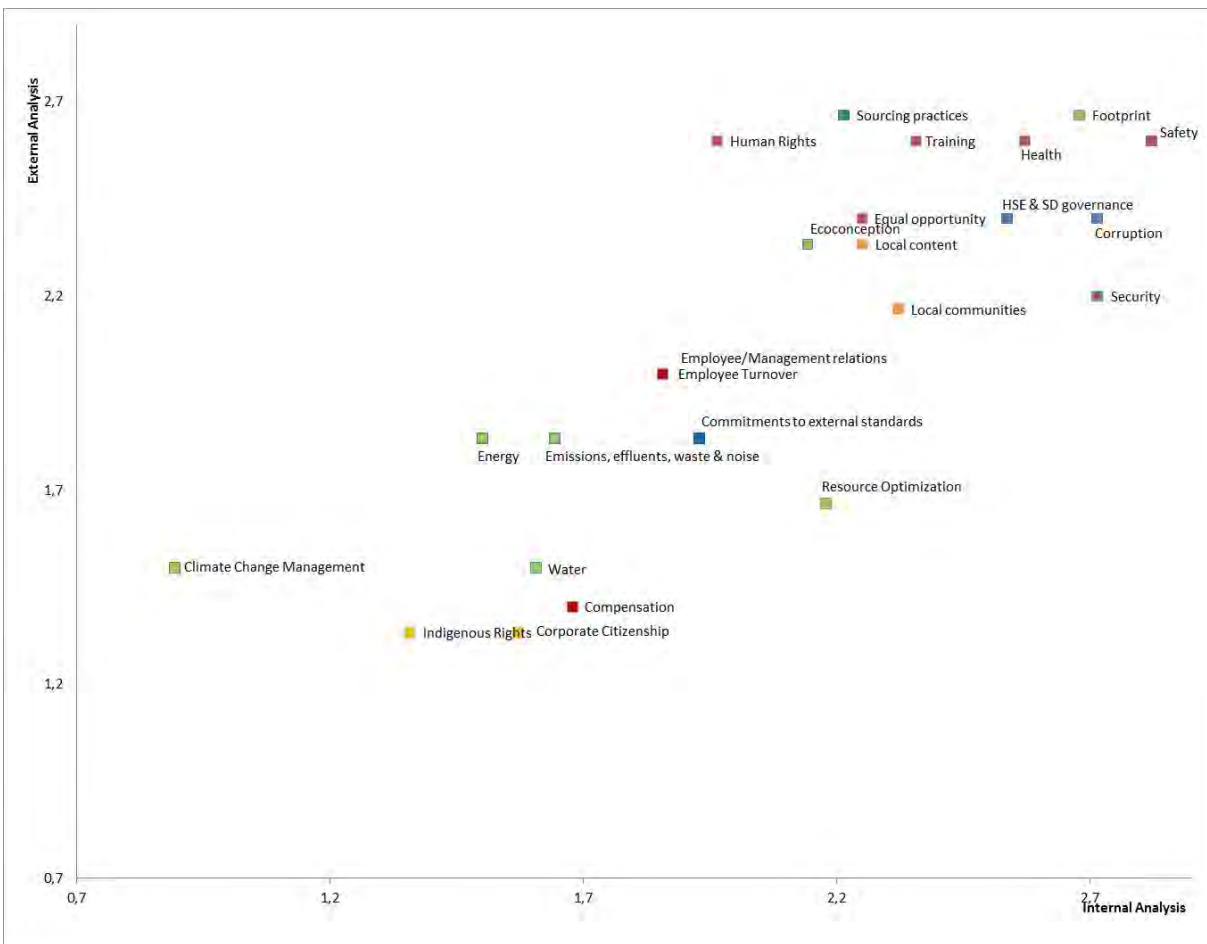
CGG is committed to be an industry leader in Health, Safety, Security, the Environment, and Sustainable Development by pursuing balanced economic development through its human capital and through responsible environmental management. This approach allows CGG to play a positive role in providing access to energy.

CGG has been a member of the United Nations Global Compact since 2007 and it reaffirms its commitment to respecting the environment, to human rights, to promoting international labour standards and to combating all forms of corruption every year at the highest level.

### 8.1. Priority sustainable development issues

For CGG, sustainable development consists first and foremost in successfully and sustainably providing geophysical products and services to the market while respecting and protecting our employees, local communities, and the environment around us.

In 2012, CGG ranked its sustainable development issues in a materiality analysis based on extensive consultation involving the management, a panel of employees from different divisions, and external stakeholders (clients, investors, NGOs, and the International Association of Geophysical Contractors). This analysis highlighted the themes pertinent to CGG and allowed CGG to focus its Sustainable Development improvement efforts between 2013 and 2015. This ranking of issues was reassessed by the Sustainable Development Department following the acquisition of Fugro Geosciences Division. Some significant themes were confirmed by the new entrants and no new issues were added.



## 8.2. Ethics

### 1. CGG ETHICS FOUNDATIONS

CGG values are the following:

*"Powered by people, around the world, we:*  
➤ *have a passion for innovation*  
➤ *operate safely and with integrity*  
*in order to deliver sustainable performance"*

Our values are the foundation of CGG Ethics. They commit us to complying with laws and regulations and the principles of its Business Code of Conduct in relation with our clients, shareholders, employees, and partners.

The Business Code of Conduct sets out rules and expected behaviour to enable the Group to conduct its business with integrity.

The CGG Ethics Committee is responsible for publishing and disseminating the Code of Ethics and the Business Code of Conduct, making recommendations, and answering questions from the Management and employees.

### 2. COMMUNICATION AND TRAINING

Adherence to our Code of Ethics and Code of Conduct is achieved through their publication and communication and their appropriation by our employees and other stakeholders responsible for their implementation.

#### **CGG Ethics**

During 2013, e-learning training on CGG Ethics launched in March 2012, continued in our facilities across the world and especially on Marine Acquisition vessels. The rate of participation in this training amounts to 68% of the Group employees on December 31, 2013.

The Ethics Committee continued actions for an enhanced visibility and communication of CGG Ethics by:

- providing the Business Code of Conduct (with the version in Russian, it is now available in nine languages on the CGG website) and the main Group policies to each new employee,
- publishing several articles on InSite (CGG Intranet and direct mailings),
- creating new InSite pages devoted to Ethics and Prevention of Corruption, grouping in a single page the principles and references to all CGG documents on these subjects. These focus pages have been well received and are now regularly consulted by managers.

#### **Corruption Prevention**

The training campaign on anti-corruption regulations (including the FCPA and the UK *Bribery Act* 2010) and prevention of the corruption begun in 2012, was continued in 2013. This campaign took the form of classroom training sessions conducted at various CGG sites.

In conjunction with this campaign, the Ethics Committee issued, in early 2013, guidelines on gifts and entertainment, invitations, facilitation payments, and political or charitable donations to help managers and employees handle these issues correctly.

In July 2013, the Ethics Committee widely distributed an educational booklet (in pdf and paper format) within the Group called "*Business Integrity Booklet: We Reject any Form of Corruption*", with a strong introductory message by Jean-Georges Malcor, Group Chief Executive Officer, which:

- described in clear and simple terms, the issues, dimensions, and consequences of corruption,
- reaffirmed CGG commitments and the "zero tolerance" sought by Jean-Georges Malcor,
- provided our managers and employees with a "key" to their relationships with stakeholders (clients, consultants, suppliers...) and references to CGG policies and resources.

This "*Business Integrity Booklet: We Reject any Form of Corruption*" is now available and provided to employees in the five most commonly spoken languages in the Group (English, French, Portuguese, Spanish and Chinese).

### 3. SUPPLIER AND SUBCONTRACTOR RELATIONSHIPS

In 2013, CGG updated its "Supplier Code of Conduct" which captures in one page the commitments that a supplier or service provider must take regarding its relations with the Group: rejection of corruption, respect for Human Rights and the Fundamental Rights of the International Labour Organisation, compliance with our policies and compliance with CGG Health, Safety, and Environment standards.

The Code also requires supplier compliance with these principles in their own supply chain and provides for the possibility for anyone to contact the CGG Ethics Committee in case of a breach of this Code.

This Supplier Code of Conduct has been posted on the Group's website and is referenced in the General Terms of Purchase for any order made by a Group entity. It will also be appended to contracts with major suppliers and service providers operating in at risk countries.

This Supplier Code of Conduct is part of a larger programme being developed by the Group Purchasing function (proper implementation of laws against bribery, including the UK Bribery Act 2010, and on responsible purchasing).

Finally, in order to ensure sustainable and fair relationships with our suppliers and service providers, the managers and employees of the Group Purchasing functions have implemented their own Code of Conduct (Purchasers Code of Conduct) covering:

- Behaviour and conflicts of interest,
- Supplier selection and contract award,
- Supplier relationships,
- Event reporting.

#### **4. THE WORK OF THE ETHICS COMMITTEE**

The Ethics Committee was contacted on several occasions in 2013:

- at various instances on topics, including conflicts of interest where managers or employees had questions upstream of a decision that could have caused a conflict or during a relationship between CGG and a related party,
- increasingly by operational or functional departments to answer questions from our clients about our ethics policy, including our efforts to prevent corruption in our activities.

This increase in questions is a strong indicator of effectiveness of:

- our ethics promotion campaign and training and
- good appropriation of these concepts by Group employees.

#### **5. CGG ETHICAL ALERT HOTLINE**

A whistle-blowing procedure was implemented in 2009. This whistle-blowing procedure complies with the specifications of the Sarbanes-Oxley law of July 31, 2002 (Article 301-4) and the provisions of the Safe Harbour Act and has also been submitted for approval by the CNIL (French Data Protection Authority); employees are reminded of its existence in every communication regarding Ethics. The ethics hotline did not receive any alerts in 2013.

### **8.3. HSE management system**

CGG's structured approach to Health, Safety, and the Environment is based on a HSE Management System. This system complies with Oil and Gas Producer recommendations (Oil & Gas Producers - OGP) for the Development and Application of Health, Safety and Environment Management Systems which have become a de facto standard in the industry. The HSE management system applies to all our activities in the areas of Health, Safety, and Security as well as the protection of the environment in all our projects and installations. The scope of our HSE Management System extends to our permanent staff, seasonal employees, and the subcontractors operating within our sphere of influence on CGG projects.

Our management plays a key role in establishing the conditions under which the HSE management system works. Our leadership in HSE is established at the highest level by formulating specific expectations on HSE performance, regular communication on HSE issues, performance monitoring throughout the year, and implementing necessary changes following periodic formal reviews.

CGG HSE expectations are established by the Chief Executive Officer and included in HSE, Health and Well-being, Security, Environment, and Sustainable Development policies; these are available to all employees on the Intranet. These are also widely communicated and displayed in all our sites around the world. Policies are supported by three-year objectives set by the Chief Executive Officer which are reviewed annually. Current objectives are based on leadership and visibility, risk management, subcontracting management, operational and staff safety, health, the environment, and skills and training. These objectives are cascaded through lower levels within the organisation to ensure that each level is clearly informed on expected results; the cascading descends all the way to the individual with each manager having at least one annual HSE objective. CGG employs close to 140 HSE professionals to support the HSE system.

Risk management is at the core of the HSE management system. We implement a structured approach to identify, assess, and control risks based on a common methodology across all Group risks worldwide. Risks are assessed for each project or permanent installation. They incorporate our incident history drawn from our database and the database shared with the International Association of Geophysical Contractors (IAGC) which covers several decades of industry incidents.

We believe that managing risks related to Health, Safety, Security, and Environment requires transparent reporting and rapid communication. We have developed effective reporting systems to ensure that incidents anywhere in the world are reported, communicated to the relevant level of management, and recorded to help us analyse and improve our performance. All incidents occurring anywhere in the world are reported and communicated to the Management. With few exceptions, incidents are reported within 24 hours.

This year we progressively integrated acquired Fugro geoscience entities into our HSE Management System. In Marine activities, the Geofield Ship Management Services SAS and CGG Eidesvik Ship Management AS joint-ventures harmonised their parent company HSE systems with that of CGG to simplify common HSE management tools and methods.

A robust audit programme ensures that our HSE policies and key processes are implemented and complied with in all our activities. Audits are supplemented by cross audits and facilities and projects are also inspected. In 2013, internal HSE audits were conducted in each Division as follows: 22 in Marine, 19 in Land, 7 in Airborne, 7 in Subsurface imaging, 18 in Equipment and 1 in Facilities for a total of 74 HSE audits. Over 100,000 department and cross-department inspections supplemented these audits.

Our HSE Management System cycle is completed by management reviews at the Division, Corporate Committee and Board HSE & Sustainable Development Committee levels to ensure the system's proper functioning, to identify areas for improvement and the corrective measures to be applied, and finally to ensure that adequate resources are available to achieve good results.

**1. SAFETY**

Our HSE Management System integrates all the necessary aspects of accident prevention and the protection of our employees and employees of our subcontractors. Our HSE program is built around the idea that all accidents can be avoided.

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

In order to continuously improve our performance, we have set three-year objectives for the Group built around a "Care and Protect" program; the main elements of this program cover leadership visibility on HSE, risk management, subcontractor management, operational and personal safety, health, the environment and finally skills and training.

As road transport is our highest risk activity, we have continued the transport program by focusing on driving skills. We use In Vehicle Monitoring Systems (IVMS), Speed Limiting Devices (SLD), Roll-over Protection, and have a permanent presence of trainers in defensive driving on our crews. Our Motor Vehicle Crash (MVC) rate has risen in comparison with two previous years. In 2013, drivers assigned to our operations drove over 28,000,000 kilometres.

	MVC rate
2011	0.84
2012	0.45
2013	0.88

This year, no deaths of our staff, subcontractors, or third-parties were recorded.

Individual risk awareness and personal responsibility are essential elements of our HSE management system. Our behavioural safety programme entitled "Rules to Live By" and "Things We All Must Know" is still force. This program, focused on our key safety risks, is deployed across all activities and in several languages and these rules are supported by clear procedures, an incentives program, and visible posting on the workplace.

CGG HSE training programmes are provided on all company sites, at the CGG University, and in the field. Specialised programmes were launched in 2013 to strengthen risk management in working at height and the use of offshore cranes. In 2013, CGG provided over 140,000 hours of HSE training.

We measure safety performance by the frequency of occupational accidents with Lost Time Injury. These indicators include permanent and seasonal Group employees and subcontracted staff working under our authority.

	Lost time injury frequency rate LTIF	Total Recorded Cases Frequency TRCF	Severity rate	Cases of permanent partial disability	Hours (Million)
2011	0.44	3.18	0.010	1	79.9
2012	0.46	2.76	0.011	0	72.1
2013	0.60	2.16	0.013	1	68.4

In 2013, we noted again a decrease in the frequency of Total Recorded Cases while the frequency of Lost Time Injury has increased. The frequency of HSE incidents with high potential severity (potentially fatal incidents including near misses), which is followed worldwide, continued to decrease for the third year running.

CGG continued to play an active role in the HSE committee of the International Association of Geophysical Contractors (IAGC) and participated in a number of working groups organised by Oil and Gas Producers (OGP).

## 2. **HEALTH**

In 2013, CGG counted on its robust occupational health management system to assure that well-being / quality of life at work were integrated into our operations.

This HSE subsystem relies on Group policy and objectives which express:

- A commitment by CGG's management to providing a healthy working environment without tobacco or alcohol on the workplace.
- Compliance with occupational health and safety laws and regulations wherever CGG operates or is represented.
- Management of risks and impacts on health, adapted to the environment and taking into account the new challenges of very isolated areas or high risk exposure.
- Sometimes innovative solutions to reduce risk to as low a level as reasonably practicable:
  - Prevention of vector borne diseases in tropical areas,
  - Prevention of food poisoning and outbreaks,
  - Prevention of occupational diseases related to exposure to hazardous and CMR chemicals<sup>1</sup>,
- Occupational health program related to public health and well-being at work:
  - Determining medical fitness at work,
  - Screening for drugs and alcohol abuse,
  - Smoking cessation support and elimination of second hand smoke,
  - Vaccination programme (adapted by region, taking into account local health risks and practices),
- Implementation of rescue and assistance resources for our staff exposed in the field:
  - Assistance in preparing medical evacuation contingency plans,
  - Medical and assistance services subcontracting,
  - Medicalization of our sites and seismic vessels,
  - Possibility of reinforcing medical equipment for diagnosis and specific medical skills,
  - Workplace First Aid training in accordance with OGP rules<sup>2</sup>,
- Organising medical evacuations:
  - from the workplace to the closest hospital,
  - Medical repatriation if necessary for casualty evacuation or return home,
  - Mobilisation of specific resources dedicated to the prevention of post-traumatic stress.

As introduced last year, we publish the figures for occupational diseases (OD) in the table below consolidated according to OGP rules. Although the number of diseases reported is very low, the consequences in terms of days lost are high.

The variations observed are not statistically significant due to the small numbers involved.

	Frequency rate OD with days lost - LTIF	Frequency rate recordable OD - TRCF	Severity Rate (LTI lost days * 1000/Exposure hours)	Hours (Million)
2011	0,01	0,80	0,00001	72,4
2012	0,13	1,00	0,005	63,7
2013	0,20	0,71	0,002	60,8

$$LTIF = (FAT+LTI)*1.000.000/Exposure\ hours$$

$$TRCF = (FAT+LTI+RWC+MTC)*1.000.000/Exposure\ hours$$

## 3. **SECURITY**

Our security system is based on prevention and deterrence. We have put in place a security intelligence and monitoring system to identify and assess risks to security in areas prone to maritime piracy and potentially unstable areas onshore. Projects in potentially at risk areas are reviewed at the highest level and supported by the assessments of security experts.

All staff receive security information on destination countries and, when necessary, are included in the local security plan. Audits and exercises are used to assess the effectiveness of these plans.

The consequences of Arab Spring events still require the application of precautionary measures for the security of our operations in North Africa and the Middle East and our security plans established in high risk countries have been updated.

<sup>1</sup> CMR: Carcinogenic, Mutagenic, and Reprotoxic.

<sup>2</sup> OGP: Oil and Gas Producers



In 2013, we continued to see a decline in piracy in the Indian Ocean reducing the size of the corresponding risk area. The opposite phenomenon was observed in the Gulf of Guinea.

#### **4. ENVIRONMENT**

##### ***Environmental management***

The need to preserve the environment in the conduct of our business is defined by the Chief Executive Officer in the Group's environmental policy. This policy explains the approach used to continuously improve CGG's environmental performance. It relies on regulatory compliance, dialogue with stakeholders, systematic management of risks of impact on the environment, training, and management reviews to achieve this. This management system approach supports the development of best practices implemented on our operations and integrated into our Research and development efforts.

Environmental management is fully integrated into the HSE Management System. It is explained in a general instruction detailing the following key stages: planning, risk assessment and management, reporting, monitoring, training, communication, performance review, and corrective actions.

Operational managers responsible for the HSE performance of Group sites and crews are supported by dedicated environment coordinators in Marine and Land Product Lines, and one Group Environment Manager.

Environmental management is taken into account at surveys' tendering stage. Proposals are made for non-invasive and non-destructive seismic acquisition methods. Upstream of the acquisition project, our teams review the Environmental Impact Assessment (EIA) for the area when it has been done by local authorities or the client and propose a suitable Environmental Management Plan. The Project Risk Assessment (PRA) plan includes a section on the environment specifying measures and procedures to eliminate or minimise the risk of impact on the environment.

Three and five day training courses on the HSE management system for HSE Advisors, HSE managers, and operational managers include an environmental component detailing Group standards and practices and focus on tools developed by the HSE Department. They are delivered at CGG University in Houston, Singapore and Massy.

Finally, daily toolbox meetings in the Acquisition Division are used to review with our workforce the areas of environmental management applicable to the various activities.

Environmental practices are regularly assessed during site crew and vessel inspections as well as during HSE Management System audits. The Group's PRISM HSE and Quality event database helps monitor the allocation and implementation of action points implemented following observations made during audits.

##### ***Minimising the footprint of our products***

CGG's footprint, in other words, its impact on fauna, flora and soils, is a major concern. The Group is at the same time convinced of the great potential for innovation of this area. Therefore, Sercel takes environmental aspects into consideration when establishing Product Development Charters. This ecodesign approach defines the environmental objectives of a product, the impact of its use in the field, its composition, and specifications. The most recent illustration of this is the new groundbreaking 508XT Land Acquisition system. The 508<sup>XT</sup>'s low weight, reduced handling, and drastically reduced battery requirements (up to 100 times less than competing systems) improves team productivity and significantly reduces acquisition costs while remaining compatible with a very wide range of sensors.

Fugro Geoteam's integration in Marine Acquisition added four state of the art ships to the fleet. They confirmed energy efficiency expectations (see section on emissions and energy use).

CGG established a program specifically for its chartered fleet of support vessels in 2011 in parallel with the policy to modernise and streamline the fleet. Designing these support vessels to meet the specific needs of seismic operations was a first in the industry. These vessels carry out refuelling as well as equipment and staff transport to CGG seismic vessels. They also ensure the safety of their operations. Three of the six vessels were chartered with Bourbon in 2013. In the interests of environmental protection and cost control they are equipped with hybrid propulsion for optimised fuel consumption management. Diesel-electric propulsion is favoured during escort while mechanical propulsion is favoured for transit or operation ensuring maximum power.

The GGR Division continued to deploy innovative solutions such as evaporative or oil cooling in its main data centres (explained in detail in the section on energy below).

##### ***Minimising the footprint of our services***

###### ***Acquisition Division: Land Business Line***

In Land Acquisition, our main footprint is caused by opening lines and the creation of helipads and geophysical equipment drop zones. Biologists explore the survey area before operations start in areas with a high risk of disturbance to wildlife and, if necessary; move the lines to avoid direct interaction with certain vulnerable and protected species of birds, ungulates, elephants, and turtles.

The width of seismic lines has significantly evolved over the past twenty years, from a width of 8 metres to what is commonly referred to as low impact seismic techniques. Receiver lines are typically 1.75 metre while source line width varies between 2.5 and 5.5 metres. In tropical environments where vibrators cannot be used, lines are only cleared of undergrowth where necessary, with a minimum number of trees cut down to help teams move safely through the vegetation. Bulldozers are only used to open lines in desert regions and dunes for safety reasons and the wind cancels out the footprint in just a few months. At each survey end, the decommissioning report informs clients and authorities of the restoration of sites used for seismic activities describing any residual footprint.

Land Acquisition activities are not very water intensive. Water is primarily used for sanitation in seismic camps accommodating staff or for shothole drilling. Special attention is paid to water consumption in water-stressed regions. In the case of the 2013 survey in the Algerian desert, water sources were chosen avoiding pressure on the environment and the local population. Measures were also taken to save water where possible. Therefore, daily vehicle cleaning was done with brushes and cloths rather than water. Employees are also informed about the importance of conserving this resource. The survey requires about 50,000 litres of water per day which is an average of 85 litres per employee.

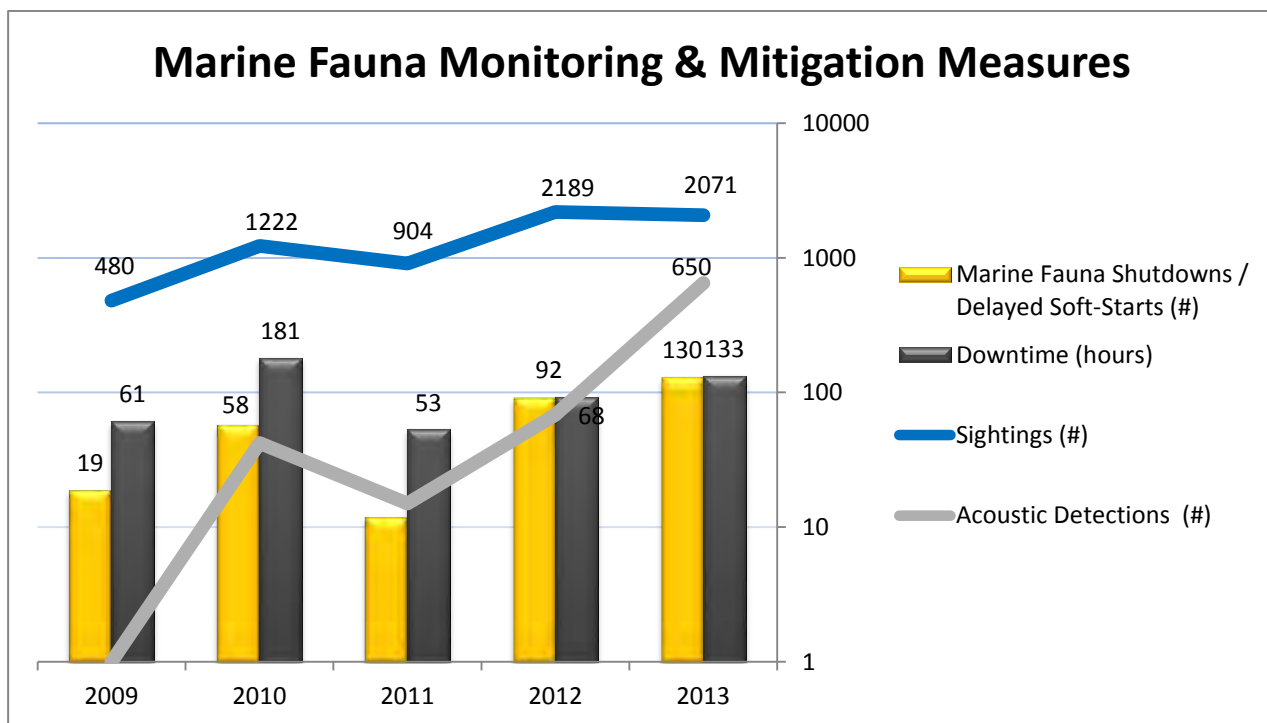
*Acquisition Division: Marine Business Line*

The increasing industrialisation of the oceans raises more questions and concerns about potential human impact on marine life. In this regard, the geophysical industry's commitment to minimise the impact of its operations on marine wildlife is not new.

Prevention and mitigation measures have been implemented on marine surveys for over ten years. On ships, marine mammal observer (MMO) teams ensure compliance with applicable regulations stipulated by the country in which we are operating. In areas that are not governed by any specific regulations, CGG follows the measures to reduce risk on cetaceans recommended by the International Association of Geophysical Contractors (IAGC) issued in June 2011.

Soft starts are used to alert marine mammals and sea turtles of our presence before starting a survey, giving them enough time to leave the immediate vicinity of our operations before our sources reach full power. Once the risk assessment has been conducted and in accordance with applicable regulations, the MMOs monitor a 500 to 3,000 metre exclusion zone around sources.

In 2013, marine mammals and sea turtles, individually or in groups, were spotted about 2100 times during our surveys, in 94 % of cases outside the exclusion zone. 130 delayed soft starts and production stops were observed, totalling 133hours of production downtime.



The Marine Acquisition waste management procedure was updated in 2013 in conjunction with CGG's maritime partners. This allowed CGG to streamline and standardise its waste segregation systems for the entire fleet while continuing to meet both International Maritime Organisation standards and national legislation. This update was accompanied by audits of waste treatment centres in certain countries where the Group did not have any references to ensure that these residues were responsibly recycled, incinerated, or, failing that, put in landfills.

*Geology, Geophysics and Reservoir Division*

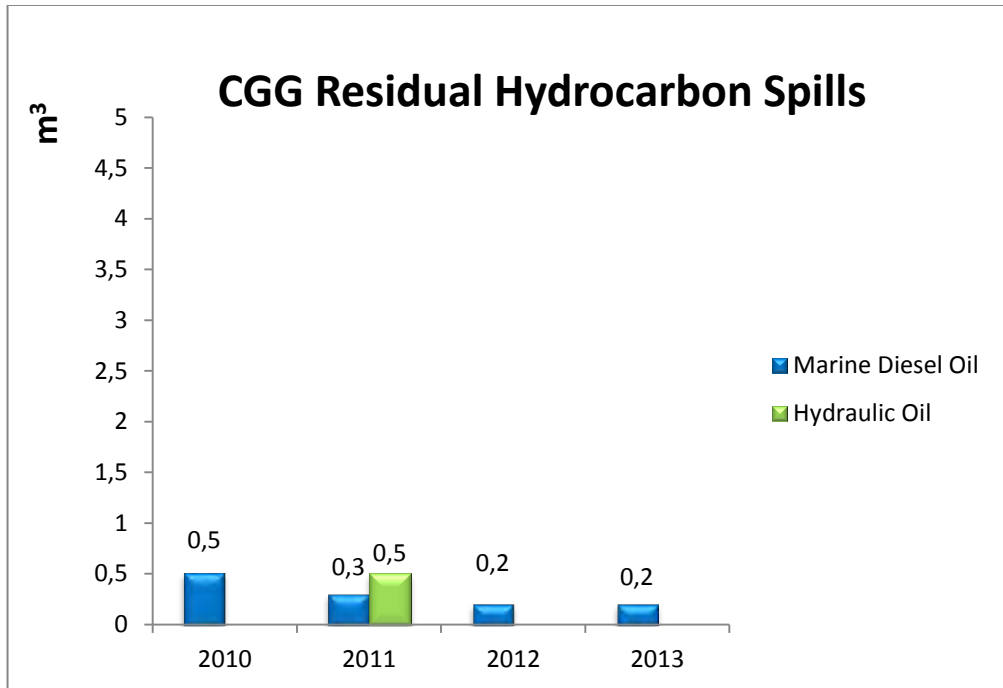
It should be noted that activities that joined GGR following the acquisition of the Fugro Geoscience Division manage their environmental risks in a structured manner. Most of their activities resemble a typical office environment. However, Robertson and Data Management Services also manage chemicals and therefore hazardous waste. These two entities have had ISO14001 certified environmental management systems for a long time ensuring an independent opinion on their environmental performance.

**Incident management**

Project or site-specific Emergency Response Plans (ERP) are designed to handle a wide variety of emergency situations. Drills are conducted periodically. Each environmental incident or near miss is recorded and rated according to its level of risk. This is used to establish a basis for analysis and take corrective actions in the field as well as to inform other operations during the weekly HSE meetings.

The environmental damage frequency measures the number of incidents recorded for one million hours of exposure. The environmental impacts of our operations are generally very limited. Any spill exceeding 0.2 m<sup>3</sup> and other types of hazardous impacts on the natural environment (such as tracks, fires, etc.) are considered recordable incidents.

In 2013, there were six moderate environmental incidents. None seriously affected the environment. Five occurred in the Marine Business Line and one in the Land Business Line.



Note: includes all accidental spillage of over 0.2<sup>3</sup> that could not be remediated

**Research and Development on sound and marine life**

As a member of the IAGC, CGG supports the Joint Industry Project (JIP), *Sound and Marine Life*. This project targets priority needs of scientific research to better assess and reduce the potential impact of sounds produced by humans on marine wildlife. This ambitious program has awarded over 32 million US dollars in grants for research focusing on:

- Sound source propagation and characterisation,
- Physical and physiological effects & hearing Behavioural reactions and biologically significant effects,
- Mitigation and monitoring,
- Research tools.

In early 2013, CGG stepped up to lead the IAGC's working group on sound and marine life. This group analyses scientific and regulatory developments relating to the impact of sound on the marine world. It also develops industry recommendations. By way of example, in the absence of guidelines from regulatory authorities, the Working Group developed a Passive Acoustic Monitoring (PAM) guidance in 2013 intended help the geophysical industry ensure the continued quality of this technology.

CGG is also actively involved in the workgroup on the impact of sound on the marine environment established by the French Maritime Cluster (CMF) following the inaugural seminar "Sound Waves and marine mammals" held in Paris in 2012. This workgroup contributed to the publication of a comprehensive report names —bderwater sound: economic and environmental stakes" published on the CMF webpage.

**Energy consumption and emissions**

*Acquisition Division - Fuel*

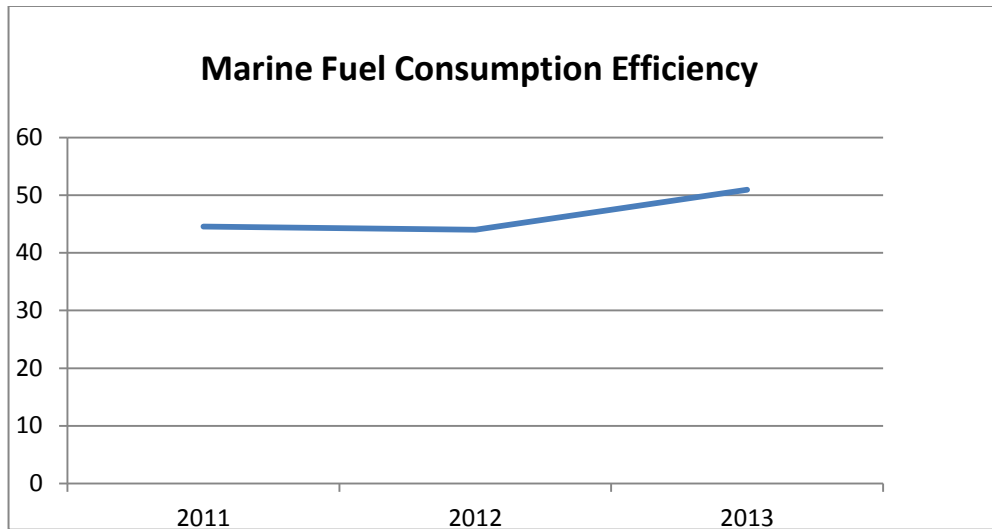
The integration of Fugro Geoteam increased CGG's fleet to 27 vessels, including seismic vessels and source vessels. Most vessels use high quality Marine Diesel Oil (MDO) which has significant environmental benefits compared to the Heavy Fuel Oil (HFO) used by the majority of the maritime industry. In 2013, our fuel consumption distribution was as follows: 88% MDO and 12% HFO.

As a seismic vessel uses between 35 and 45 m<sup>3</sup> of fuel per day, CGG and its ship owners are analysing all parameters affecting fuel consumption during and around production (transit, mobilisation) to optimise it. Energy management is an essential element of the relationship between CGG and its maritime partners which is discussed at technical seminars and HSE reviews and involves procurement, quality, HSE, and maritime departments.

CGG's maritime team therefore selected an energy management software package in 2013 which, coupled with fuel metering systems, should help further analyse the effect of fuel saving measure in 2014.

In addition, the various maritime Joint Ventures have implemented Ship Energy Efficiency Management Plans with qualitative and quantitative objectives. These plans also include measures to improve the efficiency of fuel consumed during transit. An economy transport option is systematically offered for each transit indicating the amount of fuel that would be saved compared to conventional transit.

The efficiency of fuel consumption in the maritime sector is measured taking into account the amount of linear seismic data acquired per cubic metre of fuel consumed (CMP-km/m<sup>3</sup>) during production. The efficiency of fuel consumption improved significantly in 2013, reflecting the increase in Wide Azimuth surveys which combine high added value, higher productivity and reduced environmental impact.



Land Acquisition activities totalled 28 million kilometres in 2013. All vehicles run on diesel for safety reasons. The 2013 version of the Group Vehicle Transport Procedure makes recommendations in terms of choice of vehicles and driving practices to ensure that the primary objective of staff safety is compatible with minimising our fuel consumption.

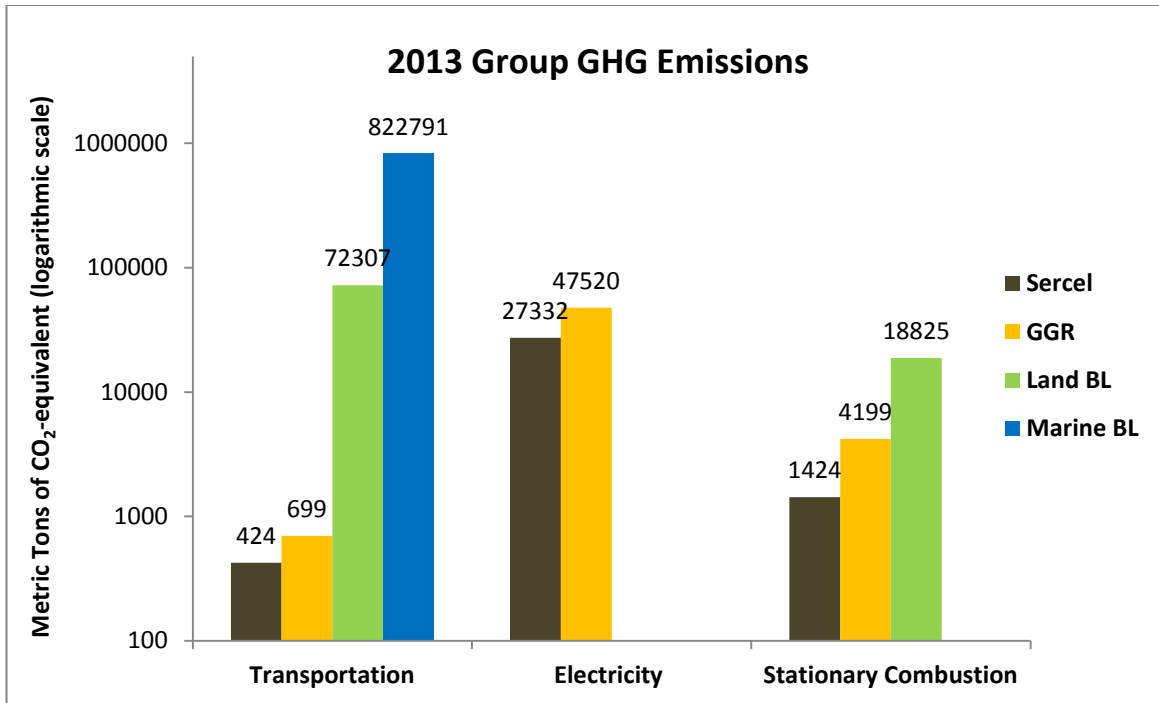
*Geology, Geophysics and Reservoir Division – Electricity*

Satisfying our strong demand for computing power while efficiently managing our total energy use is an on-going challenge. Power Usage Effectiveness (PUE), which is a measurement of the total energy used by the data centre divided by the energy only required for calculations, remains one of the key performance indicators in GGR data centres. In 2013, the average PUE resulting from the total energy used to power the three main CGG data centres divided by the total energy consumption of their equipment remained stable with that of 2012 at 1.4.<sup>3</sup>

*Group Greenhouse Gas Emissions*

Group direct and indirect emissions are directly related to its energy consumption. The Group directly and indirectly emitted a total of 995 kt of CO<sub>2</sub> equivalent. This represents an increase of 11% compared to 2012, entirely due to the higher Marine acquisition activity following the integration of Fugro Geosciences. The figure below shows that Marine surveys are the most energy-intensive.

<sup>3</sup> CGG calculates the PUE based on Energy Star's Recommendations For Measuring and Reporting Overall Data Centre Efficiency Version 2 - Measuring PUE for Data Centres, May 2011



#### 8.4. Social Responsibility

Despite the nomadic nature of some of its activities, CGG strives to develop long-term relationships with its partners and clients. In 2013, the Group was based in 42 countries on a long-term basis. CGG strives to develop local content where possible, notably by recruiting and developing local personnel and by maximizing local purchases to support its seismic acquisition operations onshore. For a number of years, CGG has developed its internal competencies and methods for managing relations with local communities. In addition, CGG support of sustainable development sponsorship initiatives reflects the Group's local integration.

The materiality analysis presented in the "Priority Issues for Sustainable Development" section confirmed CGG's major societal challenges.

##### 1. RESPECT OF HUMAN RIGHTS AND LABOR RIGHTS IN OUR OPERATIONS

As mentioned in the Group Sustainable Development Policy, CGG is a member of the UN Global Compact and recognizes the ten principles derived from it including the Universal Declaration of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work. In 2013, CGG has achieved the GC Advanced level of the Global Compact that demonstrates an advanced level of implementation and a higher degree of engagement concerning critical issues. HSE management system trainings for the HSE community and Managers include a component related to these critical issues.

In 2013, the Group conducted 74 HSE audits, which included a questionnaire about aspects of Human Rights and Rights at Work, to check that operations comply with these principles mentioned in our policies.

##### 2. LOCAL CONTENT

###### **Employment**

Successfully maintaining long term relationships with national partners is key to CGG's sustainable development approach. This is demonstrated by the Group partnership established in Saudi Arabia with 47 years of shared experience.

Our permanent sites principally employ national employees as shown by the 10 main CGG sites below.

Country	Percentage of national personnel on December 31, 2013
Australia	53%
Brazil	82%
Canada	79%
China	100%
France	94%
Netherlands	71%
Norway	73%
Singapore	46%
United Kingdom	79%
United States	79%

*National staff percentages are calculated based on information held by the Group. In some countries, such as Canada and the U.S.A, the law does not require workers to disclose their nationality.*

Regarding short-term employment for Land Acquisition, locally hired staff and continuation of employment over several successive surveys is favoured whenever possible.

In 2013 CGG carried out land acquisition operations in seven non-OECD countries (Algeria, Oman, Qatar, Saudi Arabia, South Africa, Thailand, and Tunisia) for a total of 1.61 million workdays done by workers of the nationality of those countries employing personnel who are nationals from those same countries.

In the Middle East, efforts to nationalize the workforce have been implemented for several years through training programs and partnerships with local universities. The percentage of national staff in operations in Oman and Saudi Arabia in 2013 reached respectively 86% and 63%. By way of example, ARGAS (CGG and TAQA joint venture in Saudi Arabia) signed a cooperation agreement with King Abdulaziz University (KAU) in Jeddah in 2013. This agreement is the culmination of two years of informal collaboration between the ARGAS Technology Centre in Al Khobar and the KAU's Faculty of Earth Sciences. Furthermore, CGG donated 24 licenses of Hampson-Russell's comprehensive software suite of reservoir characterization tools to KAU's University's Faculty of Earth Sciences.

The Group is currently conducting a Land Acquisition survey in Algeria for which 709 people were recruited locally. They work with 66 expatriates and experts working on a rotating schedule. Among these 709 national employees, around 30% were re-employed after the end of the previous survey about 350 kilometres away from the current survey. 89% of the 709 employees are from the acquisition area's wilaya (administrative region). Therefore, CGG employed nearly one out of four job seekers in the two towns in the immediate vicinity of the survey location.

### **Training**

The Group systematically trains its contractors and fixed-term contract employees on health, safety, and environmental issues.

In 2013, more than 67,000 training hours had been provided on land surveys worldwide.

### **Local procurement for land surveys**

During Land Acquisition surveys, CGG is particularly committed to contributing to the development of the acquisition region by sourcing locally even if the volumes of local purchases only represent a small percentage of the annual volume of CGG Services' purchases (see "Responsible Procurement" section below). To properly conduct land operations in 2013, more than 82 M\$ of supplies were purchased from local suppliers in non OCDE countries, thereby contributing to the economic development of these countries. The main purchasing categories are personnel, transport, and overheads (camp, catering, telecom, travel...) which respectively represent 30%, 29%, and 17% of those purchases.

### **3. COMMUNITY RELATIONS**

Developing and maintaining harmonious relations with local communities is paramount to the success of its operations, especially with regards to geophysical acquisition. The evaluation of the risks and opportunities tied to our community relations is part of a Project Risk Assessment Plan (PRA). The Sustainable Development Department also updated its methodological guide, the "Community Relations Management Plan" (CRMP), this year. This guide complements the PRA in assessing and minimizing project risks in areas where our seismic acquisition surveys may significantly impact life and activities of a community. This is for example the case for Marine surveys in heavy fishing areas or land surveys in urban or very isolated areas.

The CRMP and its three supporting operational implementation guides (on fishing activities, permitting and access to land, and the implementation of a Sustainable Development project) were updated in 2013 and are now available in both English and French. Another guide on managing temporary local field personnel was also designed and published in both languages.

Clients frequently expect us to participate in the CRMPs they have already initiated. Under client responsibility, we contributed to a significant number of community relations management plans: in Canada, Indonesia, South-Africa and the USA for Land Acquisition and in Columbia, Kenya, Mexico, Nicaragua, Peru and Tanzania for Marine Acquisition.

At the same time, on certain seismic surveys, CGG takes sole responsibility of managing the community relations process, including in Algeria, Australia, Brazil, Canada, France, Malaysia, Thailand and Tunisia this year.

CGG continued the CRMP initiated in Brazil in 2012 (Pernambuco). Training on sustainable fishing techniques, first aid, and safety was provided to Carmo local fishermen and their families. In Tamandaré, the fishermen's association's headquarters are currently being renovated and should be ready in early 2014. The new project for the Itamaracá fishermen's association's headquarters has been approved and is expected to begin in early 2014.

CGG's Land Acquisition surveys in Thailand all required a CRMP. The configuration of these surveys in rural agricultural areas with no land registers leads to the systematic assessment of impacts and compensation of thousands of land owners for each survey. A public relations department and a permitting department, totaling thirty people, handle daily interactions with public institutions, local communities and their representatives (chiefs of village) before, during, and sometimes even after the end of a survey if necessary.

**4. RESPONSIBLE PROCUREMENT**

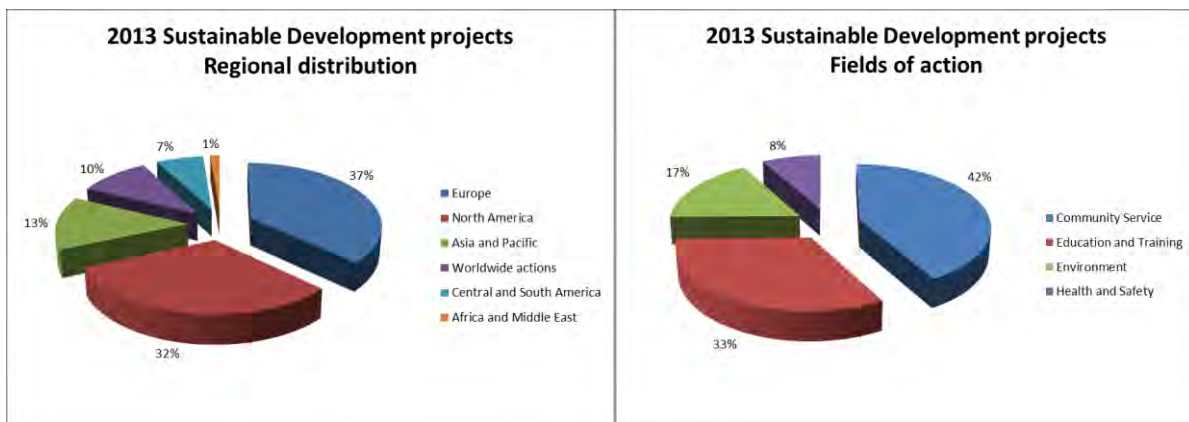
In its HSE policy, CGG is committed to manage contractors in its area of prevailing influence to ensure their compliance with Group policies and standards. The Corporate Purchasing Department continues to deploy its methodologies and tools to support this commitment. These are detailed in the section under "Ethics" on the CGG website. Among these is the Supplier Code of Conduct which describes the minimum social and environmental standards expected by CGG from its suppliers in particular with regards to the respect of Human Rights, the prohibition of child labor, and the minimisation of environmental footprint.

Goods and services purchases for the Acquisition and GGR divisions (1.69 B\$) represented more than 57%<sup>4</sup> of the turnover of these same divisions. Exposure to environmental and social risks in our supply chain is limited. In 2013, the Group purchased 86% of its products and services from suppliers in countries which have a 2013 corruption perceptions index higher than 60 (e.g. consider as low risk countries by Transparency International). Most of those countries are OECD countries that have legislation on the environment and are committed to International Labor Organisation ("ILO") principles.

This is due to the fact that most of the purchases made by CGG Services are intended to meet the needs of the Acquisition Division which has the most capital and operational expenditure. The Acquisition activity involves successive and random short-term contracts (a few weeks to a few months) in maritime or land areas in different countries. These temporary and nomadic activities therefore do not lend themselves to the concept of sustainable procurement in a given country. The majority of purchases for these activities corresponds to long-term vessel chartering contracts, vessel fuel, and the purchase of specialized equipment (seismic and computer) from suppliers mainly based in France, Norway, and the USA. The share of local purchases for Acquisition surveys' requirements is therefore small compared to the total procurement volume.

**5. SUSTAINABLE DEVELOPMENT SPONSORSHIPS**

The Group supports and contributes to community actions to advance education/training (with special focus on promoting Earth Sciences), community service, environmental protection, health and safety. A network of company sustainable development correspondents ensures the monitoring, promotion, and reporting on local projects in coordination with the Group Social Responsibility Manager. Some countries such as Australia, Brazil, the United States, and Mexico have a Sustainable Development Committee composed of volunteers who suggest and monitor local initiatives. In 2013, CGG and its employees led initiatives in thirty countries for a value of 760,000 US dollars.



<sup>4</sup> This figure of 57% should be considered as a minimum since purchases related to the Fugro Geoscience Division entities which joined CGG in 2013 were not able to be integrated in the 2013 purchase accounts.

When selecting projects to support, the Group favors initiatives in which employees take an active part. In 2013, 76% of the budget for sustainable development initiatives was spent on initiatives involving employees. These projects are located in countries where we operate and close to our main sites. They promote the Group's integration in local communities which receive us either temporarily or for the long term.

Among the projects sponsored in 2013, 45 (equivalent to 69% of the total budget) were initiatives which the Group has supported for at least two years in a row.

In 2013, CGG's Solidarity Challenge was organized for the second year running in partnership with babyloan.org. It is one of the largest projects in terms of the number of employees involved. In 2013, some 300 Group employees of 22 nationalities lent money to Indonesian, Filipino, Peruvian, and Guyanese small business entrepreneurs during the two weeks of the challenge. As always, the Group fully matched the amount of loans made by its employees. Since the first Solidarity Challenge in 2012, 206 small business entrepreneurs have been fully funded (equivalent to 133,000 USD of loans) by the Group's matching funds and it continues to re-lend the money paid back every month, mainly for artisanal fishery projects. Group employees have contributed to fully or partially financing 340 small business projects.

Finally, it is also worth mentioning that the Group Environment and Sustainable Development Manager has been appointed to the *Geoscientists Without Borders*® committee. This organization, supported by the Group through its annual donation to the *Society of Exploration Geophysicists (SEG)* Foundation, helps students from all over the world to develop their skills in geosciences by engaging in public interest projects (studies on preparing for earthquakes, landslides, volcanic eruptions, tsunamis, and aquifer management / pollution). The committee's role is to ensure that selected projects clearly reflect the *SEG* Foundation's mission.

#### **6. SOCIALLY RESPONSIBLE INVESTMENT INDICES (SRI)**

SRI Indices select and rate companies against their sustainable development performance. In 2013, the Group has once again been the only geosciences company to be included in the Dow Jones Sustainability World and Europe, ASPI Eurozone, Ethibel Excellence, and Vigeo Europe 120 indexes.

The Group also pursued direct dialogue with SRI brokers during two roadshows and provided regular updates of its ESG (Environment, Social and Governance) profile to extra-financial rating agencies.

### **8.5. Reporting method and scope**

#### **1. METHODOLOGY**

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

#### **2. SCOPE**

Health, safety, and environmental reporting concerns all employees and contractors working in CGG's prevailing influence, namely all of our sites and acquisition activities that are at least 50% CGG owned and which are consolidated in the Group's financial statements.

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

- Argas in Saudi Arabia,
- Amadeus, the ship operated by CGG through the PTSC CGGV Geophysical Survey Company Limited Joint Venture in Vietnam,
- Binh Minh, the ship that CGG has operated through the PTSC CGGV Geophysical Survey Company Limited Joint Venture in Vietnam since October 4, 2013.

Operations performed by Seabed Geosolutions BV, in which CGG has a minority interest, even when contracted through CGG, are not included in the Sustainable Development or HSE scope of this report. These operations are performed under the Seabed Geosolutions BV HSE management System.

The Airborne Business Line joined the Group in September 2013. We therefore only report their most significant HSE indicators in this report. As an example, their fuel consumption – which is negligible compared to Land and Marine seismic Acquisition's energy footprint – will only be reported from 2014 on.

Unless otherwise specified, all statistics provided in this report include this scope which accounted for 68 million hours worked in 2013.

Every services Division site, team, or ship records its HSE activities and incidents in PRISM which is CGG's integrated tool for HSE and Sustainable Development reporting and risk assessment. The Equipment Division has its own reporting tool.

Data associated with acquisitions is recorded as soon as possible and no later than January 1 of the following year; sales activities are recorded in the month following their actual output.

#### **3. SELECTION AND PERTINENCE OF INDICATORS**

Published data is intended to inform stakeholders of CGG's HSE and Sustainable development results for the current year. It is in line with OGP, EPCM, and Global Reporting Initiative (GRI) recommendations on information transparency regarding social responsibility and the environment.



Indicators were selected to monitor:

- CGG's HSE and Sustainable development commitments and policies integrated in management systems,
- Performance relating to CGG's main risks and impacts,
- Regulatory obligations (the French Commercial Code which was updated in 2012 by decree implementing Article 225 of the Grenelle II Law).

The forty-two themes mentioned in the decree are handled as transparently as possible. Some are not reported on in great detail for the following reasons:

- *Measures for consumer health and safety*

CGG mainly provides services to its clients and is not in contact with consumers. The Equipment Division trains its clients to use its products and provides all information about the components used. To date, we have not been informed of any adverse effects.

- *Consumption of raw materials and measures to improve efficiency in their use*

Given the Group's core business (seismic acquisition and marine and land seismic data processing / imaging services and equipment production), the Group does not use much raw material. However, our Equipment Division's ecodesign initiative aims to minimise their use. We have initiated due diligence in compliance with the US Frank Dodds Act to determine if minerals used in our manufacturing originate from the Democratic Republic of Congo and adjacent countries.

- *Prevention, recycling, and waste disposal measures*

Permanent sites, ships, and Land Acquisition missions have waste management plans that all include the same principles: avoid, reduce, reuse, and treat/recycle. The PRISM database and Sercel also provide information on the categories and quantities of waste generated. This waste, particularly hazardous waste, is too little to require detailed reporting.

- *Water use and supply according to local constraints*

Given the Group's core business, CGG does not use much water (volume estimated at about 850,000 m<sup>3</sup> in 2011). Issues associated with water management and supply for the Group lie more in limiting the environmental footprint of its operations. Environment risk assessment and management plans established before the start of each Land Acquisition mission include a section on water resource management and protection.

- *Adaptation to climate change*

Climate change should not have a significant impact on the Group's activities in the short-term. The Group also strives to continuously reduce its environmental footprint and improve the use of resources such as energy.

- *Measures to enhance biodiversity*

The Group is particularly committed to reducing the environmental impact on biodiversity of its activity.

- *Amount of provisions and guarantees for environmental risks*

CGG has not established any provisions for environmental risk. The amount of guarantees is considered confidential.

- *Use of renewable energy*

Most of the energy used by CGG is for the marine or land transport of Marine and Land Acquisition activities. These activities lend themselves poorly to the use of renewable energies, especially as seismic vessels or vibrators are refuelled during surveys to minimise trips to port or seismic camp. CGG permanent office locations do consider the use of renewable energy where available on a case by case basis. For example, all British CGG sites are supplied with electricity produced from a mix of wind, wave, solar, biomass, and hydro power.

#### **4. CONSOLIDATION AND INTERNAL CONTROL**

HSE and Sustainable development data is analysed every week by HSE and Sustainable development support functions. This data is then consolidated every month at Division and Group level. Data on specific indicators is calculated directly by Divisions. These processes are subject to regular internal audits.

#### **5. EXTERNAL AUDITS**

CGG chose to have its HSE and Sustainable development indicator performances audited for the second time this year. Corporate, social, and environmental information destined to be published was selected by the HSE, Sustainable development, and Human Resources Departments and audited by the Environment and Sustainable Development Department of Ernst & Young, one of the Group's Auditors. Their observations are presented in the assurance report below.

## 9. HUMAN RESOURCES

### 9.1. Consequences of the Company's Business on Labor

#### 3.1.1. Employment

##### 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 information is reported in detail, since we have access to all the reporting elements for this population that most directly reflects the sustainable growth of the Group.

As of December 31, 2013, the Group accounted for 9,688 permanent employees of more than 100 different nationalities, in more than 70 locations worldwide. These figures are to be compared with a total of 7,560 permanent employees on December 31, 2012.

A total of 2,305 employees have joined the group following the acquisition of the Fugro Geoscience division including 1,958 people on January 31, 2013 and 347 people on September 2, 2013 for the Airborne activity.

Seasonal employees are named after the North America land seismic field crews, who are hired for the duration of the acquisition campaign (winter) and regularly returns.

Crews are by nature a very fluctuating activity; they vary during the year and from one year to the other. Seasonal employees were 1,372 at the end of 2013 (1,222 end 2012); seasonal employees work mainly in North America (35%), Oman (45%) and Canada (15%).

As of December 31, 2013, the workforce was distributed by business and geographic area as follows:

	Equipment Division	Acquisition Division	Geology, Geophysics & Reservoir Division	Support Functions	Total 2013	Total 2012
Europe	1,141	460	1,562	438	3,601	2,581
Africa & Middle-East	11	156	230	11	408	331
Asia-Pacific	582	169	517	102	1,370	1,108
North America	757	416	960	161	2,294	1,782
Latin America	5	123	199	71	398	258
Marine Crew	-	1,241	1	-	1,242	970
Land Crew	-	375	-	-	375	530
<b>Total</b>	<b>2,496</b>	<b>2,940</b>	<b>3,469</b>	<b>783</b>	<b>9,688</b>	<b>7,560</b>

As of December 31, 2013, contract types are as follows:

Contract type	Total 2013	Total 2012
Expatriates	298	288
Prospectors — Land	259	390
Prospectors — Marine	1,244	970
Sedentary	7,887	5,912
<b>TOTAL</b>	<b>9,688</b>	<b>7,560</b>

Land prospector contracts apply in the Eastern hemisphere. In addition, some field staff may be temporarily assigned in offices or support bases and not on crews or seismic vessels; this explains the difference between contract type and assignment figures.

As of December 31, 2013, the distribution of the permanent workforce by age categories was as follows:

Contract type	<25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	>=60	Total
Expatriates	0	21	44	54	45	44	30	40	20	298
Prospectors — Land	5	35	47	28	27	23	25	51	18	259
Prospectors — Marine	7	108	267	219	213	191	146	62	31	1,244
Sedentary	260	898	1,371	1,194	1,063	980	869	742	510	7,887
<b>TOTAL</b>	<b>272</b>	<b>1,062</b>	<b>1,729</b>	<b>1,495</b>	<b>1,348</b>	<b>1,238</b>	<b>1,070</b>	<b>895</b>	<b>579</b>	<b>9,688</b>

In 2013, 3,411 employees have joined the Group and 1,152 have left. Among the newcomers, 2,305 are related to the integration of the Fugro Geoscience division, and 131 are seasonal permanent reclassifications. Excluding acquisition and reclassifications (seasonal - permanent), there are 1,106 entries: 891 new hires and 215 rehires. Leavers include both voluntary departures (retirement, resignations, etc.) and involuntary departures (dismissals, activity transfers, etc.). In terms of leavers, 26% are classified "involuntary". 14% are transfers to the Seabed Joint Venture.

The number of departures is due to the natural attrition inherent to the Group's businesses (in particular for field staff) and a very competitive geoscience job market, in particular in the United States, United Kingdom and Norway.

To compensate for these departures and continue its growth, the Group maintains an ambitious recruitment program; this includes hiring geophysicists, researchers, executives and offshore specialists (areas in which the Group needs to reinforce its skills).

Excluding acquisitions, entries in 2013 (891) remained stable compared to 2012 (898).

The tables below show the split of the new entries and leavers by activity:

Entries 2013	Equipment Division	Acquisition Division	Geology, Geophysics & Reservoir Division	Support Functions	Total 2013	Total 2012
Females	61	191	576	90	918	342
Males	230	987	1,210	66	2,493	896
<b>Total</b>	<b>291</b>	<b>1,178</b>	<b>1,786</b>	<b>156</b>	<b>3,411</b>	<b>1,238</b>

Leavers 2013	Equipment Division	Acquisition Division	Geology, Geophysics & Reservoir Division	Support Functions	Total 2013	Total 2012
Females	38	63	125	60	286	192
Males	126	393	301	46	866	525
<b>Total</b>	<b>164</b>	<b>456</b>	<b>426</b>	<b>106</b>	<b>1,152</b>	<b>717</b>

Net 2013	Equipment Division	Acquisition Division	Geology, Geophysics & Reservoir Division	Support Functions	Total 2013	Total 2012
Females	23	128	451	30	632	150
Males	104	594	909	20	1,627	371
<b>Total</b>	<b>127</b>	<b>722</b>	<b>1360</b>	<b>50</b>	<b>2,259</b>	<b>521</b>

As stated above, these figures include entries associated with acquisitions, reclassifications (seasonal - permanent), long term absence reintegration, as well as internal transfers. Effective net growth is 2,128 people from 2012.

**France**

The Group employs 1,945 employees through its companies established in France, 1,930 on a permanent basis ("CDI") and 15 on fixed terms ("CDD"). These personnel are employed by CGG SA, CGG Services SA, or one of the subsidiaries of Sercel in France.

This number includes 82 expatriates and 122 Marine and Land field staff. CGG SA employs 40 permanent employees. CGG Services SA has 968 permanent employees and 13 employees on a temporary basis. Sercel has 922 permanent employees and 2 fixed term employees on Dec. 31, 2013.

This workforce is divided, in France, among the following categories:

	Employees as of December 31, 2013	
	CGG SA & CGG Services SA	Sercel
Managers and engineers	84.7 %	40,8 %
Technicians	5.3 %	31,28 %
Workers/employees	10.0 %	27,92 %

In France, 168 new employees were recruited, including 6 hired by CGG SA, 99 hired by CGG Services SA and 63 hired by Sercel on a permanent basis. Temporary assignments have been strictly used to fill needs created by long term absences and temporary workload surges.

At the end of 2013, the departures from the CGG Group amounted to 143 in France, including 3 in CGG SA, 99 in CGG Services SA and 41 in Sercel.

These numbers do not include internal transfers.

**Recruitment**

In order to sustain its continuous international development, the Group recruits between 600 and 1,000 employees per year. More than half of these recruitments are in our geosciences division, mainly in France, United Kingdom and the United States. We are looking for experienced technical profiles, but also young graduates. The talents we integrate in our expert teams allow the Group to be at the forefront of innovation.

Our recruitment communication, tools and strategy are aligned with these requirements.

In 2012 / 2013, two major areas have been developed:

New recruitment software has been deployed worldwide with the aim to optimize applicant management and further foster internal mobility. This global tool respects local constraints and is interfaced with other internal software: this allows simpler data updates and more efficient processes.

In order to attract the necessary talents and increase our visibility, we have strengthened and aligned communication. Our employer brand was redefined and deployed in all the countries where we operate, resulting in new recruitment media, brochures and booths.

The launch of our employer brand, "Make Your Move," took place in June, 2013 during the EAGE in London, with three key messages:

**EXPLORE OUR WORLD, FOCUS YOUR ENERGY and ACHIEVE TOGETHER**

Teamwork, ownership, results-oriented attitude, understanding of our global structure and customer orientation are the key success factors in our organization.

Two other projects were started in 2013 and will be finalized in 2014: the CGG Scholarship program and onboarding process restructuring.

The ambition to establish ourselves in new countries and the desire to continue the development of existing activities are the main drivers of our scholarship program. This reinforces our international footprint and expansion of the group, in a sustainable way. Our goal is to attract international talent to train them to our businesses with the help of three French schools: Ecole des Mines, Ecole Centrale and IFP Energies Nouvelles. We have targeted students with engineering and master degrees in Applied Mathematics, Information Science and Geosciences.

Along with our employer brand deployment, we are reviewing our new employee onboarding process to promote the integration into a global organization, the appropriation of our group culture, and sharing our values and policies.

The group maintains close relationships with schools and universities. Promoting our image to students includes a strong presence at forums and educational programs that allow schools and universities worldwide to learn more about geoscience. These programs are often implemented by industry associations such as the SEG (Society of Exploration Geophysicists) and EAGE (European Association of Geoscientists & Engineers).

We also offer extensive internships and first experiences abroad in numerous ways: training programs in higher-level schools, ongoing adult education and professionalization, CIFRE, VIE contracts, etc.

The Group is also committed to diversity and non-discrimination. This commitment is clearly stated in the Group Code of Ethics, Business Code of Conduct, Sustainable Development policy and Human Resources policy.

#### **Measures in favor of employment and integration of physically disabled people**

The Group, as stated in its Human Resources policy intends to reject any form of discrimination in hiring or promoting the careers of its employees. This applies in particular to discrimination against persons with physical 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.

### **3.1.2. Work conditions**

In France, CGG is governed by a specific collective bargaining agreement agreed upon with the worker representatives. This agreement is common to CGG SA and CGG 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.

Four types of work schedules are provided in this agreement:

- Two regimes for people working in offices or workshops (hourly and daily rates);
- A second regime for annualized field staff (number of working days per year defined) working in rotation; and
- A third non-annualized regime for field staff who acquire off days according to the number of days worked in the field.

A specific time-off account (CET or *compte épargne temps*) was simultaneously put in place in order to allow French employees to save 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 34 persons work part-time (17.5 hours to 33.72 weekly hours): 21 persons in the UES and 13 persons in Sercel.

With regards to working time regimes outside France, employees are subject to legal labor regulations in force in their country of assignment. Field staff contracts cater to on-off work rotations, e.g., five weeks of work for five weeks of time off for marine crews. Land crew rotations are more flexible since they depend on the nature and duration of the acquisition surveys.

In 2013 absenteeism amounted to:

- 3.10% for CGG SA and CGG Services SA UES excluding maternity leaves and including 0.87% for absences shorter than 100 days;
- 2.88% for Sercel, excluding maternity leaves and including 1.69% for absences shorter than 100 days.

The Group absence management tool produces statistics for the main countries, using the local laws and regulations; this data collection process is constantly undergoing improvement. It is important to note that these figures are not comparable with the figures for French staff, since working time and absence definitions vary considerably with respect to other major countries where we employ staff.

Other 2013 absenteeism rates include (excluding long term leaves):

- USA: 0.67%;
- Singapore :1.01%; and
- Malaysia :0.89%.

### **3.1.3. Gender distribution**

Out of 9,688 employees, 26% are women distributed as follows in the divisions and functions: Equipment 30 %, Acquisition 13 %, Geology, Geophysics and Reservoir 28 % and Functions 52%.

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

	Equipment Division		Acquisition Division		Geology, Geophysics & Reservoir Division		Support Functions		Total 2013		Total 2012	
	W	M	W	M	W	M	W	M	W	M	W	M
Europe	242	899	117	343	467	1,095	230	208	1,056	2,545	727	1,854
Africa & Middle East	4	7	28	128	45	185	4	7	81	327	68	263
Asia Pacific	248	334	45	124	137	380	65	37	495	875	421	687
North America	253	504	100	316	274	686	92	69	719	1,575	563	1,219
Latin America	1	4	24	99	60	139	33	38	118	280	79	179
Crew Marine	0	0	74	1,167	0	1	0	0	74	1,168	68	902
Crew Land	0	0	3	372	0	0	0	0	3	372	10	520
<b>Total</b>	<b>748</b>	<b>1,748</b>	<b>391</b>	<b>2,549</b>	<b>983</b>	<b>2,486</b>	<b>424</b>	<b>359</b>	<b>2,546</b>	<b>7,142</b>	<b>1,936</b>	<b>5,624</b>

In France, 25% out of 1,945 employees are women. The distribution is as follows:

- CGG SA: 21 women out of 40 employees,
- CGG Services SA: 258 women out of 981 employees,
- Sercel: 205 women out of 924 employees.

Specific efforts (promotions, targeted recruitment, etc.) are sustained to promote a better ratio, especially for upper management positions.

### 3.1.4. Remuneration

The CGG compensation policy aims at closely associating remuneration and performance. It is designed to:

- be aligned with the strategic goals of the Group,
- improve performance,
- be simple and equitable,
- enhance individual involvement, team work, innovation and commitment to Health, Safety and Environment and Sustainable Development values,
- attract, motivate, engage and retain talents with the required skills and competencies,
- be coherent and competitive within the Oil and Gas industry.

These concepts apply within the legal framework of every country that CGG operates in. In France, the remuneration policy follows the same guidelines and is detailed below.

#### Salary Revision 2013

Within the UES CGG SA - CGG Services SA scope, 2013 salary negotiations with the trade unions were not materialized by a formal agreement. The 2013 salary increase amounted to 2.8% (excluding contractual increase related to seniority for certain categories) on a merit basis. A specific envelope of 1% was dedicated to promotions.

For Sercel, negotiations led to an agreement on March 5, 2013. Salary increase amounted to 3.8%, including an average of 3.10% of general and merit increase (depending on employee categories) and a specific envelope of 0.7% dedicated to promotions.

For the eighth consecutive year, a performance bonus was paid to employees in March, 2013. This variable part is distributed within all Group entities. It is implemented in two ways: 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 one (for the production entities) is a program based on production objectives.

In France, the three-year profit-sharing agreement signed on June 30, 2007, between workers’ representatives and UES CGG SA - CGG Services SA was renewed on June 20, 2012, for a three-year period. A similar agreement has been renewed within Sercel on June 6, 2012, also for a three-year period.

Within the same UES scope, i.e., CGG SA - CGG Services SA, the derogatory incentive agreement (“Participation” to the Company results) signed on June 30, 2007, has been terminated. 2012 financial results have not delivered any amount to be paid in 2013. In a similar manner, no provision was made in 2013.

Current Sercel agreements generated payments in 2013 (profit-sharing and incentive “Participation” agreements).

The additional UES CGG SA - CGG Services SA company savings plan (PEE) and collective retirement savings plan (PERCO) implemented in 2006 (2005 for Sercel), renewed in 2009, were extended for another three-year period starting from 2012. These plans were open for employees' investments and the Company's matching contributions as per the defined terms at specific dates throughout 2013.

At the end of 2013, within CGG SA and CGG Services SA, 618 employees subscribed to the PEE and 672 to the PERCO. At Sercel, 709 employees subscribed to the PEE and 542 employees to the PERCO.

#### **Agreement on professional fairness between men and women**

Within the French UES scope regrouping CGG SA and CGG Services SA, the agreement regarding men and women's 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 includes an envelope of 0.8% of the base payroll to operate salary adjustments in favor of women, applicable for the eligible people with an effective date on October 1, 2011. This agreement was enforced as planned.

This agreement also addresses the issue of recruitment monitoring and awareness programs to foster equal opportunity, especially for management staff. An agreement on professional equality was also negotiated and signed at Sercel on October 23, 2012. This agreement provides specific actions covering the percentages of men and women in specific jobs and equal access to training.

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 system on gender ratios in the various activities of the Group and in the main countries of activity. This reporting system includes a comparison of salary levels by occupational category.

It should be noted that 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.

In 2013, the wage gap between men and women decreased by 1.18% (excluding Sercel and field employees).

CGG was ranked 21<sup>st</sup> on the 2013 charts of the feminization of the governing bodies from the SBF 120 (French stock market category), published by the French Ministry of Women's Rights.

### **3.1.5. Professional relationships**

#### **Institutional Social Relationships**

In order to foster dialog and information exchange, the UES CGG SA - CGG Services SA, as well as Sercel, Company Committee, Workers' Representatives Committee, HSE Committee and various commissions, some of which having resulted in the signature of certain agreements. Within the UES CGG SA - CGG Services SA, the rights of the employees are guaranteed by a collective bargaining agreement which was signed on December 21, 2007. Four ordinary meetings and four extraordinary meetings of the Hygiene, Safety and Work Conditions Committee (CHSCT) were organized in 2013.

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

Our Norwegian prospectors (260 people, 122 living outside Scandinavia) and sedentary employees are covered by a collective agreement. Wages and other conditions are negotiated with appointed representatives. 75 sedentary employees are covered by three different agreements. Wages are defined on an individual basis. 47% of our Norwegian staff, excluding Sercel, is covered by collective agreements.

#### **Ethics and Code of Conduct**

The Code of Business Conduct and the employee reporting line have been implemented in 2009. During 2013, a training module on ethics has been deployed to all employees. 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*).

No complaints were filed within this scope throughout 2013 for a total of 136 calls received.

#### **Welfare**

The employee assistance program ("EAP") was renewed in 2012 with the American company, ComPsych, and is now active for over five years i.e., from 2012 to 2017. This program, offered with full confidentiality by a third party and thus guaranteeing 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, and individual initiatives of the elected representatives. The EAP program exists in lieu of such tools and systems in countries where the structure or the law does not provide for their existence.

### **3.1.6. Training and 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 Company university (CGG University).

CGG University offers:

- onboarding training for new hires in the various areas of the Group.
- technical training to employees of the Group and its external customers. This year again, a specific effort was made on the implementation of new training modules for the deployment of the *geovation* seismic processing software. In 2014, CGG University will enrich its catalog in the field of reservoirs and geoscience. Furthermore, 31 conferences related to geoscience and management, have been organized throughout the world, bringing together a total of 1,042 participants.
- management training programs. In 2013, these programs have improved in order to develop skills related to our leadership model. Personal development programs as well as procurement awareness and supply programs, trading, marketing, project management, and QHSE policy (quality, hygiene, safety and environment) have been updated or enriched.

Finally, training efforts were made on particular topics such as: ethics and understanding of the Business Code of conduct, discrimination and harassment. Throughout 2013, the e-learning training on CGG ethics, launched in March 2012, has been continuously deployed in all worldwide offices and also on vessels.

The participation rate in this training program was:

- as of December 31, 2013, reached 68% of the target population (9,688 invited employees: offices, processing centers and seismic vessels);
- as of December 31, 2012, only office employees and processing centers had been invited, and at this date, the participation rate amounted to 80%, showing a great interest from the concerned employees (offices, processing centers and seismic vessels) to our ethical principles and the ownership of our managers and employees.

The online version (e-learning) of the program against discrimination and harassment developed in partnership with the Sustainable Development department was published in September, 2013. By the end of 2013, 62% (2013 target was 60%) of the sedentary staff had received this training. The deployment of e-learning with marine prospectors, land prospectors and the Sercel factory workers will begin in 2014 with a target of 100% participation for the entire Group.

The Learning for Development concept is still very active within the CGG University programs. It reflects the need for the organization and every employee to continuously develop the knowledge and know-how they need to adapt to the evolution of technologies and methods. It also reflects the need to adapt to organizational changes and the evolution of internal processes. There is a close collaboration between the internal training offer and operations; CGG University is organized for this purpose.

CGG University provided a total of 16,465 training days in 2013, including 3,330 training days for external clients and 13,135 for employees of the CGG group. The 3,330 days provided to external clients focused on acquisition and data processing techniques. The 13,135 days provided to our employees were distributed as follows: 2,973 days for introduction to the fundamentals of our business and geoscience, 3,916 days for in-depth technical training, 1,072 days dedicated to the health, safety and environment and 5,174 days devoted to management programs, leadership or individual development.

In addition to the CGG University course offers, many training programs are provided by third-party organizations. External training is achieved through specialized professional organizations or equipment suppliers; they are linked to the acquisition of specific skills, generic professional skills and can be qualifying. Health, Safety and Environment (HSE) training concerning sea survival, first aid and firefighting are mandatory for our prospectors and guests visiting our seismic vessels. Finally, there is a third type of training provided in situ by the operational units themselves, which includes ongoing training for geophysicists or HSE training and trade-related instruction for land or marine crews.

### 3.1.7. International labor regulations

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 of the United Nations Global Compact and also undertakes 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 in 2012, the Group published an instruction clarifying the terms of hiring and employment of young workers under 18 years of age.

Since 2012, HSE audits also include social components 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.

### 3.1.8. 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, an SAP database is deployed. Sercel data is at this date consolidated manually.



The selected indicators cover the scope of the consolidated Group. Employees of associated companies (for example, Argas) are not included in the calculations. In case of acquisition or divestment, the scope is adjusted at the actual time of the transaction and the variations are explained.

Consolidation rules and adjustments are defined by a protocol followed for each report type 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 is 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).

This data is 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 linked 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 ensured by the check performed by operational and functional HR managers before each issue of 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, analyze and validate the information.

The reported data is based on the calendar year 2013. Given the fact that publication requirements were 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 continuously improved.

### **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.
- *CGG SA*: Group's parent company incorporated in Paris, France. CGG SA is part of the UES.
- *CGG Services SA*: French Company of the Group, incorporated in Massy, France, specialized in the field of geophysical services. CGG Services SA is part of the UES.
- *UES: "Unité Economique et Sociale" / "Social and Economic Entity"*, composed of the companies CGG SA and CGG Services SA.
- *Sercel*: Sercel subsidiary specialized in the manufacturing of equipment.
- *Sercel France*: All Sercel companies established in France.
- *Equipment*: operational division regrouping activities involving manufacturing of equipment. This division has the same scope as Sercel.
- *Land*: operational business line regrouping activities involving data acquisition in land.
- *Marine*: operational business line regrouping activities involving data acquisition in marine.
- *SI*: Subsurface Imaging, operational business line regrouping activities involving data processing, seismic imaging and reservoir characterization.
- *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 weekly based 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**

Social performance indicators are audited. The published social information was selected by the HR department and has been audited by the department of Environment and Sustainable Development from Ernst & Young, one of the Auditors of the Group.

## 9.2. Staff incentive scheme

### 3.2.1. In-House profit-sharing schemes

#### Employee savings scheme

For CGG SA and CGG Services SA, an employee savings scheme ("PEE") was set up on June 7, 2006. This PEE cancelled and replaced the CGG PEE of December 29, 1987 and the PEE CGG Marine on June 16, 1999, previously in force.

In the context of this PEE, in accordance with the obligation resulting from article 81 of Act No. 2008-776 of August 4, 2008 (article 4), a solidarity dedicated mutual fund was introduced by Amendment No. 3 of December 9, 2009, with effect from January 1, 2010, bringing to four the number of dedicated mutual funds ("FCPE") that can receive payments of employees supplemented by those of the company. These funds, certified by the Inter-Trade Union Committee of employee savings, meet criteria for the management of the socially responsible investment ("ISR").

For Sercel, an employee savings scheme ("PEE") was set up on February 22, 2006. This PEE cancelled and replaced the one from December 28, 1988. Under this PEE, four dedicated mutual funds ("FCPE") can receive payments of employees; one of these funds is certified by CIES.

Following the regulations, the FCPE shares acquired by employees are blocked for a five years period.

A Group employee savings scheme has been set up in 1997, by means of a mutual fund investment company called «CGG shareholders 1», approved by the French Securities and Exchange Commission (COB) on April 25, 1997. In this context and under the authority given to him by the combined General meeting of May 5, 1997, the Board of Directors conducted a capital increase, in accordance with articles L. 443 - 5 of the Labor Code and L. 225 - 138 of the French Commercial Code, by issuing new shares which the subscription was reserved for employees of the company or subsidiaries adherent of the above-mentioned group company savings plan; 68 917 shares have been subscribed. Subscriptions for employees to this capital increase were subject of a CGG's complementary contribution, which allowed employees to acquire additional shares.

#### PERCO

A collective retirement saving plan ("PERCO") was implemented for CGG SA and CGG Services SA on March 2, 2006 and October 13, 2005 for Sercel.

In the framework of the PERCO for CGG SA and CGG Services SA, six dedicated mutual funds (« FCPE ») can receive employee's payments supplemented by those of the Company. These funds, certified by the Inter-Trade Union Committee of savings schemes ("CIES"), meet the criteria for socially responsible investment ("ISR") management. For Sercel, four dedicated mutual funds (« FCPE ») have been selected, they can receive payments of employees supplemented by those of the Company; one of these funds is certified by CIES.

According to the regulations, the FCPE shares acquired by employees are unavailable from the first payment and until employee retirement for CGG SA, CGG Services SA and Sercel.

#### Profit sharing (participation)

Profit sharing is the result of the agreement signed on June 27, 2007, which replaced the agreement from December 28, 1983 for CGG SA - CGG Services SA, and the agreement from December 6, 1989 and its amendments for Sercel.

Under the terms of these agreements, denounced by a trade union organization in 2011 for CGG SA - CGG Services SA, each employee with at least three months seniority at the date of the financial concerned year closing, benefits from an amount calculated on the basis of the taxable income of the company, pro-rated to time spent and salary.

This amount is assigned, at employee's discretion, to the PEE or a remunerated current account for CGG SA, CGG Services SA and Sercel. It is unavailable for a period of five years and is exempt from social security contributions and income tax.

This amount can be directly received by employees; it is then subject to income tax.

CGG SA and CGG Services SA did not proceed to any payment related to profit sharing in the last five years. Sercel made payments during these years.

#### Incentives ("Intéressement")

CGG SA and CGG Services SA incentive plans signed on June 27, 2007 had not been renewed in 2010 due to the financial perspectives of the Services part of the Group. A new agreement was negotiated and signed on June 20, 2012 by the majority social representatives.

At Sercel, the incentive plan, signed on June 22, 2009 and valid for the years 2009 to 2011 was renewed by a new three-year agreement signed June 6, 2012.

Under the terms of the Sercel agreement, each employee having a minimum seniority of three months at the date of the financial year closing, benefits of an amount calculated on the basis of operating income decreased by the return on capital employed of the company, pro-rated by time spent and salary.

Payments were made in 2013 for the 2012 results, for both Sercel and CGG SA – CGG Services SA. This amount, if it is paid on the PERCO, gives employer's complementary contribution as other amount paid on this scheme, within the limits set by the agreements. If the amount is directly received by the employees, it becomes subject to income tax.

### 3.2.2. 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.

#### Stock-options plans

Individual information on stock-options allocated to the Executive Officers is set forth in item 4 of our report on Form 20-F.

The table below summarizes the evolution, during fiscal year 2013, 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, May 4, 2011 and May 3, 2013, respectively.

	2006 Plan	2007 Plan	2008 Plan	2009 Plan	2010 Plans			2011 plan	2012 plan	2013 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	06/24/2013	
Number of beneficiaries	171	145	130	149	1	339	3	366	413	672	
Total number of shares that can be subscribed,	1,012,500 <sup>(1)</sup>	1,308,750 <sup>(1)</sup>	1,188,500 <sup>(1)</sup>	1,327,000	220,000	1,548,150	120,000	1,164,363	1,410,625	1,642,574	10,942,462
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	0	1,016,667
<i>Jean-Georges Malcor</i>	—	—	—	—	220,000	162,500	0	133,333	200,000	200,000	915,833
<i>Stéphane-Paul Frydman</i>	50,000	50,000	40,000	40,000	—	60,000	—	45,000	100,000	100,000	485,000
<i>Pascal Rouiller</i>	50,000	50,000	40,000	40,000	—	60,000	—	45,000	100,000	100,000	485,000
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	06/27/2014	06/25/2015	
Expiration date	05/15/2014	03/23/2015	03/14/2016	03/16/2017	01/06/2018	03/22/2018	10/21/2018	03/24/2019	06/26/2020	06/24/2021	
Subscription price (in €) <sup>(1)(2)(4)</sup>	24.95	28.89	30.95	8.38	13.98	18.47	16.05	24.21	17.84	18.47	
Exercise rules (when the plan provides for several batches of options) <sup>(5)</sup>	- 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.	- Options accrue rights in three batches (50% after 2 years, 25% after 3 years and 25% after 4 years)	
Number of shares subscribed as at December 31, 2013 <sup>(3)</sup>	2,500	2,000	0	452,950	0	38,382	0	0	0	0	495,832
Cumulated number of stock-options which were cancelled or lapsed <sup>(3)</sup>	15,861	94,366	126,792	89,675	0	112,195	0	91,529	26,041	19,338	576,397
Remaining stock-options as at December 31, 2013 <sup>(4)</sup>	1,001,048	1,220,109	1,117,594	828,039	231,538	1,4215,977	126,291	1,130,380	1,458,208	1,622,636	10,151,820
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	0	1,048,930
<i>Jean-Georges Malcor</i>	—	—	—	—	231,538	171,026	—	140,329	210,484	200,000	953,377
<i>Stéphane-Paul Frydman</i>	52,622	52,623	42,098	37,072	—	63,149	—	47,361	105,243	100,000	500,168
<i>Pascal Rouiller</i>	52,622	52,623	42,098	0	—	63,149	—	47,361	105,243	100,000	463,096

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

<sup>(2)</sup> 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.

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

<sup>(4)</sup> Considering the adjustments done further to the capital increase of October 23, 2012 for all plans except the 2013 plan.

<sup>(5)</sup> In addition, certain performance conditions are applicable to the senior executive officers and the members of Executive Committee or Corporate Committee (see item 4 of 20-F Form)

As of the date of filing of our 2013 report on Form 20-F, the exercise price for all the plans except the 2009 one is above CGG share market price.

**Performance shares plans**

Individual information on performance shares allocated to the Executive Officers is set forth in Item 4 of our report on Form 20-F.

For your information, the terms and conditions of the plans in force are summarized in the table below:

	Information relating to performance shares allocated by the Company (pursuant to article L.225-97-1 of the French Commercial code)		
Date of General Meeting	04/29/2008	04/29/2008	05/04/2011
Date of Board of Directors	03/22/2010	03/24/2011	06/26/2012
Total number of performance shares, allocated to:	509,925	513,331 <sup>(1)</sup>	542,711 <sup>(1)</sup>
<i>Robert Brunck</i>	27,500	14,446	n.a
<i>Jean-Georges Malcor</i>	22,500	28,882	28,892
<i>Stéphane-Paul Frydman</i>	8,750	8,877	11,819
<i>Pascal Rouiller</i>	8,750	8,877	11,819
Performance conditions	Operating income EBITDAS	Operating income EBITDAS	EBI EBITDAS
Acquisition date	05/10/2012	05/03/2013	06/26/2014
Total number of shares finally allocated upon expiry of the acquisition period, allocated to:	67,575	376,080	n.a.
<i>Robert Brunck</i>	8,694	12,423	
<i>Jean-Georges Malcor</i>	7,113	24,847	
<i>Stéphane-Paul Frydman</i>	2,766	7,634	
<i>Pascal Rouiller</i>	2,766	8,166	
Cumulated number of shares as of December 31, 2013	442,350	137,251	0
Remaining performance shares as of December 31, 2013	67,575	376,080	542,711

<sup>(1)</sup> Adjusted after the capital increase dated October 23, 2012.

There was no performance shares allocated in 2013.

## 10. INDEPENDENT VERIFIER'S REPORT ON CONSOLIDATED SOCIAL, ENVIRONMENTAL AND SOCIETAL INFORMATION

### Independent verifier's report on consolidated social, environmental and societal information presented in the management report included in the Reference document

To the Shareholders,

In our quality as an independent verifier of which the admissibility of the application for accreditation has been accepted by the COFRAC, under the number n° 3-1050, and as a member of the network of one of the statutory auditors of the company CGG, we present our report on the consolidated social, environmental and societal information established for the year ended December 31, 2013, presented in chapter 2 « Environment, Sustainable Development and Employment »<sup>5</sup> of the French Reference document including the management report, hereafter referred to as the « SR Information », pursuant to the provisions of article L. 225-102-1 of the French commercial code (*Code de commerce*).

#### Responsibility of the company

It is the responsibility of the Board of Directors to establish a management report including CSR Information referred to in article R. 225-105-1 of the French commercial code (*Code de commerce*), in accordance with the protocols used by the company (hereafter referred to as the « Criteria »), and of which a summary is included in sections « 2.1.5 Reporting method and scope » and « 2.2.1.8. Reporting methodology and definitions » of chapter 2 of the Reference document including the management report, and available on request at the company's headquarters.

#### Independence and quality control

Our independence is defined by regulatory requirements, the Code of Ethics of our profession as well as the provisions of article L. 822-11 of the French commercial code (*Code de commerce*). In addition, we have implemented a quality control system, including documented policies and procedures to ensure compliance with ethical standards, professional standards and applicable laws and regulations.

#### Responsibility of the independent verifier

It is our role, based on our work:

- to attest whether the required CSR Information is present in the management report or, in the case of its omission, that an appropriate explanation has been provided, in accordance with the third paragraph of article R. 225-105 of the French commercial code (*Code de commerce*) (Attestation of presence of CSR Information);
- to express a limited assurance conclusion, that the CSR Information, overall, is fairly presented, in all material aspects, in according with the Criteria (Limited assurance on CSR Information).

Our verification work was undertaken by a team of seven people between July 2013 and April 2014 for an estimated duration of sixteen weeks.

We conducted the work described below in accordance with professional standards applicable in France and the Order of May 13, 2013 determining the conditions under which an independent third-party verifier conducts its mission, and in relation to the opinion of fairness and the reasonable assurance report, in accordance with international standard ISAE 3000<sup>6</sup>.

#### 1. Attestation of presence of CSR Information

We obtained an understanding of the company's CSR issues, based on interviews with the management of relevant departments, a presentation of the company's strategy on sustainable development based on the social and environmental consequences linked to the activities of the company and its societal commitments, as well as, where appropriate, resulting actions or programmes.

We have compared the information presented in the management report with the list as provided for in article R. 225-105-1 of the French commercial code (*Code de commerce*).

In the absence of certain consolidated information, included in the Reference document, we have verified that the explanations were provided in accordance with the provisions of article R. 225-105-1, paragraph 3, of the French commercial code (*Code de commerce*).

We verified that the information covers the consolidated perimeter, namely the entity and its subsidiaries, in the meaning of article L. 233-1 and the entities which it controls, as aligned with the meaning of article L. 233-3 of the French commercial code (*Code de commerce*) with the limitations specified in the Methodological Note « 2.1.5 Reporting method and scope » and « 2.2.1.8. Reporting methodology and definitions » in chapter 2 of the Reference document including the management report, notably regarding the information on the number of training hours that cover only part of the perimeter (primarily trainings conducted in France and those issued by CGG University).

Based on this work, we confirm the presence in the management report, included in the Reference document, of the required CSR information.

<sup>5</sup> With the exception of sections « 2.2.2.2. Optional stock investment plan » and « 2.2.2.3. Free stocks based on employee performance » of the French Reference document.

<sup>6</sup> ISAE 3000 – Assurance engagements other than audits or reviews of historical information

## 2. Limited assurance on CSR Information

### Nature and scope of the work

We undertook about twenty interviews with the people responsible for the preparation of the CSR Information in the different departments of Sustainable Development, Human Resources and HSE, in charge of the data collection process and, if applicable, the people responsible for internal control processes and risk management, in order to:

- assess the suitability of the Criteria for reporting, in relation to their relevance, completeness, reliability, neutrality, and understandability, taking into consideration, if relevant, industry standards;
- verify the implementation of the process for the collection, compilation, processing and control for completeness and consistency of the CSR Information and identify the procedures for internal control and risk management related to the preparation of the CSR Information.

We determined the nature and extent of our tests and inspections based on the nature and importance of the CSR Information, in relation to the characteristics of the company, its social and environmental issues, its strategy in relation to sustainable development and industry best practices.

For the CSR Information which we considered the most important<sup>7</sup>:

- at the level of the consolidated entity, we consulted documentary sources and conducted interviews to corroborate the qualitative information (organization, policies, actions, etc.), we implemented analytical procedures on the quantitative information and verified, on a test basis, the calculations and the compilation of the information, and also verified their coherence and consistency with the other information presented in the management report included in the Reference document;
- at the level of the representative selection of entities that we selected<sup>8</sup>, based on their activity, their contribution to the consolidated indicators, their location and a risk analysis, we undertook interviews to verify the correct application of the procedures and undertook detailed tests on the basis of samples, consisting in verifying the calculations made and linking them with supporting documentation. The sample selected therefore represented 34% of the total workforce and on average 23% of the quantitative environmental information.

For the other consolidated CSR information, we assessed their consistency in relation to our knowledge of the company.

Finally, we assessed the relevance of the explanations provided, if appropriate, in the partial or total absence of certain information.

We consider that the sample methods and sizes of the samples that we considered by exercising our professional judgment allow us to express a limited assurance conclusion; an assurance of a higher level would have required more extensive verification work. Due to the necessary use of sampling techniques and other limitations inherent in the functioning of any information and internal control system, the risk of non-detection of a significant anomaly in the CSR Information cannot be entirely eliminated.

### Conclusion

Based on our work, nothing has come to our attention that causes us to believe that the CSR Information is not fairly presented, in all material respects, in compliance with the Criteria.

### Observations

Without qualifying our conclusion above, we draw your attention to the following points:

- The consolidated data on Entries and Leavers include internal movements within the company, as mentioned in chapter 2: reclassification of employees between seasonal and permanent status, movements associated with absences, etc. Actual hires and departures of employees are not communicated in the perimeter outside France.
- The reporting Criteria associated with the environmental indicators and the absenteeism, entries and leavers indicators do not precisely and systematically detail the following elements: the data input process, the indicator's perimeter and the types of controls to be carried out.

Paris-La Défense, April 10, 2014

*French original signed by*  
The Independent Verifier  
ERNST & YOUNG et Associés

Christophe Schmeitzky  
Partner, Sustainable Development

Bruno Perrin  
Partner

<sup>7</sup> *Environmental, social and societal information: number of permanent employees, number of entries in the company, Lost Time Injury Frequency Rate (LTIF) and Total Recorded Cases Frequency (TRCF), number of training days provided by CGG University, minimization of the footprint of the Group's products and services, number of accidental spills of moderate or high level at sea or on land, Power Usage Effectiveness (PUE), amount of linear seismic data acquired per cubic metre of fuel consumed, marine fauna monitoring & mitigation measures (number of sightings, number of acoustic detections, number of hours of downtime, number of marine fauna shutdowns, number of delayed soft-starts, corrective measures, etc.), percentage of national staff by country of permanent implantation, corruption prevention actions undertaken, the share of purchases from suppliers in countries with low risk of corruption and the relationships with stakeholders.*

<sup>8</sup> *The sites of Townpark (Houston), Data Management Services (Houston) and the center of CGG University (Massy).*

## 11. CODE OF CORPORATE GOVERNANCE COMPLIED WITH BY THE COMPANY

The Company complies with the AFEP-MEDEF code of corporate governance for listed companies (the "AFEP-MEDEF Code"). This code is available on the website of the MEDEF ([www.medef.fr](http://www.medef.fr)).

However, with respect to the supplementary pension plan, the Company applies an exception to the provisions of the AFEP-MEDEF Code, according to which in some particular circumstances (in the event of the death, incapacity or dismissal of the beneficiary, except in case of gross or serious misconduct, after reaching the age of 55 and not followed by any other professional activity) a senior executive officer may still benefit from the supplementary pension plan in effect even though he is no longer an employee of the Group. Taking into consideration circular no. 105/2004 issued by the French Social Security Department on March 8, 2004, these exceptions are maintained with regard to the following elements:

- the current supplementary pension plan may continue to apply on a uniform and identical basis to all the other executive officers also benefiting from this plan without further consequences; and
- given the seniority of certain beneficiaries of this plan and in light of their service over the years, it would be unjustified for them to lose the benefit of the pension commitments made by the Company solely because of a departure arising under very special circumstances (death, disability) or occurring shortly before retirement, making it difficult to find further employment (dismissal without gross and serious misconduct, after the age of 55, not followed by any other professional activity).

## 12. REPORT OF THE CHAIRMAN ON BOARD OF DIRECTORS' COMPOSITION, PREPARATION AND ORGANIZATION OF THE BOARD OF DIRECTORS' WORK, ON INTERNAL CONTROL AND RISK MANAGEMENT

Please note that the items below are only sections II and III 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. Section I has been included in Item 6 of our report on Form 20-F.

### 12.1. Limitations imposed on the powers of the Chief Executive Officer

#### 12.1.1. General management organization

##### Split of the Chairman and Chief Executive Officer positions

When Jean-Georges Malcor joined the General management of the Group in January 2010, it was announced that the positions of Chairman of the Board and Chief Executive Officer would be split during the year. This split was effective as of June 30, 2010. Since that date, Jean-Georges Malcor has been Chief Executive Officer of the Company while Robert Brunck has remained Chairman of the Board.

During its meeting on May 10, 2012, the Board of Directors re-elected Mr. Brunck to his position as Chairman and Mr. Malcor to his position as Chief Executive Officer for a two-year period, i.e. until the shareholders' meeting to be convened to approve the 2013 financial statements.

The Chief Executive Officer is assisted by two Corporate Officers (*-Directeurs Généraux Délégués*) who are appointed for a three-year period. They are respectively in charge of Strategy, General Secretary and Investor Relations and Risk Management, HSE and Sustainable Development.

##### Role of the Chairman of the Board of Directors

The Chairman represents the Board of Directors and, except in exceptional circumstances, is the only one with the capacity to act and speak on behalf of the Board. He organizes and oversees the activities of the Board of directors and ensures that the corporate bodies operate in an efficient manner, in compliance with good governance principles. He liaises between the Board and the shareholders in coordination with the general management; he oversees the quality of the financial information released by the Company. In close coordination with the general management, he may represent the Company vis à vis top level representatives of governmental authorities and major partners of the group, whether in France or abroad. The Chairman is regularly kept informed by the Chief Executive Officer of the significant events relating to the Group business and may request from him any information that may be necessary for the Board and its committees. He may meet with the external auditors of the Company in order to prepare the meetings of the Board and the Audit committee.

##### Role of the Chief Executive Officer

The Chief Executive Officer is in charge of the general management of the Company. He is granted the broadest powers to act on behalf of the Company in any circumstances in compliance with the corporate governance principles applied by the Company and except for those powers vested in the Company's general meeting or board of directors by applicable laws. He represents the Company vis-à-vis third parties. He is responsible for the financial information released by the Company and presents, on a regular basis, the Group's results and prospects to the shareholders and the financial market. He reports on significant events for the Group business to the Board and its Chairman.

#### 12.1.2. Limitations of authority of the Chief Executive Officer

The Board of Directors imposed no restrictions on the powers of the Chief Executive Officer (Directeur Général). In consequence, in accordance with the law and article 10 of the Company's articles of association, the Chief Executive Officer is vested with the broadest powers to act in all circumstances in the name of the Company.

### 12.2. Internal control and risk management procedures implemented by the Company

The Company's internal control and risk management, effected by the Board of Directors, the management and by other personnel is designed to provide reasonable assurance regarding the achievement of objectives in the following areas:

- completion and optimization of operations, including the safeguarding of resources,
- the reliability and sincerity of financial information, and
- compliance with applicable laws and regulations.

The principal objective of our Internal Control and Risk Management systems and processes is to identify and control risks related to the activities of the Company, as well as the risks related to errors in accounting and financial reporting.

The Company is listed both in France and in the US and is therefore subject to both the Sarbanes-Oxley Act and the French "*Loi de Sécurité Financière*". In the scope of implementation of the recommendations and provisions of the Sarbanes-Oxley Act relating to internal control, the Company decided to apply the COSO internal control integrated framework, established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The *Autorité des Marchés Financiers (AMF)* has subsequently integrated the principle elements of COSO in its frame of reference.



Pursuant to the Sarbanes-Oxley Act, the Company must include in its report on Form 20-F (the "20-F Report") filed with the Securities Exchange Commission, a management report on internal control over financial reporting. This report along with the opinion of the auditors on the Company's internal control will be included in item 15 of the 20-F Report for fiscal year 2013. A translation of this item 15 into French will be included in the "*Document de Référence*" for fiscal year 2013.

### 12.2.1. Control Environment

The control environment is the foundation of all the components of internal control and risk management of the Group, providing discipline and structure. The discussion below describes the Group's Charts and Codes setting its expectations in integrity and ethics, it describes how the Group is organized and structured to assure internal control and risk management, and it describes how authority and responsibilities are delegated in the Group.

#### **12.2.1.1. Integrity and Ethics**

The Company's standards and expectations in integrity and ethics are codified in its Chart of Ethics, in its Statement of Values and in its Code of Business Conduct that apply to all employees of our Group. These documents are widely distributed globally in the Group and they are also available to all staff on the Group's employee internet portal, *InSite*.

In addition, pursuant to section 406 of the Sarbanes Oxley Act, on December 10, 2003, the Board of Directors implemented a code of ethics which is applicable to the Chairman, the Chief Executive Officer and the members of the E-Com and the Disclosure Committee. This code defines rules of conduct and integrity which the persons must follow in the performance of their function and obligations relating to disclosure. This Chart remains in full force and vigor.

#### **Values and Chart of Ethics**

The Group has developed and communicated widely to all its employees a statement of its Values – *Our Values*. This statement of values centers around the Group and its employees' commitment: *operate safely and with integrity, have a passion for innovation, be socially responsible*.

The Group's chart of ethics represents a commitment by the Group to its clients, its shareholders, its employees and its partners to comply with local laws and regulations and to respect the principles of its Code of Business Conduct.

#### **Code of Business Conduct**

The Group's Code of Business Conduct is a guide to appropriate conduct. In conjunction with the Group's statement of Mission, Vision and values it provides a framework for all employees to perform their jobs with integrity. The Business Code of Conduct addresses compliance with laws and regulations, prevention of conflicts of interest, respect for persons and the environment, protection of the Group's assets, financial security and transparency, internal verification and the role of Internal Audit. The Code is translated into eight languages. In addition, certain recommendations have been issued to the employees of the Group in order to draw their attention to unlawful behaviors and actions relating to payments, facilitations, gifts and invitations, contribution to political parties and donations to non-profit organizations. Besides, in June 2013, a business integrity booklet was released in order to help the employees to understand the concept of corruption and the associated rules, risks and red flags and to apply the Code of Business Conduct and determine the appropriate ethical behavior to adopt in every circumstance. Finally, the selection of the group commercial consultants and the management of their network is strictly monitored through a procedure defining precise and identical rules applicable within all entities of the Group in order to ensure, in particular, that the commercial consultants comply with our Chart of Ethics and Business Code of Conduct and the applicable international conventions and national regulations against corruption (such as but not limited to the conventions of the United Nations, the OECD, the US Foreign Corrupt Practices Act (FCPA) or the UK Bribery Act). This procedure is available on the Group's employee internet portal, *InSite*.

To support the Business code of conduct, the Group has established an Ethics Committee which can be contacted anonymously by employees concerning issues related to conduct. The Group has also established a global ethics alert phone line, *Ethics Alert*, which is operational 24 hours, 7 days a week. This reporting line is in compliance with SOX and with CNIL (*Commission Nationale de l'Informatique et des Libertés*) recommendations. Finally, the training program on ethics has been reinforced by the implementation of an e-learning for all the employees of the group. This program has been followed so far by 63% of our employees. We have also put in place a training program on the prevention of corruption. This training session has been delivered in our main sites worldwide.

Finally, we have launched an audit of our anti-corruption program by ADIT/Mazars in order to have it certified in the beginning of 2014.

#### **12.2.1.2 Organization of the Group**

The Group's organizational structure provides the framework within which its activities for achieving its entity-wide objectives are planned, executed, controlled and monitored. Within this framework, key areas of authority and responsibility, as well as appropriate lines of reporting, are established. The organizational structure relative to internal control and risk management is described below.

Since February 1, 2013, following the acquisition of Fugro's 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 including ten Business Lines and with six Corporate Functions and five Group 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.

The Divisions and Business Lines are the following:

- Equipment Division: this Division includes all the Sercel business entities, such as Metrolog, GRC, Optoplan and De Regt.
- Acquisition Division : this Division brings together the activities of the following Business Lines :
  - o Marine Acquisition (including Marine Gravity Magnetic Services),
  - o Land Acquisition (including Land EM and General Geophysics),
  - o Airborne Geophysics
- Geology, Geophysics and Reservoir Division (GGR) : this Division brings together the activities of the following existing Business Lines :
  - o Multi-Client and New ventures,
  - o Processing and Imaging,
  - o Jason,
  - o Hampson-Russell,
  - o Robertson,
  - o Data Management Services.

Since January 1, 2014, the business of Jason, Hampson Russell and Robertson have been incorporated into two new business lines: Geosoftware and Geoconsulting.

- the Geosoftware business line includes the software sales and development of Jason and Hampson Russell;
- the Geoconsulting business line includes the consulting activities of Jason and Hampson Russell combined with the consulting and geologic library business of Robertson.

The GGR Division is now organized as follows:

- o Multi-Client and New ventures,
- o Processing and Imaging,
- o Geosoftware,
- o Geoconsulting,
- o Data Management Services.

Corporate Functions:

These six Corporate functions, at the Group level, ensure a global transverse approach and provide support across all activities, i.e. : (i) the Finance Function, (ii) the Human Resources Function, (iii) the Global Operational Excellence Function, (iv) the General Secretary, (v) the Geomarkets and Global Marketing Function and (vi) the Technology Function.

Group Departments:

These five Group Departments are, respectively, in charge of (i) Internal Audit, (ii) Communication, (iii) Investor Relations, (iv) Strategy, Integration, PartnershipsPartnerships, and (v) Risk Management, Health, Safety and Environment & Sustainable Development.

**12.2.1.3. Group Governance**

**The Chief Executive Officer**

The Chief Executive Officer is given wide authority by the Board of Directors<sup>9</sup> of the Company to manage the Company.

The Chief Executive Officer has ultimate ownership and responsibility for the internal control and risk management system. He ensures the existence of a positive control environment, and he is responsible for seeing that all components of internal control and risk management are in place. The Chief Executive Officer provides leadership and direction to the Executive Committee.

The Chief Executive Officer is assisted by two Corporate Officers (*-Directeurs Généraux Délégués*) who are appointed for a three-year period. They are in charge of Strategy, General Secretary and Investor Relations and Risk Management, HSE and Sustainable Development, respectively.

The Chief Executive Officer and the Corporate Officers' responsibilities are cascaded to the Senior Executive Vice Presidents of each Division and Executive Vice Presidents of each Function and to the heads of the Group Departments. Thus they have responsibility for internal control and risk management related to their unit's objectives. They guide the development and implementation of internal control rules and procedures that address their unit's objectives and ensure that these are consistent with the Group's objectives.

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<sup>9</sup> The structure and responsibility of the Board of Directors having been described in Section I, it will not be described further in this section.

To achieve the goals set by the Board of Directors, the Chief Executive Officer manages the organization through senior executives and through three main committees that he chairs:

**Corporate Committee (C-Com)**

The C-Com is chaired by the Chief Executive Officer and brings together the two corporate officers of the Group and the Senior Executive Vice Presidents of the Divisions. It is a decision body which meets every month, and more often if necessary, for the review and general conduct of the business of the Group. The C-Com monitors and controls each business's performance as well as the implementation of the group strategy and the carrying-out of its projects through the Divisions, Functions and Group Departments. The members are interfacing regularly with the Board, the market and participate in the financial and business roadshows.

**Executive Committee (E-Com)**

The E-Com meets every month and supports and complement the C-Com. The E-Com brings together the members of the C-Com and the head of each Corporate Function. It is mainly a discussion- and proposition body between the Divisions and Functions for the Group, but also a decision body to validate and follow-up all projects and decisions with transverse impacts. It will in particular:

- Monitor and follow the execution of decisions taken at the C-Com level,
- Insure Group transverse initiatives consistency through the three Divisions;
- Monitor and follow the management of the support functions and shared services.

The E-Com shapes the values, principles and major operating policies that form the foundation of the Group's internal control system. The E-Com takes actions concerning the Group's organizational structure, content and communications of key policies and the planning and reporting systems the Group will use. The E-Com is directly responsible for internal control and risk management in the Group. It defines the orientations for internal control and it oversees its implementation. These obligations are cascaded through the organization in each Division and each Function.

**Management Committee (M-Com)**

The M-Com meets twice every quarter in order to exchange and discuss Group performance, business and budget information and discuss specific matters of Group interest as requested.

The M-Com brings together the members of the C-Com and E-Com as well as the Business Lines part of the Divisions and Group Departments heads.

In exercising their transverse roles, certain Functions and Group Departments play pivotal roles in internal control and risk management.

**The Corporate Functions**

Corporate Functions report to the Chief Executive Officer, except the General Secretary which reports to the Corporate Officer in charge of Strategy, Integration & Partnerships, General Secretary and Investor relations.

**Finance Function:**

The Senior Executive Vice President Finance manages the Function and serves as the Group's Chief Financial Officer.

In the Finance Function, the following Departments play critical roles in internal control and risk management:

Group Financial Control: this department oversees the budgeting process as well as the monthly, quarterly and annual financial reporting. It prepares Group financial synthesis in close coordination with Divisions' financial controllers and is very closely involved in the preparation of the Board Committee's meetings (Audit Committee, Strategic Committee, Appointment and Remuneration Committee). Along with the Divisions' financial controllers, it ensures, on a regular basis, oversight of the Group's operations and follow-up of the action plans initiated at the Group level. Finally, on a case by case basis, it also provides the Strategy, Integration & Partnerships.

Accounting and Consolidation: headed by the Chief Accounting Officer, this department is, from a general standpoint, in charge of producing and supervising financial accounts within the Group, on an individual basis for each group legal entities and on a consolidated basis and as part of the annual and quarterly reports. In this perspective, it elaborates and ensures that through the organization accounting procedures are in place and makes sure, on a continual basis, that they are in accordance with legal and regulatory reporting requirements applicable to financial information to be publicly released. This Department also has oversight of Internal Control of the Group. It oversees the implementation of process and good practice to assure the effectiveness of Internal Control across the Group. This oversight is carried out under the Group's Compliance Officer. Finally, in connection with Group Financial Control, it oversees the department in charge of the supervision of the financial information systems.

Treasury: this department ensures management of group available funds and their investment. It oversees and manages risks associated with currency fluctuations, credit and counterparty risks and commercial political risks. Treasury also manages a financial committee which reviews, on a monthly basis, the Group financial condition at the C-Com level.

Tax: from a general standpoint, this department is in charge of managing the Group tax obligations and supervising the associated risks. In this perspective, it oversees that all tax returns are filed in a timely manner all across the organization. On a case by case basis, it is involved by the operation teams ahead of significant projects in order to analyze and determine the most appropriate tax schemes.

The Finance Function carries out its missions according to the directives established by the Executive Committee in the *Internal Control Guide* and the *2013 Internal Control Objectives*.

### **Human Resources Function**

The Human Resources Function plays a key role in implementing Internal Control and Risk Management. As a driver and center of expertise in recruitment, development and the motivation of the Group's employees, it assists the Group's in meeting its objectives.

The Human Resources Function develops and assures a coherent global vision in each HR area and thereby contributes to the attractiveness of the Group through employees' development, commitment and recognition.

Human Resources supports the Group's change and progress efforts within the organization, anticipating the Group's needs and assuring that competent, talented employees are available to fill the Group's needs and development.

Recruitment – Global recruitment is managed by a cell of professionals dedicated to putting in place processes and tools to assure that the Group is well positioned to attract talent and to assure that open positions are communicated throughout the Group. Human Resources Department supports Divisions, Functions and Group Departments in their recruitment and assessment efforts for specific posts in their countries of operations.

Development – Four key processes are structured to support individual development, allow performance improvement and anticipate any career or organization change: position and competency mapping, employee performance reviews and assessments, talent reviews and career plan reviews.

- The Group's positions, and functions, are mapped in the *Magellan* system on 9 levels in order to clarify the assessment of the Group's needs and ensure coherence between Divisions, Functions, and Group Departments on one hand, regions and countries on the other hand. The system also structures and facilitates the identification of development and competency requirements for specific positions.
- Individual performance evaluations are conducted globally, throughout the Group, based on an intranet based toolset provided by Human Resources department. Evaluations of performance and competency are reviewed between managers or supervisors and their direct reports.
- The specific needs of employees identified to have a significant potential for managerial or technical development are further evaluated and reviewed by the Group's senior management in Talent Review meetings.

Training – CGG University organizes training programs to respond to the needs of the organization. The University acts either alone or in partnership with external consultants for training session in particular in the areas of leadership, safety and acquisition of technical expertise. Training is made available to all levels from new hires to experienced senior managers. Specific training modules are offered on *Internal Control* and on *Governance and Performance*.

Succession Planning – The future needs of the organization and the potential of the Group's employees are reconciled through a succession planning exercise carried out in each Function, each Division and Group Departments. These reviews are consolidated by Human Resources to provide a global view of the Group's needs in key areas and to identify development and training required to prepare its employees for future responsibilities.

Compliance – Human Resources professionals follow-up local laws and regulations in their domain and ensure with concerned parties that the Group remains in compliance.

### **Global Operational Excellence Function**

The Global Operational Excellence Function plays an important role with respect to the optimization of resources, participate in the reliability and security of information and ensure compliance with applicable laws and regulations in its area of expertise. The following departments play key roles in Internal Control and Risk management.

Trade Compliance - The Trade Compliance department is set up to ensure that all levels of the Group are aware of and take the necessary steps to comply with laws and regulations regarding the export, re-export, import and transit of controlled goods and technologies. It plays a consulting role to operations and assists operations with import & export licenses and documentation.

Information Security - The Group's Information Security department puts in place a global framework to protect information. It sets standards and implements process to assure the availability, integrity, security and reliability of information systems in the Group.

The Information Security Department carries out its mission according to the directives established by the E-Com in the *Information Security Policy*.

Global Sourcing and Supply Chain Department - The Global Sourcing and Supply Chain department oversees the purchasing of all equipment, parts, supplies and services of the Group. It oversees quality and delivery of equipment, supplies and services in close cooperation with the Divisions and Functions, it manages and develops the Group's relationships with suppliers to optimize their performance and the Group's total cost of ownership while maintaining standards of quality and delivery.

Global Sourcing and Supply Chain oversees key processes including the creation of a new supplier, approved supplier list, sourcing and validation of supplier bids and contracts.

The Global Sourcing and Supply Chain Department carries out its mission under the *Purchasing Code of Conduct* and the *Selling to Sercel* directives. The *Purchasing Code of Conduct* is always included in the Group documentation for tender offers.

Quality Department: - The Group's Quality Department focuses on a systematic approach to the management of key processes, thereby identifying and structuring the mitigation of process risk. It supports the Group's Divisions in this respect and helps reducing or eliminating the cost of non-quality, thus playing a critical role in the optimization of resources and operations.

The Quality Department carries out its mission according to the directives of the E-Com in the *Quality Policy* and in the *2013 Quality Objectives*.

### **General Secretary**

The General Secretary plays a key role in terms of Group Governance, compliance and risk management.

#### *Group Governance:*

The General Secretary assists General Management with the definition and implementation of corporate governance principles based on the best practices of the financial markets where the Company is listed. It represents the Group within organizations such as AFEP or IFA which are specialized in the field of governance.

The General Secretary ensures the legal management of the top holding Company of the Group, listed on Euronext and the New York Stock Exchange as well as the other Group legal entities. It acts as Corporate Secretary for the Board of Directors.

The General Secretary oversees all directorships within the Company and its subsidiaries. It drafts group instructions relating to the management of legal entities and branches of the Group.

Finally, the General Secretary prepares the agenda of each meeting of the corporate committees and their minutes.

#### *Compliance and risk management:*

Through the legal department of each division and the group legal department, the General Secretary provides legal support to the Corporate Functions the Group Departments and the Company's Divisions and group legal entities.

The group legal department has oversight of Group compliance with (i) securities laws and regulations and in particular on external reporting including filings and relations with market authorities, (ii) financial covenants and (iii) local laws and regulations in particular with respect to prevention of corruption. It also provides support for mergers and acquisitions, financing, and corporate law. It provides functional management of the trademark portfolio of the Group.

The Group Legal Department drafts the general instruction on delegation of authority and delegation of powers in the Company, oversees their implementation, assuring their adaptation in the event of changes in the organization.

The Legal department of each Division plays an active role in operations providing support to the Divisions and Sales & Marketing & Geomarkets in their day to day business to ensure:

- Timely delivery of business oriented solutions to operations;
- Prevention and management of legal risks;
- Compliance with laws and regulations and Company policies and instructions.

It drives the Company's bid and contract review process assuring that major risks related to bids and contracts, with both clients and sub-contractors, contain terms which protect the Company.

### **Sales & Marketing & Geomarkets Function**

The main responsibilities of the Sales & Marketing & Geomarkets Function are the following:

- Support the Division commercial strategies and share regional sales objectives;
- Represent and promote the full company portfolio of business to clients;
- Manage client relations at global and local levels such as they result in sales opportunities for Divisions through privileged client communications and customer intimacy;
- Collaborate with Divisions, Business Lines and group communication to ensure that a robust and consistent marketing plan is deployed;
- Manage the commercial consultant networks;
- Gather, manage and report to the Group Commercial Committee on regional targets, actions and results.

The Executive Vice-president in charge of this Function is assisted by :

- Geomarket Directors, in charge of a given country or group of countries, and their associated teams of Key Area managers overlooking sub-regions and local accounts;
- Key Account Managers, in charge of global clients with international footprint;
- The Technical Marketing Team, responsible for creating and delivering technology-oriented material in support of external engagements with clients;
- The commercial consultant manager, in charge of the supervision of the network of commercial consultants.

### **Technology Function**

The major objectives of the Technology Function are the following:

- Develop a culture of technical excellence,
- Deliver a technology plan aligned with the business strategy,

- Provide geoscience & engineering expertise,
- Develop R&D talent,
- Provide the environment for innovation in order to identify & develop breakthrough concepts,
- Incubate breakthrough concepts on behalf of the Divisions,
- Manage Intellectual Property and ensure that it is respected worldwide,
- Coordinate R&D between divisions,
- Contribute to the promotion of our technology.

The Executive Vice-President in charge of the Technology Function relies on the following organization:

- The CTO Core Team and R&D Division VPs constitute the backbone of the Technology Function
- An Internal CTO R&D work force, incubating concepts on behalf of the divisions
- Dedicated experts supporting each Division
- An IP management team with correspondents in Divisions
- Teams deployed in the Corporate Technology Centers (Saudi Arabia, Brazil, Canada) ensuring
- Proximity to key trusted customers/partners.

## **The Group Departments**

### ***Internal Audit***

The Group Internal Audit has direct access to the E-Com and to the Board's Audit Committee; it assists them in carrying out their oversight responsibilities on the effectiveness of the Group's risk management, internal control and enterprise governance. As of the date of this report, the Corporate Internal Audit function was staffed with ten auditors, reporting to the SVP Internal Audit.

Internal Audit evaluates internal controls on the basis of the COSO framework and tools and in compliance with the code of conduct of the Institute of Internal Auditors (IIA). Since May 2012, Internal Audit has a charter which governs its operating procedures. This charter has been approved by the audit committee. Finally, in June 2013, Internal Audit was certified by IFAC/IIA.

Internal Audit planning was based on a three-year cycle to ensure the regular review of all entities. From 2014, audit planning will be based on a five-year cycle. The Group's significant entities are reviewed every year. Priorities are established based on current operations and the supposed level of risk. The annual internal audit plan is defined by the Corporate Internal Audit department, approved by the E-Com and presented to the Audit Committee.

Internal Audit conducts financial and accounting audits as well as operational and compliance audits. Recommendations issued as a result of the audits are approved by the E-Com and the associated action plans are carried out by line management and monitored by Internal Audit until all open issues have been resolved. Also included in the scope of Internal Audit is the performance of conformity tests of internal controls as they relate to the Sarbanes-Oxley Act requirements.

Over the past three years, the units audited have accounted for approximately 90% of the average revenues of the Group. In 2013, the internal audit activities, excluding those linked to Sarbanes-Oxley, were mostly dedicated to the major scope of activities of the Group, in particular Equipment division entities and Processing & Imaging entities and the entities considered as being a priority based on the assessments of risks exposure such as IT security, compliance with import & export rules and the Marine entities partnerships. The annual budget of Internal Audit is close to 0.1% of the Group revenues which is in compliance with the standards existing for companies in the same industrial sector.

This Department reports to the Chief Executive Officer.

### ***Investor Relations***

This Department is mainly in charge of the relations and communication of the Group with the financial community, i.e. Group shareholders, Group lenders and generally speaking investors. Its missions include particularly the preparation of press releases related to the annual, semi-annual and quarterly financial results, the organization of roadshows and participation to investor conferences.

This Department reports to the Corporate Officer in charge of Strategy, Integration & Partnerships, General Secretary and Investor relations.

### ***Risk Management, Health, Safety & Environment ("HSE") and Sustainable Development***

The HSE management system provides governance, develops process and procedures in the areas of employee and stakeholder health, safety, environment and the security of our operations. The HSE organization provides oversight in these areas across all of the Group's operations.

The HSE organization also addresses the Group's reputation risk through its Sustainable Development (SD) programs.

The HSE & SD Group Department carries out its missions according to directives established by the E-Com in the *Quality, Health, Safety and Environment Policy*, as well as in specific policies addressing *Health and Wellness, Sustainable Development, Environment, and Security*. Its objectives are set over a three-year period and are cascaded within the Business Lines which adapt such objectives to their business needs and specify them so that each business line has clear and measurable objectives.

The missions of the Department in terms of Group risk management are described below under Risk Management.

The Department reports to the Corporate Officer in charge of Risk Management, HSE and Sustainable Development.

#### **Group Communication**

This Department oversees the Company's communication processes and sponsorship. It develops mechanisms to strengthen two way internal communication. Group Communication is in charge of the Group internal communication, and in this scope manages the Group intranet. The Department regularly measures the quality of internal communications through a global survey of the Group's staff. This Department also oversees the Group's external communications, in particular commercial press releases, to assure their accurate and timely communication.

Group Communications carries out its mission according to the directives established by the E-Com in the *Media Release and Financial Communications Policy, the News Release Procedure* and the *Press Release Procedure*.

Group communication reports to the Chief Executive Officer.

### **12.2.2. Risk Management**

The Group has put in place organization, process and procedure as well as working practices to manage risks across the organization. The management of risk is fully integrated in the decision making process in the Group. The Group identifies and evaluates the principal risks that can impact the Group's operational and financial objectives or compromise compliance with laws and regulations. The Group manages risk through robust management systems, departments focused on specific risk areas and through cross Group processes.

The Group Department Risk Management, Health, Safety, Environment and Sustainable Development has established a risk management framework for the Group; it animates the implementation of this framework. Through the framework it provides a risk management methodology and identifies high level risks in the Group and defines, with Divisions, Functions and Group Departments, control and mitigation measures to manage these risks. It works through the Functions, the Group Departments and the Divisions, as described above, on the implementation of risk controls. It monitors the implementation and effectiveness of controls and provides to the E-Com a view of the high level risks faced by the Group.

The Group has implemented risk management flows throughout the organization to identify, assess and control risks:

- The identification of events that can have an impact on the Group comprises a combination of techniques and supporting tools including event inventories, internal analyses, risk interviews, process flow analysis, leading event indicators and loss event data methodologies.
- Risk assessments are conducted to determine the extent to which potential events may have an impact on the Group. Risks are evaluated in terms of impact and probability. In assessing risks, managers consider impacts on people, environment, financial situation, accounts, strategic and other business objectives, compliance with laws and regulations and the Group's reputation. The Group's risk assessment methodology comprises a combination of qualitative and quantitative techniques.
- Risks are controlled through robust processes allowing their avoidance, reduction, sharing or acceptance. The Group employs comprehensive processes to reduce risk probability or risk severity or both. Control activities flow from policies and procedures established to manage risks. Control activities occur throughout the organization at all levels and in all functions. Group policies, objectives, management instructions and procedures are available to all personnel in the *Document Management System (DMS)* available on the intranet.

The Group's Insurance department reports to the Group Department Risk management, Health, Safety, Environment and Sustainable Development to assure an integrated approach to risk in the Group. A robust Insurance program has been implemented at the Group level to share or transfer risk. Each high level risk is evaluated to determine whether the risk can be transferred through insurance policies within a practical cost structure.

#### **Risk Map**

One of the products of the Group's risk management program is the Risk Map. The Risk Map is a management tool which provides a shared view in the Group of the risks that have the potential of material impact on the Group. The risks in the Risk Map are organized by risk family: Operational risks, Technology risks, Accounting and Financial risks, HR risks and Communications risks.

The Risk Map is presented to both the E-Com and to the Audit Committee on an annual basis.

### **12.2.3. Internal Control**

The Group has an internal control department reporting to the Chief Accounting Officer whose role is to support the organization in implementing and maintaining effective processes, and to ensure that that controls effectively mitigate the risks identified. It also maintains our internal control framework and coordinates the evaluation system of internal control over financial reporting (section 404 of the Sarbanes-Oxley Act).

Since 2012, the Group has an Internal Control guide based on the COSO internal control framework which provides Group staff with a single source of internal control guidance. This guide was rolled-out across all sites, divisions and support functions and aims at improving the Group risks management.

## 12.2.4. Financial Security Management

Specific processes and controls have been put in place by the Group to assure that financial reporting is reliable and pertinent.

### **Financial information**

- Key processes such as the preparation of consolidated financial statements, documents for the Board of Directors and the Audit Committee, preparation of budgets, etc., are formally described.
- Instructions of the E-Com with respect to Financial Security principles and objectives are regularly renewed to remind all financial and operational managers of each unit, the importance of internal control and the necessity to constantly see to its implementation, based on annual objectives and training at demand.
- The Group has an accounting manual which sets forth its accounting practices, instructions and reporting rules. The accounting manual applies to all Group entities and is designed to ensure that the accounting rules are applied across the Group in a reliable and homogeneous way. It details procedures for closing the books, preparation of the income statement, balance sheet, cash flow statement as well as the consolidation process. Additionally, it outlines the principles for producing the notes to the consolidated financial statements.
- To limit risks of fraud, processes of segregation of duties are in place from approval of the orders to payment of the vendors and suppliers.
- All Group entities process consolidated accounts in the format chosen by the Group using a standardized package. All reclassifications from the corporate accounts to the consolidated accounts are documented using a specific standard format.
- Intercompany transactions are carried out in various areas (different services, geophysical equipment sales, software licenses). The corresponding fees vary according to the nature of the transaction and in compliance with market conditions and transfer pricing policy.
- Management software packages implemented within the Company in finance, logistics and procurement are critical organizational components of the internal control system as they define in detail the processes to be applied in each of these areas.

### **Information technology infrastructure and information systems security**

- Access to the internal networks of the Group's companies and information systems are regulated.
- The networks are protected by firewalls and antivirus systems. External access is possible through secure and encrypted connections.
- Users are duly authenticated before being granted access to the system.
- Data backup, archiving and recovery systems have been put into place. Procedures are created, modified and updated by competent personnel and approved by the appropriate management. Once a year, an internal audit is carried out to test the effectiveness of such procedures, including some intrusion tests with assistance of external IT experts.

### **Control of the disclosure of information externally**

- The Group has a procedure which outlines rules for preparing, validating and approving press releases.
- The Group follows a pre-determined process for the preparation and distribution of its regulatory documents.

### **Disclosure Committee**

Within the framework of the implementation of the Sarbanes-Oxley Act, the Chief Executive Officer and Chief Financial Officer of the Group created a Disclosure Committee in February 2003 to assure they will be able to properly issue the certificate provided for by section 302 of the Sarbanes-Oxley Act which must accompany annual financial statements filed by the Company with the Securities and Exchange Commission.

The principle functions of this Committee are to:

- analyze the importance of information and determine the appropriateness of a disclosure, and if so according to what schedule, and to this purpose:
  - review all information to be published and their draft wording,
  - oversee disclosure procedures and coordinate disclosures to external parties (shareholders, market authorities, investors, the press etc.).
- provide guidelines for internal control procedures to ensure the reporting of material information to be disclosed within the framework of quarterly, semiannual or annual communications to market authorities or destined for financial markets,
- inform the Chief Executive Officer and the Group Chief Financial Officer of any changes, deficiencies or material weaknesses pointed out by the Committee in the process of the reporting of information.



In 2013, the Committee was chaired by the Senior Vice President, Group Chief Accounting Officer and composed as follows:

- Senior Executive Vice President, Acquisition Division
- Senior Executive Vice President, GGR Division
- Senior Executive Vice President, Equipment Division
- Financial Controller, Equipment Division
- Financial Controller, Acquisition Division
- Financial Controller, GGR Division
- Senior Vice President, Group Internal Audit
- Senior Vice President, Investor Relations
- Senior Vice President, Group Tax Director
- Senior Vice President, Group Treasurer
- Senior Vice President, General Secretary and Group General Counsel
- Senior Vice President, Group Communication

The Committee meets quarterly before periodic disclosures of the Company are published. A self-evaluation is performed each year and is adjusted for ongoing improvement of the Committee functioning.

#### **Delegation of powers and areas of responsibility**

Delegations of Power are authorized by the Chief Executive Officer and the Senior Executive Vice Presidents and cascaded to successive levels of management through a formal, documented process that clarifies the responsibilities related to the delegation. The approval of offers and contracts as well as capital expenses and operating expenses are controlled through these delegations. Approval levels for investments, leases, sale-and-lease back transactions and other expenses are also defined.

Delegations of Authority are carried out according to directives established by the E-Com in the *General Instruction on Delegation of Authority and Delegation of Powers*.

The process for preparing offers, and controlling and approving contracts signed between the Group's legal entities on the one hand, and its customers, partners and subcontractors on the other hand, is managed through the bid and tender review process. The process includes authorization rules to be applied with respect to contractual commitments and in particular the limits where a prior review and authorization by the C-Com is required. This review process cuts across all Functions that contribute to the control of risks in bid and contract review including the Legal Department of the concerned Division, the Tax department, Treasury, and the HSE Department.

### 12.2.5. Control activities

Processes implemented by the Group to identify necessary control procedures are based on risk assessments and on the necessary processes required to fulfill the Group's objectives.

#### **Internal control procedures**

Control procedures of the Group are implemented according to the hierarchical levels of personnel involved and the principles of materiality and the separation of functions. Control procedures are implemented in light of the identification of risks.

#### **System of evaluation of Internal Control**

Internal Control in the Group is evaluated through self-assessment tools and through internal audits.

Financial security annual objectives are set requiring self-assessments of all active Company entities using the *Internal Control Assessment Form (ICAF)*. This questionnaire includes approximately 40 prerequisites defined for operating Divisions and support Functions. On an annual basis, the results of these reviews are consolidated, assessed and distributed to relevant managers; through these assessments, Internal Control improvement areas are identified.

Internal Control is continuously evaluated through a program of internal audits. In 2013, almost 50 audits were conducted by the Group Internal Audit Department in addition to SOX testing, 7 were compliance audits, 8 were operational audits and 29 general audits (financial and operational and performance). Audit findings and recommendations are in each case reviewed with relevant managers and are presented to the executive management of the Division if necessary, and action plans are agreed to assure continuous improvement. Audit reports and action plans are submitted to the E-Com whose members receive on a monthly basis, the Internal Audit dashboard to monitor progress on improvement actions.

Areas of improvement from ICAF assessments and from internal audits form the base of annual strategic plans (organizational changes) and annual Financial Security objectives.

Furthermore, hub-level controllers were put in place to assure better control of far reaching geographies.

### **Financial and accounting controls**

Internal control procedures in force in the Group are designed principally to ensure that accounting, financial and management information communicated to corporate bodies of the Group provide a fair presentation of the activity and situation of the Group.

- The financial statements of all the Group's subsidiaries are reviewed by the Finance Function. Physical inventories are carried out on a regular basis at each site, comparing the balance sheet values of inventories with those of the physical inventories. Variances noted are then corrected.
- Access to the accounting information systems is formally restricted in accordance with the function and responsibilities of each user.
- Current management information systems make it possible to record transactions in a complete and exact manner, to trace them and regularly back them up.
- All Intercompany transactions are documented and reconciled on given dates according to the transactions.
- The Company monitors its off-balance sheet commitments.
- Comparisons and reconciliations are performed at various levels, particularly between reporting and consolidation. The consolidated financial statements are reviewed by the Chief Financial Officer at corporate level and the Chief Financial Officers of the divisions.

In accordance with requirements of the Sarbanes-Oxley Act, the Group has a system to evaluate the effectiveness of internal controls over financial reporting.

The E-Com fully supports this project as a contribution to a proper business control, which is also in line with the implementation of values and the application of the financial security program with our personnel.

### **12.2.6. Information and Disclosure**

The Group's ability to meet its objectives depends on effective dissemination of information at all levels of the Group.

Quality standards, security requirements or legal and professional obligations demand that the procedures be documented and accessible. The Group encourages the sharing of knowledge and best practices. An intranet site provides all personnel with access to charters, Group policies, annual objectives, general instructions, procedures, standards and other documents on which the Group's Management System is based. Generally, the internet site of the Group allows the achievement of a better communication and cooperation between the Group entities and the operating and support functions.

The Group organizes annual seminars, for the C-Com, E-Com and M-Com, for Senior Management and for key managers around the globe.

The Group has implemented a weekly, monthly and quarterly reporting system according to the hierarchical levels and relevance, to obtain and exchange information necessary to carry out, manage and control operations. The data distributed concerns operations, finance, or legal and regulatory compliance issues. It includes not only data produced by the Group but also data related to the external environment.

Senior management evaluates the performance of the Group on the basis of both internal and external information.

### **12.2.7. Monitoring and Management Review**

The Group's business environment is by nature continuously changing and evolving. As a result, the internal control system is continuously adapted taking into account the environmental conditions and past experience.

Operations are managed and evaluated against performance criteria on a day to day basis and monitored by successive levels of management in the organization, finally being reviewed by the Executive Committee. Management carries out periodic evaluations, taking into account the nature and importance of any changes which may have occurred.

The Senior Vice President Internal Audit, the Chief Accounting Officer, the Compliance Officer and the Senior Vice President Risk Management, HSE and Sustainable Development met every month for information and mutual coordination.

The monitoring of risks is built into our business review processes at the project level, at the Division level and at the E-Com level. Key indicators have been identified to signal risk environment changes and adverse trends. These are reviewed in management meetings at each level. Transverse Functions and Group Departments assist the Divisions in monitoring these indicators and when necessary focus attention on specific Group risks.

The Group has implemented a global incident monitoring system for round the clock alerts; actual incidents and High Potential Incidents (HPIs) anywhere in our operations are reported within 24 hours to the relevant management level through our internet based system PRISM.

The E-Com regularly reviews the Group's key risks and the measures put in place to control these risks. The E-Com reviews the Group's Risk Map annually as well as the Insurance policies put in place to transfer the Group's risks. The E-Com establishes a schedule of key risks which it reviews in more depth during the year.

The Board, through its Committees regularly reviews key risks faced by the Group. The Board receives annually a mapping of the key risks facing the Group and is informed on the organization of the Group's risk management program as well as on the key risk controls put in place. Through the Audit Committee, the HSE and sustainable development Committee, the Technology Committee, the Appointment and Remuneration Committee and the Strategic Committee, specific risks in the domain of each Committee are reviewed.

### 12.2.8. Reasonable Assurance

Every system of internal control, however well-designed and effective, has inherent limitations. Notably, there is an inherent risk that controls may be circumvented or bypassed. This means that the internal control system can offer only a reasonable assurance as to the reliability and sincerity of financial statements. Furthermore, the effectiveness of internal control procedures may vary over time, in response to new circumstances.

In order to evaluate the effectiveness of internal control procedures on a regular and formal basis and beyond the related actions undertaken by the internal audit management, the Group has put in place a tool for internal control self-evaluation for all units of the Group. At the Corporate level a compliance officer has been appointed thus showing the Group commitment to good corporate governance rules.

### 13. SENIOR EXECUTIVE OFFICERS' REMUNERATION COMPONENTS SUBMITTED TO THE VOTE OF SHAREHOLDERS

The following tables reflect the Company's senior executive officers' remuneration components that will be submitted to the vote of shareholders during the Annual General Meeting to be held on June 4, 2014.

#### 1. Mr. Robert Brunck, Chairman of the Board of Directors

Remuneration components due or granted for the fiscal year	Amounts submitted to the vote	Presentation
<b>Fixed remuneration</b>	<b>€275,000</b>	The fixed remuneration of Mr. BRUNCK for fiscal year 2013 was determined by the Board of Directors on March 20, 2013. It is unchanged since 2012.
<b>Annual variable remuneration</b>	<b>NA</b>	Mr. BRUNCK does not receive any variable remuneration.
<b>Deferred annual variable remuneration</b>	<b>NA</b>	Mr. BRUNCK does not receive any deferred annual variable remuneration.
<b>Multi-annual variable remuneration</b>	<b>NA</b>	Mr. BRUNCK does not receive any multi-annual variable remuneration.
<b>Exceptional compensation</b>	<b>NA</b>	Mr. BRUNCK does not receive any exceptional compensation.
<b>Value of options / performance shares granted during the fiscal year</b>	<b>NA</b>	Mr. BRUNCK has not been allocated any stock-options since 2012
	<b>Performance shares</b>	The Board of Directors held a meeting on February 27, 2013 where it noted that, for the plan of March 24, 2011, the condition for the achievement of the EBITDA for the Services sector had been met up to 85%, the condition for the achievement of the EBITDA for the Equipment sector had been met up to 108%, and the condition for the achievement of the EBITDA for the Group had been met up to 92%. Mr. BRUNCK was thus allocated 12,423 shares under this plan, i.e. 0.007% of the share capital.
<b>Directors' fees</b>	<b>NA</b>	Mr. BRUNCK does not receive any Directors' fees.
<b>Value of benefits in kind</b>	<b>€10,440</b>	Mr. BRUNCK benefits from a company's car. This benefit was approved on March 20, 2013.

Remuneration components due or granted for the fiscal year that are or were submitted to a vote during a General Meeting as part of the Agreements and Commitments approvals	Amounts submitted to the vote	Presentation
<b>Severance pay</b>	<b>NA</b>	Mr. BRUNCK does not benefit from any severance agreement.
<b>Non-compete clause</b>	<b>NA</b>	Mr. BRUNCK does not benefit from any non-compete agreement.
<b>General benefits plan</b>	<b>NA</b>	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. BRUNCK 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.
<b>Supplementary pension plan</b>	<b>NA</b>	Mr. BRUNCK is already retired.

## 2. Mr. Jean-Georges Malcor, Chief Executive Officer

Remuneration components due or granted for the fiscal year	Amounts submitted to the vote	Presentation
<b>Fixed remuneration</b>	<b>€630,000</b>	The fixed remuneration of Mr. MALCOR for fiscal year 2013 was determined by the Board of Directors on March 20, 2013. It was previously €600,000 in 2011 et 2012.
<b>Annual variable remuneration</b>	<b>€257,040</b>	<p>The annual variable remuneration of Mr. MALCOR is based on the achievement of individual objectives (accounting for 1/3 of the variable compensation) and financial objectives (accounting for 2/3 of the variable compensation). His target amount is set as 100% of his fixed compensation.</p> <p>For 2013 :</p> <ul style="list-style-type: none"> <li>- The financial objectives were related to net earnings per share (25% weighting), Group free cash flow (15% weighting), Group external revenues (20% weighting), Group EBIT (20% weighting) and EBITDA minus tangible and intangible investments made in the course of the fiscal year (20% weighting);</li> <li>- The individual objectives were related to Group governance, integration of Fugro Geosciences division, relations with our major customers, relations with our shareholders and financial community, our promotion and development in the industry, operational performance and human resources.</li> </ul> <p>On March 26, 2014, based on the achievement of the hereinabove qualitative and quantitative targets and the final 2013 results, the Board of Directors set this variable remuneration at €257,040. This corresponds to an overall achievement rate of 41% of the target amount of the variable remuneration.</p>
<b>Deferred annual variable remuneration</b>	<b>NA</b>	Mr. MALCOR does not receive any deferred annual variable remuneration.
<b>Multi-annual variable remuneration</b>	<b>Performance units value : €462,000 (IFRS value)</b>	<p>On June 24, 2013, the Board of Directors of the Company, upon the Appointment-Remuneration Committee's proposal, implemented a multi-annual bonus system in the form of performance units, replacing the performance shares plans with a twofold objective:</p> <ul style="list-style-type: none"> <li>- Implement a globally harmonized remuneration mechanism consistent with the growing internalization of our Group,</li> <li>- Establish a closer link between the remuneration of the main senior executives and the share price performance and the economic performance of the Group taken as a whole on a mid-term basis (3 years).</li> </ul> <p>The performance units vest upon the expiry of a 3-year period from the allocation date subject to a presence condition in the Group at the time of vesting and achievement of certain performance conditions. These performance conditions are based on the achievement of Group objectives related to the return on capital employed and balance sheet structure along with achievement of Divisions' financial objectives aligned with the Group strategic orientations over a 3-year period.</p> <p>The number of vested 2013 performance units is based on achievement of the Group objectives up to 60% of the global allocation. The balance is allocated based on the achievement of the Divisions' objectives.</p> <p>The valuation of each vested 2013 performance unit shall be equal to the average closing price of CGG shares on Euronext over the 5 trading days prior to the vesting date. The vested performance units will be paid half in cash and half in existing CGG shares.</p> <p>The Board of Directors allocated 27,500 performance units to Mr. MALCOR under this plan.</p>
<b>Exceptional compensation</b>	<b>NA</b>	Mr. MALCOR does not receive any exceptional compensation.

Remuneration components due or granted for the fiscal year	Amounts submitted to the vote	Presentation
Value of options / performance shares granted during the fiscal year	<b>Stock-options : €810,000 (IFRS book value)</b>	<p>On June 24, 2013, based on the 27<sup>th</sup> resolution of the shareholders' meeting held on May 3, 2013, the Board of Directors allocated 200,000 options to Mr. MALCOR, i.e. 0.11% of the share capital of the Company.</p> <p>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 3 batches during the first 4 years of the plan dated June 24, 2013 (50% of the options allocated in June 2015, 25% of the options allocated in June 2016 and 25% of the options allocated in June 2017) and that the acquisition of options would be subject to the following performance conditions:</p> <ul style="list-style-type: none"> <li>- The average, over the 60 trading days preceding the date of allocation, of the ratio of the CGG ADS price over the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>) index shall equal at least 2/3 of the same average ratio over the same period of 60 trading days 3 years before the vesting date;</li> <li>- The average, over the 60 trading days preceding the date of allocation, of the ratio of the CGG share price over SBF 120 index shall equal at least 2/3 of the same average ratio over the same period of 60 trading days 3 years before the vesting date;</li> <li>- Over the vesting period, the market price of the CGG share shall have increased at least by 8% on an annual basis;</li> <li>- 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.</li> </ul> <p>The other conditions of the plan are disclosed in item 6 of our annual report on Form 20-F.</p>
	<b>Performance shares</b>	<p>The Board of Directors held a meeting on February 27, 2013 where it noted that, for the plan of March 24, 2011, the condition for the achievement of the EBITDA for the Services sector had been met up to 85%, the condition for the achievement of the EBITDA for the Equipment sector had been met up to 108%, and the condition for the achievement of the EBITDA for the Group had been met up to 92%.</p> <p>Mr. MALCOR was thus allocated 24,847 shares under this plan, i.e. 0.01% of the share capital.</p>
<b>Directors' fees</b>	<b>NA</b>	Mr. MALCOR does not receive any Directors' fees.
<b>Value of benefits in kind</b>	<b>€11,880</b>	Mr. MALCOR benefits from a company's car. This benefit was approved on March 20, 2013.

Remuneration components due or granted for the fiscal year that are or were submitted to a vote during a General Meeting as part of the Agreements and Commitments approvals	Amounts submitted to the vote	Presentation
<b>Severance pay</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>Mr. Malcor benefits from a contractual termination indemnity only 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:</p> <ul style="list-style-type: none"> <li>(a) a gross amount of 200% of the gross fixed compensation paid by the Company to Mr. MALCOR during the 12-month period preceding his departure date, to which is added the annual average of the variable compensation paid by the Company to Mr. MALCOR over the 36-month period preceding his departure date (hereinafter <del>the</del> "Reference Annual Compensation"), and</li> <li>(b) any sum to which Mr. MALCOR may be entitled as a result of such termination, including any sums to be paid further to the application of his non-competition commitment.</li> </ul> <p>The indemnity global amount shall not exceed 200% of the Reference Annual Compensation.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- The average, calculated over the 60 trading days preceding the departure date, of the ratio of the CGG ADS price over the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>) index shall equal at least 2/3 of the same average ratio over the same 60-day period 4 years before the date on which Mr. MALCOR leaves the Group;</li> <li>- The average, calculated over the 60 trading days preceding the departure date, of the ratio of the CGG share price over the SBF 120 index shall equal at least 2/3 of the same average ratio over the same 60-day period 4 years before the date on which Mr. MALCOR leaves the Group;</li> <li>- The average margin rate of the Group EBITDAS over the 4 years preceding the date on which Mr. MALCOR leaves the Group or shall be at least 25%.</li> </ul> <p>Payment of the full amount of the special termination indemnity is subject to the fulfillment of 2 conditions out of 3. In case only 1 condition is fulfilled, then Mr. MALCOR will be entitled to receive only 50% of the said special termination indemnity.</p> <p>In accordance with section L. 225-42-1 of the Commerce code, this commitment was approved by the Board of Directors on May 10, 2012 and ratified by the shareholders' meeting on May 3, 2013.</p>
<b>Non-compete clause</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>This non-compete agreement applies to any geophysical data acquisition, processing or interpretation services or the provision of equipment or products designed for the acquisition, processing or interpretation of geophysical data. Mr. MALCOR has agreed that he will not contribute to projects or activities in the same field as those in which he was involved at CGG for period of 18 months starting on the date on which he leaves the Group.</p> <p>In consideration for this undertaking, Mr. MALCOR will be entitled to receive compensation corresponding to 100% of his annual reference compensation as defined in the protection letters related to payment of the contractual indemnity in case of termination of his office.</p> <p>On June 30, 2010, the Board of Directors approved, in accordance with procedures applicable to related party agreements and provided for by section L.225-38 et seq. of the French Commercial Code, the signature of a non-compete agreement between the Company and Mr. MALCOR. This agreement was ratified by the General Meeting held on May 4, 2011.</p>

Remuneration components due or granted for the fiscal year that are or were submitted to a vote during a General Meeting as part of the Agreements and Commitments approvals	Amounts submitted to the vote	Presentation
<b>General benefits plan</b>	<b>No amount is to be paid for 2013 fiscal year</b>	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. 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.
<b>Individual benefits plan</b>	<b>No amount is to be paid for 2013 fiscal year</b>	On November 30, 2011, 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 entry into this benefits plan until December 31, 2014. This agreement was ratified by the General Meeting held on May 10, 2012.
<b>Individual insurance covering loss of employment</b>	<b>No amount is to be paid for 2013 fiscal year</b>	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. MALCOR. The annual subscription fee payable by the Company amounts to €10,137 for 2013. This insurance provides for the payment of a maximum of 13% of his 2013 target compensation (corresponding to €162,941), for a duration of 12 months. This agreement was ratified by the General Meeting held on May 4, 2011.
<b>Supplementary pension plan</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>Mr. MALCOR benefits from the supplemental retirement plan for the members of the Executive Committee (as composed prior to February 1, 2013) and the Management Board of Sercel Holding (as composed prior to April 19, 2012). It is an additive defined benefit plan with a cap. Accruals are acquired per year of services, with a ceiling of twenty years.</p> <p>Further, to participate in the plan, the beneficiaries shall comply with the main following cumulative conditions:</p> <ul style="list-style-type: none"> <li>– have liquidated their social security pension and all possible other rights to pensions,</li> <li>– have at least 5 years of service as member of the Executive Committee of the Group (as composed prior to February 1, 2013) or of the Management Board of Sercel Holding (as composed prior to April 19, 2012) and until they were 55 years of age, and</li> <li>– end their professional career when leaving the Company.</li> </ul> <p>The conditions relating to the age and length of service are assessed taking into account the service continuity within the new governance bodies of the Group.</p> <p>As of December 31, 2013, the Company's commitment under the supplemental retirement plan corresponds for Mr. MALCOR to an annual pension equal to 16% of his annual 2013 target compensation. The aggregate present benefit value of this supplemental plan as of December 31, 2013 was €14,963,043 of which €1,013,186 has been recorded as an expense for fiscal year 2013. Of such present benefit value, the portions relating to Mr. MALCOR are €1,162,351 and €334,336 respectively.</p> <p>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 extension of this supplemental retirement plan to Mr. MALCOR. This agreement was ratified by the General Meeting held on May 4, 2011.</p>



### 3. Mr. Stéphane-Paul Frydman, Corporate Officer

Remuneration components due or granted for the fiscal year	Amounts submitted to the vote	Presentation
<b>Fixed remuneration</b>	<b>€416,000</b>	<p>The fixed remuneration of Mr. FRYDMAN for fiscal year 2013 was determined by the Board of Directors on March 20, 2013. Its components are as follows :</p> <ul style="list-style-type: none"> <li>- €336,000 paid under his employment agreement (€320,000 in 2012);</li> <li>- €80,000 paid for his corporate office (<i>mandat social</i>) (unchanged compared to 2012).</li> </ul>
<b>Profit sharing</b>	<b>€4,022</b>	Mr. FRYDMAN benefited from the profit sharing plan dated June 20, 2012 applicable within CGG SA (please refer to item 6 of the annual report on form 20-F). No payment was made in 2012 under this plan.
<b>Annual variable remuneration</b>	<b>€142,896</b>	<p>The annual variable remuneration of Mr. FRYDMAN is based on the achievement of individual objectives (accounting for 1/3 of the variable compensation) and financial objectives (accounting for 2/3 of the variable compensation). His target amount is set as 75% of his fixed compensation.</p> <p>For 2013 :</p> <ul style="list-style-type: none"> <li>- The financial objectives were related to net earnings per share (25% weighting), Group free cash flow (15% weighting), Group external revenues (20% weighting), Group EBIT (20% weighting) and EBITDA minus tangible and intangible investments made in the course of the fiscal year (20% weighting);</li> <li>- The individual objectives were related to Group governance, internal control, management of our financial resources, relations with investors and the financial market as a whole, strategy and management of our capital employed and human resources.</li> </ul> <p>On March 26, 2014, based on the achievement of the hereinabove qualitative and quantitative targets and the final 2013 results, the Board of Directors set this variable remuneration at €142,896. This corresponds to an overall achievement rate of 46% of the target amount of the variable remuneration.</p>
<b>Deferred annual variable remuneration</b>	<b>NA</b>	Mr. FRYDMAN does not receive any deferred annual variable remuneration.
<b>Multi-annual variable remuneration</b>	<b>Performance units value : €210,000 (IFRS value)</b>	<p>On June 24, 2013, the Board of Directors of the Company, upon the Appointment-Remuneration Committee's proposal, implemented a multi-annual bonus system in the form of performance units, replacing the performance shares plans with a twofold objective:</p> <ul style="list-style-type: none"> <li>- Implement a globally harmonized remuneration mechanism consistent with the growing internalization of our Group,</li> <li>- Establish a closer link between the remuneration of the main senior executives and the share price performance and the economic performance of the Group taken as a whole on a mid-term basis (3 years).</li> </ul> <p>The performance units vest upon the expiry of a 3-year period from the allocation date subject to a presence condition in the Group at the time of vesting and achievement of certain performance conditions. These performance conditions are based on the achievement of Group objectives related to the return on capital employed and balance sheet structure along with achievement of Divisions' financial objectives aligned with the Group strategic orientations over a 3-year period.</p> <p>The number of vested 2013 performance units is based on achievement of the Group objectives up to 60% of the global allocation. The balance is allocated based on the achievement of the Divisions' objectives.</p> <p>The valuation of each vested 2013 performance unit shall be equal to the average closing price of CGG shares on Euronext over the 5 trading days prior to the vesting date. The vested performance units will be paid half in cash and half in existing CGG shares.</p> <p>The Board of Directors allocated 12,500 performance units to Mr. FRYDMAN under this plan.</p>

Remuneration components due or granted for the fiscal year	Amounts submitted to the vote	Presentation
<b>Exceptional compensation</b>	<b>NA</b>	Mr. FRYDMAN does not receive any exceptional compensation.
<b>Value of options / performance shares granted during the fiscal year</b>	<b>Stock-options : €405,000 (IFRS book value)</b>	<p>On June 24, 2013, based on the 27<sup>th</sup> resolution of the shareholders' meeting held on May 3, 2013, the Board of Directors allocated 100,000 options to Mr. FRYDMAN, i.e. 0.05% of the share capital of the Company.</p> <p>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 3 batches during the first 4 years of the plan dated June 24, 2013 (50% of the options allocated in June 2015, 25% of the options allocated in June 2016 and 25% of the options allocated in June 2017) and that the acquisition of options would be subject to the following performance conditions:</p> <ul style="list-style-type: none"> <li>- The average, over the 60 trading days preceding the date of allocation, of the ratio of the CGG ADS price over the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>) index shall equal at least 2/3 of the same average ratio over the same period of 60 trading days 3 years before the vesting date;</li> <li>- The average, over the 60 trading days preceding the date of allocation, of the ratio of the CGG share price over SBF 120 index shall equal at least 2/3 of the same average ratio over the same period of 60 trading days 3 years before the vesting date;</li> <li>- Over the vesting period, the market price of the CGG share shall have increased at least by 8% on an annual basis;</li> <li>- 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.</li> </ul> <p>The other conditions of the plan are disclosed in item 6 of our annual report on Form 20-F.</p>
	<b>Performance shares</b>	<p>The Board of Directors held a meeting on February 27, 2013 where it noted that, for the plan of March 24, 2011, the condition for the achievement of the EBITDA for the Services sector had been met up to 85%, the condition for the achievement of the EBITDA for the Equipment sector had been met up to 108%, and the condition for the achievement of the EBITDA for the Group had been met up to 92%.</p> <p>Mr. FRYDMAN was thus allocated 7,634 shares under this plan, i.e. 0.004% of the share capital.</p>
<b>Directors' fees</b>	<b>NA</b>	Mr. FRYDMAN does not receive any Directors' fees.
<b>Value of benefits in kind</b>	<b>€4,800</b>	Mr. FRYDMAN benefits from a company's car. This benefit was approved on March 20, 2013.

Remuneration components due or granted for the fiscal year that are or were submitted to a vote during a General Meeting as part of the Agreements and Commitments approvals	Amounts submitted to the vote	Presentation
<b>Severance pay</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>Mr. FRYDMAN benefits from a contractual termination indemnity only 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:</p> <ul style="list-style-type: none"> <li>(a) a gross amount of 200% of the gross fixed compensation paid by the Company to Mr. FRYDMAN during the 12-month period preceding his departure date, to which is added the annual average of the variable compensation paid by the Company to Mr. FRYDMAN over the 36-month period preceding his departure date (hereinafter <del>the</del> "Reference Annual Compensation"), and</li> <li>(b) any sum to which Mr. FRYDMAN may be entitled as a result of such termination, including any sums to be paid further to the application of his non-competition commitment.</li> </ul> <p>The indemnity global amount shall not exceed 200% of the Reference Annual Compensation.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- The average, calculated over the 60 trading days preceding the departure date, of the ratio of the CGG ADS price over the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>) index shall equal at least 2/3 of the same average ratio over the same 60-day period 4 years before the date on which Mr. FRYDMAN leaves the Group;</li> <li>- The average, calculated over the 60 trading days preceding the departure date, of the ratio of the CGG share price over the SBF 120 index shall equal at least 2/3 of the same average ratio over the same 60-day period 4 years before the date on which Mr. FRYDMAN leaves the Group;</li> <li>- The average margin rate of the Group EBITDAS (i) over the 4 years preceding the date on which Mr. FRYDMAN leaves the Group shall be at least 25%.</li> </ul> <p>Payment of the full amount of the special termination indemnity is subject to the fulfilment of 2 conditions out of 3. In case only 1 condition is fulfilled, then Mr. FRYDMAN will be entitled to receive only 50% of the said special termination indemnity.</p> <p>In accordance with section L. 225-42-1 of the Commerce code, this commitment was approved by the Board of Directors on February 29, 2012 and ratified by the shareholders' meeting on May 10, 2012.</p>
<b>Non-compete clause</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>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. FRYDMAN 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 18 months starting on the date on which he leaves the Group.</p> <p>In consideration for this undertaking, Mr. FRYDMAN 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.</p> <p>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 Mr. FRYDMAN. This agreement was ratified by the General Meeting held on May 10, 2012.</p>

Remuneration components due or granted for the fiscal year that are or were submitted to a vote during a General Meeting as part of the Agreements and Commitments approvals	Amounts submitted to the vote	Presentation
<b>General benefits plan</b>	<b>No amount is to be paid for 2013 fiscal year</b>	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 extension to Mr. FRYDMAN 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 10, 2012.
<b>Supplementary pension plan</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>Mr. FRYDMAN benefits from the supplemental retirement plan for the members of the Executive Committee (as composed prior to February 1, 2013) and the Management Board of Sercel Holding (as composed prior to April 19, 2012). It is an additive defined benefit plan with a cap. Accruals are acquired per year of services, with a ceiling of twenty years.</p> <p>Further, to participate in the plan, the beneficiaries shall comply with the main following cumulative conditions:</p> <ul style="list-style-type: none"> <li>– have liquidated their social security pension and all possible other rights to pensions,</li> <li>– have at least 5 years of service as member of the Executive Committee of the Group (as composed prior to February 1, 2013) or of the Management Board of Sercel Holding (as composed prior to April 19, 2012) and until they were 55 years of age, and</li> <li>– end their professional career when leaving the Company.</li> </ul> <p>The conditions relating to the age and length of service are assessed taking into account the service continuity within the new governance bodies of the Group.</p> <p>As of December 31, 2013, the Company's commitment under the supplemental retirement plan corresponds for Mr. FRYDMAN to an annual pension equal to 27% of his annual 2013 target compensation. The aggregate present benefit value of this supplemental plan as of December 31, 2013 was €14,963,043 of which €1,013,186 has been recorded as an expense for fiscal year 2013. Of such present benefit value, the portions relating to Mr. FRYDMAN are €907 881 and €87,466 respectively.</p> <p>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 February 29, 2013 the extension of this supplemental retirement plan to Mr. FRYDMAN. This agreement was ratified by the General Meeting held on May 10, 2012.</p>

4. Mr. Pascal Rouiller, Corporate Officer

Remuneration components due or granted for the fiscal year	Amounts submitted to the vote	Presentation
<b>Fixed remuneration</b>	<b>€416,000</b>	The fixed remuneration of Mr. ROUILLER for fiscal year 2013 was determined by the Board of Directors on March 20, 2013. Its components are as follows : <ul style="list-style-type: none"> <li>– €336,000 paid under his employment agreement including €12,000 for his corporate office in Sercel SA (€320,000 in 2012);</li> <li>– €80,000 paid for his corporate office (<i>mandat social</i>) (unchanged compared to 2012).</li> </ul>
<b>Profit sharing</b>	<b>€3,845</b>	Mr. ROUILLER benefited from the profit sharing plan dated June 20, 2012 applicable within CGG SA (please refer to item 6 of the annual report on form 20-F). No payment was made in 2012 under this plan.
<b>Annual variable remuneration</b>	<b>€162,448</b>	The annual variable remuneration of Mr. ROUILLER is based on the achievement of individual objectives (accounting for 1/3 of the variable compensation) and financial objectives (accounting for 2/3 of the variable compensation). His target amount is set as 75% of his fixed compensation. For 2013 : <ul style="list-style-type: none"> <li>– The financial objectives were related to net earnings per share (25% weighting), Group free cash flow (15% weighting), Group EBITA minus tangible and intangible investments made during the fiscal year (10% weighting), Equipment EBITDA minus tangible and intangible investments made during the fiscal year (10% weighting), Equipment Division production (20% weighting), Group EBIT (10% weighting) and Equipment Division EBIT (10% weighting);</li> <li>– The individual objectives were related to HSE, our group performance plan, technology, strategic development of the Equipment Division and human resources.</li> </ul> On March 26, 2014, based on the achievement of the hereinabove qualitative and quantitative targets and the final 2013 results, the Board of Directors set this variable remuneration at €162,448. This corresponds to an overall achievement rate of 56%.
<b>Deferred annual variable remuneration</b>	<b>NA</b>	Mr. ROUILLER does not receive any deferred annual variable remuneration.
<b>Multi-annual variable remuneration</b>	<b>Performance units value : €210,000 (IFRS value)</b>	On June 24, 2013, the Board of Directors of the Company, upon the Appointment-Remuneration Committee's proposal, implemented a multi-annual bonus system in the form of performance units, replacing the performance shares plans with a twofold objective: <ul style="list-style-type: none"> <li>– Implement a globally harmonized remuneration mechanism consistent with the growing internalization of our Group,</li> <li>– Establish a closer link between the remuneration of the main senior executives and the share price performance and the economic performance of the Group taken as a whole on a mid-term basis (3 years).</li> </ul> The performance units vest upon the expiry of a 3-year period from the allocation date subject to a presence condition in the Group at the time of vesting and achievement of certain performance conditions. These performance conditions are based on the achievement of Group objectives related to the return on capital employed and balance sheet structure along with achievement of Divisions' financial objectives aligned with the Group strategic orientations over a 3-year period. The number of vested 2013 performance units is based on achievement of the Group objectives up to 60% of the global allocation. The balance is allocated based on the achievement of the Divisions' objectives. The valuation of each vested 2013 performance unit shall be equal to the average closing price of CGG shares on Euronext over the 5 trading days prior to the vesting date. The vested performance units will be paid half in cash and half in existing CGG shares. The Board of Directors allocated 12,500 performance units to Mr. ROUILLER under this plan.

Remuneration components due or granted for the fiscal year	Amounts submitted to the vote	Presentation
<b>Exceptional compensation</b>	<b>NA</b>	Mr. ROUILLER does not receive any exceptional compensation.
<b>Value of options / performance shares granted during the fiscal year</b>	<b>Stock-options : €405,000 (IFRS book value)</b>	<p>On June 24, 2013, based on the 27<sup>th</sup> resolution of the shareholders' meeting held on May 3, 2013, the Board of Directors allocated 100,000 options to Mr. ROUILLER, i.e. 0.05% of the share capital of the Company.</p> <p>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 3 batches during the first 4 years of the plan dated June 24, 2013 (50% of the options allocated in June 2015, 25% of the options allocated in June 2016 and 25% of the options allocated in June 2017) and that the acquisition of options would be subject to the following performance conditions:</p> <ul style="list-style-type: none"> <li>- The average, over the 60 trading days preceding the date of allocation, of the ratio of the CGG ADS price over the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>) index shall equal at least 2/3 of the same average ratio over the same period of 60 trading days 3 years before the vesting date;</li> <li>- The average, over the 60 trading days preceding the date of allocation, of the ratio of the CGG share price over SBF 120 index shall equal at least 2/3 of the same average ratio over the same period of 60 trading days 3 years before the vesting date;</li> <li>- Over the vesting period, the market price of the CGG share shall have increased at least by 8% on an annual basis;</li> <li>- 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.</li> </ul> <p>The other conditions of the plan are disclosed in item 6 of our annual report on Form 20-F.</p>
	<b>Performance shares</b>	<p>The Board of Directors held a meeting on February 27, 2013 where it noted that, for the plan of March 24, 2011, the condition for the achievement of the EBITDA for the Services sector had been met up to 85%, the condition for the achievement of the EBITDA for the Equipment sector had been met up to 108%, and the condition for the achievement of the EBITDA for the Group had been met up to 92%.</p> <p>Mr. ROUILLER was thus allocated 8,166 shares under this plan, i.e. 0.004% of the share capital.</p>
<b>Directors' fees</b>	<b>NA</b>	Mr. ROUILLER does not receive any Directors' fees.
<b>Value of benefits in kind</b>	<b>€5,280</b>	Mr. ROUILLER benefits from a company's car. This benefit was approved on March 20, 2013.

Remuneration components due or granted for the fiscal year that are or were submitted to a vote during a General Meeting as part of the Agreements and Commitments approvals	Amounts submitted to the vote	Presentation
<b>Severance pay</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>Mr. ROUILLER benefits from a contractual termination indemnity only 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:</p> <ul style="list-style-type: none"> <li>(a) a gross amount of 200% of the gross fixed compensation paid by the Company to Mr. ROUILLER during the 12-month period preceding his departure date, to which is added the annual average of the variable compensation paid by the Company to Mr. ROUILLER over the 36-month period preceding his departure date, (hereinafter <del>the</del> Reference Annual Compensation"), and</li> <li>(b) any sum to which Mr. ROUILLER may be entitled as a result of such termination, including any sums to be paid further to the application of his non-competition commitment.</li> </ul> <p>The indemnity global amount shall not exceed 200% of the Reference Annual Compensation.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- The average, calculated over the 60 trading days preceding the departure date, of the ratio of the CGG ADS price over the PHLX Oil Service Sector<sup>SM</sup> (OSX<sup>SM</sup>) index shall equal at least 2/3 of the same average ratio over the same 60-day period 4 years before the date on which Mr. ROUILLER leaves the Group;</li> <li>- The average, calculated over the 60 trading days preceding the departure date, of the ratio of the CGG share price over the SBF 120 index shall equal at least 2/3 of the same average ratio over the same 60-day period 4 years before the date on which Mr. ROUILLER leaves the Group;</li> <li>- The average margin rate of the Group EBITDAS (i) over the 4 years preceding the date on which Mr. ROUILLER leaves the Group shall be at least 25%.</li> </ul> <p>Payment of the full amount of the special termination indemnity is subject to the fulfillment of 2 conditions out of 3. In case only 1 condition is fulfilled, then Mr. ROUILLER will be entitled to receive only 50% of the said special termination indemnity.</p> <p>In accordance with section L. 225-42-1 of the Commerce code, this commitment was approved by the Board of Directors on February 29, 2012 and ratified by the shareholders' meeting on May 10, 2012.</p>
<b>Non-compete clause</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>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. ROUILLER 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 18 months starting on the date on which he leaves the Group.</p> <p>In consideration for this undertaking, Mr. ROUILLER 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.</p> <p>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 Mr. ROUILLER. This agreement was ratified by the General Meeting held on May 10, 2012.</p>

Remuneration components due or granted for the fiscal year that are or were submitted to a vote during a General Meeting as part of the Agreements and Commitments approvals	Amounts submitted to the vote	Presentation
<b>General benefits plan</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>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 extension to Mr. ROUILLER 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 10, 2012.</p>
<b>Supplementary pension plan</b>	<b>No amount is to be paid for 2013 fiscal year</b>	<p>Mr. ROUILLER benefits from the supplemental retirement plan for the members of the Executive Committee (as composed prior to February 1, 2013) or of the Management Board of Sercel Holding (as composed prior to April 19, 2012). It is an additive defined benefit plan with a cap. Accruals are acquired per year of services, with a ceiling of twenty years.</p> <p>Further, to participate in the plan, the beneficiaries shall comply with the main following cumulative conditions:</p> <ul style="list-style-type: none"> <li>- have liquidated their social security pension and all possible other rights to pensions,</li> <li>- have at least 5 years of service as member of the Executive Committee of the Group (as composed prior to February 1, 2013) or of the Management Board of Sercel Holding (as composed prior to April 19, 2012) and until they were 55 years of age, and</li> <li>- end their professional career when leaving the Company.</li> </ul> <p>The conditions relating to the age and length of service are assessed taking into account the service continuity within the new governance bodies of the Group.</p> <p>As of December 31, 2013, the Company's commitment under the supplemental retirement plan corresponds for Mr. ROUILLER to an annual pension equal to 21% of his annual 2013 target compensation. The aggregate present benefit value of this supplemental plan as of December 31, 2013 was €14,963,043 of which €1,013,186 has been recorded as an expense for fiscal year 2013. Of such present benefit value, the portions relating to Mr. ROUILLER are €2,536,739 and €104,606 respectively.</p> <p>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 February 29, 2013 the extension of this supplemental retirement plan to Mr. ROUILLER. This agreement was ratified by the General Meeting held on May 10, 2012.</p>



## 14. FINANCIAL DELEGATIONS AND AUTHORIZATIONS

### Share capital increases

	Authorizations in force during 2013 fiscal year			
	Resolution number - GM	Period	Maximum authorized amount	Use of the authorization in 2013
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	18 <sup>th</sup> - GM 2013 <sup>(2)</sup>	26 months	€35 million <sup>(1)</sup>	None
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	19 <sup>th</sup> - GM 2013 <sup>(2)</sup>	26 months	€9 million <sup>(3)</sup>	None
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	20 <sup>th</sup> - GM 2013 <sup>(2)</sup>	26 months	€9 million <sup>(3)</sup>	None
Increase of the number of shares issued pursuant to the three resolutions listed above	22 <sup>nd</sup> - GM 2013 <sup>(2)</sup>	26 months	12.5% of the initial issue	None
Increase of share capital by incorporation of reserves, profits or premiums	23 <sup>rd</sup> - GM 2013 <sup>(2)</sup>	26 months	€10 million <sup>(3)</sup>	None
Increase of capital in order to compensate for contributions in kind	24 <sup>th</sup> - GM 2013 <sup>(2)</sup>	26 months	10% of the share capital as of the date of the Board of Directors' decision	None
Issuance of securities giving right to debt securities	29 <sup>th</sup> - GM 2013 <sup>(2)</sup>	26 months	€1.2 billion	None
Increase of capital, reserving the subscription of the shares to be issued to members of a Company Savings Plan (-Plan d'Epargne Entreprise")	25 <sup>th</sup> - 2013 <sup>(2)</sup>	26 months	€2.5 million <sup>(3)</sup>	None

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

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

<sup>(3)</sup> Within the limit of the aggregate ceiling of €35 million.

**Stock-options, performance shares and free shares**

	Authorizations in force during 2013 fiscal year			
	Resolution number - GM	Period	Maximum authorized amount	Use of the authorization in 2013
Stock-options	26 <sup>rd</sup> (2) - GM 2013 / Allocation to the employees (excluding the Chief Executive Officer and the members of the Corporate Committee)	26 months	1.32% of the share capital as of the date the Board of Directors' decision, without exceeding 0.85% of the share capital over a 12-month period. No discount.	<u>June 24, 2013</u> : Allocation of 1,062,574 options
	27 <sup>th</sup> (2) - GM 2013 / Allocation to the Chief Executive Officer and the members of the Corporate Committee	26 months	0.68% of the share capital as of the date the Board of Directors' decision, without exceeding 0.43% of the share capital over a 12-month period. Subject to performance conditions. No discount.	<u>June 24, 2013</u> : Allocation of 580,000 options
Performance shares	23 <sup>rd</sup> (2) - GM 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, without exceeding 0.30% of the share capital over a 12-month period. No discount.	None
	24 <sup>th</sup> (2) - GM 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, without exceeding 0.08% of the share capital over a 12-month period. No discount.	None
Free shares	20 <sup>th</sup> - GM 2010	38 months	0,5% of the share capital as of the date the Board of Directors' decision.	None

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

## 15. 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, you will find below the elements which are likely to have an influence in case of a take-over bid.

### **Capital structure of the Company:**

#### **Notice of crossing of a statutory threshold:**

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 has been 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 ~~Item~~ 7: Principal Shareholders – Major Shareholders” of our report on Form 20-F.

### **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 agreement between Banque Publique d’Investissement (formerly named Fonds Stratégique d’Investissement) and IFP Energies Nouvelles is referred to in ~~Item~~ 7: Principal Shareholders – Major Shareholders” of our report on Form 20-F.

### **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 case 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 case of a take-over bid. The delegations of competence currently in force cannot be used by the Board of Directors in case 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 Item 6: Directors, Senior Management and Employees – Contractual Indemnity in case of termination” of our report on Form 20-F, 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.

