# Annual Report 2011

www.pgs.com

PGS

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## Financial Calendar 2012

**MAY 3, 2012**
Annual General Meeting

**MAY 8, 2012**
Q1 2012 Earnings Release

**JULY 26, 2012**
Q2 2012 Earnings Release

**OCTOBER 25, 2012**
Q3 2012 Earnings Release

**DECEMBER 18, 2012**
Capital Markets Day, Oslo

## Key Financial Figures

| | 2011 | 2010 |
|---|---|---|
| *In millions of US dollars, except per share data* | | |
| Revenues | 1,253.3 | 1,135.1 |
| Adjusted EBITDA | 534.8 | 475.4 |
| EBIT ex. impairment charges[1] | 141.3 | 130.5 |
| Net income | 33.7 | (14.0) |
| EPS basic | 0.16 | (0.07) |
| EPS diluted | 0.15 | (0.07) |
| | | |
| Cash flow from operations | 480.4 | 355.5 |
| Capital expenditures (whether paid or not) | 279.9 | 223.5 |
| MultiClient cash investments | 203.9 | 166.7 |
| | | |
| Total assets | 3,137.2 | 3,035.0 |
| MultiClient library | 334.1 | 310.8 |
| Cash and cash equivalient | 424.7 | 432.6 |
| Shareholders equity | 1,771.7 | 1,755.3 |
| Net interest bearing debt | 394.2 | 279.2 |

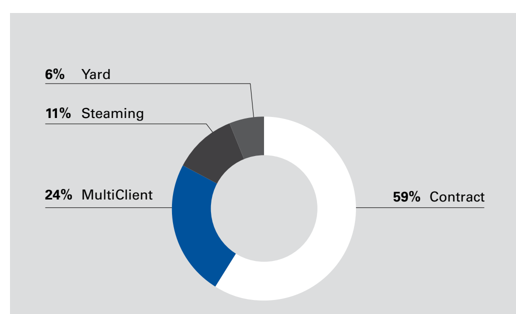
1. Net impairment charge was USD 2.6 million and USD 79.1 million for the full year 2011 and 2010 respectively.

## Non Financial Figures

| | 2011 | 2010 |
|---|---|---|
| | | |
| Head count | 2,145 | 2,090 |
| Lost Time Incident Frequency (LTIF) | 0.93 | 0.59 |
| Total Recordable Case Frequency (TRCF) | 1.44 | 1.94 |

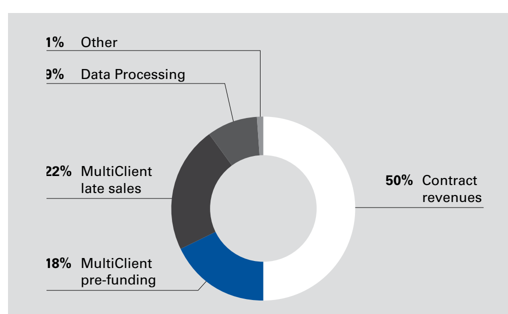
### VESSEL UTILIZATION 2011

*In percent of total streamer months*




### REVENUES 2011

*Split of total revenues in percent*



# 2011 HIGHLIGHTS

**REVENUES** of USD 1 253 million

**EBITDA** of USD 535 million

**OPERATING PROFIT** of USD 139 million, a margin of 11 percent

Solid **CASH FLOW** from operations of USD 480 million

Robust **BALANCE SHEET** position with net interest-bearing debt of USD 394 million

**LIQUIDITY RESERVE** of USD 775 million

**MULTICLIENT REVENUES** of USD 502 million

**RECORD LATE SALES** revenues of USD 278 million

**PRE-FUNDING LEVEL** of 110 percent of capitalized MultiClient cash investments

Continued GeoStreamer implementation with the upgrade of **RAMFORM VIKING** and **PGS APOLLO**

By year-end 2011, nearly 60 percent of PGS' 3D capacity was equipped with **GEOSTREAMER®**

**CONTRACT AWARDED** to Mitsubishi Heavy Industries Ltd. for delivery of two Ramform Titan-class vessels

Sucessful offering of a **USD 300 MILLION SENIOR NOTES** due December 2018

Launched **GEOSTREAMER GS™** —the only ghost-free acquisition solution in the industry

Completed processing of **CRYSTAL III WIDE-AZIMUTH** survey in the Gulf of Mexico in time for the Western Lease Sale

# WORLDWIDE OFFICES

**ANGOLA**
Luanda Office

**AUSTRALIA**
Perth Office

**BRAZIL**
Rio Office

**CHINA**
Beijing Office

**EGYPT**
Cairo - Maadi Office
Cairo - Nasr City Office

**FRANCE**
Pau Office

**INDIA**
Mumbai Office
New Delhi Office

**INDONESIA**
Jakarta Office

**JAPAN**
Makuhari Office
Nagasaki
Tokyo - Toranomon Office
Tokyo - Uchisaiwai Office

**KAZAKHSTAN**
Almaty Office

**LIBYA**
Tripoli Office

**MALAYSIA**
Cyberjaya Office
Kuala Lumpur Office

**MEXICO**
Villahermosa Office

**NETHERLAND**
Leiden Office

**NIGERIA**
Lagos Office

**NORWAY**
Bergen Office
Lysaker Office
Stavanger Office

**OMAN**
Muscat Office

**RUSSIA**
Gelendjik Office
Moscow Office

**SAO TOME & PRINCIPE**
Sao Tome Office

**SINGAPORE**
Singapore Office

**SWEDEN**
Stockholm Office

**TURKMENISTAN**
Ashgabat Office

**UK**
Edinburgh Office
Maidenhead Office
Weybridge Office

**UNITED ARAB EMIRATES**
Abu Dhabi Office

**USA**
Austin Office
Houston - AGS Office
Houston - Memorial Office
Houston - Park Row 10 Office
Houston - Westway Park Office

**VIETNAM**
Hanoi Office

# MAIN OFFICES

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PGS headquarters is located in Lysaker (Oslo), Norway

PGS' Houston Memorial office

PGS' Weybridge office

PGS' Singapore office

# LETTER FROM THE CEO

## Dear Fellow Shareholder

**Strong MultiClient revenues boosted PGS' financial performance despite the challenging 2011 market. The introduction of PGS' GeoStreamer GS strengthened our technology leadership and ability to deliver superior seismic data quality. A strong balance sheet and delivery of two Ramform Titan-class vessels in 2013 will position PGS for future growth in a seismic market with improving fundamentals.**

Our MultiClient business performed well in 2011, with solid pre-funding and record late sales revenues. The advances made by MultiClient prove that the reorganization of the Company completed in 2010, following sale of our Onshore business, is delivering the expected results.

Over the cycle, we have experienced MultiClient profitability to be less volatile than proprietary contract work, given its concept of a pre-funding stage and late sales potential over a period of several years after data acquisition and processing have been completed.

To optimize profitability and cash flow over the cycle, PGS proactively allocates vessel resources between MultiClient and Marine Contract. In a weak market, more capacity is allocated to robust MultiClient projects with a pre-funding rate in the range of 80-120 percent of the capitalized cash investment. We maximize profit by executing more Marine Contract work in a strong market. A trend towards more MultiClient business industry wide raises the industry's barriers to entry and underlines the importance of a strong MultiClient organization in a vessel owning company. Developing attractive projects requires a skilled organization of geologists and geophysicists and PGS retains and develops these skills through its Reservoir organization with resources similar to a medium sized oil company.

**OUR MULTICLIENT BUSINESS PERFORMED WELL IN 2011, WITH SOLID PRE-FUNDING AND RECORD LATE SALES REVENUES.**

The market for marine seismic was characterized by overcapacity in 2011, leading to low profit margins for contract work and less demand for low-end 3D vessels. PGS' Marine Contract business also experienced weak utilization and productivity in the second half of the year primarily due to extended yard stays and downtime caused by maritime issues. These factors combined with higher fuel costs and a weaker US dollar, reduced Marine Contract's operating profit margin to four percent for the full year.

A profit improvement program was initiated in late 2011. The program targets a $50 million EBIT run-rate improvement by year-end 2012. Measures include general cost cutting, several procurement initiatives, operation-specific cost reductions, and work-flow process improvements, including management of yard stays and logistics at all levels.

Our successes in the high density (HD) segment contributed further to growth in the data processing business in 2011. Proprietary GeoStreamer processing, best-in-class imaging tools and ultrafast velocity model building capabilities using hyperBeam added to our market-share momentum. This was limited only by our ability to grow our Data Processing organization fast enough in terms of skilled geophysicists.

The HD market segment is best served by PGS' high capacity Ramform vessels and cutting-edge technology. Demand for HD seismic is driven by deepwater exploration and production in geologically complex areas such as offshore Brazil, West Africa and the Gulf of Mexico. The HD market is growing faster than the general seismic market. Our HD market share will increase further when we take delivery of two Ramform Titan-class vessels in 2013. The Ramform new building contract awarded to Mitsubishi Heavy Industries Ltd. in April 2011 includes an option to build two additional sister ships. The vessels feature the design strengths demonstrated by today's Ramform fleet with several capability enhancements across a series of key technologies.

In 2011, we reinforced our position in the HD market through continuing to rollout our

**TO OPTIMIZE PROFITABILITY AND CASH FLOW OVER THE CYCLE, PGS PROACTIVELY ALLOCATES VESSEL RESOURCES BETWEEN MULTICLIENT AND MARINE CONTRACT.**

Jon Erik Reinhardsen
*President and Chief Executive Officer*

GeoStreamer technology. *Ramform Viking* and *PGS Apollo* were equipped with GeoStreamer in 2011 and by year-end nearly 60 percent of our streamer capacity was GeoStreamer.

**Technology Leadership**
Technology plays an increasingly important role in supplier differentiation and building our competitive advantage. GeoStreamer is the best example of PGS' technology differentiation. At its launch in June 2007, it was heralded as the most significant breakthrough in streamer technology in 60 years. GeoStreamer is the first-ever dual-sensor streamer, yielding greater imaging on deeper targets, enhanced resolution and improved operational efficiency.

In 2011, we enhanced GeoStreamer technology with the introduction of GeoSource (GS). GeoStreamer in combination with GeoSource comprise our GeoStreamer GS technology, the only ghost-free acquisition solution in the industry. GeoStreamer GS improves bandwidth beyond the capabilities of the GeoStreamer and delivers unrivaled image resolution. GeoStreamer GS is unique in its ability to generate sharper, more precise imaging of complex targets located at great depths or beneath salt, basalt, and other challenging geological structures. PGS aims to equip all GeoStreamer vessels with GeoStreamer GS technology by year-end 2012.

Our next products in the technology pipeline are the OptoSeis fiber-optic solution for permanent monitoring and towed Electro Magnetic (towed EM) acquisition. We are moving ahead with our fiber-optic deployment breakthrough, the agreement signed with Petrobras in 2010 for a seabed-installed fiber-optic monitoring system at the deepwater Jubarte field offshore Brazil. The system will be installed mid 2012. We are planning to run the first commercial towed EM survey in 2012. Our ultimate goal is to acquire seismic and EM data simultaneously.

**Financial Strength**
Building on our strategy of having a conservative balance sheet, PGS has maintained its ability to invest in technology, MultiClient library, and capacity expansion despite a challenging market. We extended the Company's debt maturity, from approximately three years in early 2011 to approximately four years by year-end. Issuance of a $300 million Senior Notes due in 2018 and amendment of our revolving credit facility were the two most significant achievements. The Senior Notes offering was well received in the market and priced at favorable terms.

Our strategy has and will continue to be to deliver return to shareholders over the business cycle. To demonstrate the earnings capability of PGS the Board of Directors propose to the Annual General Meeting in 2012 a dividend for the full year 2011 of NOK 1.10 per share, in line with earlier announcements. We have a dividend policy aimed at distributing 25-50 percent of net income to shareholders over the business cycle.

Health, safety, environment, and quality — HSEQ — remains a key priority for PGS. Our ambition is to operate in a manner that does not cause harm to people or the environment. Total Recordable Case Frequency (TRCF) was 1.44 per million man-hours in 2011 compared with 1.94 per million man-hours in 2010. The Lost Time Incident Frequency (LTIF) for 2011 was 0.93 per million man-hours compared with 0.59 per million man-hours in 2010. We work proactively to reduce employees' exposure to risk. In 2011, the Company received OHSAS 18001 certification, with Det Norske Veritas (DNV) as the certifying body. OHSAS 18001 is an internationally recognized standard that defines requirements for management systems covering occupational health and safety. Certification brings us one step closer to our goal of becoming one of the best in our industry on HSEQ performance.

**Outlook**
We have achieved higher prices for marine contract work for the 2012 North Atlantic season. Market activity has increased significantly for work in the second and third quarter 2012 driven by increased interest for Baffin Bay, Greenland and the Barents Sea. Activity in the Gulf of Mexico combined with incremental demand offshore Angola

contributes to improve the fundamentals of the marine seismic industry and bring us closer to a tight market.

Turmoil in Egypt and Libya slowed down, and in some cases halted, seismic activity in the Mediterranean. Activity is gradually picking up in the region, and contributes to improve the supply/demand balance in the seismic market further.

Increased activities in the Gulf of Mexico, Angola, and Mediterranean along with expectations of another busy North Atlantic season with higher prices are all positive factors in our market outlook. Another good sign is a tapering off of capacity additions in the coming couple of years. PGS is well positioned to take advantage of a stronger market. Our services are competitive, we offer leading edge technologies, and our financing is robust.

The long-term prospects for our industry are good. Energy companies continue their search for new hydrocarbon resources in regions with deeper waters, harsher environments, extreme reservoir depths, and complex geologies. Further seismic is increasingly used over producing fields to facilitate improved oil recovery. These factors are likely to intensify the use of seismic as a risk mitigating tool for expensive drilling campaigns and promote deployment of high-density seismic. Demand is also growing for seismic work to monitor and manage producing reservoirs. Production seismic, typically funded from oil and gas companies' production budgets, is less exposed to industry-wide investment cycles. Our advanced fleet and data processing technology uniquely position PGS to compete effectively and earn good margins in the years to come.

**Jon Erik Reinhardsen**
President and CEO

# INTRODUCTION TO BUSINESS UNITS

## Proactive Capacity Allocation to Optimize Profitability

**Petroleum Geo-Services is a focused marine geophysical company. Noted for fleet efficiency and technological innovation, PGS ranks among the world's three largest marine seismic companies.**

PGS provides a broad range of geophysical and reservoir services worldwide and is organized into four business units: Marine Contract, MultiClient, Operations, and Data Processing & Technology.

The business model of **Marine Contract** is acquiring and processing seismic data under exclusive contracts with individual customers, such as oil and natural gas companies and governments. Seismic data is vital to them; key uses are to identify structures that may contain hydrocarbons, determine the size of reservoirs and optimize reservoir production. A highly efficient seismic fleet and advanced acquisition technologies are major PGS competitive advantages.

Acquisition and processing is also conducted for PGS' library of **MultiClient** field surveys. Under this business model, PGS invests in MultiClient seismic surveys and the processed data sets and images are marketed to multiple customers on a non-exclusive basis. MultiClient has two revenue sources: *pre-funding* and *late sales*. Customers pre-funding surveys commit to buying into the survey before and while the data are acquired and processed. Late-sales customers purchase the data when it has become a part of the MultiClient library of acquired and processed data. Reservoir Services consulting is a part of the MultiClient business unit. Reservoir Services comprises an industry-leading team of subsurface and production geoscientists providing interpretation and reservoir characterization expertise to PGS and external customers.

PGS ALLOCATES ITS SEISMIC ACQUISITION CAPACITY BETWEEN MARINE CONTRACT AND MULTICLIENT ASSIGNMENTS — IN ORDER TO MAXIMIZE PROFITABILITY

The **Operations** business unit supports Marine Contract and MultiClient with reliable and efficient production capacity as well as resource planning, fleet renewal and expansion strategies.

**Data Processing & Technology** is managed as a separate business unit due to its distinctive specializations. The business unit has two departments: *DATA PROCESSING* provides a full range of processing, advanced imaging and reservoir-related processing services to a global exploration and production customer base and to PGS' MultiClient library and regional MegaSurveys. *GEOSCIENCE & ENGINEERING* constitutes PGS' research and development center. Core projects are GeoStreamer dual-sensor streamer technology, survey fleet efficiency, high-end imaging and automation, and electromagnetic (EM) acquisition research.

**Proactive Allocation of Capacity**
PGS allocates its seismic acquisition capacity between Marine Contract and MultiClient assignments — in order to maximize profitability. The annual budgetary vessel allocation is based on the relative strength of the market, geographical focus and specific projects. A key decision criterion for MultiClient investments is whether the project delivers a risk-adjusted profitability that, on a discounted basis, compares favorably to use of the capacity for contract work. In a weak market, the margins from good MultiClient projects are on average higher than in the contract market, so more capacity is allocated to MultiClient. To reduce exposure to the cyclical nature of the contract market, PGS will allocate more capacity to solid MultiClient projects with high pre-funding levels to optimize profitability and cash flow when the contract market is weak. This strategy results in an internal competition for capacity between the business units Marine Contract and MultiClient.

**PGS History**
In 1991, the Norwegian venture capital firm Norsk Vekst acquired all the shares of A/S Geoteam in order to develop it into a worldwide seismic company. Norsk Vekst renamed the company Petroleum Geo-Services (PGS) as of July 1, 1991. Subsequently, PGS established a new subsidiary, Geoteam A/S, to which all PGS operating activities were

transferred. Core businesses included pre-drilling site surveys, pipeline inspection, exclusive and non-exclusive 2D seismic surveys and the processing and interpretation of survey data. PGS remained a holding company for Precision Seismic and Geoteam Exploration Ltd. until late 1991, when PGS merged with Nopec A/S. By year-end 1991, PGS had established itself as an important 2D and 3D seismic operator in the North Sea and the Gulf of Mexico.

PGS was reincorporated as a public limited liability company, Petroleum Geo-Services ASA, and listed on the Oslo Stock Exchange in 1992. PGS was listed on NASDAQ in 1993, and in 1997 trade in the Company's American Depository Shares (ADS) was transferred to the New York Stock Exchange. Today, PGS is listed on the Oslo Stock Exchange while ADS trade is quoted on the US Pink Sheets.

From 1995 to 1999, PGS designed, built and deployed six proprietary Ramform survey vessels and grew to become one of the worldwide leaders in the development and industrialization of 3D marine seismic acquisition.

In 1998, PGS acquired Golar-Nor, which owned the vessels *Petrojarl I* and *Petrojarl Foinhaven*. The acquisition gave PGS a foothold in the Floating Production Storage and Offloading (FPSO) market. PGS subsequently added *Ramform Banff* and *Petrojarl Varg* to its fleet of FPSO vessels. As the year 2000 approached, PGS' financial situation deteriorated. Aggressive growth in an unfavorable market strained the Company's liquidity. Sale of shares in the subsidiary Spinnaker Exploration, a Gulf of Mexico oil company, and sale of PGS' data management business and related software to Landmark Graphics Corporation, a Halliburton subsidiary, provided some relief.

To secure maximum utilization of its FPSO fleet, PGS bought a 70-percent license interest in the Varg field in the North Sea from Norsk Hydro and Statoil and established the exploration and production company Pertra. PGS' liquidity situation remained challenging and in 2001 the Company sought to sell another non-core asset, the exploration and production company Atlantis. Early in 2003, Sinochem bought the company, but at a significantly lower price than PGS' original asking price. The low purchase price received for Atlantis and an inability to meet debt installment payments resulting from, among other factors, significant budget overruns on the FPSO newbuilding *Ramform Banff*, left PGS with no alternative but to voluntarily file for reorganization under Chapter 11 of the US Bankruptcy Code in July 2003. PGS emerged from Chapter 11 four months later.

In March 2005, Pertra was sold to Talisman and PGS became a dedicated oil services company. Divestments continued. In 2006, PGS demerged its Petrojarl floating production unit. In late 2009, PGS' Onshore seismic business was sold to Houston based Geokinetics.

PGS is now a focused marine geophysical company; its foremost competitive advantage is the Ramform seismic fleet. The fleet was enhanced further in 2008 and 2009 when PGS took delivery *Ramform Sovereign* and *Ramform Sterling*. The Ramform vessels deliver proven operational capabilities and superior efficiency and deploy state-of-the art technologies. PGS holds the industry record for towing and handling the greatest number of streamers. Fleet efficiency will continue to improve in 2013 when the Company takes delivery of two Ramform Titan-class vessels. PGS' proprietary GeoStreamer GS technology is another key competitive advantage, complemented and enhanced by sophisticated data processing and imaging capabilities.

PGS headquarters are located at Lysaker (Oslo), Norway. The PGS Group has offices in 26 countries around the world and operates major regional centers in London, Houston and Singapore. During the year ended December 31, 2011 PGS had on average 2,145 full-time employees worldwide.

**PGS HOLDS THE INDUSTRY RECORD FOR TOWING AND HANDLING THE GREATEST NUMBER OF STREAMERS**

# MARINE CONTRACT

MARINE CONTRACT WORK IS WHERE PGS ACQUIRES SEISMIC DATA UNDER EXCLUSIVE CONTRACTS WITH ITS CUSTOMERS. IN 2011, 72 PERCENT OF PGS STREAMER CAPACITY WAS USED FOR MARINE CONTRACT SEISMIC WORK.

RAMFORM SOVEREIGN
SINGAPORE

# MARINE CONTRACT

**EFFICIENCY AND PRODUCTIVITY LEADERSHIP**
**COMPLETE MARINE CONTRACT PRODUCT OFFERING**
**EXPANDING MARINE CONTRACT BUSINESS**

## Seismic Data under Exclusive Client Contracts

**Despite healthy bidding volumes, pricing for marine contract work in 2011 remained depressed throughout the year as a result of excess industry supply.**

The Marine Contract business unit acquires seismic data under exclusive contracts with its customers, who retain ownership of the survey data. In 2011, PGS used 72 percent of active vessel capacity for marine contract seismic work. Creation of growth opportunities for PGS through commercialization of new technology and business ideas is also a function of the Marine Contract business unit. Key new ventures are PGS' towed EM solution and OptoSeis®, a fiber-optic seismic monitoring system that is permanently installed at a producing field.

**Aiming High**
PGS' vision is to be the industry's best geophysical supplier; the Company's mission is providing reliable, on time and on budget delivery of seismic data, with a global presence to meet customer needs using leading-edge technology.

SURVEYING WITH THE HIGHEST PRODUCTIVITY AVAILABLE, POSITIONS MARINE CONTRACT TO DELIVER AMONG THE HIGHEST PROFIT MARGINS IN THE INDUSTRY

PGS has gained considerable respect in the international marine contract market as a result of the Company's distinctive focus on specially designed seismic vessels that can tow the largest streamer spreads in the industry. The ability to tow large, dense streamer spreads, as well as rapid streamer deployment and retrieval systems, are critical factors that secure seismic acquisition efficiency and reliable on time delivery of seismic data. PGS' Ramform vessels are uniquely designed to excel at seismic tasks. Measured in terms of cost per streamer per day, no other fleet in the industry delivers better productivity than the PGS fleet. Surveying with the highest productivity available, positions Marine Contract to deliver among the highest profit margins in the industry.

**HD3D**
High Density 3D (HD3D) seismic is a premium seismic data product that addresses a broad range of challenges in exploration, reservoir description and reservoir monitoring (4D). There are several ways to acquire HD3D. The most common HD3D technique is to use a narrower streamer separation than the 100 meters typically used for exploration seismic. Acquisition techniques such as Wide-Azimuth, Multi-Azimuth and repetitive 4D surveying are integral to PGS' HD3D product range.

Measured in vessel months, HD3D activity accounted for approximately 35 percent of the total seismic market in 2011. Approximately 55 percent of PGS' Ramform vessel months were dedicated to this segment, while competition generally allocates around 30 percent. Demand is more stable for HD3D, especially 4D surveying, than the demand for conventional 3D seismic. The cost effective high-end Ramform fleet is optimally suited to perform HD3D surveys. PGS will continue to invest in additional HD3D capabilities, new technologies and efficiency enhancements.

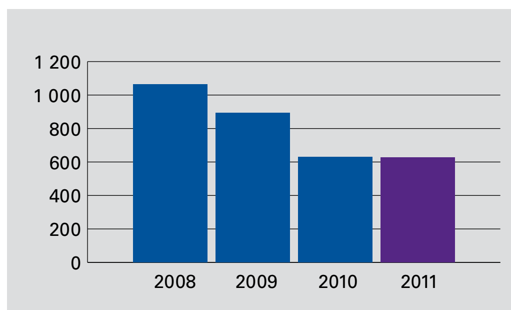
**New Ventures**
While seismic data yields an image of the subsurface geology's structure, EM data

provides more detailed information about the lithology and fluid content of potential reservoirs. PGS has been developing a towed EM streamer system for several years. In 2009, PGS successfully field tested a 2D EM line that was towed over the documented Peon field. Field testing continued in 2010 and 2011. Clients have shown great interest in a towed EM solution as it can deliver both high operational efficiency and good data quality.

Fiber-optic technology for permanently installed seismic reservoir monitoring is another new venture of the Marine Contract business unit. In 2010, Petrobras awarded PGS a contract to design and install a permanent fiber-optic seismic monitoring system at the Jubarte Field offshore Brazil. System components were manufactured mainly in 2011 and seabed installation will be in 2012. The OptoSeis system has been certified by DNV for operation at water depths of up to 3,000 meters. Features include a high channel count, long service lifetime and excellent reliability. The market for permanent seismic monitoring is still in an early phase. Encouraging is the number of oil companies showing a keen interest in permanently installed monitoring systems for producing fields. Greater tendering of commercial projects is anticipated. (See the business case on page 19 for further information about the Jubarte Field OptoSeis project.)

**MARINE CONTRACT REVENUES**

*In millions of US dollars*




Revenue decline from 2008 to 2011 reflects reduction in unit rates post the global financial crisis.

**Market and Market Position**

In terms of the combined contract and MultiClient 3D market, PGS holds a market share in excess of 20 percent. In 2007, there were two significant corporate acquisitions in the seismic industry: WesternGeco acquired EasternEcho and PGS acquired Arrow Seismic. The seismic market consolidated further when CGGVeritas acquired Wavefield Inseis in early 2009. Currently, WesternGeco, CGGVeritas and PGS account for approximately 70 percent of total global streamer capacity.

Other established, but smaller-sized players, are Fugro, via its geoscience division, and TGS Nopec. New market entrants include Polarcus and Dolphin Geophysical. Additionally, there are several niche players such as Electromagnetic Geoservices, Spectrum, Seabird Exploration, Reservoir Exploration Technology and Octio — all of which are active within limited areas of PGS' overall service scope.

THE OPTOSEIS SYSTEM HAS BEEN CERTIFIED BY DNV FOR OPERATION AT WATER DEPTHS OF UP TO 3,000 METERS

OptoSeis is PGS fiber-optic permanent monitoring system. Fiber-optic cables are installed on the sea bed of producing fields to monitor and optimize reservoir production and maximize resource recovery.

## OPTOSEIS:

# ENHANCING RESERVOIR PRODUCTION

*In appropriate cases, the geophysical and logistics aspects of a producing reservoir warrant the use of seismic receivers permanently installed on the seabed. PGS has developed the OptoSeis fiber-optic system to meet this emerging market. The system offers a number of basic benefits: no in-sea electronics, lightweight, safe and robust operations over at least two decades without intervention, deepwater deployment, adaptable multi-component configuration and life-of-field cost-effectiveness. Imaging improvements are also significant: OptoSeis features a high dynamic range, low noise and crosstalk and high channel count. Operational benefits include on-demand periodic and continuous (passive) 4D acquisition, low operating costs, superior repeatability and more frequent updating of the reservoir model. Going forward, reservoir experts may consider OptoSeis the ultimate reservoir management solution.*

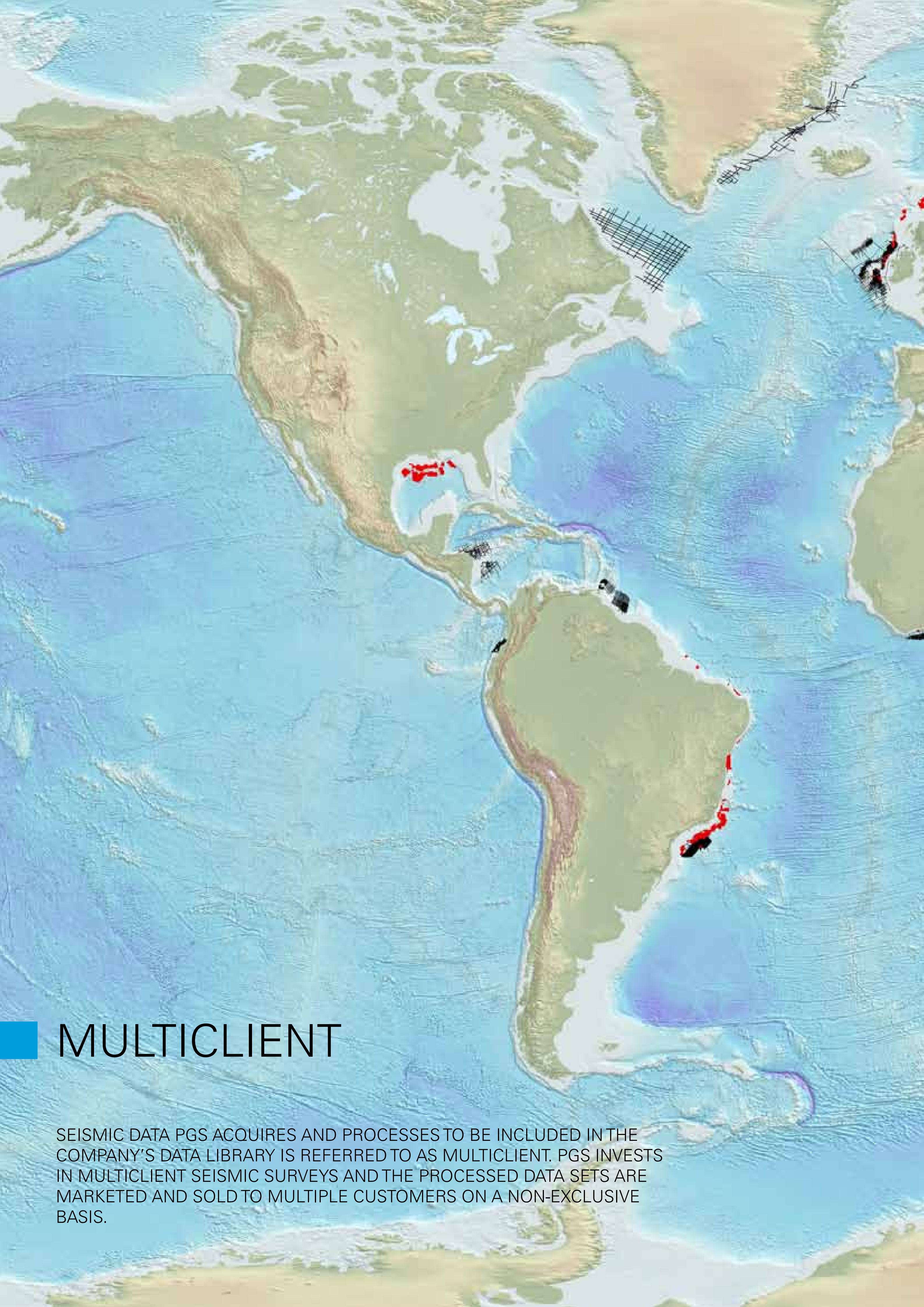
*In today's market there are three potential providers of permanently installed fiber-optic monitoring solutions: PGS, TGS and CGGVeritas. TGS entered the market after acquiring Stingray in 2011 and CGGVeritas established a market presence following the merger with Wavefield Inseis and its subsidiary Optoplan.*

*Activity in the market for permanent monitoring systems has been fairly low. In 2008, CGGVeritas was awarded a contract to supply a seabed seismic sensor system for reservoir monitoring at the ConocoPhillips' operated Ekofisk field in the North Sea. In 2010, PGS was awarded a contract by Petrobras to install a permanent seismic monitoring system at the Jubarte Field in the North Campos basin, Espiritos Santo province, offshore Brazil. Installation of the system is scheduled to be completed in 2012. This project is a significant step forward in the use of geophysics for reservoir surveillance, especially the application of 4D4C seismic to map the flow of fluids in Brazil's deepwater reservoirs. OptoSeis data will improve the quality and timeliness of information that Petrobras geophysicists analyze and forward to their colleagues, the reservoir and production engineers who operate the offshore fields. Tendering activity for permanent monitoring solutions has increased and there is considerable potential for OptoSeis permanent monitoring solutions to become an important PGS business niche.*

### WHAT IS RESERVOIR MONITORING?

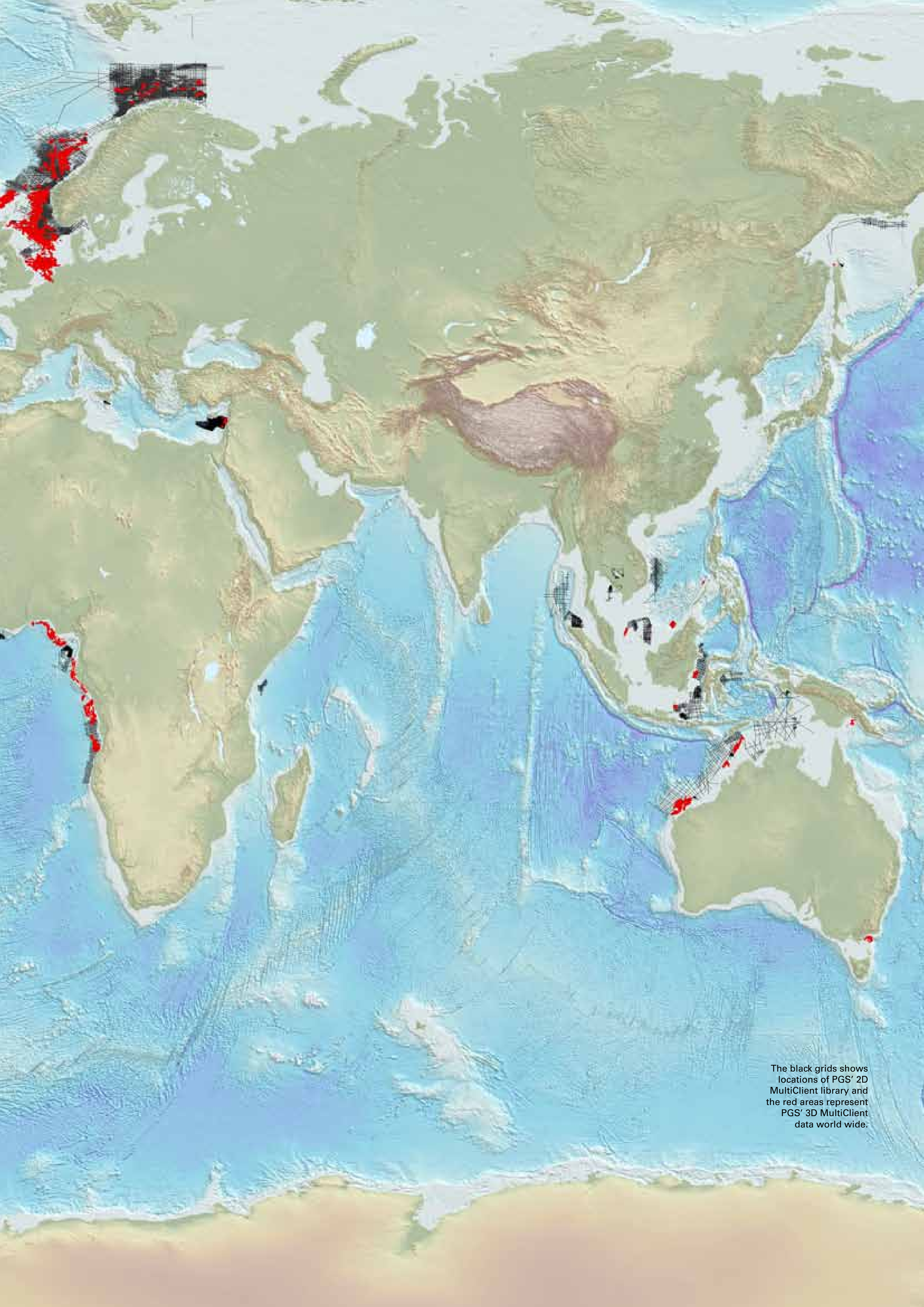
*Conducting repeat seismic surveys generates information vital to optimizing reservoir production and maximizing resource recovery. Production and management techniques apply cell-based model simulations of reservoir production. History matching is used to reconcile predicted with actual reservoir state and behavior observations; the results facilitate modification of the current reservoir model. New 3D seismic data is periodically acquired across the reservoir to further update the reservoir model, particularly when history matching proves inadequate. Successive 3D seismic surveys over a field are referred to as time-lapse 3D or a 4D survey. Classic applications for 4D seismic include the identification of bypassed reserves, placement of injection wells, identification of unknown permeability conduits, depletion monitoring and CO2 sequestration.*

*PGS has dedicated staff with expertise and technological resources covering the four key phases of 4D seismic work: planning, acquisition, processing and interpretation/characterization. The Company offers 4D services using acquisition via towed streamer and/or OptoSeis permanent monitoring solutions.*



# MULTICLIENT

SEISMIC DATA PGS ACQUIRES AND PROCESSES TO BE INCLUDED IN THE COMPANY'S DATA LIBRARY IS REFERRED TO AS MULTICLIENT. PGS INVESTS IN MULTICLIENT SEISMIC SURVEYS AND THE PROCESSED DATA SETS ARE MARKETED AND SOLD TO MULTIPLE CUSTOMERS ON A NON-EXCLUSIVE BASIS.



The black grids shows locations of PGS' 2D MultiClient library and the red areas represent PGS' 3D MultiClient data world wide.

# MULTICLIENT

**EXPLORATION PATHFINDERS**
**ENABLING EXPLORATION SUCCESS**
**GLOBAL REACH AND LOCAL PRESENCE**
**THE WORLD'S MOST DIVERSE HIGH-TECHNOLOGY MULTICLIENT LIBRARY**

## Securing Strong Performance Through the Cycle

**MultiClient manages, markets and sells all the seismic data that PGS acquires on a non-exclusive basis to multiple customers.**

MultiClient has two main revenue sources: *pre-funding* and *late sales*. Customers who pre-fund surveys are committed to license the data during acquisition and processing. Pre-funding survey revenues are recorded on a percentage-of-completion basis. The other key revenue stream, late sales, represents sales of data sets that were previously acquired, processed and integrated into the MultiClient library.

### Value Proposition

The MultiClient business unit helps PGS' clients achieve exploration success by locating commercially viable hydrocarbon resources more rapidly, more cost effectively and with less risk. PGS and its MultiClient customers share the same investment rationale: to acquire survey data in regions with good prospects of finding oil or natural gas. MultiClient's Reservoir Services organization, a team of experts in geology, geophysics and reservoir interpretation and characterization, initially localize surveys optimally and enable PGS to effectively profile the geology and prospectivity of survey regions.

**OVER THE CYCLE, PGS HAS EXPERIENCED MULTICLIENT PROFITABILITY TO BE LESS VOLATILE THAN PROPRIETARY CONTRACT WORK**

The PGS MultiClient business unit leverages the full range of PGS acquisition and data processing technologies and fleet capacity. A range of MultiClient business models provide targeted solutions to meet each client's survey objectives.

Over the cycle, PGS has experienced MultiClient profitability to be less volatile than proprietary contract work. This is linked to a number of factors. Firstly, solid pre-funding is required, in the range of 80-120 percent of capitalized cash investments on average, which de-risks the initial investment. Secondly, late sales occur in subsequent years that are, to an extent, detached from the vessel pricing scenarios that develop in the contract market. PGS can ensure optimal performance through the cycle by proactively managing its vessel and processing capacity between the Contract and MultiClient business units. In a soft contract market more capacity is allocated to MultiClient and vice versa.

### Why MultiClient?

The traditional advantage of MultiClient 3D in mature basins is that it combines several individual survey requirements over licensed acreage into a single large seismic survey. This reduces participants' costs and makes project turnaround considerably more efficient than acquiring each survey independently. Participating clients also gain a better understanding of the surrounding geology and exploration potential.

In areas that are more frontier, with more open acreage, MultiClient 2D and 3D surveys provide a cost-effective way for oil companies to gain critical insight into new areas before making significant investment decisions, such as selecting blocks and determining pricing ahead of bidding in a licensing round.

### MultiClient Library

PGS owns a substantial international library of marine MultiClient seismic data acquired in all of the world's major oil and gas basins.

The MultiClient data library comprises approximately 437,000 square kilometers of 3D data and 308,300 line kilometers of recent 2D seismic. As an additional product, PGS has integrated third-party data to build MegaSurveys with a total coverage of 540,000 square kilometers. MegaSurveys integrate multiple surveys into a single contiguous dataset, which enables explorationists to assess local hydrocarbon prospects in a basin-wide geological framework.

GeoStreamer is the preferred streamer for MultiClient acquisition. Pre-funding participants benefit from the greater imaging quality and survey efficiency delivered by GeoStreamer and the new data is applied by PGS to upgrade the contents of the MultiClient data library.

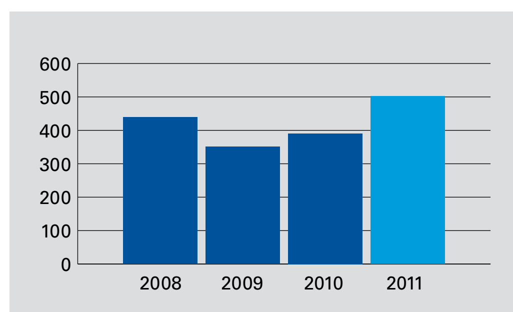
**Geographic Diversity**
PGS is active in most of the world's offshore petroleum-producing basins. Although the North Sea is a mature region, it remains rich in opportunity, as demonstrated by a series of recent discoveries. PGS is strongly committed to this region and will continue its GeoStreamer MultiClient campaign in 2012. The North Sea GeoStreamer MultiClient campaign began in 2009; by the end of 2011, approximately 25,000 square kilometers of MultiClient GeoStreamer 3D and approximately 18,000 line-kilometers of 2D GeoStreamer had been acquired. PGS' North Sea GeoStreamer MultiClient library contains data sets of substantially higher quality than data gathered previously by the industry using conventional streamers. Accordingly, oil companies and governmental bodies have shown considerable interest in and support for this library.

One key area for PGS' MultiClient activities in 2012 is Angola. The reason for current high interest there among oil companies can be found in Brazilian oil province geology. About 120 million years ago, the continents of Africa and South America were in the process of separation and the geologies found offshore Angola largely correspond to the geology found in some of the basins offshore Brazil. In late 2011, PGS commenced a large MultiClient project offshore Angola. (See the Angola business case on page 25 for further details.)

Gulf of Mexico used to be the largest MultiClient market in the world pre-Macondo. Now the Gulf of Mexico is gradually returning to normality. Since 2006 and 2007, the Gulf of Mexico has served as a high-end technology proving ground through the Wide-Azimuth surveys and the processing technologies developed to support and refine the acquisition technique. Large discoveries in the Gulf of Mexico fueled interest in the basin. PGS acquisition of Crystal III Wide-Azimuth survey was completed in the spring of 2010, with the processing being completed in the fall of 2011, just in time for the western lease sale in December 2011. The next central Gulf of Mexico lease sale is now confirmed for June 20, 2012. Crystal IV, PGS next Wide- Azimuth

**GEOSTREAMER IS THE PREFERRED STREAMER FOR MULTICLIENT ACQUISITION**

**MULTICLIENT REVENUES**
*In millions of US dollars*



OIL COMPANIES HAVE EMBRACED MEGASURVEY PRODUCTS IN THEIR QUEST TO PLACE THEIR ACREAGE IN A LARGER REGIONAL CONTEXT FOR NEAR-FIELD EXPLORATION AND FOR EVALUATION OF OPEN BLOCKS

survey, where GeoStreamer will be used for the first time in the Gulf of Mexico, is planned to commence in the second half of 2012.

**MegaSurveys and MegaProjects**
MegaSurveys and MegaProjects are well recognized PGS MultiClient products that are key PGS business enablers. MegaProjects integrate 2D with 3D coverage, while MegaSurveys are merged 3D data sets. These products are constructed by seamlessly combining many MultiClient surveys — both PGS data sets and those of third parties — into large, contiguous regional surveys. These products enable oil companies to map, with unparalleled insight, the geology and hydrocarbon potential of entire basins. Oil companies have embraced MegaSurvey products in their quest to place their acreage in a larger regional context for near-field exploration and for evaluation of open blocks or farm-in and farm-out opportunities. In addition, PGS uses MegaSurveys as a pathfinder for developing new MultiClient projects. These large, integrated survey products also bring value to governments by updating and including their national databases for these projects. PGS has extensive MegaSurvey coverage in the North Sea, West Africa, Brazil, the Gulf of Mexico and Northwest Australia.

**Reservoir Services**
PGS Reservoir Services provides skills that are integral to PGS' MultiClient projects and vital to PGS' Data Processing businesses. Reservoir Services employees are experts in sub-surface interpretation and reservoir characterization. They provide consultancy to national, major and independent oil companies, governments and financial institutions.

Reservoir teams produce interpretation products and services, including exploration play studies and inversion volumes that complement PGS MultiClient services, such as MegaSurveys, and enhance the value of PGS data. Through these projects, PGS has gained extensive knowledge about petroleum basins around the globe and an ability to accurately assess the variety of sub-surface risks a client faces.

To meet the oil industry's growing demand for enhanced oil recovery and improved reservoir understanding, PGS is investing in state-of-the-art reservoir characterization skills and technologies. The Company's goal is to provide clients with additional solutions that integrate seismic data, advanced processing, characterization and interpretation. Reservoir Services provides the skill sets essential to a significant improvement in hydrocarbon exploration and recovery. PGS reservoir focused services help clients to better image reservoirs, quantify reservoir and fluid properties and, ultimately, improve drilling success.

## ANGOLA:

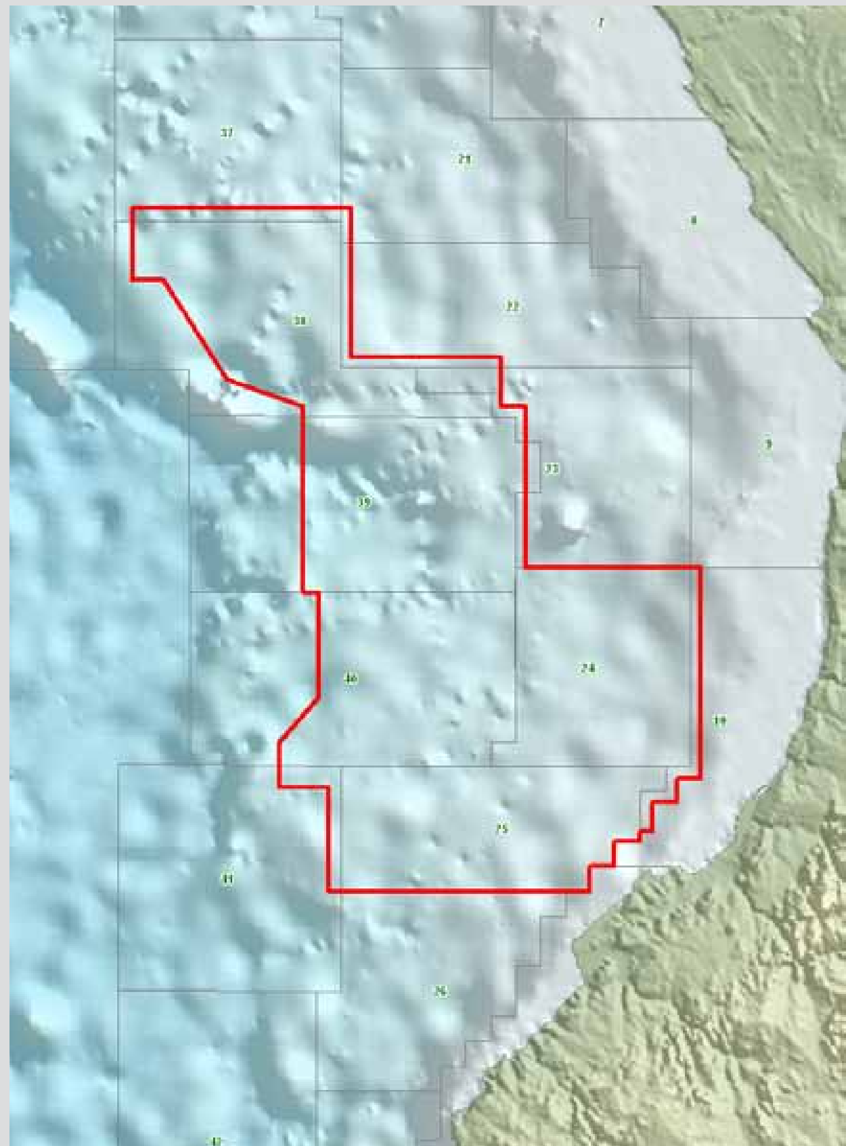
# MAPPING THE SUB-SALT STRUCTURES OFFSHORE ANGOLA

*In December 2011, the **Ramform Valiant** began acquisition of more than 26,000 square kilometers of GeoStreamer MultiClient data on five blocks in the Kwanza/Benguela Basins offshore Angola. The size of the survey area corresponds to an area slightly larger than Massachusetts or Wales. The project was preceded by 12,500 line-kilometers of 2D GeoStreamer data acquired earlier in 2011 that targeted subsalt regions in the Kwanza, Benguela and Namibe basins. In the final block awards on December 20, 2011, BP, Total and Statoil were made operators of blocks 24, 25, 38, 39 and 40, for which PGS will acquire seismic data. Sonangol is a partner in all of the block licenses. All four oil companies have committed to pre-fund the PGS MultiClient survey. Operators will benefit from early access to 3D seismic data acquired via the most advanced seismic technology available, clearer images of subsalt structures and more lead-time for planning the exploration wells they are committed to drill over the next five years.*

*The salt basins of Angola have a clear geological association with similar offshore Brazil basins. Recent advances in tectonic reconstruction indicate strong parallels with the prolific presalt Santos and Campos areas. PGS will use its extensive MultiClient library covering both sides of the Atlantic to study these links.*

*In February 2012, the **PGS Apollo** joined the **Ramform Valiant** and acquisition will continue with both vessels until the fourth quarter of 2012. PGS will begin processing data in March, utilizing the latest depth imaging technologies and building on the Company's experience of illuminating presalt targets in Angola. Together, the two vessels will operate 20 vessel-months on this project.*

*PGS, in association with Sonangol, has a long history of investing in the latest technology for Angola exploration and development. The Company will work closely with Sonangol to ensure that the project delivers valuable data and time saving advantages to the operators and significantly advances the collective understanding of the geology of this important play. PGS already has a high quality conventional MultiClient 3D data set on blocks 24 and 25, orthogonal to the data being acquired in 2012. The existing data set will be reprocessed by the Company. Together, these data sets will enable PGS to construct the best possible velocity model for processing the latest 3D GeoStreamer data.*



In 2012 PGS will acquire high quality GeoStreamer MultiClient data on block 24, 25, 38, 39 and 40 offshore Angola, marked by the red polygon. The acreage covered is more than 26,000 square kilometers and corresponds to an area slightly larger than Massachusetts or Wales.

# OPERATIONS

OPERATIONS SUPPORTS BOTH MARINE CONTRACT AND MULTICLIENT WITH RELIABLE AND EFFICIENT PRODUCTION AS WELL AS RESOURCE PLANNING AND FLEET RENEWAL STRATEGIES.

# OPERATIONS

**HSEQ PERFORMANCE DELIVERS COST EFFECTIVE OPERATIONS**
**STATE-OF-THE-ART FLEET**

## Building Competitive Advantages

**PGS' Operations business unit supports Marine Contract and MultiClient with reliable and efficient production capacity. Efficient operation of sophisticated systems enhances customer satisfaction and PGS' profitability.**

Health, Safety, Environment and Quality (HSEQ) performance is important for safe and efficient operations of seismic vessels. Operations aims at improving PGS' HSEQ results, in particular the lost time injury incidents, where the Company experienced an increase in 2011. PGS' HSEQ management systems set the framework for high quality product and service by continuous risk assessment of all operations, job tasks, processes and systems. These systems have undergone a thorough review by DNV this year in conjunction with the OHSAS 18001 certification process. During this process the systems and implementation of the systems offshore and in the office were reviewed.

Training and continuous development of employees are important to maintain skilled and motivated staff. Automation of work processes by new vessel and equipment design contributes to improved efficiency and reduced risk for personnel injuries. The overall Lost Time Incident Frequency (LTIF) for vessel operations increased to 1.29 per million man-hours in 2011 compared to 0.89 in 2010, while PGS experienced a decrease in the Total Recordable Case Frequency (TRCF) to 2.06 per million man-hours compared to 2.80 in 2010. PGS also has a high environmental focus and strong awareness of Corporate Social Responsibility at all levels.

PGS HAS SHOWN AN IMPROVING HSEQ PERFORMANCE OVER THE LAST YEARS AND OPERATIONS AIMS AT IMPROVING THE RESULTS EVEN FURTHER

**The Ramform Advantage**
PGS is recognized throughout the industry for its unique Ramform vessels. The seismic vessels have a delta-shaped hull that is distinguished by an extremely wide aft beam, twice the width of a conventional vessel. The broad aft workspace allows for efficient deployment and retrieval of streamers and seismic sources. The Ramform's propulsion power is also industry leading. The Ramform S-class has enough thrust to tow a 1.4-kilometer wide spread of streamers more than eight kilometers long. The acknowledged efficiency and productivity benefits of PGS Ramform vessels, along with the effectiveness of PGS' personnel, make the PGS fleet industry leading.

In 2011, PGS' Marine streamer fleet consisted of:

- Seven Ramform vessels, capable of towing up to 22 streamers each
- One vessel in the medium-capacity segment, capable of towing 10 streamers
- Three classic streamer vessels, capable of towing up to eight streamers
- Two 2D/source vessels.

The *Nordic Explorer*, one of the three classic streamer vessels, was converted from 3D to 2D in December 2011. The *Nordic Explorer* replaced the *Harrier Explorer* as a 2D/source vessel; the latter was returned to its owner when the vessel's charter expired in September 2011.

**Continuous Focus on Reducing Technical Downtime — Best-in-Class Performance**
Technical downtime as a percentage of total fleet time has dropped sharply from roughly 14 percent in 1992 to about 3.5 percent in 2011. Similarly, performance increased from approximately 80 percent in 1997 to 91 percent

in 2011. The performance figure shows the relationship between actual fleet survey production hours and downtime, excluding standby, unfavorable weather and steaming time. From 2010 to 2011, the fleet performance figure declined slightly.

In order to improve performance, enhance profitability and cut costs, PGS implemented a profit improvement program in the fourth quarter of 2011, targeting a USD 50 million EBIT run-rate improvement by year-end 2012. The Operations business unit is responsible for five components of the profit improvement program:

- Yard stays management — tighter control over costs, quality and duration
- General procurement initiatives — focus on general cost level and vendor count
- Reduction of non-productive vessel time — reexamine overall logistics and between-project activities
- Support and chase vessel cost management — launch initiatives to reduce these significant cost components of seismic operations; assess wide-scale fleet renewal to improve fuel efficiency as well as general operating efficiency of the support fleet
- Reorganizational upgrading —implement organizational changes that improve efficiency, safety and control while reducing expenses.

**Ramform Titan-class**

In late 2010, PGS launched a fleet renewal and expansion program. Two new Ramform Titan-class vessels were ordered from Mitsubishi Heavy Industries Ltd. The vessels will continue with the proven design advantages of PGS' current Ramform fleet and implement capability enhancements across several key performance parameters. Delivery of the first vessel is scheduled for first quarter 2013, with the second being delivered in fourth quarter 2013.

Estimated 2012 capital expenditures for the new builds will amount to approximately USD 200 million out of a project total of some USD 500 million, or USD 250 million per vessel.

The vessels will further strengthen PGS' premier status in the fast growing HD3D market segment, where a premium seismic data product is required in order for customers to gain a solid understanding of the geology and resource potential of deep targets with complex structures. For conducting HD3D surveys large spreads are required, with long offsets and dense streamer separation. The Ramform Titan-class vessels are even better suited for these premium surveys than the existing Ramform fleet.

**GeoStreamer Rollout**

GeoStreamer is a proprietary, dual sensor streamer technology unique to PGS. GeoStreamer eliminates the receiver ghost during acquisition and offers oil companies better penetration, enhanced resolution, reduced risk and improved imaging and attributes. Demand for GeoStreamer acquisition has surpassed all expectations.

As the search for new oil and gas fields becomes more difficult, exploration increasingly targets deeper reservoirs that present more challenging conditions and increasingly complex stratigraphic traps that confound traditional seismic studies.

GeoStreamer technology was commercialized in 2008 and quickly gained wide acceptance among oil companies. PGS rolled out the new streamer technology on 2D vessels in 2008 to prove its benefits to customers. In 2009, PGS extended the rollout to 3D operations and the *Atlantic Explorer* was the first 3D vessel to have the new streamer technology installed. In late 2009, *Ramform Challenger* was equipped with GeoStreamer to become the Company's first high-capacity Ramform vessel to deploy the advanced streamer technology. Survey and vessel performance has been excellent since the conversion to GeoStreamer.

Considerable demand for GeoStreamer surveys justified an accelerated GeoStreamer rollout in 2010. The *Ramform Valiant* was upgraded to a GeoStreamer vessel in the second quarter and *Ramform Explorer* followed early in the third quarter. GeoStreamer rollout continued in 2011, with the *Ramform Viking* in the first quarter and *PGS Apollo* in the second quarter. The *Ramform Vanguard* is scheduled for GeoStreamer upgrade in 2012.

**PGS IS RECOGNIZED THROUGHOUT THE INDUSTRY FOR ITS UNIQUE RAMFORM VESSELS**

In addition to delivering better seismic data quality, GeoStreamer significantly widens the weather window in which data acquisition can be performed. This is possible because GeoStreamer can be towed deeper than conventional streamers, since receiver ghosts, which degrade data, have been eliminated. Improved operational efficiency is a clear PGS advantage and a significant contributor to increased margins, with customers benefitting from shorter cycle times.

The next advance was PGS' introduction of GeoSource (GS) in 2011, which removes the source ghost. Deployment of the complementary acquisition technologies — GeoSource *plus* GeoStreamer — is referred to as GeoStreamer GS.

**ROLLOUT OF GEOSTREAMER GS TO ALL GEOSTREAMER-EQUIPPED VESSELS IS PLANNED TO BE COMPLETED BY YEAR-END 2012**

With GeoStreamer GS, the Company can provide its customers with a ghost-free acquisition solution — the only one available in the industry. (See the Data Processing & Technology section of this report for further technology details.) Rollout of GeoStreamer GS to all GeoStreamer-equipped vessels is planned to be completed by year-end 2012.

## RAMFORM'S SUSTAINABLE PRODUCTIVITY BENEFITS:

# SETTING NEW WORLD RECORDS

*The Ramform design is a distinctive PGS hallmark. The concept of the delta-shaped hull with a characteristic extremely wide aft beam — twice the width found on a conventional vessel — was introduced with the* ***Ramform Explorer*** *in 1995. The benefits of the Ramform vessel were immediately obvious and PGS continued to order more of the purpose-built seismic vessels.* ***Ramform Challenger****, the next in the series, entered the market in 1996, followed by* ***Ramform Viking*** *and* ***Ramform Valiant*** *two years later and* ***Ramform Vanguard*** *and* ***Ramform Victory*** *(now* ***Shigen****) in 1999.*

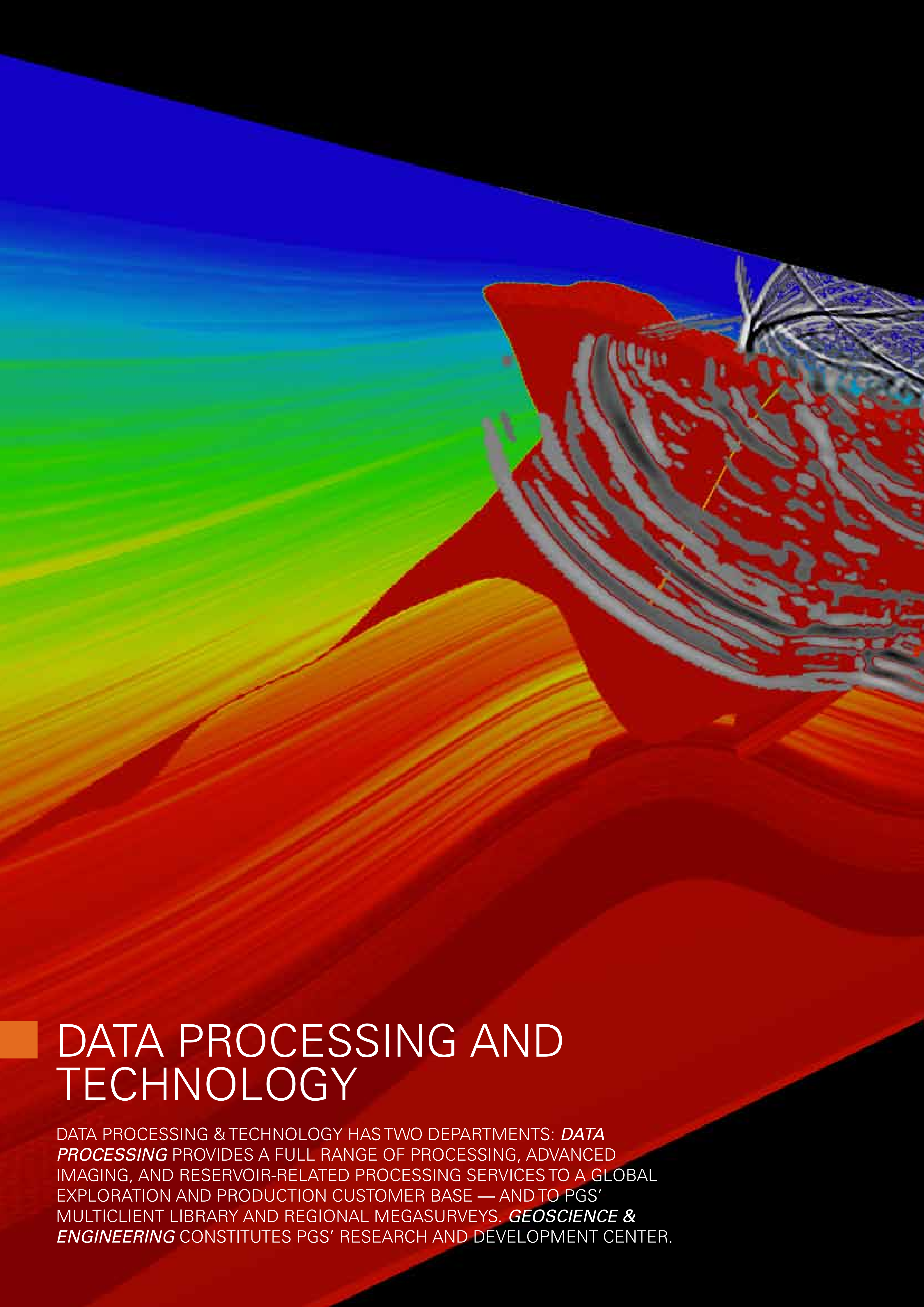
*Early on, PGS differentiated itself as the most efficient industry participant. PGS has continued to focus on high-capacity vessels. The* ***Ramform Sovereign*** *and* ***Ramform Sterling****, which entered service in 2008 and 2009 respectively, were even larger and featured more capabilities than their Ramform predecessors and have executed notable projects.*

***Ramform Sovereign*** *was assigned to a major contract for Petrobras in the second half of 2008 that was scheduled to last approximately one year. The vessel performed well and several project extensions ensued. At the time of writing this report the* ***Ramform Sovereign*** *was still under contract with Petrobras doing HD4D mapping of the world's largest oil fields. In most of its work,* ***Ramform Sovereign*** *has been operating with 14 streamers, each 8,100 meters long, with 50-meter streamer separation. This dense spread is a deployment of more than 112 kilometers of streamers. By year-end 2011, the spread had been in the water for 1,000 days and another 300–400 days of data gathering are anticipated before survey work is completed. The size and complexity of the streamer spread is a world record and* ***Ramform Sovereign*** *has been performing that record tow on a daily basis for several years.*

*Her sister ship, the* ***Ramform Sterling****, is acquiring seismic data using a similarly impressive spread. In the second half of 2011, she began a project towing 12 streamers, each 8,100 meters long, with 120-meter separation. In terms of survey footprint, this is the world's largest spread.* ***Ramform Sterling*** *has been logging a daily maximum production that exceeds 140 square kilometers. This coverage represents approximately half the size of a small seismic survey. In its first two weeks of operations deploying its record spread,* ***Ramform Sterling*** *acquired more than 1,750 square kilometers of high-quality seismic data.*

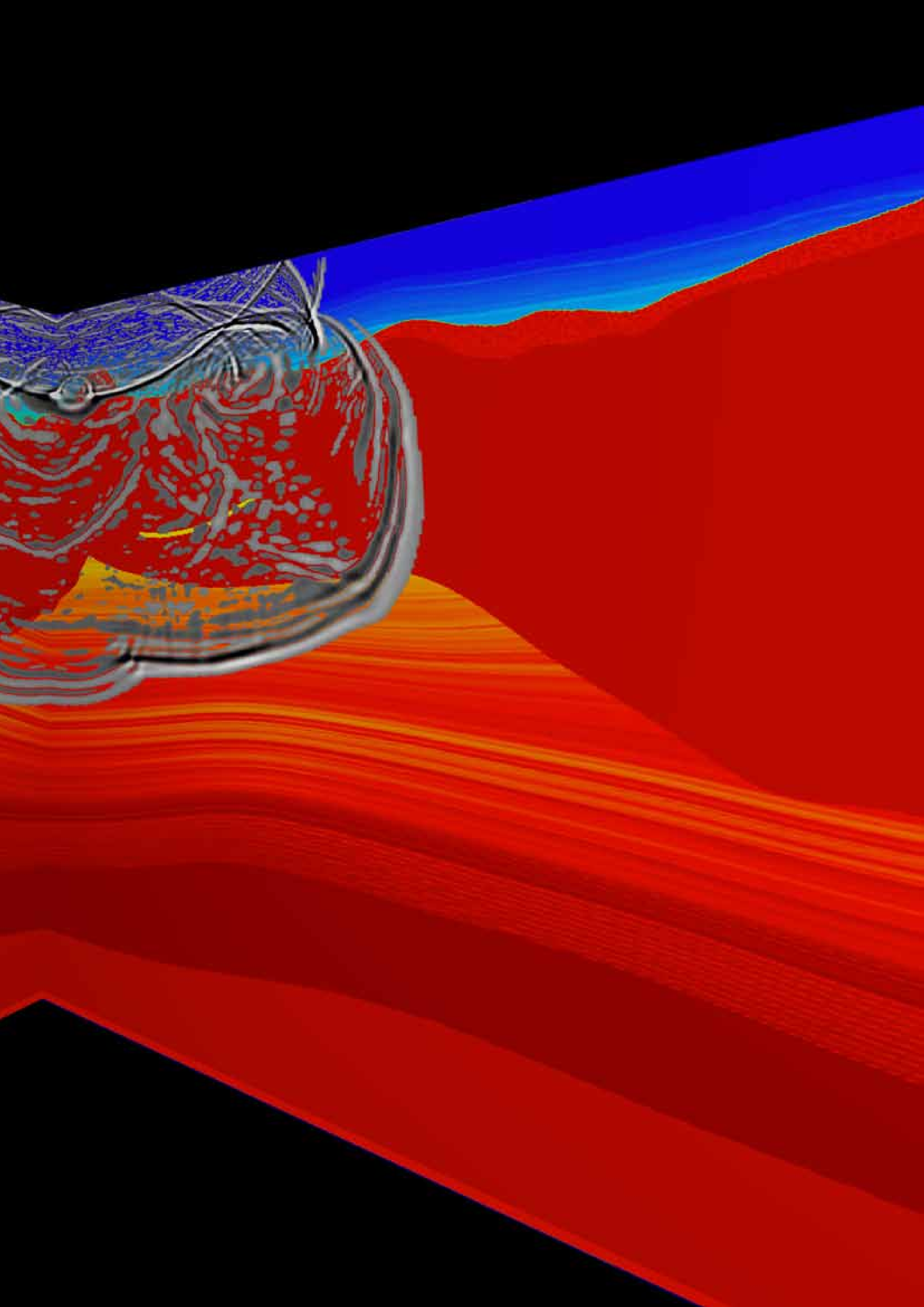
***Ramform Vanguard****, one of the V-class Ramforms, towed 17 streamers each 3,600 meters long, with 50-meter separation, for a project that began in the summer of 2011. The assignment was a 4D survey in the North Sea where* ***Ramform Sovereign*** *had made the first baseline survey in 2008. This performance proves that PGS' V-class vessels are capable of towing more than 16 streamers, which had been the previous record for that type of vessels.*

The *Ramform Sovereign* is here doing a 17 streamer survey in the North Sea in 2008, which was repeated by the *Ramform Vanguard* in the summer of 2011.



# DATA PROCESSING AND TECHNOLOGY

DATA PROCESSING & TECHNOLOGY HAS TWO DEPARTMENTS: ***DATA PROCESSING*** PROVIDES A FULL RANGE OF PROCESSING, ADVANCED IMAGING, AND RESERVOIR-RELATED PROCESSING SERVICES TO A GLOBAL EXPLORATION AND PRODUCTION CUSTOMER BASE — AND TO PGS' MULTICLIENT LIBRARY AND REGIONAL MEGASURVEYS. ***GEOSCIENCE & ENGINEERING*** CONSTITUTES PGS' RESEARCH AND DEVELOPMENT CENTER.



# DATA PROCESSING AND TECHNOLOGY

**DATA PROCESSING**
**GEOSCIENCE & ENGINEERING**

## Managing Growth

**PGS has successfully recruited and trained new geophysicists, significantly increased its compute capacity and grown both its external data-processing revenues and processing of its own MultiClient data production.**

The business unit Data Processing and Technology consists of two entities: *Data Processing* and *Geoscience and Engineering*.

**Data Processing Department**
PGS' external data processing market share is approximately 10 percent, an increase from about six percent five years ago. Growth is primarily attributable to proprietary GeoStreamer processing, best-in-class imaging tools and hyperBeam® ultra-fast velocity model building capabilities. With both processing power and advanced software tools readily available at PGS, the limiting factor for rapid project turnaround has shifted to the number of skilled geophysicists.

Data Processing focuses on delivering geophysical solutions that offer significantly improved imaging and characterization of customers' targets and PGS' MultiClient data sets. Strong sales performance has led to historically high order reserves for external customers and continues to drive significant growth.

PGS' EXTERNAL DATA PROCESSING MARKET SHARE IS APPROXIMATELY 10 PERCENT, AN INCREASE FROM ABOUT SIX PERCENT FIVE YEARS AGO

Data Processing has a number of state-of-the-art imaging products that are attractive to clients. These technologies include PGS hyperBeam, which is an integration of PGS Beam migration imaging technology and innovative holoSeis visualization. Client feedback highlights the way hyperBeam improves in-house workflows at all stages, from exploration to production. PGS hyperBeam allows customers to iterate through geological scenarios quickly, enabling them to make faster, more informed decisions and reduce risk. High-end imaging technology has boosted PGS data processing revenues and generated higher-quality data and shorter cycle times. Robust visualization capabilities have enhanced customers' target interpretation, characterization and decision-making processes.

Dual-sensor GeoStreamer technology, which eliminates the receiver ghost, has proved its ability to reveal intricate geological conditions, ranging from complex salt structures to shallow carbonates and many other tough seismic imaging challenges. The results have been unequivocal: every GeoStreamer survey acquired and processed by PGS has delivered improved frequency bandwidth and data quality. In short, GeoStreamer data is always better than conventional streamer data.

**Geoscience & Engineering Department**
Geoscience and Engineering constitutes PGS' research and development (R&D) department. Projects focus on a diverse range of development and support functions for marine seismic acquisition techniques and data processing technology, including PGS' towed EM technology and other innovative technologies not yet commercialized. PGS has large R&D departments in the United States, United Kingdom and Norway, with additional groups in the Netherlands, Sweden, Australia and Singapore.

The objectives of PGS' R&D activities are to develop technologies and services that sustain the Company's position of leadership in operational efficiency and that differentiate

PGS' strong service capabilities in the identification and characterization of complex reservoirs.

PGS typically spends more than USD 60 million annually on research and development. In 2011, R&D expenditures were slightly higher, due to greater investments in developing a towed EM solution that can be commercially launched in the second half of 2012.

*GeoSource*
GeoSource was officially introduced at the EAGE conference in 2011. GeoSource is a source de-ghosting application developed for GeoStreamer data. The combined technologies, called GeoStreamer GS, provide a full de-ghosting solution: GeoStreamer eliminates the receiver ghost and GeoSource eliminates the source ghost. GeoStreamer GS further improves GeoStreamer's bandwidth and gives unrivaled image resolution. (See business case on page 37 for more details.)

*Marine Acquisition Technology*
Significant R&D efforts continue to improve all elements of the Company's acquisition systems and capabilities, including ongoing development of PGS' proprietary GeoStreamer technology.

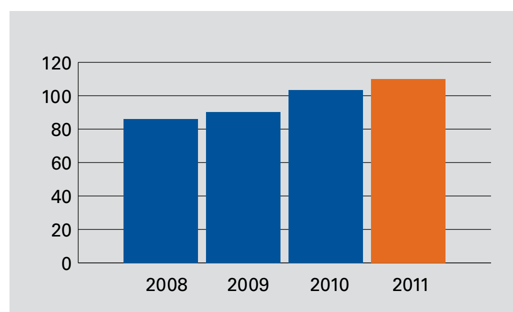
The GeoStreamer steering system, called eBird, developed in cooperation with Kongsberg Seatex, was first installed onboard a PGS 2D vessel in 2009. 3D tests began in 2010 and a complete commercial 3D spread was installed onboard *Ramform Challenger* in 2011. The next vessel to be equipped with eBird will be the *Ramform Vanguard* in early 2012. One of the main features of eBird is that its steering wings are attached directly to the streamer. This arrangement creates less drag and noise compared to conventional devices and results in safer and more efficient operations.

The next GeoStreamer development stage is nearing completion. Acoustic pingers, which provide streamer positioning, and retrievers (for streamer recovery in the event of a rupture) are being integrated within the streamer's casing. Embedding these devices, instead of externally mounting them, results in less drag and noise while making streamer deployment and retrieval more efficient. Furthermore, because these devices will get their power directly from the streamer, there will be no need for changing batteries in sea, making operations a lot safer. The new in-line pingers and retrievers are currently under development and the Company expects delivery toward year-end 2012.

*Modeling and Visualization*
Successful seismic surveys require careful planning to achieve the best-possible image quality and optimal cost effectiveness. PGS provides industry-leading survey planning, a process enhanced by the Company's proprietary survey-planning software package, Nucleus+. The software applies sophisticated

**PGS TYPICALLY SPENDS MORE THAN USD 60 MILLION ANNUALLY ON RESEARCH AND DEVELOPMENT**

**DATA PROCESSING REVENUES**
*In millions of US dollars*



seismic modeling to simulate the results of a seismic survey under various source and receiver configurations. Nucleus+ is the most comprehensive planning package on the market and is widely used throughout the oil and gas industry.

At PGS, the unique holoSeis visualization technology is an integral part of the complete seismic workflow — from quality control of seismic data during acquisition, to the building of complex velocity models for pre-stack depth migration and visualization of the end product for customers. PGS' holoSeis is in daily use at Company facilities worldwide, including onboard survey vessels. More than 500 holoSeis systems have been installed under license at customers' offices and field locations. PGS holoSeis package is a preferred tool for visualization and interpretation of exceptionally large volumes of 3D seismic data

*Processing Technology*
PGS has invested considerable resources to develop and deliver efficient data processing solutions and technological differentiators to its clients. In the realm of time processing, this has included a client-rated "best in class" 3D Surface-Related Multiple Elimination (SRME). PGS has also developed a proprietary suite of multi-dimensional regularization algorithms and technologically advanced solutions for the automated selection of dense velocity fields. Optivel is one of these proprietary solutions. Optivel uses a generic algorithm to quickly provide the optimum velocity and anisotropic parameter fields for use on very dense processing grids. Development projects also focus on methods that ensure that each processing project is completed at optimum efficiency — which reinforces PGS' value proposition of delivering outstanding quality and cost effectiveness.

PGS offers GeoStreamer as an integrated acquisition and processing solution that delivers unparalleled features that differentiate the Company's product capabilities from industry alternatives. The Company has developed proprietary technology and built up considerable know-how concerning the generation of up-going pressure wavefield data (P-UP) and full processing through to final product delivery. Workflows have been implemented to match the new generation of GeoStreamer and GeoStreamer GS survey data with non-GeoStreamer legacy data in the context of 4D processing. Full backward compatibility has been demonstrated.

PGS data processing techniques have been enhanced to take full advantage of the additional low-frequency signal content of GeoStreamer GS surveys. For example, data processing separates the wave field into up- and down-going components and uses the data to build industry-leading velocity models which result in superior depth-migrated images. The additional signal energy in the low-frequency range also benefits full waveform inversion, an automated method to refine seismic velocity models. Additional cascaded benefits are realized in later stages involving data interpretation and reservoir characterization.

**Intellectual Property**
PGS' patents, trademarks, service marks, copyrights and licenses protect its proprietary technology. The Company's intellectual property rights include the Ramform™ seismic vessels, GeoStreamer®, Multi-Transient Electro Magnetic (MTEM™), OptoSeis® and HD3D® seismic solution software, PGS hyperBeam® and GeoSource®. The Company's intellectual property rights collectively represent a material business asset. As of December 31, 2011, PGS held 305 patents under the laws of the U.S., U.K., and Norway — an increase of 52 new patents in these jurisdictions during 2011. Additional patent-protected innovations help sharpen and preserve the competitive advantages achieved by PGS through technological differentiators.

## GEOSTREAMER GS :

# A NEW ERA OF GHOST-FREE BROADBAND SEISMIC DATA

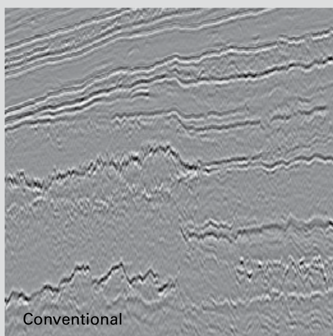
*Seismic data acquired without source or receiver sea-surface reflections (ghosts) yield subsurface seismic images of unprecedented quality. Ghost-free GeoStreamer GS technology removes the noise components that have historically plagued marine streamer seismic surveys.*

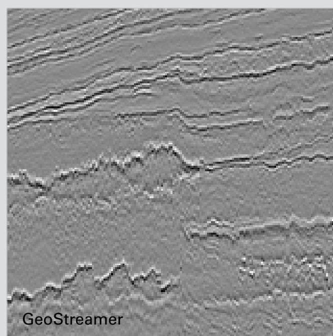
*In 2007, PGS solved a 40-year-old industry problem by eliminating the receiver ghost through the use of the Company's unique dual-sensor solution, GeoStreamer. Deploying GeoStreamer acquisition, results in seismic data with considerably broader frequency bandwidth and resolution than conventional seismic data.*

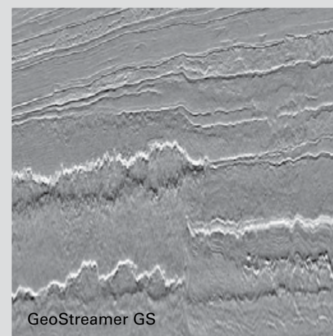
*Immune to receiver ghosts, GeoStreamer is towed at depths of 15 to 25 meters. Greater towing depth significantly increases operational efficiency while greatly reducing surface-induced noise — additional unique advantages of GeoStreamer.*

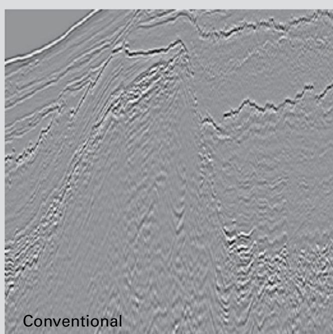
*At the EAGE conference in Vienna in 2011, PGS announced development of GeoSource, which removes the source ghost, and the resultant combined product offering: GeoStreamer GS. By deploying GeoStreamer GS technology, both source and receiver ghosts can be completely removed, thus revealing the true earth response, the ultimate expression of geological structure, stratigraphy and fluid distribution.*

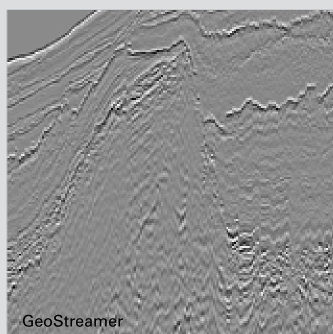
*GeoStreamer GS technology is scheduled to be available in 3D in most regions of the world by year-end 2012.*

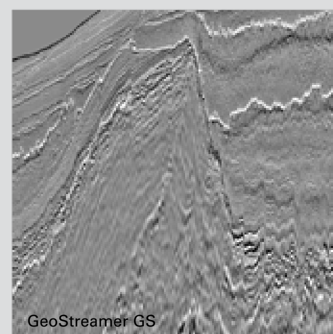



GeoStreamer GS offers significantly improved data quality compared to a conventional data set.

# CORPORATE RESPONSIBILITY: PGS' DEFINITION

**In recent years, PGS has undertaken an internal review of how the Company address the many aspects of Corporate Responsibility (CR). In 2010, an internal assessment and a gap analysis were conducted, comparing current PGS policies, initiatives and practices with international standards, recommendations and principles as set forth in the OECD Guidelines for Multinational Enterprises and the UN Global Compact.**

In 2011, PGS established an internal advisory group, made up of senior managers and specialists, to review the Company's current performance, compare it with benchmark principles, refine and, where necessary, re-define the Company's ambition levels.

PGS' many stakeholders are increasingly expecting the Company to communicate its Corporate Responsibility goals and PGS wants to use this opportunity to demonstrate its performance. Stakeholders include PGS employees, investors, customers, subcontractors, agents and the local communities in which the Company operates.

In 2011, PGS adopted the Company's Corporate Responsibility Framework consisting of four fundamental building blocks: People, Environment, Conduct and Stakeholder engagement. Each category addresses a range of related issues commonly associated with Corporate Responsibility. Naturally, CR awareness and compliance issues span traditional departmental borders.

PGS FIRST RESPONSIBILITY REVIEW 2011 DESCRIBES THE COMPANY'S VARIOUS CR SYSTEMS AND PROCESSES

PGS' Corporate Responsibility Framework guides the Company's performance and ensures that PGS:

- Provides the safest working areas for employees, contractors and third parties to enable the Company to acquire better seismic data more efficiently than competitors
- Conducts business activities according to PGS' Core Values, addressing all legal and regulatory requirements relevant to the Company's activities
- Minimizes harm to the environment and local communities by assessing and reducing the environmental and social risks associated with PGS' operations
- Communicates with stakeholders in a timely and transparent manner.

PGS first Responsibility Review 2011, which is published separately from this annual report, describes the Company's various systems and processes. The Responsibility Review provides transparent insight into PGS' culture of Corporate Responsibility.

PGS believes that it has much to be proud of in regards to its commitment to Corporate Responsibility and CR performance throughout the Company, both at sea and in the offices, in R&D projects and at data processing centers worldwide.

RAMFORM CHALLENGER

# HEALTH, SAFETY, ENVIRONMENT AND QUALITY

**Health, Safety, Environment & Quality (HSEQ) management and reporting are key parameters for the evaluation of business performance at all PGS management levels and by the Company's Board of Directors.**

Two important projects in 2011 reinforced the Company's strong HSEQ culture and improved HSEQ management systems: OHSAS 18001 certification and Group wide HSEQ training courses.

In early 2011, PGS began a process aimed at obtaining certification of the Company's occupational health and safety management systems. OHSAS 18001 certification was achieved in December 2011. OHSAS 18001 is an internationally recognized standard that defines requirements for management and record-keeping systems for occupational health and safety; DNV was the certifying organization. The broad scope of the certification process covered a fleet comprising 14 vessels and four main offices located at Lysaker, Houston, Weybridge and Singapore.

An HSEQ competence and awareness campaign initiated in 2010 was continued in 2011. Several training initiatives were also implemented in 2011:

- Development and execution of a two day HSEQ Supervisor training course, held at several locations and attended by more than 100 managers
- A one-day basic-level HSEQ awareness course; attendance in 2011 exceeded 300 employees
- Development and online publication of e-learning courses; five courses were launched in 2011
- HSEQ workshops for offshore crews, held onboard vessels or during project start-ups, that focused on HSEQ awareness, risk management, safety procedures and workplace conduct
- Advanced HSEQ training for offshore mangers (Party Chiefs and Captains) via temporary assignments at onshore HSEQ departments; a key objective was the mutual transfer of knowledge and experience between offshore and land-based personnel.

OHSAS 18001 CERTIFICATION WAS ACHIEVED IN DECEMBER 2011

In 2011, PGS total activity (core fleet vessels and PGS offices) comprised 11,773,684 man-hours. Total activity in 2010 was 11,786,931 man-hours.

The PGS organization (core fleet vessels and PGS offices) experienced the following health and safety incident levels:

- Zero fatalities, compared with zero in 2010
- 11 Lost Time Incidents, compared with seven in 2010
- Three Restricted Work Day Cases, compared with 10 in 2010
- Three Medical Treatment Cases, compared with six in 2010
- Five High Potential Incidents, compared with five in 2010.

The overall Lost Time Incident Frequency (LTIF) increased to 0.93 per million man-hours in 2011, compared with 0.59 in 2010. The Total Recordable Case Frequency (TRCF) decreased to 1.44 per million man-hours from 1.94 in 2010.

While the number of Lost Time Incidents increased in 2011, it is important to note that the number of Restricted Work Day Cases and Medical Treatment Cases decreased significantly. The occurrence of High Potential Incidents remained unchanged. The number of total recordable incidents declined from 23 in 2010 to 17 in 2011.

In 2012, PGS will initiate the process for obtaining ISO 14001 certification, the Environmental Management Systems standard of the International Organization for Standardization. The Company's objective is to receive certification by year-end 2012.

**Marine Operations**

In 2011, PGS Marine Operations (core fleet) experienced the following health and safety incident rates:

- Zero fatalities, compared with zero in 2010
- 10 Lost Time Incidents, compared with seven in 2010
- Three Restricted Work Day Cases, compared with 10 in 2010
- Three Medical Treatment Cases, compared with five in 2010
- Five High Potential Incidents, compared with four in 2010.

In 2011, PGS Marine Operations (core fleet) comprised 7,753,704 man-hours, compared with 7,870,271 in 2010.

The overall LTIF increased to 1.29 compared with 0.89 per million man-hours in 2010. The TRCF decreased to 2.06 compared with 2.80 per million man-hours in 2010. The number of total recordable incidents declined from 22 in 2010 to 16 in 2011.

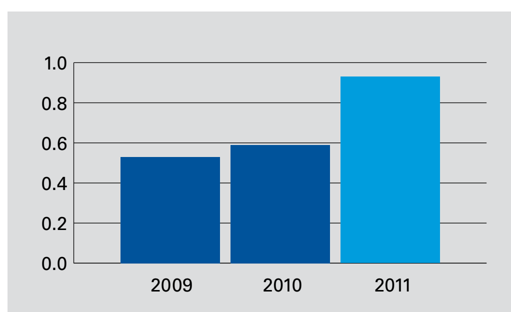
**Office Activities**
In 2011, PGS offices experienced the following health and safety incident rates:
- Zero fatalities, compared with zero in 2010
- One Lost Time Incidents, compared with zero in 2010
- Zero Restricted Work Day Cases, compared with zero in 2010
- Zero Medical Treatment Cases, compared with one in 2010
- Zero High Potential Incidents, compared with one such incident in 2010.

In 2011, PGS office operations totaled 4,019,980 man-hours, compared with 3,978,220 in 2010.

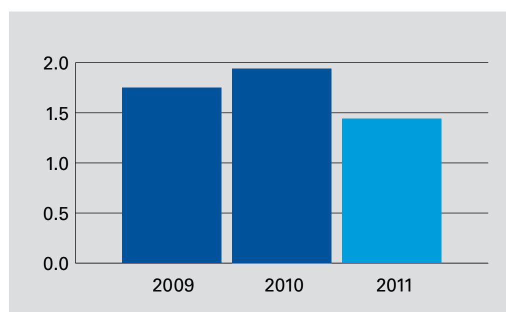
The overall LTIF increased to 0.25 per million man-hours in 2011, compared with 0.00 in 2010. The TRCF was 0.25 per million man-hours in 2011, compared with 0.25 in 2010.

IN 2012, PGS WILL INITIATE THE PROCESS FOR OBTAINING ISO 14001 CERTIFICATION

**LOST TIME INCIDENTS FREQUENCY (LTIF)**
*Per million man-hours*




**TOTAL RECORDABLE CASE FREQUENCY (TRCF)**
*Per million man-hours*



# THE PGS SHARE

**The PGS share has its primary listing on the Oslo Stock Exchange. In the United States, shares are quoted on the Pink Sheets and trade as American Depository Shares (ADS) in the OTC market.**

**Share Facts**
PGS has 217,799,997 shares outstanding (including ADS), all of which are of the same class, with equal voting and dividend rights. Each share has a par value of NOK 3.

PGS' ordinary shares are listed on the Oslo Stock Exchange (ticker: PGS) and denominated in Norwegian kroner (NOK). The Company's American Depository Shares are quoted on the US Pink Sheets (ticker: PGSVY) and denominated in US dollars (USD); each ADS represents one share.

**Share Liquidity**
Interest among investors in the PGS share is strong. On average, approximately 3.1 million shares were traded daily in 2011 which measured by turnover value, made PGS the eighth-most traded stock on the Oslo Stock Exchange. Excluding companies in which the Norwegian government is a substantial owner, PGS ranks number three, behind Seadrill and Subsea 7. The liquidity of PGS' ADS is significantly lower; the average daily trading volume was approximately 15,000 shares in 2011.

**Information Policy**
All Company information considered material to shareholders is published via the Oslo Stock Exchange's news service: www.newsweb.no, and posted on the Company's website: www.pgs.com and other news channels. PGS holds public presentations and arranges conference calls and webcasts in connection with the release of quarterly results. The Company hosts an annual Capital Markets Day presentation for the investment community, and management regularly meets with investors and participates at conferences.

ON AVERAGE, APPROXIMATELY 3.1 MILLION SHARES WERE TRADED DAILY IN 2011

In 2011, the Norwegian Investor Relations Association and the Oslo Stock Exchange prepared a code of practice for reporting investor relations (IR) information. PGS complies with the new Oslo Stock Exchange code.

On January 1, 2008, the amended Norwegian Securities Trading Act and Stock Exchange Act went into effect. A requirement of the new legislation and regulations is that all companies whose shares trade on the Oslo Stock Exchange must publish their financial reports in Norwegian. PGS has been exempted from this requirement. The exemption stems from factors that include the Company's international operations; PGS' listing on the Pink Sheets in the US, which requires press releases to be in English; the composition of PGS' shareholder base, which has remained international for several years; and the use of English as the Company's in-house language.

Early in 2010, PGS was also exempted from the requirement in the Norwegian Accounting Act (Section 3-4, third paragraph) that companies produce a Norwegian version of their annual report.

**Treasury Shares**
PGS is authorized to purchase up to 10 percent of its own share capital. The authorization was made by the Company's 2011 Annual General Meeting and remains valid for one year following its date of registration with the Norwegian Register of Business Enterprises. As of December 31, 2011, the Company owned 1,223,921 own shares, equal to 0.56 percent of total shares outstanding.

**Dividend**
PGS has a dividend policy aimed at distributing 25-50 percent of net income to shareholders over the business cycle. The Board of Directors propose to the Annual General Meeting in 2012 a dividend for the year ended December 31, 2011 of NOK 1.10 per share (NOK 240 million in total).

**Analyst Coverage**
As of December 31, 2011, there were 27 sell-side analysts covering PGS on a regular basis, with market updates and estimates of PGS' financial results. Of these, 12 are based in the UK, two in France and the remainders are based in Norway. An updated list of analyst coverage is published on the Company's website: www.pgs.com.

## 20 LARGEST PGS SHAREHOLDERS AS OF DECEMBER 31, 2011

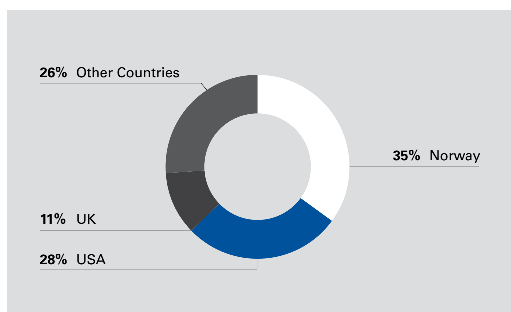
| RANK | SHAREHOLDER | SHARES HELD | OWNERSHIP (%) |
|---|---|---|---|
| | | | |
| 1 | Folketrygdfondet | 21,498,610 | 9.87 |
| 2 | State Street Bank | 17,728,269 | 8.14 |
| 3 | Euroclear Bank | 6,770,384 | 3.11 |
| 4 | State Street Bank | 5,968,116 | 2.74 |
| 5 | Clearstream Banking | 5,777,215 | 2.65 |
| 6 | State Street Bank | 4,517,352 | 2.07 |
| 7 | JPMorgan Chase Bank | 4,289,453 | 1.97 |
| 8 | State Street Bank | 3,830,016 | 1.76 |
| 9 | Danske Bank | 3,565,554 | 1.64 |
| 10 | Tapiola | 3,000,000 | 1.38 |
| 11 | Citibank | 2,655,692 | 1.22 |
| 12 | Citibank [1)] | 2,620,485 | 1.20 |
| 13 | Caceis Bank | 2,579,304 | 1.18 |
| 14 | The Northern Trust | 2,412,335 | 1.11 |
| 15 | Bank Of New York Mellon | 2,362,845 | 1.08 |
| 16 | Morgan Stanley | 2,329,795 | 1.07 |
| 17 | Statoil Pensjon | 2,194,806 | 1.01 |
| 18 | Goldman Sachs | 2,189,251 | 1.01 |
| 19 | SEB | 2,161,950 | 0.99 |
| 20 | Vanguard Energy Fund | 2,128,238 | 0.98 |
| | | | |
| **Total, 20 largest shareholders** | | **100,579,670** | **46.18** |

1. The beneficial owners of American Depository Shares held by depositaries are not disclosed in the above table due to depository agreement terms.

PGS HAS A DIVIDEND POLICY AIMED AT DISTRIBUTING 25-50 PERCENT OF NET INCOME TO SHAREHOLDERS OVER THE BUSINESS CYCLE

## CITIZENSHIP OF SHAREHOLDERS

*as of December 31, 2011*



**Shareholders**
PGS had 7,503 shareholders on record as of December 31, 2011, according to the Norwegian Central Securities Depository (VPS).

By year-end 2011, non-Norwegian investors owned approximately 65 percent of outstanding shares. During 2011, non-Norwegian ownership increased by approximately five percentage points, mainly driven by US-based investors increasing their proportionate holdings from approximately 20 percent to just under 30 percent. Investors in the UK decreased their ownership in 2011 from approximately 15 percent to slightly below 10 percent. Other non-Norwegian shareholders, mainly domiciled in Europe, own approximately 25 percent of PGS' outstanding shares.

As of December 31, 2011, Wellington Management Company was the largest PGS shareholder, owning 24.6 million shares or 11.3 percent of the outstanding shares.

**2012 Annual General Meeting**
PGS' 2012 Annual General Meeting is scheduled for May 3, 2012 at the Company's headquarters at Strandveien 4, Lysaker, Oslo, Norway. Each PGS share is entitled to one vote. Please note that Norwegian regulations stipulate that shares must be registered in the name of a specific owner in order for that person (or duly authorized agent) to be allowed to vote. Accordingly, for ADS to qualify to vote at an annual or extraordinary general meeting, a specific shareholder must be registered with Norway's VPS as the holder of title to said shares before the general meeting.

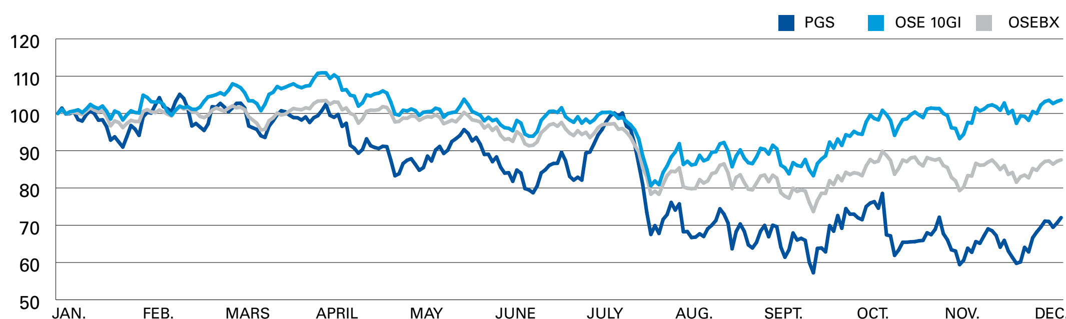
Shareholders who wish to attend the Annual General Meeting are requested to pre-register via the Company's registrar. Registration and proxy forms will be mailed to shareholders' registered addresses along with meeting documents. The registrar's contact information follows:

DNB ASA
Registrar Services
Stranden 21
NO-0021 Oslo, Norway
Phone: +47 22 48 35 90
Fax: +47 22 48 11 71
Email: kua@dnb.no

Owners of American Depository Shares can vote by surrendering their shares to the ADS depositary bank, Citibank, so that title to the shares in question is appropriately recorded in the share register maintained by Norway's VPS prior to the meeting date.

BY YEAR-END 2011, NON-NORWEGIAN INVESTORS OWNED APPROXIMATELY 65 PERCENT OF OUTSTANDING SHARES

**PGS VS. NORWEGIAN MARKETS IN 2011**



PGS IS RATED 'BB' BY STANDARD AND POOR'S AND 'BA2' BY MOODY'S INVESTOR SERVICE

**Contact Information for ADS Shareholders**
The depositary bank for PGS' American Depository Shares (ADS) is Citibank, as follows:

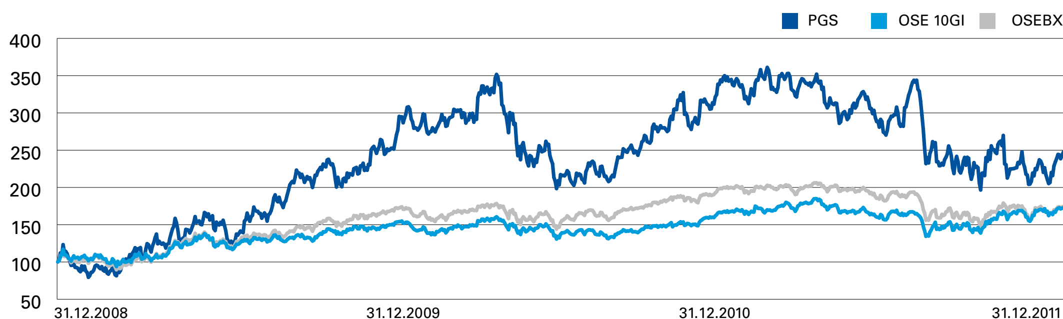
Citibank Shareholder Services
PO Box 43077
Providence, RI 02940-3077
United States of America

Toll free: +1 877 CITI ADR
Outside the US, tel: +1 781 575 4555
Fax: +1 201 324 3284
Email: citibank@shareholders-online.com

**Corporate Debt Rating**
PGS is rated 'BB' by Standard and Poor's and 'Ba2' by Moody's Investor Service. The Company issued USD 300 million of Senior Notes with seven years maturity in 2011. Both Standard and Poor's and Moody's Investor Service awarded the facility the same rating they had applied at the corporate level. PGS' secured debt, which includes the Term Loan B and the Revolving Credit Facility, is only rated by Moody's Investor Service; Moody's awarded these obligations the same rating as applied at the corporate level.

**International Financial Reporting Standards (IFRS)**
PGS began preparing and presenting its financial statements based on IFRS as of January 1, 2007. A transition document was published that quantifies certain accounting differences between IFRS reporting and PGS' prior reporting according to US GAAP. The document is available on the Company's website: www.pgs.com.

**PGS VS. NORWEGIAN MARKETS FROM 2009 TO END 2011**



# CORPORATE GOVERNANCE

**Petroleum Geo-Services is committed to maintaining high standards of corporate governance. We believe that effective corporate governance is essential to our Company's success and establishes the framework by which we conduct ourselves in delivering services to our customers and creating value for our shareholders.**

Petroleum Geo-Services ASA is registered in Norway as a public limited liability company, and our corporate governance model is based on Norwegian corporate law and the Norwegian Code of Practice for Corporate Governance. To the extent practicable, PGS adheres to requirements applicable to registrants of foreign securities in the United States, where our American Depositary Shares (ADS) are publicly traded. We have also implemented corporate governance guidelines particularly suited to our Company and the industry in which we operate.

The Norwegian Public Limited Companies Act section 5-6 (4) requires that the Ordinary General Meeting approves the statement of Corporate Governance. This report will therefore be presented to the General Meeting on May 3, 2012.

Our corporate governance principles, which have been adopted by our Board of Directors, are summarized below. Our website provides full versions of our basic corporate government documents. These items include the Company's articles of association, corporate governance policy, the Board of Directors' Rules of Procedure, and the charters for the Company's Audit Committee, Remuneration and Corporate Governance Committee, and Nomination Committee. The documents can be downloaded from our website: www.pgs.com.

In accordance with the Norwegian Accounting Act section 3-3b PGS is required to give a statement of our corporate governance in the Board of Directors report. In the Board of Directors report we refer to this document.

**Code of Conduct and Core Values**
We have adopted a Code of Conduct that reflects our commitment to our shareholders, customers, and employees to carry out our business with the utmost integrity. Our Code of Conduct and Core Values are available in full on our website: www.pgs.com.

**Business**
Our business purpose, as presented in the Company's Articles of Association, is as follows:

*"The business of the Company is to provide services to and participate and invest in energy related businesses."*

Our business operations and the goals and strategies for our business areas are presented in greater detail on pages 16-37 of this annual report.

**Equity and Dividends**
The Board continually monitors the adequacy of the Company's equity in light of its objectives, strategy, and risk profile.

The Board of Directors has adopted a dividend policy whereby it is the intention to distribute between 25 percent to 50 percent of net income as dividends.

The Board of Directors is authorized to buy back up to 10 percent of the Company's share capital. The current such authorization expires no later than June 30, 2012.

It has been an ongoing practice of PGS shareholders to grant limited authorizations to the Board of Directors permitting it to increase the Company's share capital and/or acquire the Company's shares (treasury shares) for certain defined purposes. Separate General Meeting votes are held for (a) authorizations related to employee stock insentive programs and (b) authorizations for other purposes. When a proposed authorization encompasses share capital increases and/or acquisition of treasury shares for various purposes, the Company does not find it practical to hold separate votes on each proposed purpose. Authorizations are time-limited; they expire at the next AGM.

**Equal Treatment of Shareholders and Transactions with Close Associates**
PGS has a single share class where all shares

carry the same rights. At our General Meetings, each share carries one vote. Our Board of Directors is committed to equal treatment of shareholders in all respects.

When applicable, transactions involving the Company's own shares should be carried out through a stock exchange, or at prevailing stock-exchange prices if carried out in an alternative manner.

Transactions between the Company and shareholders, a shareholder's parent company, members of the Board of Directors, executive officers or close associates of any such party (referred to as "Close Associates") shall be conducted at arm's length and at market terms. Material transactions with Close Associates will be subject to independent valuation by third parties. According to PGS' Code of Conduct, our employees shall not have any personal or financial interest that might conflict with those of PGS nor influence, or appear to influence judgments or actions in carrying out their responsibilities on behalf of the Company. According to our Rules of Procedure, a member of our Board of Directors may not participate in discussions or decision-making as to issues in which the director or any person closely associated to the director has a material personal or financial interest. The Code of Conduct and Rules of Procedure are available on our website: www.pgs.com.

**Freely Transferable Shares**

The Company's shares are freely transferable.

**General Meetings**

Through participation in General Meetings, our shareholders exercise ultimate authority over the Company and elect the members of its Board of Directors and the chairperson of the Board of Directors.

Pursuant to PGS' Articles of Association, the notice of an Annual General Meeting (AGM) is distributed at least four weeks in advance of the meeting to shareholders or their depository banks. For ADS holders, the record date for notice-distribution purposes is set at approximately five weeks prior to the AGM. A copy of the call notice with appendices will be posted on our website: www.pgs.com.

Notices convening Extraordinary General Meetings (EGM) must be distributed at least two weeks ahead of the meeting. The Board of Directors is to call shareholders to an EGM upon a written demand by the Company's independent auditor or shareholders representing at least five percent of the share capital, or for other purposes. Shareholders who wish to attend a General Meeting must notify the Company's registrar or PGS by the date stated in the meeting notice, which must be at least two working days before the General Meeting.

According to the Company's Articles of Association, documents to be considered at the General Meeting may be published on our website. The same applies to documents that, due to statutory requirements must be attached to, or included in the notice calling the General Meeting. If the documents are published in such a manner, the statutory requirements for distribution shall not apply. Nevertheless, shareholders are entitled to request that documents to be considered by the General Meeting be sent to them via regular mail.

To vote at General Meetings, in person or by proxy, a shareholder must be registered with the Norwegian Central Securities Depository (VPS). Holders of ADS may vote according to the underlying shares by: (a) having the underlying shares transferred to an account with the Norwegian Central Securities Depository in the name of the holder, (b) attending the meeting as a shareholder by providing their name and address and a confirmation from Citibank, depositary for the ADS, to the effect that they are the beneficial owner of the underlying shares, or (c) authorizing Citibank to vote the ADS on their behalf.

An owner with shares registered through a custodian has voting rights equivalent to the number of shares covered by the custodial arrangement, provided that the owner of the shares, within two working days of the General Meeting, provides us with his or her name and address together with written confirmation from the custodian to the effect that he or she is the beneficial owner of the shares held in custody.

Written and/or electronic voting in accordance with the Public Companies Act § 5-8 b), shall be allowed for meetings where such method of voting is arranged by the Board of Directors.

All directors generally attend the AGM. In accordance with our Articles of Association, the chairperson of the Board of Directors chairs General Meetings. This is a deviation from the NUES Recommendation (identified below) No. 6 for making arrangements to ensure an independent chairman for the General Meetings. The reason for this deviation is that the Company has found this more practical and that PGS wishes to ensure that General Meetings are chaired by a competent person having proper insight in PGS' overall operations.

**Nomination Committee**

According to our Articles of Association, the Company has a Nomination Committee

comprised of three members to be elected by our shareholders at the AGM. Nominations should take into account the interests of shareholders in general. The members and the chairperson of the Nomination Committee are elected at the General Meeting. The majority of Nomination Committee members shall qualify as independent parties, pursuant to the Norwegian Code of Practice for Corporate Governance. The term of service shall be two years unless the General Meeting determines that the period shall be shorter.

The Nomination Committee's main responsibilities, which are set out in its charter, are to propose nominees for election as members and chairperson of the Board of Directors and the Nomination Committee. Further, the Committee proposes remuneration to be paid to members of the Board of Directors and Nomination Committee. Remuneration is approved by the General Meeting. Annually, the Nomination Committee produces a written report containing its nominations and proposals, which is distributed in advance of each AGM.

Once a year the Nomination Committee meet with each individual director and discuss the how the Board and its committees function and whether there are a need for changes to the Board.

**Current Nomination Committee**
The current Nomination Committee comprises Roger O'Neil (chairperson), C. Maury Devine, and Hanne Harlem. All three were reelected at the AGM held 11 May 2011 for a service period ending with the 2012 AGM.

Shareholders who wish to propose new Board members may do so by submitting a candidate's name to PGS' investor relations staff via the Company's website: www.pgs.com by following the link, "Nominate a Board Member." The deadline for submissions each year is the end of February. Alternatively, candidates can be proposed by letter to PGS or via email to: ir@pgs.com. PGS does not employ any Nomination Committee members and none is a member of our Board of Directors.

In 2011, the Nomination Committee held two meetings. The Nomination Committee's report on its work and recommendations will be distributed with the notice of the 2012 Annual General Meeting.

**Board of Directors — Composition and Independence**
According to PGS' Articles of Association, our Board of Directors shall have from three to thirteen directors. The period of service for members of the Board of Directors shall be one year.

The Board has adopted its own Rules of Procedure that establish in more detail its roles and responsibilities, including:

- Directors' qualifications
- Requirement that a majority of the Board, a majority of the members of the Remunetation and Corporate Governance Committee and all members of the Audit Committee are considered to be independent directors
- Annual review and determination of the independence of each director.

The composition of the Board of Directors is a reflection of the Company's commitment to protect the common interests of all shareholders and the Company's need for expertise, capacity, and diversity.

All directors are independent of the Company's management. All directors are also per December 31, 2011 independent of our major business relations and major shareholders. No member of our Board of Directors may be an executive of PGS. Directors are not permitted to perform paid consultancy work for us. Five board members, directly or indirectly, own PGS shares.

Shareholders and other interested parties may communicate directly with our independent directors by written correspondence addressed to Petroleum Geo-Services, Board of Directors (Independent Members), Secretary of the Board of Directors and General Counsel Rune Olav Pedersen, PO Box 89, NO-1325 Lysaker, Norway. On www.pgs.com we also invite any shareholders to set up a meeting or call with Mr. Pedersen where any issue on corporate governance or corporate responsibility may be discussed.

**Current Board of Directors**
As of December 31, 2011, the Board of Directors comprised seven shareholder representatives. Current board members are presented on the Company's website: www.pgs.com and in this annual report. Board meeting attendance in 2009-2011 exceeded 75 percent for each board member elected at the last AGM.

**The work of the Board of Directors**
In accordance with Norwegian corporate law, our Board of Directors has overall responsibility for management of our company, while our CEO is responsible for day-to-day management.

The Board of Directors supervises our CEO's day-to-day management and company activities in general. The Board of Directors is also responsible for ensuring that appropriate management, guidelines, and control systems are in place and are followed. Our CEO, as agreed with the chairperson of the Board of Directors, annually submits a schedule for the meetings of the Board of Directors in

the upcoming calendar year. The schedule is subject to Board approval. In 2011, the Board of Directors held 9 meetings including conference calls.

Key elements of the Rules of Procedure covering the Board of Directors' responsibilities to determine the Company's financial targets, set strategies along with the CEO and executive committees, and approve business plans, budgets, and budgetary and risk frameworks. In its supervision of the Company's business activities, the Board of Directors will seek to ensure that satisfactory procedures exist for monitoring and follow-up of board approved corporate principles and guidelines covering areas such as ethical conduct; adherence to laws, rules, and regulations; health, safety and environment; and corporate social responsibility.

The rules also require an annual self-evaluation to determine whether the Board of Directors and its committees are functioning effectively. The annual self evaluation is prepared and facilitated by the Remuneration and Corporate Governance Committee. An anonymous survey is carried out and the results are discussed in the Board of Directors. The results of the survey is made available for the Nomination Committee.

The tasks and duties of our CEO vis-à-vis PGS' Board of Directors are also outlined in the rules, along with the tasks and duties of the chairperson of the Board of Directors. The CEO participates in all board meetings other than closed sessions. The Board of Directors elects a vice chairperson to chair board meetings in the chairperson's absence. The full text of the Board of Directors' Rules of Procedure is available at: www.pgs.com.

Our governance structure is organized as described below.

Our Board of Directors is responsible for the development and supervision of our business activities. The Board has established an Audit Committee and a Remuneration and Corporate Governance Committee to assist in organizing and carrying out its responsibilities.

Board responsibilities include:

- The Board of Directors appoints PGS' CEO
- The Board of Directors, along with the CEO, is committed to operating PGS in an effective and ethical manner in order to create value for our shareholders. Our Code of Conduct requires management to maintain an awareness of the risks involved in carrying out our business strategies. Personal interests must not override or conflict with the interests of PGS.

The responsibilities of the CEO include:

- The CEO is responsible for the day-to-day management of company activities
- The CEO organizes PGS' Executive Committees and our Disclosure Committee to further assist the CEO
- The CEO, under the guidance and supervision of our Board of Directors and the Audit Committee, is responsible for ensuring that the Company's financial statements in all material respects, fairly present our financial condition and the results of operations. Timely disclosure of issues to the Board of Directors is also essential to the assessment of the Company's financial condition, business performance and risks.

**Board of Directors Committees**

Our Audit Committee comprises board members Harald Norvik (chairperson), Carol Bell, and Daniel J. Piette. All committee members are considered independent of the Company. The committee's functions are to assist our Board of Directors in its supervision of the integrity of PGS' financial statements; to monitor the independent auditor's qualifications, independence, and performance; to monitor the performance of the internal audit function; and to promote and control compliance with laws and regulatory requirements.

PGS' Remuneration and Corporate Governance Committee comprises board members Holly Van Deursen (chairperson), Annette Malm Justad, and Ingar Skaug. The function of the committee is to assist in matters relating to the compensation, benefits, and perquisites of our CEO and other senior executives. Review and modification of the Company's guidelines for good corporate governance are also committee responsibilities.

**Risk Management and Internal Control**

The Board of Directors is responsible for ensuring that appropriate guidelines, monitoring, and internal control systems are in place and effective.

The Board of Directors has systems in place to ensure that the CEO exercises appropriate and effective management. Further the Board of Directors supervises and controls that effective internal control systems are in place, including systems for risk management and financial reporting. The Board of Directors makes sure that the internal control functions are working as intended and that necessary measures are taken to reduce extraordinary risk exposure. Furthermore, the Board of Directors makes certain that satisfactory routines exist to ensure follow-up of principles and guidelines adopted by the Board of Directors governing ethical conduct; compliance with laws, rules, and regulations; health, safety, and

working environment; and corporate social responsibility.

PGS' management conducts day-to-day follow-up of financial management and reporting. The Board of Directors' Audit Committee assesses the integrity of our accounts. It also inquires into, on behalf of the Board of Directors, issues related to financial review, internal control, and external audit of PGS' accounts.

PGS has an appropriate and effective internal auditing system, and the Board of Directors ensures that it is capable of producing reliable annual reports and that the external auditor's recommendations are given thorough attention.

Each year the internal audit department consults management and prepares a risk matrix setting out the main risks for the Company. These risk factors and what the Company is doing to mitigate them are subject to discussion in the Board of Directors.

The Board of Directors shall conduct a periodic review of PGS' corporate governance policies and procedures, including the Board of Directors' Rules of Procedure. This process is done annually and managed by the Remuneration and Corporate Governance Committee. Any changes to policies or procedures are presented to the Board of Directors for approval.

The Company's anti-corruption program includes a policy statement, guidelines on several ethical issues, periodic training, compulsory contract wording etc. This program is evaluated yearly by the Audit Committee.

Any non-conformance is systematically followed up and corrective measures are implemented and monitored.

**Remuneration of the Board of Directors and Executive Management**
Remuneration of board members is not linked to performance, but is based on participation in meetings and is approved annually by the General Meeting. Board members shall not solicit or accept specific assignments for PGS beyond their role as board members. Board members do not hold any PGS share options.

For details on compensation for individual board members, please see Note 34 to the financial statement of PGS.

Remuneration paid to board members will be proposed by the Nomination Committee, according to its charter, and submitted to the AGM for approval.

The compensation level, structure and guidelines for executive managers are subject to annual review by the Remuneration and Corporate Governance Committee and any compensation issues pertaining to the CEO is approved by the Board of Directors. The Remuneration and Corporate Governance Committee uses an external advisor for this work and a specific peer group of comparable companies and an executive remuneration philosophy has been adopted. This is done in order to ensure and facilitate a structured approach to the annual review of executive compensation. The Remuneration and Corporate Governance Committee reviews the total compensation level, the mix between fixed and performance related compensation and the mix between short, medium and long term compensation.

PGS currently has a compensation structure for our executive managers that include base salary, benefits such as free newspaper and mobile phone etc, cash bonus, share bonus, a pension plan and stock option programs. Features in these programs include an absolute ceiling on performance-related remuneration, shares received as bonus will have to be held for at least three years and a cap on maximum gain on the option programs.

For further details on our compensation structure and total compensation to executive team members, see Note 34 to the financial statement of PGS.

**Information and Communications**
Our Board of Directors is committed to reporting financial results and other relevant information based on openness and the requirement for equal treatment of all shareholders and securities market participants. As a listed company, we comply with relevant disclosure rules and regulations. Announcements are released through the Thomson Reuters reporting channel and posted on the Oslo Stock Exchange's news service: www.newsweb.no. In addition, all announcements are available on the Company's website: www.pgs.com. Our policy of accessibility for shareholders is also presented on the Company's website.

**Takeover Bids**
The Board of Directors has established guiding principles for how it will act in the event of a takeover bid. The Board of Directors will ensure that all shareholders are treated equally and prevent disruptions to or interference with Company operations to the extent possible. In the event of a takeover bid, the Board of Directors will, in accordance with its overall responsibility and good corporate governance, act for the benefit of our shareholders and ensure that they are given sufficient information in the matter. If a takeover bid

is made, the Board of Directors will issue a statement containing a recommendation as to whether our shareholders should accept or reject the offer, including an independent valuation of the offer. PGS' Articles of Association do not contain any restrictions, limitations, or defense mechanisms against acquisition of our shares.

**Auditor**

Our Audit Committee shall support the Board of Directors in the administration and exercise of its responsibility for supervision of the work of the independent auditor, who shall keep the Board of Directors informed of all aspects of its work for PGS. This duty includes submission of an annual plan for the audit of PGS. The auditor attends all Audit Committee meetings and, at least once a year, meets with our Audit Committee without the presence of management. In-house policies govern the use of the auditor's services.

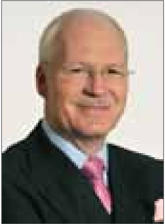
The independent auditor meets with our full Board of Directors at least once a year in connection with the preparation of the annual financial statements and, at least once a year, presents a review of our financial reporting and internal control procedures for financial reporting. At least once a year our independent auditors have a meeting with the Board of Directors without the precense of any member of the executive management.

The remuneration paid to the auditor for mandatory and other audit services will be reported to the AGM for approval.

**Compliance with Laws, Rules, Regulations and Recommendations**

As part of our Business Practice outlined on www.pgs.com, PGS is inter alia commited to comply with relevant laws, rules and regulations. In addition, PGS complies with the current recommendations given by the Norwegian Code of Practice for Corporate Governance ("NUES Recommendations"), subject only to the deviations identified and justified in this report. The NUES Recommendations are available at www.nues.no

# BOARD OF DIRECTORS



**FRANCIS GUGEN**
**Chairperson**
(Elected 2003)

**FRANCIS GUGEN** was elected PGS Board Chairman in May 2009. Currently an energy-industry consultant and investor, he worked at Amerada Hess Corporation for 18 years, from 1982 to 2000. Mr. Gugen served as Chief Executive of Amerada Hess UK from 1995 to 2000 and Amerada Hess' Chief Executive of North West Europe from 1998 to 2000. His board positions at listed companies include Board Chairman of IGas Energy Plc and Board Member of SBM Offshore NV; Mr Gugen is an IGas Energy investor. Francis Gugen is also Chairman of the Board and investor in a number of privately held companies. A UK chartered accountant, he has also worked at Arthur Andersen. As of April 4, 2012, Mr. Gugen owns 30,000 PGS shares.

**HARALD NORVIK**
**Vice Chairperson**
(Elected 2003)
*Audit Committee Chairperson*

**HARALD NORVIK** is an independent advisor and consultant. He is Chairman of the Board of Telenor, Board Chairman of Aschehoug Publishing House and Board Member of ConocoPhillips, Inc., Deep Ocean Holding and Umoe. Mr. Norvik was President and Chief Executive Officer of Statoil from 1988 to 1999. From 1981 to 1988, he was Finance Director and a Member of the Executive Board of the Aker Group. Harald Norvik served as Personal Secretary to the Prime Minister of Norway and as State Secretary in the Ministry of Petroleum and Energy from 1979 to 1981. He received his Master of Science in Business from the Norwegian School of Economics and Business Administration. As of April 4, 2012, Mr. Norvik owns 8,000 PGS shares.

**DR.CAROL BELL**
**Board Member**
(Elected 2009)
*Audit Committee Member*

**DR.CAROL BELL** has over 30 years of experience in the energy industry, with particular expertise in investment and financing in the oil and gas sector. She is the senior non-executive director of Hardy Oil and Gas plc, a non-executive director of Salamander Energy plc, a Member of the Board of Det norske oljeselskap ASA and a Member of the Investment Advisory Committee of Gemini Oil and Gas, a private investment fund. Dr. Bell is Chair of the Investment Committee of Girton College in Cambridge. She has held senior positions in investment banking, including Managing Director of the Global Oil & Gas Group at Chase Manhattan Bank, Head of European Equity Research at JPMorgan and Global Head of its Oil and Gas Equity Research Team. Dr. Bell began her career in corporate planning and development with RTZ Oil and Gas and later worked at Charterhouse Petroleum plc. She was awarded a Ph.D. in May 2005 for her research on the evolution of economic and trade relations in the Ancient Eastern Mediterranean across the Late Bronze/Iron Age transition and in 2006 published a book on this subject. Dr. Bell is Honorary Treasurer of the British School at Athens. She was educated as a scientist, earning an M.A. in Biochemistry from Cambridge University, a B.A. in Geology from the Open University, and a Ph.D. in Archaeology from University College, London. As of April 4, 2012, Dr. Bell owns 5,000 PGS shares.

**DANIEL PIETTE** is CEO and a Board Member of Object Reservoir, a technology company focused on addressing complex reservoir modeling challenges in shale and other unconventional environments. As President and CEO of OpenSpirit Corporation from 2003 to 2011, Mr. Piette led the upstream and E&P software company through seven years of 20 percent annual growth and spearheaded its acquisition by TIBCO Software, Inc. (NASDAQ: TIBX) in 2010. After receiving his B.Sc. with honors in Mining Engineering from the University of Wisconsin-Madison in 1980, he held several executive management positions in the oil and gas industry, including business unit manager for the land acquisition systems group at Input/Output, President and CEO of Bell Geospace and Vice President and General Manager of the Asia Pacific region for Landmark Graphics. As of April 4, 2012, Mr. Piette owns 7,000 PGS shares.

**DANIEL PIETTE**
**Board Member**
(Elected 2007)
*Audit Committee Member*

**ANNETTE MALM JUSTAD** is an independent consultant and board member. She has served as CEO of Eitzen Maritime Services ASA, VP and Head of Purchasing for Yara International ASA, VP and Fleet Manager of Norgas Carriers AS and has held various technical and commercial positions at Norsk Hydro ASA. Ms. Malm Justad holds a Master's degree in Technology Management from MIT/NTH, as well as an M.Sc. in Chemical engineering from the Norwegian University of Science and Technology. Board memberships of Norwegian-listed companies include Board Chairman of American Shipping Company and Board Member of Awilco. As of April 4, 2012, Ms. Malm Justad does not own any PGS shares.

**ANNETTE MALM JUSTAD**
**Board Member**
(Elected 2008)
*Remuneration and Corporate Governance Committee Member*

**HOLLY VAN DEURSEN** currently holds non-executive director positions with Petroleum Geo-Services, Bemis Company, Inc., Actuant Corporation, Capstone Turbine Corporation and Anson Industries, Inc. She served on BP plc's Top-Forty Executive Team as Group Vice President, Petrochemicals from 2003 to 2005 and Group Vice President, Strategy from 2001 to 2003. Prior to these executive appointments, Ms. Van Deursen held a variety of senior positions with BP and Amoco in Chicago, London, and Hong Kong and has served on the boards of directors of the American Chemistry Council and Amoco's joint ventures in Korea, Taiwan, and Japan. Ms. Van Deursen holds a B.Sc. in Chemical Engineering from the University of Kansas and an MBA from the University of Michigan. As of April 4, 2012, Ms. Van Deursen owns 2,000 PGS shares.

**HOLLY VAN DEURSEN**
**Board Member**
(Elected 2006)
*Remuneration and Corporate Governance Committee Chairperson*

**INGAR SKAUG** was Group CEO of the maritime industrial group Wilh. Wilhelmsen ASA from 2003 to 2010, after having served in several senior management positions within the group since 1990. Previously, Mr. Skaug was VP and Deputy Chief Operating Officer of SAS Airlines, a position that capped nearly three decades with the airline. Mr. Skaug is a Board Member of the ferry company DFDS AS, the offshore safety monitoring innovator Miros and the travel bureau Berg-Hansen. He is also Board Chairman of Bery Maritime AS and Ragni Invest AS and Deputy Board Chairman and a member of the auditing committee of J. Lauritzen AS. Ingar Skaug is a member of the Advisory Board of Bremen Lagerhaus Gesellschaft (BLG) International Logistics Corp and Chairman of the Center for Creative Leadership. He received his MBA degree from the University of Nürnberg, Germany. As of April 4, 2012, Mr. Skaug does not own any PGS shares.

**INGAR SKAUG**
**Board Member**
(Elected 2009)
*Remuneration and Corporate Governance Committee Member*

# EXECUTIVE MANAGEMENT

**JON ERIK REINHARDSEN**
**President and CEO**
*(Born 1956)*

**JON ERIK REINHARDSEN** joined PGS in April 2008 as President and Chief Executive Officer. Prior to PGS, he was President, Global Primary Products Growth in Alcoa. In this position he was responsible for developing and implementing major primary metal and refining growth opportunities for the company worldwide. Mr. Reinhardsen joined Alcoa from Norway-based Aker Solutions ASA, an international contractor in the oil, gas, chemicals and polymers industry. In Aker Solutions he was group executive vice president of Aker Solutions ASA based in Houston, Texas, where he was responsible for all contracting operations outside of Europe and product businesses worldwide.

Earlier in his career, Mr. Reinhardsen led the Aker Maritime ASA product business in Norway, where he was involved in merger and acquisition activities, new business development, marketing and sales and investor relations. He also led Aker's seismic venture Aker Geo that was later sold to CGG. In June 2009 Mr. Reinhardsen was elected to the board of directors of Cameron and he has been a member of the board of directors of Hoegh Autoliners Holdings AS and Hoegh LNG Holdings Ltd since 2005. He is also a member of the board of directors of Awilhelmsen Management AS. Mr. Reinhardsen obtained a master's degree in Applied Mathematics and Geophysics from the University of Bergen, Norway. He completed the International Executive Program in 1991 from the Institute for Management Development (IMD) in Lausanne, Switzerland.

**GOTTFRED LANGSETH**
**Senior Vice President and CFO (Elected 2006)**
*(Born 1966)*

**GOTTFRED LANGSETH** joined PGS in November 2003 and was appointed Senior Vice President and Chief Financial Officer as of January 1, 2004. He was Chief Financial Officer of the information technology company Ementor ASA from 2000 to 2003. Mr. Langseth was Senior Vice President of Finance and Control at the offshore engineering and construction company Aker Maritime ASA from 1997 to 2000. Langseth worked at Arthur Andersen Norway from 1991 to 1997; he was certified as a Norwegian state-authorized public accountant (CPA) in 1993. Mr. Langseth received his Master of Business Administration degree from the Norwegian School of Economics and Business Administration.

**SVERRE STRANDENES**
**Executive Vice President, MultiClient**
*(Born 1956)*

**SVERRE STRANDENES** was appointed Executive Vice President MultiClient on May 1, 2010. Previous to that he held the position of Group President, Data Processing & Technology from November 2006. Sverre Strandenes has held several senior PGS management positions; before taking charge of Data Processing & Technology operations in 2006, he was President, Marine Geophysical EAME Region (Europe, Africa, and Middle East). Prior to joining PGS in 1995, Mr. Strandenes was the Geoscience department manager at Norsk Hydro Research Centre. Sverre Strandenes received his M.S. in Geophysics from the University of Bergen in 1981.

**GUILLAUME CAMBOIS** joined PGS in 2007 as the senior advisor spearheading deployment of PGS' GeoStreamer technology. From March 2009, he acted as Marine President, Asia-Pacific. Prior to joining PGS, Guillaume Cambois spent 20 years with the geophysical services company CGGVeritas, at which he held various management positions including Executive Vice President Data Processing and Chief Technology Officer. An active member of the Society of Exploration Geophysicists, he was the Society's Vice President in 2007/2008. Mr. Cambois received his Ph.D. in Geophysics from the University of Texas at Austin.

**GUILLAUME CAMBOIS**
**Executive Vice President, Data Processing and Technology**
*(Born 1964)*

**PER ARILD REKSNES** advanced to Executive Vice President in April 2010, serving initially as chief of the New Ventures area, followed by heading Marine Contract. From 2007–2010, he was PGS Marine's President for Europe, Africa, Middle East and CIS. His job titles at PGS have included President for Technology, Vice President for Profiling and Marketing and Vice President Technical Marketing. He instead of Per Arild Reksnes joined PGS in 2001 from his position as Chief Geophysics Professional at Norsk Hydro. During 16 years at Norsk Hydro, he held several geophysical and management positions. Mr. Reksnes holds a Master's degree in Applied Geophysics from the University of Oslo and a Master's degree in Technology Management from MIT/NTH (Norwegian University of Science and Technology).

**PER ARILD REKSNES**
**Executive Vice President, Marine Contract**
*(Born 1957)*

**MAGNE REIERSGARD** joined PGS at its inception in 1990/91 and has held a number of key executive positions in the PGS Group, including Vice President, Marine Acquisition; President, Marine Geophysical Asia Pacific Region, based in Singapore; and most recently President, Marine Geophysical NSA Region, based in Houston. Prior to joining PGS, he held various management positions in the survey division of Geoteam AS. He is currently on the Board of Directors of IAGC (International Association of Geophysical Contractors), an office he has held since 2005, and served as Chairman in 2006/2007. Reiersgard served as Chairman of IAGC in 2006/2007. Mr. Reiersgard holds an Electronics degree from Agder University College, Grimstad, Norway and a business degree from BI Norwegian School of Management.

**MAGNE REIERSGARD**
**Executive Vice President, Operations**
*(Born 1961)*

# BOARD OF DIRECTORS' REPORT

**Excess vessel capacity and low prices for marine contract services made 2011 a challenging year for the Marine seismic industry. Still, during 2011 PGS managed to reinforce its competitive position by delivering record MultiClient late sales revenues and maintaining a robust balance sheet. Through continued investment in PGS' unique technologies, such as GeoStreamer GS™, as well as fleet expansion and improvement, PGS is well positioned for profitable growth in a seismic market with improving fundamentals.**

Petroleum Geo-Services (PGS) is a focused Marine geophysical company providing a broad range of seismic and reservoir services, including acquisition, processing, interpretation, and field evaluation. We also possess the world's most geographically diverse 3D MultiClient data library. Our Company operates on a worldwide basis with headquarters at Lysaker, Norway.

Our operations are organized into four business units: Marine Contract, MultiClient, Operations, and Data Processing & Technology (DP&T).

- **Marine Contract** initiates and manages client relationships for seismic data acquired under exclusive contracts with a diversified client base comprising a wide range of the world's independent and sovereign oil and gas exploration and production companies.
- **MultiClient** initiates and manages the projects and the client relationships related to seismic data licensed on a non-exclusive basis from our library of field surveys covering substantial parts of the major offshore hydrocarbon basins that we and our clients believe have the highest potential for development such as offshore Brazil, the Gulf of Mexico, offshore West Africa, the Mediterranean Sea and the North Sea, while we retain ownership of the seismic data.
- **Operations** supports both our Marine Contract and MultiClient units with reliable and efficient data acquisition by managing the operation of our seismic vessels and related equipment, including fleet expansion and maintenance.
- **DP&T** processes the seismic data we acquire for our MultiClient library and for our clients on contract and manages our research and development activities.

**2011 Business Highlights**

- Revenues of $1,253 million
- EBITDA of $535 million
- Operating profit of $139 million, a margin of 11 percent
- Solid cash flow from operations of $480 million
- Robust balance sheet position, with net interest-bearing debt of $394 million and a liquidity reserve of $775 million
- MultiClient revenues of $502 million, with record late sales revenues of $278 million
- Pre-funding level of 110 percent of capitalized MultiClient cash investments
- Continued GeoStreamer implementation with the upgrade of *Ramform Viking* and *PGS Apollo*. By year-end 2011, nearly 60 percent of PGS' 3D capacity was equipped with GeoStreamer
- Contract awarded to Mitsubishi Heavy Industries Ltd. for delivery of two Ramform Titan-class vessels
- Launched GeoStreamer GS — an acquisition-based solution that eliminates both source and receiver ghosts to reveal the true earth response — the only ghost-free acquisition solution in the industry
- Successful offering of $300 million Senior Notes , due December 2018.

**Health, Safety, Environment and Quality (HSEQ)**

HSEQ management and reporting are key elements in the evaluation of business performance at all management levels and by the Board of Directors.

In 2011, two main activities took place in the continued building of a strong HSEQ culture and improving PGS HSEQ management systems;

OHSAS 18001 Certification was achieved for the whole PGS fleet and the four main offices (Lysaker, Houston, Weybridge and Singapore). OHSAS 18001 is an internationally acknowledged standard that defines requirements for management systems for occupational health and safety.

Efforts initiated in 2010 to raise the HSEQ competence and awareness in the Company continued in 2011. Several training initiatives were implemented.

In 2011, PGS total activity (core fleet vessels and PGS offices) comprised 11,773,684 man-hours. Compared with the 11,786,931 man-hours recorded in 2010.

The PGS organization (core fleet vessels and PGS offices) experienced the following health and safety incident levels:

- Zero fatalities, compared with zero in 2010
- 11 Lost Time Incidents, compared with seven in 2010
- Three Restricted Work Day Cases, compared with 10 in 2010
- Three Medical Treatment Cases, compared with six in 2010
- Five High Potential Incidents, compared with five in 2010.

The overall Lost Time Incident Frequency (LTIF) increased to 0.93 per million man-hours in 2011, compared with 0.59 in 2010. The Total Recordable Case Frequency (TRCF) decreased, to 1.44 per million man-hours from 1.94 in 2010.

PGS will during 2012 issue its first publication summarizing our efforts as regards Corporate Responsibility. The Corporate Responsibility Framework consists of four fundamental building blocks: People, Environment, Conduct and Stakeholder engagement.

In 2012 PGS will initiate a process to gain certification under the ISO 14001 (International Standards Organization Environment Management) standard. The aim is to obtain certification by end December 2012.

**Markets and Main Businesses**

PGS is one of the three largest participants in the global marine 3D seismic market, with a market share in excess of 20 percent.

Capital expenditures for exploration and production by oil companies continued to increase in 2011, driving demand for seismic services. The year 2011 was historic in that the average price of oil exceeded $100 per barrel. Stable, high oil prices promote continued exploration and production spending. Additional main drivers were a considerable need to explore and develop new areas, secure an acceptable replacement of reserves, and obtain enhanced oil recovery from producing fields.

The macro environment was volatile in 2011, fueled primarily by the sovereign debt crisis in Europe and social unrest in the Arab world. Despite this turbulence, most seismic buyers maintained a long-term planning horizon and the market has not seen any significant change in how customers operate.

However, annual demand growth of 10-15 percent, measured in terms of square kilometers of acquired seismic, has not been sufficient to improve market prices. Overcapacity in the seismic market prevailed in 2011. During the year, capacity increased by approximately seven percent, as measured by number of streamers. While such expansion may not seem excessive, when added to the surge in capacity in 2010, the aggregate supply increase outpaced the demand growth over the same period. The supply growth in 2010 relates largely to capacity ordered before the market downturn late 2008 and which entered service some two years later.

Access to acreage has been another limiting factor. The Macondo incident in the Gulf of Mexico in April 2010 put a halt to offshore US market activity. Repositioning of seismic capacity from the Gulf of Mexico to other markets pressured the supply/demand balance. A similar, but not as prominent downturn occurred in 2011 when civil unrest began in Egypt and Libya, which in turn led to a reduction in seismic work in the Mediterranean.

Despite an unfavorable supply/demand balance, PGS has been able to avoid idle time for its 3D vessels by continually adjusting capacity deployment to adapt to the Company's order book and by capitalizing on its industry leading technology. Further, PGS staff demonstrated considerable success in being able to build additional continuity into the fleet order book. Throughout 2011, order book status was maintained at approximately five to six months of production, which generally provided an adequate planning and scheduling horizon.

For Marine Contract work PGS achieved an average operating profit margin of approximately four percent for the full year 2011. The figure was below the Company's target of 10-15 percent. Oil prices increased significantly during the first quarter of 2011. Whilst a higher oil price is a positive factor longer term, driving seismic spending among oil companies, short term, it has a negative impact on margins, due to its immediate impact on fuel cost. The significant weakening of the US dollar in the first half of 2011 also squeezed margins, as most revenues are in US dollars, while a significant part of expenses is in other currencies.

In addition to the unfavorable development of key exogenous factors, resource utilization and productivity in the second half of 2011 were weak as a result of extended yard stays, unfavorable weather conditions, and downtime caused by maritime issues.

We have implemented a profit improvement program targeting a $50 million run-rate improvement by year-end 2012. The improvement initiatives include specific cost reduction measures, a number of procurement initiatives and work-flow process improvements such as yard stays management and general logistics.

As of December 31, 2011, PGS' order book amounted to $678 million, compared with $584 million as of December 31, 2010.

Seismic acquisition can be performed as contract seismic, whereby data is acquired under exclusive contractual agreements with a customer, or as MultiClient where PGS invests in seismic surveys that are licensed to multiple customers on a non-exclusive basis. MultiClient revenues are two-fold: pre-funding revenues relating to ongoing surveys and late sales from our library of completed MultiClient projects.

Over the cycle, we have experienced MultiClient profitability being less volatile than proprietary contract work, given it is characterized by a pre-funding stage and late sales potential over a period of several years after data acquisition and processing have been completed. In order to optimize profitability and cash flow over the cycle, we take a proactive approach to the allocation of capacity between MultiClient and Marine Contract.

Contract seismic work continued to dominate our business activities in 2011, with approximately 72 percent of active vessel time being spent on contract work. Pre-funding of new MultiClient surveys continued at high levels and amounted to 110 percent of capitalized cash investment of the MultiClient library in 2011.

***Data Processing & Technology***

PGS Beam Migration has been a key vehicle for advancing us to a leading position in high-end data processing and imaging. Beam Migration technology is used by all of our data processing centers around the world. PGS hyperBeam, which is based on the integration of PGS Beam Migration and holoSeis, improves client workflows from conception to production. It allows customers to iterate velocity models quickly, enabling them to make faster, more informed decisions that cut their costs and reduce risk.

High-end imaging technology has contributed to data processing revenue growth and has resulted in higher-quality data, shorter cycle times, and better-informed decision-making by customers. Our goal is to provide services that are recognized as state-of-the-art and consistently maintain best-in-class MultiClient data processing capabilities that secure a market share for data processing that approximates our seismic acquisition market share, which is in excess of 20 percent.

Data processing for external customers is becoming an increasingly important revenue stream. In 2011, external processing revenues were $110.0 million, up from $103.5 million in 2010. The order book for external data processing has remained at high levels, and by year-end 2011 amounted to $97.1 million.

GeoStreamer, the first-ever dual-sensor streamer and a proprietary PGS technology, represents a step change in streamer technology and the best proof of PGS' technology differentiation. GeoStreamer delivers enhanced resolution, better penetration, and improved operational efficiency.

To complement the GeoStreamer, we officially introduced the GeoStreamer GS technology at the 2011 EAGE conference in Vienna. GeoStreamer GS is a full de-ghosting solution, wherein GeoStreamer removes the receiver ghost and GeoSource (GS) eliminates the source ghost. GeoStreamer GS further improves GeoStreamer bandwidth and yields unrivaled image resolution.

In 2011, we installed GeoStreamer on *Ramform Viking* and *PGS Apollo*. GeoStreamer upgrades will continue in 2012: *Ramform Vanguard* will be refitted by mid-year and all GeoStreamer vessels will have GeoStreamer GS capabilities by year-end 2012.

OptoSeis is a fiber-optic seismic monitoring system that is permanently installed on the seabed. The system helps optimize reservoir recovery at producing fields by providing on-demand seismic monitoring of reservoir changes over time. In 2010, we signed an agreement with Petrobras to install a permanent seismic monitoring system at the Jubarte field in the North Campos Basin, Espirito Santo province, offshore Brazil. The equipment was manufactured in 2011 and will be installed in 2012. The acquisition phase starts in the second half of 2012.

We continue our development of a towed Electro Magnetic (EM) survey system. The objective is the commercial launch of a towed EM system in 2012. We believe that our towed EM system can be a game changer in the EM market, redefining the efficiency benchmark for this technology.

**Two Ramform Titan-class Vessels Ordered**

In the fourth quarter of 2010, we announced our vessel expansion and renewal program and, in April 2011, we signed shipbuilding contracts with Mitsubishi Heavy Industries Ltd. for

delivery of two Ramform Titan-class vessels in 2013, with options for another two vessels to be delivered in 2015. The estimated cost per vessel, including seismic equipment, is $250 million. By ordering new industry-leading capacity, we continue to strengthen our efficiency lead and position PGS to take full advantage of a recovery in the marine seismic market.

**Financial Results**
Total revenues were $1,253.3 million, compared to $1,135.1 million in 2010, an increase of 10 percent. Revenues from marine contract seismic acquisition decreased slightly from 2010, and the contract EBIT margin for the full year 2011 was 4%, compared to 17% in 2010. The lower profitability is caused by a sharp increase in fuel prices, lower utilization and production as a result of extended yard stays and maritime issues in the second half of the year, in addition to reduced profitability on certain long term contracts.

Total MultiClient revenues (pre-funding and late sales combined) increased by $111.3 million, or 28 percent, to $501.8 million in 2011, driven by increased demand for MultiClient. Europe, Gulf of Mexico and Asia Pacific were the regions contributing the most to total MultiClient sales.

Cash investment in the MultiClient library increased by $37.2 million, or 22 percent, to $203.9 million in 2011. Pre-funding as a percentage of capitalized cash investment was 110 percent in 2011, compared to 119 percent in 2010. The decrease in pre-funding level was driven by lower pre-funding on MultiClient projects acquired in Asia Pacific and offshore Australia, where the pre-funding level is normally lower than in a majority of the other regions where we operated in 2010. In 2011, the fleet allocation factor (active 3D vessel time for marine contract vs. MultiClient data acquisition) was approximately 72:28, compared to 70:30 in 2010.

Operating costs, which include cost of sales, expensed research and developments costs, and selling and general administrative costs, totaled $718.5 million in 2011 compared to $659.7 million in 2010, an increase of $58.8 million. The increase primarily reflects a net growth in vessel and processing capacity as well as higher fuel costs and an unfavorable development in the US dollar.

Reported research and development costs increased by $2.5 million to $24.3 million in 2011. The increase is primarily due to more activity to develop a towed EM solution ready for commercial launch in 2012. The research and development costs mainly relate to efficiency improvements in the core business activities of marine seismic acquisition and processing, as well as our efforts to develop the towed EM solution. Capitalized development cost totaled $18.4 million in 2011, compared to $13.2 million in 2010. Capitalized development costs primarily relate to OptoSeis and towed EM.

As disclosed earlier we implemented a change of our accounting policy for costs relating to major overhauls of vessels with effect from January 1, 2011. The change was made to better reflect economic reality, reduce volatility and align accounting with more common industry practice and general practice among vessel owning companies. Following this change, PGS capitalizes all costs relating to major vessel overhauls and depreciates relevant assets over the estimated periods between major overhauls, which typically range from three to five years. The former policy was to expense substantially all such costs when incurred. Reported periods prior to January 1, 2011, have been restated accordingly

Depreciation and amortization for full year 2011 amounted to $397.9 million compared to $344.9 million in 2010, an increase of $53.0 million or 15 percent.

Depreciation increased by $13.4 million. Depreciation increased due to full year effect of *PGS Apollo*, which entered operations mid May 2010, investments in GeoStreamer and equipment on the chartered 2D vessel *Sanco Spirit*, partially offset by an increase in depreciation capitalized to the MultiClient library and de-rigging of the *Beaufort Explorer* during Q1 2011.

MultiClient amortization for 2011 increased by $39.5 million, or 20 percent compared to 2010. MultiClient amortization as a percentage of total MultiClient revenues was 47 percent in 2011, compared to 51 percent in 2010. The net book value of our MultiClient library was $334.1 million as of December 31, 2011, compared to $310.8 million as of December 31, 2010.
In 2011, we recorded a net impairment charge on long-lived assets of $2.6 million.

In 2011 we participated in the establishment of the E&P focused investment company Azimuth Ltd. (Azimuth) primarily by contributing our existing equity holdings in smaller E&P companies. We own 45 percent of Azimuth and have entered into a cooperation agreement whereby we provide certain services to Azimuth and whereby Azimuth has the right to buy, for cash and at fair value, up to 50 percent of any future equity settlement that PGS may receive as payment for its library services. This transaction resulted in other operating income of $4.4 million. PGS has no obligation to provide further funding to Azimuth and has no guarantees outstanding.

Operating profit in 2011 was $138.7 million.

Excluding impairment of long-lived assets, 2011 operating profit was $141.3 million. The corresponding 2010 operating profit was $130.5 million.

Interest expense was $42.2 million in 2011, compared to $47.0 million in 2010. The decrease is due to an increase of capitalized interest to the MultiClient library and reduced interest rates, partially offset by less interest capitalized to construction in progress.

Other financial income was $24.5 million in 2011 compared to $13.9 million of other financial income in 2010. The increase in 2011 was primarily driven by gains from sale of shares held in smaller E&P companies, establishment of the E&P focused investment company Azimuth and interest income.

Other financial expense was $33.7 million in 2011, compared to $17.6 million in 2010. The increase is primarily related to impairments of shares that PGS retained after the establishment of Azimuth, loss on the repurchase of convertible notes, and fair value adjustment to the investment in a convertible bond to SeaBird Exploration PLC.

The currency loss in 2011 was $10.3 million, compared to a gain of $0.9 million in 2010. The Company holds foreign currency positions to balance its operational currency exposure. These positions are not accounted for as hedges, but marked to market at each balance sheet date, generally causing the short term effect to be negative when the US dollar appreciates. In 2011 the foreign currency translation of the deposit held in Brazilian Real relating to PGS' exposure for the municipal tax (ISS) in Brazil had a significant impact on the currency loss due to weakening of the Brazilian real compared to US dollar.

The income from associated companies was a loss of $12.4 million in 2011, compared to a loss of $10.2 million in 2010. The loss in 2011 primarily relates to the associated company Geokinetics Inc. (Geokinetics), where PGS owns 11.4 percent and the E&P focused investment company Azimuth. The loss in 2010 primarily related to Geokinetics.

Income tax expense was $30.0 million in 2011, compared to $13.9 million in 2010. The 2011 tax expense includes a current tax expense of only $1.2 million, compared to a current tax expense of $18.9 million in 2010. Current tax expense relates primarily to foreign taxes or income taxes in countries in which we have no carry forward losses or where there are limitations on the application of such losses. Deferred tax for 2011 was an expense of $28.8 million, compared to a benefit of $5.0 million in 2010.

We have an ongoing dispute with the tax office of Rio de Janeiro in Brazil related to municipal service tax (ISS) on the sale of MultiClient data relating to years 2000 and onwards. The issue has been disclosed in annual and quarterly reports since 2005. As of December 31, 2011, the Company estimates the total exposure to be approximately $161 million, including possible penalties and interest. Because we consider it more likely than not that the contingency will be resolved in our favor, no provisions have been made for any portion of the exposure. The dispute is described in more detail in the notes to the 2011 financial statements.

With multi-national operations, PGS is subject to taxation in many jurisdictions around the world with increasingly complex tax laws. We have identified issues in several jurisdictions that could eventually make us liable to pay amounts in taxes relating to prior years and require us to recognise liabilities for anticipated tax issues based on estimates of whether additional taxes will be due.

PGS has substantial deferred tax assets in different jurisdictions, predominantly in Norway. Deferred tax assets recognized in the consolidated statements of financial position amounted to $177.9 million as of December 31, 2011, compared to $210.8 million as of December 31, 2010.

Net income to equity holders of PGS ASA was $33.7 million in 2011, compared to a loss of $14.0 million in 2010.

**Arrow Vessels**

For the cancelled Arrow vessels, NB 532 and NB 533, approximately EUR 7 million per vessel with the addition of interest, is still outstanding from Factorias Vulcano S.A (Factorias Vulcano). Factorias Vulcano is in Spanish bankruptcy proceedings. We are pursuing several routes to recover the outstanding amounts, but there is significant risk relating to such recovery. The net book value of the remaining receivables from the yard is approximately $9 million.

Cash Flow, Financial Position and Financing

Net cash provided by operating activities totaled $480.4 million in 2011, compared with $355.5 million in 2010. The increase is largely attributable to improvements in operating profit and working capital.

Cash and cash equivalents totaled $424.7 million as of December 31, 2011, compared with $432.6 million at year-end 2010.

In June 2007, we established a $600 million Term Loan B maturing in 2015 and a $350 million revolving credit facility originally maturing in 2012. In the first quarter of 2011, we signed an agreement to extend the maturity of

the revolving credit facility from 2012 to 2015. The purpose of the extension is to secure a longer term liquidity reserve. Margin on the new revolving credit facility is 225 basis points, compared with 175 basis points on the previous facility. As of December 31, 2011, $470.5 million remained outstanding on the Term Loan B, while the revolving credit facility was undrawn.

We issued $400 million of convertible notes in December 2007. The coupon interest rate on the convertible bond is 2.7 percent and the conversion price is NOK 216.19 per PGS share. As of December 31, 2011 we had repurchased $209.4 million of the nominal value of the convertible notes, with $190.5 million of nominal value still outstanding.

In November 2011, we issued $300 million of Senior Notes due in 2018. The facility was priced with a coupon of 7.375 percent and issued at 98.638 percent of the principal amount. The net proceeds are expected to be used for general corporate purposes and to repurchase and repay the outstanding principal amount of the convertible notes on or prior to maturity in December 2012.

By extending the maturity of the revolving credit facility and issuing $300 million of Senior Notes, the maturity of our debt was extended from 2.8 years at the beginning of 2011 to 3.9 years as of year-end 2011.

Total interest-bearing debt, including capital leases, but excluding deferred loan costs, amounted to $954.5 million as of December 31, 2011, compared with $790.2 million as of December 31, 2010.

Net interest-bearing debt (interest-bearing debt less cash and cash equivalents, restricted cash, and interest-bearing investments) was $394.2 million as of December 31, 2011, compared with $279.2 million as of December 31, 2010.

PGS' interest-bearing debt comprises the following primary components:

As of December 31

| | 2011 | 2010 |
|---|---|---|
| *(In USD million)* | | |
| **Secured:** | | |
| Term loan B, due 2015 | 470.5 | 470.5 |
| USD 300 million Senior Notes, due 2018 | 300.0 | --- |
| **Convertible notes:** | | |
| Convertible notes, due 2012 | 183.8 | 319.6 |
| Total | 954.5 | 790.2 |

**Investments**

In 2011, total MultiClient cash investments, excluding capitalized interest, amounted to $203.9 million, compared with $166.7 million in 2010, an increase of $37.2 million. The increase is primarily due to a higher general cost inflation, especially higher fuel cost as a result of the higher oil price in 2011. More MultiClient activity in high cost regions also contributed to increased MultiClient cash investments in 2011, compared to 2010.

Capital expenditures totaled $279.9 million in 2011, compared with $223.5 million in 2010, an increase of $56.4 million or 25 percent. The increase is largely attributable to accelerated GeoStreamer investments, more vessel upgrades and yard expenses, and higher capital expenditures related to vessel new builds.

**Financial Market Risk**

PGS is exposed to certain market risks, including adverse changes in interest rates and foreign currency exchange rates, as discussed below.

***Interest Rate Risk***

We enter into financial instruments, such as interest rate swaps, to manage the impact of interest rate fluctuations.

As of December 31, 2011, our debt structure included $470.5 million in floating interest rate debt, with interest based on three month LIBOR rates, plus a margin. The fixed interest rate debt had a book value of $483.7 million. To reduce the adverse effects of any interest rate increases, the Company has a portfolio of interest rate swaps (IRS) with a total nominal value of $500.0 million, of which $200.0 million is forward starting replacing maturing swaps. The fair value of the IRS portfolio was minus $25.5 million as of December 31, 2011. The swaps are for periods of six months to 3 ¼ years. Taking into account the effect of interest rate swaps, for every (hypothetical) one percentage point increase in LIBOR, the annual net interest expense of our debt, including finance leases, would decrease by approximately $1.0 million, given our cash holdings as of December 31, 2011.

***Currency exchange risk***

We conduct business primarily in US dollars (USD), but also in various other currencies, including Brazilian real, Euro (EUR), Singapore dollar, Nigerian naira, British pound (GBP), and Norwegian kroner (NOK). We are subject to foreign currency exchange rate risk on cash flows related to sales, expenses, financing, and investment transactions in currencies other than the US dollar.

We predominantly sell our products and services in US dollars, and to a small extent in other currencies. In addition to USD, a significant proportion of our operating expenses are incurred in GBP and NOK. Less substantial amounts are incurred in Singapore

dollars and various other currencies. Thus, regarding expenses and revenues in currencies other than US dollars, such expenses will typically exceed revenues.

A stronger US dollar reduces our operating expenses as reported in US dollars. We estimate that a 10-percent change of the US dollar against our two most significant non-USD currencies, NOK and GBP, would have an annual impact on operating profit of $20 million to $24 million and $9 million to $11 million, respectively, before currency hedging.

We hedge part of our foreign currency exposure related to operating income and expenses by entering into forward currency exchange contracts. While we enter into these contracts with the purpose of reducing our exposure to exchange rate fluctuations, we do not treat these contracts as hedges unless they are specifically designated as hedges of firm commitments or certain cash flows. Consequently, these forward currency exchange contracts are recorded at estimated fair value with gains and losses included in the line Currency exchange gain (loss) in the consolidated statement of operations.

As of December 31, 2011, we had net open forward contracts to buy/sell British pounds, Norwegian kroner, Euro, Singapore dollars, and Brazilian real. The total nominal amount of these contracts was approximately $139.5 million, compared with $240.5 million at year-end 2010. Of the total notional amounts of forward exchange contracts, $23.7 million were accounted for as fair value hedges as of December 31, 2011 and none were accounted for as fair value hedges as of December 31, 2010. There were no designated foreign currency cash flow hedges in 2011 or in 2010. Outstanding contracts at year-end 2011 had a net negative fair value of $4.6 million, compared with a net positive fair value of $0.1 million at year-end 2010.

A 10 percent appreciation of the US dollar against each of the currencies in which we hold derivative contracts, would decrease the fair value of these contracts by approximately $3.1 million. The profit and loss effect of such a change would be a $4.3 million loss.

All interest-bearing debt is denominated in US dollars.

***Credit Risk***

Our accounts receivable are primarily from multinational, integrated oil companies and larger-sized independent oil and natural gas companies, including companies that are owned in whole or in part by governments. We manage our exposure to credit risk through ongoing credit evaluations of customers. We believe our exposure to credit risk is relatively limited due to the nature of our customer base, the long-term relationships we have with most of our customers, and the low level of losses on our accounts receivable incurred over the years.

We monitor the counterparty credit risk of our banking partners, including derivatives counterparties and the institutions in which our cash is held on deposit. The Company is also exposed to credit risk related to remaining refund claims against the Spanish shipyard Factorias Vulcano.

***Liquidity Risk***

As of December 31, 2011, PGS had an unrestricted cash balance of $424.7 million and a total liquidity reserve, including available unutilized drawing facilities, of $774.7 million, compared with $432.6 million and $777.9 million respectively at year-end 2010. We have a structured approach to monitoring our credit risk as to financial counterparties, and have no reason to doubt their ability to meet their funding commitments if and when called upon to do so.

Based on the year-end cash balance, available liquidity resources, and the current structure and terms of our debt, it is the Board's opinion that PGS has adequate liquidity to support its operations and investment programs.

The credit agreement for the $600 million (remaining balance $470.5 million) Term Loan B and the $350 million revolving credit facility has certain terms that place limitations on the Company. The revolving credit facility contains a covenant whereby the total leverage ratio (as defined) cannot exceed 2.75:1. As of December 31, 2011, the total leverage ratio was 1.80:1. The credit agreement generally requires the Company to apply 50 percent of excess cash flow (as defined in the agreement) to repay outstanding borrowings when the senior leverage ratio exceeds 2.00:1 or if the total leverage ratio exceeds 2.50:1 for the financial year.

We have a robust debt structure as to existing debt, with duration of approximately 3.9 years. The convertible notes mature in December 2012 and we intend to redeem the outstanding amount before or on maturity with cash at hand. After 2012, there will be no material maturities before 2015, when our Term Loan B and the revolving credit facility mature. Financial covenants on the facilities we have in place are not unduly restrictive. However, materially adverse future market developments could require us to implement measures to meet financial covenants or refinance debt.

***Commodity Risk***
Operation of our seismic vessels requires substantial fuel purchases. Thus, we are exposed to changes in fuel prices. Based on our fuel consumption in 2011, a 10 percent increase in fuel prices would increase our total fuel costs and operating expenses by approximately $1.0 million per month. We changed our approach to fuel price risk during 2011, seeking to pass fuel price risk to the customer in a majority of contracts.

**Operational and Other Risks**
Demand for our products and services are dependent upon the level of spending by oil and gas companies on hydrocarbon-resource exploration, field development, and production. Spending levels are heavily influenced by oil and gas prices. In addition to the risk of less demand for our services or for data from our MultiClient data library, we are subject to a large number of other risk factors including, but not limited to increased competition, the attractiveness of our technology, changes in governmental regulations affecting our markets, technical downtime, licenses and permits, and operational hazards such as weather conditions.

Contracts for services are occasionally modified by mutual consent and in certain instances may be cancelled by customers on short notice without compensation. Consequently, the order book as of any particular date may not be indicative of actual operating results for any succeeding period.

**Shares, Share Capital, and Dividend**
The Company has 217,799,997 shares issued and outstanding, all of which are of the same class and with equal voting and dividend rights. Each share has a par value of NOK 3.

Our ordinary shares are listed on the Oslo Stock Exchange (ticker: PGS) and denominated in Norwegian kroner (NOK). The PGS share continues to be traded as an American Depositary Share (ADS) on the US Pink Sheets (ticker: PGSVY). Quotes are denominated in US dollars and each ADS represents one share.

The Board of Directors propose to the Annual General Meeting in 2012 a dividend for the year ended December 31, 2011 of NOK 1.10 per share, in line with earlier announcements. PGS has a dividend policy aiming at distributing 25-50 percent of net income as dividends over the business cycle. Proposals for dividend distribution in future years will be subject to assessments of business performance, operating environment, and growth opportunities in determining the appropriate level in any specific year.

At the AGM held May 11, 2011, the authorization for share repurchases of up to 10 percent of our share capital, initially granted in 2006, was extended for another year. We plan to propose a similar authorization at the May 2012 AGM for the subsequent year.

It has been an ongoing practice of PGS shareholders to grant limited authorizations to the Board of Directors permitting it to increase the Company's share capital and/or acquire the Company's shares (treasury shares) for certain defined purposes. Separate General Meeting votes are held for (a) authorizations related to employee stock option programs and (b) authorizations for other purposes. When a proposed authorization encompasses share capital increases and/or acquisition of treasury shares for various purposes, the Company does not find it practical to hold separate votes for each proposed purpose. Authorizations are time-limited; they expire at the following AGM.

As of December 31, 2011, the Company held 1,223,921 treasury shares, primarily to be able to satisfy the exercise of options granted under our employee option programs.

**Events After the end of the Reporting Period**
Subsequent to December 31, 2011 the Company has repurchased a further $144.0 million of principal amount of its convertible notes at an average price of 100.67% of par. Following these transactions PGS has bought back a total of $353.4 million of principal amount, representing 88% of the $400.0 million principal amount originally issued. According to the loan agreement PGS can redeem all of the Notes outstanding at their principal amount if it has repurchased and cancelled more than 85% of the principal amount issued. On February 20, 2012 PGS announced its intention to exercise the option to redeem the remaining outstanding Notes, including accrued but unpaid interest up until the redemption date set to be March 16, 2012. On March 16, 2012 note holders for a nominal amount of $1.1 million requested that their notes were converted to shares. This was effectuated on March 20, 2012 when the Company transferred 28,079 of its treasury shares as settlement. The remaining outstanding amount was redeemed and cancelled on March 22, 2012.

**Organization**
PGS had an average of 2,145 and 2,090 regular active employees during the years ended December 31, 2011 and 2010 respectively (excluding employees in the Onshore division which was sold in 2010).

As an employer we strive for balance and equality with respect to gender, age, and cultural diversity among our staff. As of December 31, 2011, our employees represented 72 nationalities; 31 percent of our office based

employees are women (six percent of offshore employees are women). Among our staff working in Norway, 34 percent are women. Our Board of Directors has four male and three female directors.

At our headquarters in Lysaker, 21 percent of management positions are held by women. 10 percent of women working for our organization in Norway work on a part-time basis.

We consciously strive to improve the nationality and gender diversity of our staff. Long-standing practices include ensuring that offshore crews are culturally diverse and balanced, and that cultural sensitivity training is offered at all levels of the organization. Recent initiatives include a new cultural sensitivity course being offered globally, the rollout of a new appraisal structure for offshore crew that includes cultural awareness criteria that can be measured at the aggregate level and a renewed strategic focus on women in our recruiting programs for new graduates and offshore crew.

University educated employees include geophysicists, geologists, engineers, and other professionals. The average monthly salary of active regular employee in December 2011 was $7,807 ($5,672 for female employees and $8,446 for male employees) based on January 31, 2012 exchange rates.

Our headquarters are located at Lysaker (Oslo), Norway. We also have offices in other cities in Norway, and in 25 other countries: Angola, Australia, Brazil, China, Egypt, France, India, Indonesia, Japan, Kazakhstan, Libya, Malaysia, Mexico, the Netherlands, Nigeria, Oman, Russia, Sao Tome & Principe, Singapore, Sweden, Turkmenistan, United Kingdom, United Arab Emirate, United States of America, and Vietnam.

**Board of Directors and Corporate Governance**
Our Board of Directors consists of Francis Gugen (Chairperson), Harald Norvik (Vice Chairperson), Holly Van Deursen, Annette Malm Justad, Daniel J. Piette, Carol Bell, and Ingar Skaug.

The Board has established two sub-committees: an Audit Committee, consisting of Harald Norvik (Chairperson), Carol Bell and Daniel J. Piette, and the Remuneration and Corporate Governance Committee, consisting of Holly Van Deursen (Chairperson), Annette Malm Justad, and Ingar Skaug. The committees act as preparatory bodies for the Board of Directors and assist the Directors in exercising their responsibilities.

We also have a Nomination Committee, elected by our shareholders, consisting of Roger O'Neil (Chairperson), Hanne Harlem and C. Maury Devine.

The Board of Directors held nine meetings in 2011, including conference calls.

We are committed to maintaining high standards of corporate governance. We believe that effective corporate governance is essential to the success of PGS and establishes the framework by which we conduct ourselves in delivering services to our customers and value to our shareholders.

PGS is registered in Norway as a public limited liability company, and our governance model builds on Norwegian corporate law. We also implement corporate governance guidelines beneficial to our business.

Our corporate governance principles are adopted by the Board of Directors. The Board periodically reviews these principles. Statements of our corporate governance structure are described in more detail in the corporate governance section of this annual report. Our articles of association, in addition to full versions of the rules of procedures for our Board of Directors, the Audit Committee charter, the Remuneration and Corporate Governance Committee charter, the Nomination Committee charter, and our code of conduct are available on our website www.pgs.com (under About us – Commitments – Corporate Governance).

Since 2004, we have maintained a compliance hotline operated by an external service provider in order to facilitate reporting of any concerns regarding inappropriate business conduct. We encourage use of the hotline by anyone who has concerns relating to compliance with laws and regulations, breaches of our code of conduct, fair treatment, or any other matter. Concerns can also be raised directly with our general counsel or any Board member.

**Outlook Improving**
Towards the end of 2011, we experienced an increase in tendering activity primarily driven by contract work in Baffin Bay, Offshore Greenland, the Barents Sea, and the Norwegian Sea. The positive trend has continued into 2012. At the same time there is limited new capacity entering the market. This combined with higher market activity drives an improved supply/demand balance in the market.

Activity in the Gulf of Mexico is increasing and is expected to return to pre-Macondo levels in the near future. Most of the major seismic companies have been awarded permits for seismic acquisition in the region. Angola is another region where demand will grow incrementally in 2012. Angola's state owned oil company, Sonangol, awarded 11 pre-salt blocks to large international oil companies in the first half of 2011. Late in the year, production

sharing agreements between Sonangol and the oil companies were completed, which allowed work to begin on the awarded blocks. Seismic acquisition began in late 2011 and will be ramped up in 2012.

Civil unrest in Egypt and Libya slowed down, and in some cases halted, seismic activities in the Mediterranean in early 2011. The short-term effects on our business were negative. The Mediterranean is a region with significant upside potential due to below-average survey activity over the last couple of years and expectations that the region may regain its former importance for oil companies.

The marine contract market is improving. Incremental demand offshore Angola, the Gulf of Mexico and increased interest for Baffin Bay, Greenland and the Barents Sea is expected to improve the supply/demand balance in the seismic market. We have achieved higher prices and margins for awarded marine contract work so far for the 2012 North Atlantic season as compared to 2011 and we expect a tighter North Atlantic market to have spill over effects to other regions.

Considering the high oil price levels, the reserve replacement ratio for the oil industry and the forecasted decline in oil reserves, we expect demand fundamentals for seismic services to be strong longer term as well.

We have a competitive advantage in our cost-efficient and uniform fleet, which will be enhanced further when we take delivery of two Ramform Titan-class vessels. Going forward, this advantage will be increasingly important for us in order to maintain industry-leading margins and generate robust cash flows through the cycles.

We enter 2012 with an order book for our 3D fleet averaging approximately six months. We expect our revenues and EBITDA to increase in 2012.

The Board emphasizes that forward looking statements contained in this report are based on various assumptions made by management, depend on factors beyond our control, and are subject to certain risks and uncertainties. Accordingly, actual results may differ materially from those contained in forward looking statements.

Pursuant to §3-3a of the Norwegian accounting act, the Board confirms that the 2011 financial statements have been prepared based on the assumption of a going concern and that it believes that this assumption is appropriate.

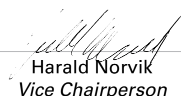
**Allocation of the Parent Company's Gain for 2011**

The financial statements of the parent company, Petroleum Geo-Services ASA (PGS ASA), are prepared and presented in accordance with generally accepted accounting principles in Norway (N GAAP). PGS ASA reported a net income of NOK 638.1 million for 2011, compared to a net loss of NOK 515.6 million in 2010. PGS ASA is a holding company with no material operating activities. The positive net income for 2011 is primarily caused by dividends from subsidiaries.

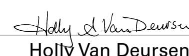
Of the total 2011 net income of NOK 638,061,000, the Board proposes to allocate NOK 398,481,000 to other equity and NOK 239,580,000 as dividend to shareholders. Total shareholders' equity in PGS ASA as of December 31, 2011 was NOK 10,281,274,000, corresponding to 49 percent of total assets. Other equity as of December 31, 2011 was NOK 7,311,756,000 of which NOK 6,505,306,000 was unrestricted equity.

London, March 22, 2012
Board of Directors
Petroleum Geo-Services ASA

Francis Gugen
*Chairperson*


Harald Norvik
*Vice Chairperson*

Carol Bell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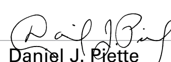
Annette Malm Justad


Daniel J. Piette

Ingar Skaug

Jon Erik Reinhardsen
*Chief Executive Officer*

# RESPONSIBILITY STATEMENT

Today, the Board of Directors and the Chief Executive Officer reviewed and approved the Board of Directors' report and the consolidated and separate annual financial statements for PGS ASA, for the year ending and as of December 31, 2011.

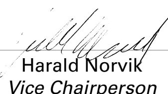
PGS ASA's consolidated financial statements have been prepared and presented in accordance with IFRSs and IFRICs as adopted by the EU and additional disclosure requirements in the Norwegian Accounting Act, and that should be used as of December 31, 2011. The separate financial statements for PGS ASA have been prepared in accordance with the Norwegian Accounting Act and Norwegian accounting standards as of December 31, 2011. The Board of Directors report for the group and the parent company is in accordance with the requirements of the Norwegian Accounting Act and Norwegian accounting standard 16, as of December 31, 2011.

To the best of our knowledge:

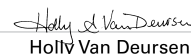
- The consolidated and separate annual financial statements for 2011 have been prepared in accordance with applicable accounting standards.
- The consolidated and separate annual financial statements give a true and fair view of the assets, liabilities, financial position, and result of operations as a whole as of December 31, 2011, for the group and the parent company.
- The Board of Directors' report for the group and the parent company include a true and fair review of:
  - The development and performance of the business and the position of the group and the parent company.
  - The principal risks and uncertainties the group and the parent company face.

London, March 22, 2012
Board of Directors
Petroleum Geo-Services ASA

Francis Gugen
*Chairperson*


Harald Norvik
*Vice Chairperson*

Carol Bell


Holly Van Deursen

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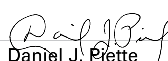

Daniel J. Piette

Ingar Skaug

Jon Erik Reinhardsen
*Chief Executive Officer*

A work boat arrives the stern cradle of a Ramform vessel under operations and will be on-loaded shortly after.

PETROLEUM GEO-SERVICES

# CONSOLIDATED STATEMENTS OF OPERATIONS

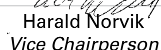
| (In thousands of dollars) | Note | 2011 | 2010 Restated(2) | 2009 Restated(2) |
|---|---|---|---|---|
| | | Years ended December 31, | | |
| Revenues | 6 | $ 1,253,300 | $ 1,135,134 | $ 1,350,202 |
| Cost of sales (1) | | 643,434 | 581,900 | 599,053 |
| Research and development costs (1) | | 24,281 | 21,791 | 22,806 |
| Selling, general and administrative costs (1) | | 50,822 | 56,014 | 49,270 |
| Depreciation and amortization | 6, 7 | 397,881 | 344,908 | 303,783 |
| Impairments of long-lived assets | 6, 7 | 2,583 | 79,136 | 153,615 |
| Other operating income | 20 | (4,400) | - | - |
| Total operating expenses | | 1,114,601 | 1,083,749 | 1,128,527 |
| Operating profit | 6 | 138,699 | 51,385 | 221,675 |
| Share of profit (loss) of equity accounted investments | 20 | (12,389) | (10,183) | 1,901 |
| Interest expense | 8 | (42,170) | (46,996) | (45,232) |
| Other financial income | 9 | 24,451 | 13,860 | 24,489 |
| Other financial expense | 9 | (33,731) | (17,580) | (11,117) |
| Currency exchange gain (loss) | | (10,347) | 916 | 24,806 |
| Income (loss) before income tax expense | | 64,513 | (8,598) | 216,522 |
| Income tax expense | 10 | 30,044 | 13,903 | 51,942 |
| Income (loss) from continuing operations | | 34,469 | (22,501) | 164,580 |
| Income (loss) from discontinued operations, net of tax | 4 | 589 | 8,548 | (8,248) |
| Net income (loss) | | $ 35,058 | $ (13,953) | $ 156,332 |
| Net income attributable to non-controlling interests | | 1,367 | 67 | 2,094 |
| Net income (loss) to equity holders of PGS ASA | | $ 33,691 | $ (14,020) | $ 154,238 |

(1) Excluding depreciation and amortization, which is shown separately.
(2) See note 2

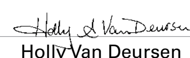
| | Note | 2011 | 2010 | 2009 |
|---|---|---|---|---|
| **Earnings per share, to ordinary equity holders of PGS ASA:** | 11 | | | |
| - Basic | | $ 0.16 | $ (0.07) | $ 0.82 |
| - Diluted | | $ 0.15 | $ (0.07) | $ 0.82 |
| **Earnings per share from continuing operations, to ordinary equity holders of PGS ASA:** | 11 | | | |
| - Basic | | $ 0.15 | $ (0.11) | $ 0.86 |
| - Diluted | | $ 0.15 | $ (0.11) | $ 0.86 |

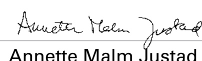
London, March 22, 2012
Board of Directors
Petroleum Geo-Services ASA

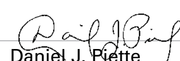
Francis Gugen
*Chairperson*


Harald Norvik
*Vice Chairperson*

Carol Bell


Holly Van Deursen


Annette Malm Justad


Daniel J. Piette

Ingar Skaug

Jon Erik Reinhardsen
*Chief Executive Officer*

PETROLEUM GEO-SERVICES

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

| (In thousands of dollars) | Note | Years ended December 31, 2011 | 2010 Restated(1) | 2009 Restated(1) |
|---|---|---|---|---|
| Net income (loss) | | $ 35,058 | $ (13,953) | $ 156,332 |
| *Other comprehensive income* | | | | |
| Cash flow hedges | 26 | 2,582 | 2,701 | 15,582 |
| Deferred tax on cash flow hedges | 10 | (723) | (732) | (4,388) |
| Revaluation of shares available-for-sale | 13 | (12,822) | 11,946 | (2) |
| Other comprehensive income (loss) from equity accounted investments | | 242 | - | - |
| Translation adjustments and other | | 1,356 | (1,412) | 26 |
| Other comprehensive income (loss), net of tax | | (9,365) | 12,503 | 11,218 |
| Total comprehensive income | | 25,693 | (1,450) | 167,550 |
| Total comprehensive income attributable to non-controlling interest | | 1,367 | 67 | 2,094 |
| Total comprehensive income to equity holders of PGS ASA | | $ 24,326 | $ (1,517) | $ 165,456 |

(1) See note 2

PETROLEUM GEO-SERVICES

# CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

| (In thousands of dollars) | Note | December 31, 2011 | 2010 Restated(1) |
|---|---|---|---|
| ASSETS | | | |
| *Current assets* | | | |
| Cash and cash equivalents | | $ 424,734 | $ 432,579 |
| Restricted cash | 12 | 4,605 | 4,773 |
| Accounts receivable | 14 | 220,765 | 225,301 |
| Accrued revenues and other receivables | 15 | 110,367 | 145,187 |
| Available-for-sale investments | 13 | 6,205 | - |
| Other current assets | 17 | 104,876 | 98,432 |
| Total current assets | | 871,552 | 906,272 |
| *Long-term assets* | | | |
| Property and equipment | 18 | 1,292,583 | 1,213,206 |
| MultiClient library | 19 | 334,135 | 310,843 |
| Restricted cash | 12 | 89,051 | 66,395 |
| Deferred tax assets | 10 | 177,923 | 210,766 |
| Equity accounted investments | 20 | 48,521 | 24,523 |
| Available-for-sale investments | 13 | 24,864 | 33,282 |
| Other long-lived assets | 21 | 23,987 | 27,245 |
| Goodwill | 22 | 139,852 | 139,852 |
| Other intangible assets | 23 | 134,711 | 102,594 |
| Total long-term assets | | 2,265,627 | 2,128,706 |
| Total assets | 6 | $ 3,137,179 | $ 3,034,978 |
| | | | |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | | |
| *Current liabilities* | | | |
| Short-term debt and current portion of long-term debt | 24, 25 | $ 183,011 | $ - |
| Current portion of finance lease obligations | 27 | 96 | - |
| Accounts payable | | 61,733 | 95,486 |
| Accrued expenses | 28 | 266,003 | 244,938 |
| Income taxes payable | 10 | 21,298 | 43,994 |
| Total current liabilities | | 532,141 | 384,418 |
| *Long-term liabilities* | | | |
| Long-term debt | 25 | 753,414 | 783,693 |
| Long-term finance lease obligations | 27 | 60 | - |
| Deferred tax liabilities | 10 | 17,134 | 20,757 |
| Other long-term liabilities | 29 | 62,740 | 90,831 |
| Total long-term liabilities | | 833,348 | 895,281 |
| *Shareholders' equity* | | | |
| *Paid-in capital* | | | |
| Common stock; par value NOK 3; issued and outstanding 217,799,997 shares | 31 | 96,490 | 96,490 |
| Treasury shares, par value | 31 | (607) | (240) |
| Additional paid-in capital | | 508,217 | 503,111 |
| Total paid-in capital | | 604,100 | 599,361 |
| Accumulated earnings | | 1,187,705 | 1,166,848 |
| Cumulative translation adjustment and other reserves | | (20,307) | (10,942) |
| Non-controlling interests | | 192 | 12 |
| Total shareholders' equity | | 1,771,690 | 1,755,279 |
| Total liabilities and shareholders' equity | | $ 3,137,179 | $ 3,034,978 |

(1) See note 2

PETROLUEM GEO-SERVICES

# CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDER'S EQUITY

| (In thousands of dollars, except for share data) | Common stock Number | Common stock Par value | Treasury shares Par value | Additional paid-in capital | Acc-umulated earnings (deficit) | Cumulative translation adjustm. and other reserves | Total | Non-controlling interests | Share-holders' equity |
|---|---|---|---|---|---|---|---|---|---|
| | Attributable to equity holders of PGS ASA | | | | | | | | |
| Balance at January 1, 2010 | 197,999,999 | $ 86,583 | $ - | $ 237,542 | $ 1,147,551 | $ (23,445) | $1,448,231 | $ 805 | $ 1,449,036 |
| Effect of policy change (note 36) | - | - | - | - | 39,884 | - | 39,884 | - | 39,884 |
| Restated balance at January 1, 2010 | 197,999,999 | $ 86,583 | $ - | $ 237,542 | $ 1,187,435 | $ (23,445) | $1,488,115 | $ 805 | $1,488,920 |
| Total comprehensive income | - | - | - | - | (14,020) | 12,503 | (1,517) | 67 | (1,450) |
| Share issue (19,799,998 shares) [1] | 19,799,998 | 9,907 | - | 260,215 | - | - | 270,122 | - | 270,122 |
| Dividend to non-controlling interests | - | - | - | - | - | - | - | (860) | (860) |
| Acquired treasury shares | | - | (420) | - | (8,804) | - | (9,224) | - | (9,224) |
| Exercise employee share options | - | - | 180 | - | 2,237 | - | 2,417 | - | 2,417 |
| Employee share options | - | - | - | 5,354 | - | - | 5,354 | - | 5,354 |
| Restated balance at December 31, 2010 | 217,799,997 | $ 96,490 | $ (240) | $ 503,111 | $1,166,848 | $ (10,942) | $1,755,267 | $ 12 | $ 1,755,279 |
| Total comprehensive income | - | - | - | - | 33,691 | (9,365) | 24,326 | 1,367 | 25,693 |
| Dividends to non-controlling interes | - | - | - | - | - | - | - | (1,217) | (1,217) |
| Capital increase, non-controlling interests | - | - | - | - | - | - | - | 30 | 30 |
| Acquired treasury shares | - | - | (673) | - | (16,731) | - | (17,404) | - | (17,404) |
| Exercise employee share options | - | - | 306 | - | 3,897 | - | 4,203 | - | 4,203 |
| Employee share options | - | - | - | 5,106 | - | - | 5,106 | - | 5,106 |
| Balance at December 31, 2011 | 217,799,997 | $ 96,490 | $ (607) | $ 508,217 | $ 1,187,705 | $ (20,307) | $1,771,498 | $ 192 | $ 1,771,690 |

(1) Transaction costs amounting to $4.0 million are recognized against "Additional paid-in capital" net of related income tax benefits of $1.5 million.

The components of other comprehensive income, recognized in cumulative translation adjustments and other reserves are as follows:

| (In thousands of dollars) | Net foreign currency translation adjustments | Net unrealised gain (loss) investments | Net gain (loss) cash flow hedges: Interest rate | Net gain (loss) cash flow hedges: Exchange rate | Cumulative translation adjustments and other reserves |
|---|---|---|---|---|---|
| Balance at January 1, 2010 | $ (1,276) | $ 44 | $ (22,213) | $ - | $ (23,445) |
| Year ended December 31, 2010: | | | | | |
| Revaluation of cash flow hedges | - | - | 2,701 | - | 2,701 |
| Deferred tax on cash flow hedges | - | - | (732) | - | (732) |
| Revaluation of shares available-for-sale | - | 11,946 | - | - | 11,946 |
| Other | (1,412) | - | - | - | (1,412) |
| Balance at December 31, 2010 | $ (2,688) | $ 11,990 | $ (20,244) | $ - | $ (10,942) |
| Year ended December 31, 2011: | | | | | |
| Revaluation of cash flow hedges | - | - | 2,582 | - | 2,582 |
| Deferred tax on cash flow hedges | - | - | (723) | - | (723) |
| Revaluation of shares available-for-sale | - | (12,822) | - | - | (12,822) |
| Other | 1,356 | 242 | - | - | 1,598 |
| Balance at December 31, 2011 | $ (1,332) | $ (590) | $ (18,385) | $ - | $ (20,307) |

PETROLEUM GEO-SERVICES

# CONSOLIDATED STATEMENTS OF CASH FLOWS

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 Restated(1) | 2009 Restated(1) |
| Cash flows provided by operating activities: | | | |
| Net income (loss) | $ 33,691 | $ (14,020) | $ 154,238 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | |
| Depreciation and amortization, continuing operations | 397,881 | 344,908 | 303,783 |
| Depreciation and amortization, discontinued operations | - | - | 22,701 |
| Impairments of long-lived assets | 2,583 | 79,136 | 153,615 |
| (Gain) loss on sale and retirement of assets | 1,641 | 9,185 | 47 |
| Share of (profit) loss in equity accounted investments | 12,389 | 10,183 | (1,901) |
| Interest expense | 42,170 | 46,996 | 45,035 |
| (Increase) decrease in deferred income taxes | 28,368 | (11,254) | 7,095 |
| Net decrease (increase) in restricted cash | 10,844 | 1,347 | 383 |
| Income taxes paid | (20,244) | (36,098) | (65,487) |
| Gain on sale of shares | (10,985) | (6,483) | (8,670) |
| Gain on sale of subsidiary (Onshore), net of transaction cost | - | (10,082) | - |
| Other items | 5,724 | 3,861 | 2,908 |
| (Increase) decrease in accounts receivable, net | 4,536 | (54,034) | (15,703) |
| (Increase) decrease in unbilled and other receivables | 34,820 | (3,062) | 45,721 |
| (Increase) decrease in other current assets | (6,445) | (11,665) | 39,354 |
| (Increase) decrease in other long-lived assets | (8,773) | 1,311 | 6,963 |
| Increase (decrease) in accounts payable | (24,405) | 10,009 | (6,686) |
| Increase (decrease) in accrued expenses and income taxes payable | 2,132 | (13,497) | 21,394 |
| Increase (decrease) in other long-term liabilities | (25,546) | 8,777 | (21,781) |
| Net cash provided by operating activities | 480,381 | 355,518 | 683,009 |
| Cash flows (used in) provided by investing activities: | | | |
| Investment in MultiClient library | (203,922) | (166,711) | (183,083) |
| Investment in MultiClient library, discontinued operations | - | (1,208) | (3,599) |
| Capital expenditures | (299,060) | (223,510) | (238,154) |
| Capital expenditures on new-builds on charter | - | - | (3,839) |
| Capital expenditures, discontinued operations | - | - | (10,538) |
| Proceeds/ refunds from new-build cancellations | - | 157,376 | - |
| Investments in other intangible assets | (19,960) | (12,614) | (7,811) |
| Investments in other intangible assets, discontinued operations | - | (219) | (4,577) |
| Investment/sale of equity accounted investments, net | (263) | (9,935) | - |
| Long term receivable, net | (28,441) | - | - |
| Proceeds from sale of assets and equity accounted investments | 555 | 1,382 | 12,143 |
| Proceeds from assets held-for-sale | - | 2,400 | 58,000 |
| Investment in available-for-sale shares | - | (15,355) | (8,128) |
| Proceeds from available-for-sale shares | 12,535 | 15,650 | 14,681 |
| Sale of subsidiaries (Onshore) | - | 176,754 | - |
| Long-term deposit | (33,331) | (66,395) | - |
| Other items, net | - | 1,000 | 1,956 |
| Net cash used in investing activities | (571,887) | (141,385) | (372,949) |
| Cash flows (used in) provided by financing activities: | | | |
| Proceeds from issuance of common stock, net | - | 268,582 | 98,523 |
| Purchase of treasury shares | (17,404) | (9,224) | - |
| Proceeds from issuance of long-term debt | 288,025 | - | 20,000 |
| Repayment of long-term debt | (155,992) | (127,436) | (354,538) |
| Principal payments under capital leases | (23) | (354) | (3,703) |
| Proceeds from sale of treasury shares | - | - | 20,276 |
| Proceeds from exercise of employee share options | 4,203 | 2,417 | - |
| Dividend paid to non-controlling interets in subsidiaries | (1,217) | (860) | (1,299) |
| Interest paid | (33,931) | (40,639) | (58,606) |
| Net cash (used in) provided by financing activities | 83,661 | 92,486 | (279,347) |
| Net (decrease) increase in cash and cash equivalents | (7,845) | 306,618 | 30,713 |
| Cash and cash equivalents as of January 1 | 432,579 | 125,961 | 95,248 |
| Cash and cash equivalents as of December 31 | $ 424,734 | $ 432,579 | $ 125,961 |

(1) See note 2

| | | | |
|---|---|---|---|
| Cash flow from (used in) discontinued operation (Onshore) (a): | | | |
| Net cash provided by operating activities | - | - | 23,045 |
| Net cash used in investing activities | - | (1,427) | (17,350) |
| Net cash used in financing activities (capital leases) | - | - | - |
| Net cash from (used in) discontinued operation | - | (1,427) | 5,695 |

(a) included in the consolidated statement of cash flow above.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## Note 1 - General Information about the Company and Basis of Presentation

**General information**
Petroleum Geo-Services ASA ("PGS ASA") is a public limited liability company established under the laws of the Kingdom of Norway in 1991. Unless stated otherwise, references herein to the "Company" and "PGS" refer to Petroleum Geo-Services ASA and its majority owned subsidiaries and affiliates, companies in which it has and controls a majority voting interest.

PGS is a technologically focused oilfield service company principally involved in providing geophysical services worldwide. PGS provides a broad range of geophysical and reservoir services, including seismic data acquisition, processing, interpretation and field evaluation. The Company's headquarters are at Lysaker, Norway. See further discussion of the Company's services in Note 6.

The Company has prepared its consolidated financial statements in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union ("EU"). IFRS as adopted by the EU differ in certain respects from IFRS as issued by the International Accounting Standards Board ("IASB"). References to IFRS hereafter should be construed as references to IFRS as adopted by the EU. The consolidated financial statements have been prepared under the historical cost basis, except for available-for-sale financial assets and derivative financial instruments that have been measured at fair value and assets impaired that are measured at value-in-use. The consolidated financial statements are presented in US Dollars ("$" or "dollars"), which is defined as the presentation currency.

The consolidated financial statements were authorised for issue by the Board of Directors on March 22, 2012.

**Significant transactions and events, including subsequent events**
In February 2011 SeaBird Exploration PLC issued a convertible loan of $42.9 million directed towards the Company. In December 2011 the instrument was partially repaid and partially restructured as a Senior Secured Bond (Coupon rate 6%) with a nominal value of $31.7 million. A loss of $7.5 million was recognized in the consolidated statement of operations in 2011 as the fair value of the new bond was lower than the nominal value.

In April 2011, the Company ordered two Ramform Titan-class vessels, with an option for another two vessels, from Mitsubishi Heavy Industries Ltd. The vessels are the first in a new generation of Ramform vessels. Agreed deliveries of the two first vessels are in 2013, and progress is according to plan. The options for delivery of the two additional vessels in 2015 are valid to mid April 2012. The estimated total cost for each of the Ramform Titan-class is approximately $250 million, including commissioning and a comprehensive seismic package, but excluding capitalized interest.

In third quarter 2011, the Company participated in the establishment of the Exploration & Production (E&P) focused investment company Azimuth primarily by contributing existing equity holdings in smaller E&P companies. The Company owns 45.1% of Azimuth and has entered into a cooperation agreement whereby the Company provides certain services to Azimuth and whereby Azimuth has the right to buy, for cash and at fair value, up to 50% of any future equity settlement that PGS may receive as payment for its library or services. The Company has no obligation to provide further funding of Azimuth and has no guarantees outstanding.

In November 2011, the company issued $300 million Senior notes which are due in December 2018. The Senior notes were issued at 98.638% of the principal amount with a coupon of 7.375%. The Senior notes are ranked as senior obligations of the company and rank equally in right of payment with all other existing and future senior debt.

In fourth quarter 2011, the Company recognized an impairment of long-lived assets with a net effect of $2.6 million which consists of adjusted estimates of impairment on the cancelled Arrow new builds in Spain of $4.6 million and reversal of impairment on previously impaired equipment to be used on the vessels in construction of $2 million.

In fourth quarter 2011, the Company recognized an impairment of shares available for sale of $9.6 million due to a significant decline in the share price of San Leon and Providence.

During 2011 the company made optional repurchases of the Convertible notes for a nominal amount of $153.9 million at an average price of 98.83%. Per December 31, 2011 the Company owns $209.4 million of the Convertible notes representing 52.4% of the total outstanding issue.

*Subsequent events*
During 2012 the Company made optional repurchases of the Convertible notes for a nominal amount of $144.0 million at an average price of 100.67%. Following the transactions the Company owns $353.4 million of the Convertible notes representing 88.4% of the total outstanding issue. According to the loan agreement the Company can redeem all of the Notes outstanding at their principal amount if it has repurchased and cancelled more than 85% of the principal amount issued. On February 20, 2012 the Company announced its intention to exercise the option to redeem the remaining outstanding Notes, including accrued but unpaid interest up until the redemption date set to March 16, 2012. On March 16, 2012 note holders for a nominal amount of $1.1 million requested that their notes were converted to shares. This was effectuated on March 20, 2012 when the Company transferred 28,079 of its treasury shares as settlement. The remaining outstanding amount was redeemed and cancelled on March 22, 2012.

## Note 2 - Summary of Significant Accounting Policies

**Adoption of new and revised policies and standards and interpretations**
The new standards, amendments and interpretations effective for the year ended 31 December 2011 have not been applied in preparing these consolidated financial statements as they did not have any significant impact.

**Significant changes to accounting policies**
From January 1, 2011 the Company changed the policy for recognition of costs incurred in connection with major overhaul of vessels. Under the new policy the directly attributable costs incurred in connection with major overhaul are capitalized and depreciated over the estimated period till the next similar overhaul. The former policy was to expense such costs when incurred. The change is made to better reflect the economic reality, reduce volatility and align the accounting to industry practice and practice among other vessel owning companies. The change in policy is applied for all reported periods, including periods prior to January 1, 2011. See note 36 for presentation of adjustments made in the restated periods.

**Consolidation**

*Subsidiaries and business combinations*
Subsidiaries are all entities (including special purpose entities) over which the Company has the power to govern the financial and operating policies generally accompanying a shareholding of more than one half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Company controls another entity.

Subsidiaries are consolidated in the financial statements from the point in time when the Company gains control. The acquisition of subsidiaries is accounted for using the acquisition method of accounting. Acquisition cost is assigned to the assets and liabilities of the subsidiaries, including previously unrecognized intangible assets and contingent liabilities, using their fair value at the date of acquisition. Any excess of purchase cost over fair value of assets and liabilities is recorded as goodwill. Following initial recognition, goodwill is not amortized, but measured at cost less any accumulated impairment losses. All inter-company transactions and balances have been eliminated in the consolidation. In those cases where the subsidiaries are not wholly owned, the non-controlling interests are presented separately in the consolidated statements of operations and consolidated statements of financial position.

*Investments in joint ventures*
A joint venture is a contractual arrangement whereby the Company undertakes an economic activity that is subject to joint control under which strategic financial and operating policy decisions relating to the activities require the unanimous consent of the parties sharing control.

The Company reports its interests in jointly controlled entities using the equity method of accounting. Under the equity method, investments in joint ventures are carried in the consolidated statements of financial position at cost as adjusted for post-acquisition changes in the Company's share of the net assets of the joint venture (i.e. profit or loss and equity adjustments), less any impairment in the value of individual investments. Losses of a joint venture in excess of the Company's interest in that joint venture (which includes any long-term interests that, in substance, form part of the Company's net investment in the joint venture) are not recognized, unless the Company has incurred legal or constructive obligations or made payments on behalf of the joint venture. Profits and losses resulting from transactions between the Company and the joint venture are eliminated to the extent of the interest in the joint venture.

When the Company contributes or sells assets to the joint venture, any portion of gain or loss from the transaction is recognised based on the substance of the transaction and any gain or loss of such transactions are eliminated to the extent of the Company's interest in the joint venture. When the Company purchases assets from the joint venture, the Company does not recognise its share of the profits of the joint venture from the transaction until it resells the assets to an independent party.

The Company periodically reviews its net investments in joint ventures to determine whether there is any indication of impairment loss. If any such indication exists, the recoverable amount of the joint venture is estimated in order to determine the extent of the impairment loss (if any).

*Investments in associated companies*
An associated company is an entity over which the Company has significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies, generally accompanying a shareholding of between 20% and 50% of the voting rights.

The net results and assets and liabilities of associated companies are incorporated in these financial statements using the equity method of accounting, except when the investment is classified as held-for-sale (see below).

The Company periodically reviews its investments in associated companies to determine whether there is any indication of an impairment loss. If such indication exists, the recoverable amount of the associate is estimated in order to determine the extent of the impairment loss (if any).

**Held-for-sale and discontinued operations**
Results of subsidiaries or operations disposed of during the financial year are included in the Company's profit up to the effective date of disposal. When the Company intends to dispose of, or classify as held-for-sale, a business component that

represents a separate major line of business it would classify such operations as discontinued. The result from discontinued operations are reported net of tax and presented separately in the consolidated statements of operations. Assets and liabilities are presented as separate line items in the consolidated statements of financial position. Comparative consolidated statements of operations and cash flow information is restated based on the classification (as continuing and discontinued) at the current reporting date.

Non-current assets are classified as held-for-sale when their carrying amount will be recovered principally through sale rather than through continuing use. This condition is deemed to exist when the sale is highly probable, the asset is available for immediate sale in its present condition and management is committed to the sale. Such assets are measured at the lower of carrying amount and fair value less costs to sell and are presented separately on the face of the consolidated statements of financial position. Comparative amounts are not restated when an asset is classified as held-for-sale.

**Cash and cash equivalents**
The carrying amounts of cash and cash equivalents approximate fair value. Cash and cash equivalents include demand deposits and all highly liquid financial instruments purchased with original maturities of three months or less. Cash and cash equivalents that are restricted from the Company's use are presented separately in the consolidated statements of financial position and are classified as current or long-term depending on the nature of the restrictions. Such restrictions primarily relate to Brazilian tax claim deposit (Note 27), employee tax withholdings, cash collateral for bid or performance bonds, certain health insurance and restricted deposits under contracts.

**Foreign currency translation and transactions**
The financial statements of non-US subsidiaries having their respective local currency as their functional currency are translated using the current exchange rate method. Assets and liabilities are translated at the rate of exchange in effect at the period end; share par value and paid-in capital are translated at historical exchange rates; and revenues and expenses are translated at the average rate of exchange in effect during the period. Translation adjustments are recorded as a separate component in the consolidated statement of comprehensive income.

Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation of realized and unrealized monetary assets and liabilities denominated in foreign currencies are recognized in the consolidated statements of operations, except when recognized in the consolidated statement of comprehensive income as qualifying cash flow hedges and qualifying net investment hedges.

**Operational and finance leases**
The determination of whether an arrangement is, or contains a lease is based on the substance of the arrangement and requires an assessment of whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset.

The Company has significant operating lease arrangements in all of its operating segments and also has some finance lease arrangements relating to marine seismic equipment and UK leases for vessels (See Note 27).

Finance leases, which transfer to the Company substantially all the risks and benefits incidental to ownership of the leased item, are capitalized at inception of the lease at the fair value of the leased asset or, if lower, at the present value of the minimum lease payments. Assets under finance leases are depreciated over the shorter of the estimated useful life of the asset and the lease term, if there is no reasonable certainty that the Company will obtain ownership by the end of the lease term.

Operating lease payments are expensed in the consolidated statements of operations on a straight-line basis over the lease term, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating leases are expensed in the period in which they are incurred.

**Goodwill**
Goodwill is initially recognized as an asset at cost and is subsequently measured at cost less any accumulated impairment losses.

**Intangible assets**
Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Internally generated intangible assets other than those specified below are expensed as incurred.

*MultiClient library*
The MultiClient library consists of seismic data surveys to be licensed to customers on a nonexclusive basis. Costs directly incurred in acquiring, processing and otherwise completing seismic surveys are capitalized to the MultiClient library. Also included are costs incurred while relocating or “steaming” a vessel or crew from one location to another and capitalized borrowing costs.

The Company records the costs incurred on the MultiClient library in a manner consistent with its capital investment and operating decision analysis, which generally results in each component of the MultiClient library being recorded and evaluated separately. Projects that are covered by the same political regime, with similar geological traits and that are marketed collectively are recorded and evaluated as a group by year of completion.

Amortization of the MultiClient library is generally recorded in proportion to revenue recognized in a period as a percentage of the total remaining expected revenue. On an annual basis the Company categorizes each MultiClient survey into one of four amortization categories with amortization rates of 90%, 75%, 60% or 45% of sales. Classification of each project into a rate category is based on the ratio of its remaining net book value to estimated remaining sales. Each category therefore is comprised of surveys for which the remaining book value as a percentage of estimated remaining sales is less than or equal to the amortization rate applicable to that category.

An integral component of amortization of the MultiClient library is the minimum amortization policy. Under this policy, the book value of each survey or group of surveys of the MultiClient library is reduced to a specified percentage by year-end, based on the age of the survey or group of surveys in relation to its year of completion. This requirement is applied each year-end regardless of future sales estimates for the MultiClient library survey or groups of surveys. The specified percentage generates the maximum permitted book value for each MultiClient library survey or group of surveys as the product of the percentage multiplied by the original book value of the MultiClient library survey or group of surveys at the respective period end. Any additional or "minimum" amortization charges required are then determined through a comparison of the remaining book value to the maximum permitted book value allowed for each survey or group of surveys of the MultiClient library.

The specified percentages used to determine the maximum book value of its MultiClient library components are summarized as follows:

| Calendar year after project completion | 5-year profile | 3-year profile |
|---|---|---|
| Year 0 (a) | 100% | 100% |
| Year 1 | 80% | 66% |
| Year 2 | 60% | 33% |
| Year 3 | 40% | 0% |
| Year 4 | 20% | |
| Year 5 | 0% | |

(a) Represents the year in which the survey is classified as completed.

All Marine MultiClient projects have a 5-year profile starting in the year after project completion. All derivative processed products have a 3-year profile starting in the year after data delivery. Derivative products are mainly reprocessing that creates data that can be sold as a separate project.

The Company classifies as amortization expense in its consolidated statements of operations any impairment of individual MultiClient surveys that are based on changes in project specific expectations and that are not individually material. The Company expects this additional, non-sales related, amortization expense to occur regularly because each individual project is evaluated at least annually for impairment or when specific indicators exist. The Company classifies as impairment in its consolidated statements of operations write-downs related to fundamental changes in estimates affecting a larger part of the Company's MultiClient library where the effects are material, see *impairment of property, equipment and intangibles* below.

*Research and development costs*

Research costs are expensed as incurred. An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following have been demonstrated: the technical feasibility of completing the intangible asset so that it will be available for use or sale; the intention to complete the intangible asset and use or sell it; the ability to use or sell the intangible asset; how the intangible asset will generate probable future economic benefits; the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally generated intangible asset can be recognized, development costs are expensed as incurred.

Subsequent to initial recognition, internally generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately. Capitalized development costs are amortized on a straight line basis over the estimated useful life.

*Patents, licenses and technology*

Patents, licenses and technology are stated at cost less accumulated amortization and any impairment charges. Amortization is calculated on a straight-line basis over the estimated period of benefit, ranging from one to twenty years.

*Exploration expenses*

The Company obtains ownership of oil and gas properties in exchange for providing acquisition services and licenses. These assets are capitalized as exploration expenses and are initially measured at the fair value of the received asset. The Company uses the "successful efforts" method of accounting for exploration expenses. Expenditures to acquire mineral interests in oil and gas properties are capitalized within intangible assets until the well is complete and the results have been evaluated. If, following evaluation, the exploratory well has not found proved reserves the previously capitalized costs are evaluated for derecognition or tested for impairment. Unproven oil and gas properties are assessed for impairment when fact and circumstances suggest that the carrying amount of the asset may exceed the recoverable amount.

**Property and equipment**
Property and equipment are stated at cost, excluding the costs of the day-to-day servicing, less accumulated depreciation and impairment losses. Depreciation is calculated on a straight-line basis over the useful life of the assets based on cost less estimated residual values. The estimated useful lives for property and equipment are as follows:

| | Years |
|---|---|
| Seismic vessels | 25 - 30 |
| Seismic and operations computer equipment | 3 - 15 |
| Buildings and related leasehold improvements | 1 - 17 |
| Fixture, furniture, fittings and office computers | 3 - 5 |
| Major overhaul | 3 - 5 |

Subsequent expenditures and major inspections/overhaul are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of any replaced part is derecognised. All other repairs and maintenance are charged to the consolidated statements of operations during the financial period in which they are incurred.

The assets' residual values, useful lives and method of depreciation are reviewed, and adjusted if appropriate, at least at each financial year-end.

Assets under construction are carried at cost, less any impairment loss. Cost includes borrowing costs capitalized in accordance with the Company's accounting policy as stated below. Depreciation of these assets commences when the assets are ready for their intended use.

An item of property and equipment is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statements of operations in the year the asset is derecognized.

Significant spare parts are capitalized with the asset to which they pertain, while other spare parts, consumables and bunkers are classified as other current assets and stated at cost less any impairment charges.

**Borrowing costs**
Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization. All other borrowing costs are expensed as incurred.

**Steaming costs**
Steaming costs relate to relocating or "steaming" a vessel or crew from one location to another. The Company includes such costs in the cost of the MultiClient survey or exclusive contract with which the costs are associated. The steaming costs related to MultiClient survey are capitalized as a part of the MultiClient library (see above). Steaming costs on exclusive surveys are deferred and charged to expense based upon the percentage of completion of the project.
Both for MultiClient and exclusive surveys the estimated probable future economic inflows which are documented at inception must cover the costs capitalized or deferred. If the projects are not able to cover all of the costs which could be capitalized or deferred then only those costs that are recoverable (discounted cash inflow of the project or activity undertaken exceeds the discounted cash outflow) are capitalized/deferred.

**Impairment of property, equipment and intangibles**
The Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have been impaired. If any such indication exists, or when annual impairment testing for an asset is required, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). An asset's recoverable amount is the higher of an asset's or cash generating unit's fair value less cost to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. In assessing value in use, the estimated future cash flows are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted. If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately and presented separately in the consolidated statements of operations.

Goodwill does not generate cash flows independently of other assets or groups of assets and is allocated to the cash-generating units expected to benefit from the synergies of the combination that gave rise to the goodwill. Upon internal reorganization goodwill is allocated to the new cash-generating units based on the relative fair value.

Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Goodwill (and the cash-generating unit to which goodwill has been allocated) and intangible assets not yet available for use are tested for impairment annually, or whenever there is an indication that the asset may be impaired. If the recoverable amount of the cash generating unit is less than the carrying amount of the unit (including goodwill allocation), the impairment loss goes first to reduce the carrying amount of any goodwill and then to reduce the carrying amount of the other assets of the unit pro-rata on the basis of the carrying amount of each assets in the unit.

Where an impairment loss subsequently reverses, the carrying amount of the asset (cash-generating unit) is increased to the revised estimate of its recoverable amount. That increased carrying amount cannot exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately and presented separately in the consolidated statements of operations. Impairment loss recognized for goodwill cannot be reversed in future periods.

**Derivative financial instruments and hedging**
The Company accounts for derivative financial instruments in accordance with IAS 39 Financial Instruments: Recognition and Measurement (“IAS 39”). The Company uses derivative financial instruments to reduce risk exposure related to fluctuations in foreign currency rates and interest rates. Derivative instruments are recognized in the consolidated statements of financial position at their fair values while realized and unrealized gains and losses attributable to derivative instruments that do not qualify for hedge accounting are recognized as other financial items, net, as they arise.

The Company applies either fair value or cash flow hedge accounting when a transaction meets the specified criteria in IAS 39 for hedge accounting. To qualify for hedge accounting the instrument should be designated as a hedge at inception of a hedge relationship. At the time a financial instrument is designated as a hedge, the Company documents the relationship between the hedging instrument and the hedged item. Documentation includes risk management objectives and strategy in undertaking the hedge transaction, together with the methods that will be used to assess the effectiveness of the hedging relationship. Accordingly, the Company formally assesses, both at the inception of the hedge and on an ongoing basis, whether the hedging derivatives have been “highly effective” in offsetting changes in the fair value or cash flows of the hedged item. A hedge is normally regarded as “highly effective” if, at inception and throughout its life, it can be expected, and actual results indicate, that changes in the fair value or cash flows of the hedged item are effectively offset by the changes in the fair value or cash flows of the hedging instrument. Actual results must be within a range of 80% to 125%. Hedge accounting will be discontinued when (a) the Company determines that a derivative is not, or has ceased to be, highly effective as a hedge, (b) the derivative expires, or is sold, terminated or exercised, (c) the hedged item matures or is sold or repaid, or (d) a forecast transaction is no longer deemed highly probable.

The Company accounts for hedges that meet these criteria as follows:
*Fair value hedges:* The change in fair value of the hedging instrument is recognized in the consolidated statements of operations. The change in fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognized in the consolidated statements of operations. When an unrecognized firm commitment is designated as a hedged item, the subsequent cumulative change in fair value of the firm commitment attributable to the hedged risk is recognized as an asset or liability with a corresponding gain or loss recognized in the consolidated statements of operations.

*Cash flow hedges:* The effective portion of the gain or loss on the hedging instrument is recognized in the consolidated statement of comprehensive income, while any ineffective portion is recognized immediately in the consolidated statements of operations. Amounts recorded in the consolidated statement of comprehensive income are transferred to the consolidated statements of operations when the hedged transaction affects the consolidated statements of operations.

**Revenue recognition**
The Company recognizes revenue when persuasive evidence of a sale arrangement exists, delivery has occurred or services have been rendered, the sales price is fixed or determinable and collection is reasonably assured. The Company defers the unearned component of payments received from customers for which the revenue recognition requirements have not been met. Consideration is generally allocated among the separate units of accounting based on their estimated relative fair values when elements have stand alone value. If an element of a customer agreement does not have stand alone value, revenue is deferred and recognized over the period services are provided. The Company's revenue recognition policy is described in more detail below.

*(a) Sales of MultiClient library data*
*Late sales* - The Company grants a license to a customer, which entitles the customer to have access to a specifically defined portion of the MultiClient data library. The Company recognizes revenue for late sales when the customer executes a valid license agreement and has received the underlying data or has the right to access the licensed portion of the data, the customer's license payment is fixed and determinable and collection is reasonably assured.

*Volume sales agreements* - The Company grants licenses to the customer for access to a specified number of blocks of MultiClient library within a defined geographical area. These licenses typically enable the customer to select and access the specific blocks over a period of time. Although the license fee is fixed and determinable in all cases, the payment terms of individual volume sales agreements vary, ranging from payment of the entire fee at the commencement of the agreement, to instalment payments over a multi-year period, to payment of the license fee as the specific blocks are selected.
Revenue recognition for volume sales agreements is based on a proportion of the total volume sales agreement revenue, measured as the customer executes a license for specific blocks and the customer has received the data or has been granted access to the data and collection is reasonably assured.

*Pre-funding arrangements* - The Company obtains funding from a limited number of customers before a seismic project is completed. In return for the pre-funding, the customer typically gains the ability to direct or influence the project specifications, to access data as it is being acquired and to pay discounted prices.

The Company recognizes pre-funding revenue as the services are performed on a proportional performance basis. Progress is measured in a manner generally consistent with the physical progress on the project, and revenue is recognized based on the ratio of the project's progress to date, provided that all other revenue recognition criteria are satisfied.

*(b) Proprietary sales/contract sales*
The Company performs seismic services under contract for a specific customer, whereby the seismic data is owned by that customer. The Company recognizes proprietary/contract revenue as the services are performed and become chargeable to the customer on a proportionate performance basis over the term of each contract. Progress is measured in a manner generally consistent with the physical progress of the project, and revenue is recognized based on the ratio of the project's progress to date, provided that all other revenue recognition criteria are satisfied.

*(c) Other services*
Revenue from other services is recognized as the services are performed, provided all other recognition criteria are satisfied.

**Income taxes**
Income tax expense represents the sum of the current tax expense (or recovery) plus the change in deferred tax liabilities and asset during the period, except for current and deferred income tax relating to items recognized in the consolidated statement of comprehensive income, in which case the tax is also recognized in the consolidated statement of comprehensive income.

Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and liabilities are calculated using the liability method for all temporary differences between the carrying amount of assets and liabilities in the consolidated financial statements and for tax purposes, including tax losses carried forward. Such assets and liabilities are not recognized if the temporary difference arises from the initial recognition of goodwill.

Deferred income tax is recognized on temporary differences arising on investments in subsidiaries, associates and interests in joint ventures, except where the timing of the reversal of the temporary differences can be controlled by the Company and it is probable that the temporary differences will not reverse in the foreseeable future.

The Company includes deductions/benefits from uncertain tax positions when it is probable that the tax position will be ultimately sustained.

The carrying amount of deferred income tax assets is reviewed at each end of the reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilized. Unrecognized deferred income tax assets are reassessed at each end of the reporting period and are recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered. The probability assessment is based on Management's judgement and estimates in regards to future taxable income and tax planning opportunities (see separate note describing accounting estimates below).

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes are related to the same taxable entity and the same taxation authority. Deferred tax is classified as long-term in the consolidated statements of financial position.

**Provisions**
A provision is a liability of uncertain timing or amount. Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Company expects some or all of a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain. The expense relating to any provision is presented in the consolidated statements of operations net of any reimbursement. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

*Onerous contracts*
An onerous contract is considered to exist where the Company has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. Existing obligations arising under onerous contracts are recognized and measured as a provision.

**Employee benefits**
*Pension obligations*
The Company operates various pension schemes. The schemes are funded through payments to insurance companies or trustee-administered funds. The Company has both defined benefit and defined contribution plans. A defined benefit plan is a pension plan which defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognized in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period as adjusted for unrecognized actuarial gains or losses and past service costs, and as reduced by the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using estimated interest rates of high-quality corporate bonds (or government bonds where there is no deep market in high quality corporate bonds) that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions in excess of the greater of 10% of the value of plan assets or 10% of the defined benefit obligation (the “corridor”) are recognized in the consolidated statements of operations over the employees’ expected average remaining working lives.

Past service costs, which is an increase in the present value of the defined benefit obligation for employee services in prior periods due to current period changes to a defined benefit plan, are recognized immediately in income unless the changes to the defined benefit plan are conditional on the employees remaining in service for a specified period of time (the vesting period). In this case, the past service costs are recognized on a straight-line basis over the vesting period.

For defined contribution plans, the Company pays contributions to privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Company has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expense when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

*Bonus plans*
The Company recognizes a provision where contractually obliged or where there is a past practice that has created a constructive obligation.

*Share-based payments*
Equity-settled share-based payments to employees are measured at the fair value of the equity instrument at the grant date. Fair value is measured using the Black-Scholes pricing model. The expected life used in the model is based on management’s best estimate and takes into account the effects of non-transferability, exercise restrictions and behavioural considerations. Social security tax on options is based on the share value as of the end of the reporting period is recorded as a liability and is recognized over the option period.

The dilutive effect of outstanding options is reflected as additional share dilution in computation of earnings per share.

**Interest bearing debt and borrowings**
Interest bearing loans are recognized initially at fair value less transaction costs. Subsequent to initial recognition, interest bearing loans are measured at amortized cost using the effective interest method. Gains and losses are recognized in the consolidated statements of operations when the liabilities are derecognized as well as through the amortization process.

**Financial assets and liabilities**
Financial assets and liabilities are recognized when the Company becomes party to the contractual obligations of the financial instrument and are initially recognized at fair value.

Financial assets and liabilities are classified into categories as follows:

*(a) Financial assets and liabilities measured at fair value through the consolidated statements of operations*
This category includes financial assets and liabilities held-for-trading and financial assets and liabilities designated upon initial recognition at fair value with change in fair value through the consolidated statements of operations. After initial measurement, financial assets and liabilities in the category are measured at fair value with unrealized gains and losses being recognized through the consolidated statements of operations.

Financial assets and liabilities are classified as held-for-trading if they are acquired for the purpose of selling in the near term. Derivatives are also classified as held-for-trading unless they are designated as effective hedging instruments. Gains and losses on financial assets held-for-trading are recognized in the consolidated statements of operations.

*(b) Financial assets and liabilities measured at amortized cost*
The category includes loans and receivables and other non-derivative financial assets and liabilities with fixed or determinable payments that are not quoted in an active market. Financial assets and liabilities in the category are initially recognized at fair value, with addition for directly attributable transaction costs. After initial measurement, financial assets and liabilities in the category are subsequently carried at amortized cost using the effective interest method less any allowance for impairment.

*(c) Financial assets and liabilities measured at fair value through the consolidated statement of comprehensive income*
The category includes financial assets and liabilities that are non-derivatives and are either designated as available-for-sale or not classified in any of the other categories. After initial measurement, financial assets and liabilities in the category are measured at fair value with unrealized gains or losses being recognized in the consolidated statement of comprehensive income. When the asset or liability is disposed of, the cumulative gain or loss previously recorded in the consolidated statement of comprehensive income is recognized in the consolidated statements of operations.

The fair value of financial instruments that are traded in active markets at each reporting date is determined by reference to quoted market prices or dealer price quotations, without any deduction for transaction costs. For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques. Such techniques may include using recent arm's length market's transaction, reference to the current fair value of other instruments that is substantially the same, discounted cash flow analysis or other valuation models. An analysis of fair values of financial instruments and further details as to how they are measured are provided in Note 26.

The Company assesses at end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the case of equity instruments designated as available-for-sale, a significant or prolonged decline in the fair value of the instrument below its cost is considered as an indicator that the instrument is impaired. If any such evidence exists for available-for-sale financial assets, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognized in the consolidated statement of operations – is reversed through the consolidated statement of comprehensive income and recognized in the consolidated statement of operations. Impairment losses recognized in the consolidated statements of operations on equity instruments are not reversed through the consolidated statements of operations. Impairment testing of trade receivables is described in Note 26 "Credit risk".

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of host contracts and the host contracts are not carried at fair value through the consolidated statements of operations.

**Treasury shares (own shares)**
Own equity instruments which are reacquired (treasury shares) are recorded as a reduction of shareholders' equity. No gain or loss is recognized in the consolidated statements of operations on the purchase, sale, issue or cancellation of the Company's own equity instruments.

**Earnings per share**
Basic earnings per share is calculated by dividing the profit attributable to equity holders of the Company by the weighted average number of ordinary shares in issue during the year, excluding ordinary shares purchased by the Company and held as treasury shares. Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. For diluted earnings per share, diluted potential ordinary shares are determined independently for each period presented. When the number of ordinary shares outstanding changes (e.g. share split) the weighted average number of ordinary shares outstanding during all periods presented is adjusted retrospectively. Basic and diluted earnings per share are presented separately for continuing and discontinued operations.

**Classification in the consolidated statements of financial position**
An asset or liability is classified as current when it is part of a normal operating cycle, when it is held primarily for trading purposes, when it falls due within 12 months and when it consists of cash or cash equivalents at the end of the reporting period. Other items are long-term. A dividend does not become a liability until it has been formally approved by the Annual General Meeting.

**Consolidated statements of cash flows**
The Company's consolidated statements of cash flows is prepared in accordance with the indirect method, where cash flows from operating activities are incorporated as a part of the consolidated statement of cash flow, and where the cash flows are divided into operating activities, investing activities and financing activities.

**Standards issued but not yet effective (which the Company has not early adopted)**
*IFRS 7 Financial Instruments – Disclosures (amendment)*
The amendment relates to disclosure requirements for financial assets that are derecognised in their entirety, but where the entity has a continuing involvement. The amendments will assist users in understanding the implications of transfers of financial assets and the potential risks that may remain with the transferor. The amended IFRS 7 is effective for annual periods beginning on or after 1 July 2011. The Company will implement the amended IFRS 7 as of 1 January 2012. The amendment affects disclosure only and has no impact on the Company's financial position or performance.

The IASB has also introduced new disclosure requirements in IFRS 7. These disclosures, which are similar to the new US GAAP requirements, would provide users with information that is useful in (a) evaluating the effect of potential effect of netting

arrangements on an entity's financial position and (b) analysing and comparing financial statements prepared in accordance with IFRS and US GAAP. The amended IFRS 7 is effective for annual periods beginning on or after 1 January 2013, but the amendment is not yet approved by the EU. The Company expects to implement the amended IFRS 7 as of 1 January 2013. The amendment affects disclosure only and has no impact on the Company's financial position or performance.

*IFRS 9 Financial Instruments*
IFRS 9 as issued reflects the first phase of the IASBs work on replacement of IAS 39 and applies to classification and measurement of financial assets and financial liabilities as defined in IAS 39. According to IFRS 9 financial assets with basic loan features shall be measured at amortised cost, unless one opts to measure these assets at fair value. All other financial assets shall be measured at fair value. The classification and measurement of financial liabilities under IFRS 9 is a continuation from IAS 39, with the exception of financial liabilities designated at fair value through profit or loss (fair value option), where change in fair value relating to own credit risk shall be separated and shall be presented in other comprehensive income. In subsequent phases, the IASB will address hedge accounting and impairment of financial assets. IFRS 9 is effective for annual periods beginning on or after 1 January 2015, but the standard is not yet approved by the EU. The Company expects to apply IFRS 9 as of 1 January 2015.

*IFRS 10 Consolidated Financial Statements*
IFRS 10 replaces the portion of IAS 27 Consolidated and Separate Financial Statements that addresses the accounting for consolidated financial statements. IFRS 10 establishes a single control model that applies to all entities including special purpose entities. The changes introduced by IFRS 10 will require management to exercise significant judgement to determine which entities are controlled, and therefore, are required to be consolidated by a parent, compared with the requirements that were in IAS 27. This standard becomes effective for annual periods beginning on or after 1 January 2013, but is not yet approved by the EU. The Company expects to apply IFRS 10 as of 1 January 2013.

*IFRS 11 Joint Arrangements*
IFRS 11 replaces IAS 31 Interests in Joint Ventures and SIC-13 Jointly-controlled Entities — Non-monetary Contributions by Venturers. IFRS 11 removes the option to account for jointly controlled entities (JCEs) using proportionate consolidation. Instead, JCEs that meet the definition of a joint venture must be accounted for using the equity method. This standard becomes effective for annual periods beginning on or after 1 January 2013, but is not yet approved by the EU. The Company expects to apply IFRS 11 as of 1 January 2013.

*IFRS 12 Disclosure of Interests in Other Entities*
IFRS 12 includes all of the disclosures that were previously in IAS 27 related to consolidated financial statements, as well as all of the disclosures that were previously included in IAS 31 and IAS 28. These disclosures relate to an entity's interests in subsidiaries, joint arrangements, associates and structured entities. A number of new disclosures are also required. This standard becomes effective for annual periods beginning on or after 1 January 2013, but is not yet approved by the EU. The Company expects to apply IFRS 12 as of 1 January 2013.

*IFRS 13 Fair Value Measurement*
IFRS 13 establishes a single source of guidance under IFRS for all fair value measurements. IFRS 13 does not change when an entity is required to use fair value, but rather provides guidance on how to measure fair value under IFRS when fair value is required or permitted. The Company is currently assessing the impact that this standard will have on the financial position and performance. This standard becomes effective for annual periods beginning on or after 1 January 2013, but is not yet approved by the EU. The Company expects to apply IFRS 13 as of 1 January 2013.

*IAS 19 Employee Benefits (amendment)*
The IASB has issued numerous amendments to IAS 19. These range from fundamental changes such as removing the corridor mechanism and the concept of expected returns on plan assets to simple clarifications and re-wording. The amended standard becomes effective for annual periods beginning on or after 1 January 2013, but has not yet been approved by the EU. The Company expects to implement the amended IAS 19 as of 1 January 2013. The unrecognized actuarial loss per December 31, 2011 is $37.3 million.

*IAS 28 Investments in Associates and Joint Ventures (as revised in 2011)*
As a consequence of the new IFRS 11 and IFRS 12, IAS 28 has been renamed IAS 28 Investments in Associates and Joint Ventures, and describes the application of the equity method to investments in joint ventures in addition to associates. IAS 28 as revised in 2011 becomes effective for annual periods beginning on or after 1 January 2013, but the revised standard has not yet been approved by the EU. The Company expects to implement the revised IAS 28 as of 1 January 2013.

Other issued standards are not expected to have a significant effect of the financial statement of the Company.

## Note 3 - Critical Accounting Judgments, Estimates and Assumptions

**Critical judgments**
The preparation of financial statements in accordance with IFRS requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities. In many circumstances, the ultimate outcome related to the estimates, assumptions and judgments may not be known for several years after the preparation of the financial statements. Actual amounts may differ materially from these estimates due to changes in general economic conditions, changes in laws and regulations, changes in future operating plans and the inherent imprecision associated with estimates.

In the process of applying the Company's accounting policies, which are described above, judgments made by the management that have the most significant effect on the amounts recognized in the consolidated financial statements are described below.

**Estimation uncertainty and assumptions**
The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

*Deferred tax assets*
Deferred tax assets are recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits. The estimates of projected future taxable profits are based on a variety of factors and assumptions, many of which are subjective and are outside of the Company's control. Accordingly these estimates could differ significantly from year to year, and the Company might end up realizing more or less of the deferred tax assets than the Company has recognized in the consolidated statements of financial position.

*Revenue recognition*
For multiple-deliverable arrangements and arrangements with other consideration than cash, significant management judgment may be required in order to allocate the consideration received to separate units of accounting, depending on the available evidence to support fair value which may include experience with similar transactions, evaluations of expected profit margins, external appraisals and other evidence as situations warrant.

*Amortization of MultiClient library*
In determining the annual amortization rates applied to the MultiClient library, management considers expected future sales and market developments and past experience. These expectations include consideration of geographic location, prospects, political risk, exploration license periods and general economic conditions. Management updates, at least annually, the total expected revenue for each survey or group of surveys of the MultiClient library. Because of the inherent difficulty in estimating future sales and market developments, it is possible that the amortization rates could deviate significantly from year to year. To the extent that such revenue estimates, or the assumptions used to make those estimates, prove to be higher than actual revenue, the Company's future operations will reflect lower profitability due to increased amortization rates applied to the MultiClient library in later years, and the MultiClient library may also become subject to minimum amortization and/or impairment. The minimum amortization policy described in significant accounting policies is an additional element of the Company's MultiClient library accounting policy in order to reduce the inherent risk in the general amortization policy that is based on the above described sales forecasting.

*Property, equipment and other intangibles*
Depreciation and amortization is based on management estimates of the future economic benefits and expected useful lives. These estimates may change due to changes in market conditions including competition, technological development, use of the assets and strategic considerations.

*Impairment of property, equipment and intangibles*
Property, equipment and intangibles (including goodwill) are regularly reviewed for impairment, whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. In order to assess if there is any impairment, estimates are made of the future cash flows expected to result from the use of the asset and its eventual disposal.

Estimating future cash flows requires management to make judgments regarding long-term forecasts of future revenues and costs related to the assets subject to review. These forecasts are subject to uncertainty as they require assumptions about demand for our products and services, future market conditions and technological developments. Significant and unanticipated changes in these assumptions could require a provision for impairment in a future period. Given the nature of these evaluations and their application to specific assets and specific times, it is not possible to reasonably quantify the impact of changes in these assumptions.

*Income taxes*
The Company is subject to income taxes in numerous jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The Company recognises liabilities for uncertain tax positions based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts

that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

*Pension cost*
The cost of defined benefit pension plans is determined using actuarial valuations. The actuarial valuation involves making assumptions about discount rates, expected rates of return on assets, future salary increases, mortality rates and future pension increases.

*Development cost*
Development costs are capitalized in accordance with the accounting policy described under significant accounting policies above. Determining the probable future economic benefit, which is the maximum value of the capitalized amount, requires management to make assumptions regarding the expected future cash generation of the assets, discount rates to be applied and the expected period of benefits.

*Provision for contingencies, claims and tax litigations*
The Company records accruals for contingencies, claims and other uncertain liabilities including possible tax litigations when it is more likely than not that a liability has been incurred and the amount can be reasonably estimated. These accruals are adjusted periodically as assessments change or new or additional information becomes available.

The outcomes of these issues are subject to a significant degree of uncertainty and management must make estimates and use judgment in determining the expected outcome.

## Note 4 - Disposals

In 2002, the Company sold its Production Services (formerly Atlantic Power Group) subsidiary to Petrofac Limited. The Company recognized the remaining additional consideration of $0.5 million in 2009.

In 2003, the Company sold its Atlantis oil and gas activities to Sinochem. In both 2010 and 2009 additional proceeds of $1 million was recognized. In 2011, no additional proceeds were recognized.

In December 2009, the Company entered into an agreement to sell Onshore to Geokinetics. The transaction was closed at February 12, 2010. Geokinetics paid approximately $184 million in cash and the Company received 2.15 million shares, representing approximately 12% of the current outstanding common shares of Geokinetics. The historical consolidated statements of operations has been restated and the results from Onshore are included in discontinued operations for all periods presented and as of December 31, 2009 the asset and liabilities related to Onshore were classified as held-for-sale.

The results of operations for Onshore are summarized as follows:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Revenues | --- | 21,756 | 194,624 |
| Operating costs (a) | --- | 23,259 | 175,997 |
| Depreciation and amortization | --- | --- | 22,702 |
| Total operating expenses | --- | 23,259 | 198,699 |
| Operating profit | --- | (1,503) | (4,075) |
| Financial items, net | --- | 286 | 2,352 |
| Income before income tax expense (benefit) | --- | (1,217) | (1,723) |

(a) Operating costs include cost of sales, research and development costs, and selling, general and administrative costs.

A reconciliation of income (loss) before income tax expense (benefit) for the Onshore segment, as presented above, and income (loss) from discontinued operations, net of tax, as presented in the consolidated statements of operations, is as follows:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Income before income tax expense (benefit) | --- | (1,217) | (1,723) |
| Gain on sale of Onshore | 282 | 16,224 | --- |
| Transaction costs Onshore | --- | (6,142) | (2,368) |
| Additional proceeds (Atlantis and Production Services, see above) | --- | 1,000 | 1,956 |
| Tax from discontinued operations | 307 | (1,317) | (6,113) |
| Income from discontinued operations, net of tax | 589 | 8,548 | (8,248) |

## Note 5 - Acquisitions

Business combinations are recorded using the acquisition method of accounting. The Company did not enter in to any business combinations in the years ended December 31, 2011, 2010 or 2009.

## Note 6 - Segment and Geographic Information

Up until the sale of Onshore the Company operated its business in two segments, Marine and Onshore. Effective from May 1, 2010 the Company changed its organization to a simplified and more operational model based on service lines and the operating segments after the re-organization are Marine Contract and MultiClient.

The executive management regularly evaluates the operating segments operational and financial performance. The financial information disclosed is consistent with that used by the executive management in controlling the Company's business, for making strategic decisions and for allocating resources. The Company's operating segments are managed separately and represent strategic business product lines. The segments serve a similar worldwide market. Customers for both segments are primarily composed of the same major multi-national, independent and national or state-owned oil companies.

Marine Contract and MultiClient segments meet the aggregation criteria under IFRS and are accordingly presented as a combined Marine reporting segment. Effective May 2010, the Electric magnetic (EM) business was included in Marine which is reflected in the tables below. Corporate overhead and significant charges that do not relate specifically to the operations of any one segment are presented as Other. Tables below are restated accordingly. Inter-segment sales are made at prices that approximate market value. Financial items, income tax expense and liabilities are not included in the measure of segment performance.

**Year ended December 31, 2011:**

| (In thousands of dollars) | Marine | Other | Elimination of inter-segment items | Total continuing operations |
|---|---|---|---|---|
| Revenues by service lines | | | | |
| Marine Contract | 627,015 | --- | --- | 627,015 |
| MultiClient pre-funding | 223,528 | --- | --- | 223,528 |
| MultiClient late sales | 278,279 | --- | --- | 278,279 |
| Data Processing | 110,031 | --- | --- | 110,031 |
| Other | 14,166 | 281 | --- | 14,447 |
| Total revenues | 1,253,019 | 281 | --- | 1,253,300 |
| Operating costs (a) | (707,218) | (11,320) | 1 | (718,537) |
| EBITDA | 545,801 | (11,039) | 1 | 534,763 |
| Other operating income | 4,400 | --- | --- | 4,400 |
| Impairments of long-lived assets (Note 7) | (2,583) | --- | --- | (2,583) |
| Depreciation and amortization (Note 7) | (155,311) | (5,565) | --- | (160,876) |
| Amortization of MultiClient library (Note 7) | (237,005) | --- | --- | (237,005) |
| Operating profit (loss) | 155,302 | (16,604) | 1 | 138,699 |
| **Statements of financial position items and cash investments as of December 31, 2011:** | | | | |
| Investment in associated companies | 45,139 | 3,382 | --- | 48,521 |
| Total assets | 2,507,833 | 629,346 | --- | 3,137,179 |
| Cash additions to long-lived assets (b) | 499,985 | 3,828 | --- | 503,813 |

(a) Operating costs include cost of sales, expensed research and development costs, and selling, general and administrative costs.
(b) Consist of cash investments in MultiClient library, capital expenditures, capital expenditures on new-builds on charter and investments in other intangible assets

**Year ended December 31, 2010:**

| (In thousands of dollars) | Marine | Other | Elimination of inter-segment items | Total continuing operations | Discontinued operations Onshore |
|---|---|---|---|---|---|
| Revenues by service lines | | | | | |
| Marine Contract | 629,101 | --- | --- | 629,101 | 19,796 |
| MultiClient pre-funding | 198,278 | --- | --- | 198,278 | --- |
| MultiClient late sales | 192,262 | --- | --- | 192,262 | 1,960 |
| Data Processing | 103,471 | --- | --- | 103,471 | --- |
| Other | 9,239 | 2,783 | --- | 12,022 | --- |
| Total revenues | 1,132,351 | 2,783 | --- | 1,135,134 | 21,756 |
| Operating costs (a)(c) | (636,163) | (22,821) | (721) | (659,705) | (23,259) |
| EBITDA(c) | 496,188 | (20,038) | (721) | 475,429 | (1,503) |
| Impairments of long-lived assets (Note 7) | (79,136) | --- | --- | (79,136) | --- |
| Depreciation and amortization (Note 7)(c) | (140,875) | (6,573) | --- | (147,448) | --- |
| Amortization of MultiClient library (Note 7) (c) | (197,481) | --- | 21 | (197,460) | --- |
| Operating profit (loss) | 78,696 | (26,611) | (700) | 51,385 | (1,503) |
| **Statements of financial position items and cash investments as of December 31, 2010:** | | | | | |
| Investment in associated companies | 12,629 | 11,894 | --- | 24,523 | |
| Total assets(c) | 2,385,672 | 649,306 | --- | 3,034,978 | --- |
| Cash additions to long-lived assets (b) | 398,198 | 4,637 | --- | 402,835 | 1,427 |

(a) Operating costs include cost of sales, expensed research and development costs, and selling, general and administrative costs.
(b) Consist of cash investments in MultiClient library, capital expenditures, capital expenditures on new-builds on charter and investments in other intangible assets.
(c) Restated, see note 2.

| **Year ended December 31, 2009:** (In thousands of dollars) | Marine | Other | Elimination of inter-segment items | Total continuing operations | Discontinued operations Onshore |
|---|---|---|---|---|---|
| Revenues by service lines | | | | | |
| Marine Contract | 893,050 | --- | --- | 893,050 | 190,404 |
| MultiClient pre-funding | 169,043 | --- | --- | 169,043 | 1,595 |
| MultiClient late sales | 182,135 | --- | --- | 182,135 | 2,625 |
| Data Processing | 90,158 | --- | --- | 90,158 | --- |
| Other | 15,816 | --- | --- | 15,816 | --- |
| Total revenues | 1,350,202 | --- | --- | 1,350,202 | 194,624 |
| Operating costs (a)(c) | (652,263) | (18,318) | (548) | (671,129) | (175,997) |
| EBITDA(c) | 697,939 | (18,318) | (548) | 679,073 | 18,627 |
| Impairments of long-lived assets (Note 7) | (153,615) | --- | --- | (153,615) | --- |
| Depreciation and amortization (Note 7) (c) | (137,639) | (6,519) | --- | (144,158) | (19,076) |
| Amortization of MultiClient library (Note 7) (c) | (159,646) | --- | 21 | (159,625) | (3,626) |
| Operating profit (loss) | 247,039 | (24,837) | (527) | 221,675 | (4,075) |
| **Statements of financial position items and cash investments as of December 31, 2009:** | | | | | |
| Investment in associated companies | 7,032 | 11 | --- | 7,043 | --- |
| Total assets(c) | 2,465,817 | 279,183 | --- | 2,745,000 | 224,292 |
| Cash additions to long-lived assets (b) | 429,473 | 3,414 | --- | 432,887 | 18,714 |

(a) Operating costs include cost of sales, expensed research and development costs, and selling, general and administrative costs.
(b) Consist of cash investments in MultiClient library, capital expenditures, capital expenditures on new-builds on charter and investments in other intangible assets
(c) Restated, see note 2

Since the Company provides services worldwide to the oil and natural gas industry, a substantial portion of the property and equipment is mobile, and the respective locations at the end of the period (as listed in the tables below, together with MultiClient library) are not necessarily indicative of the earnings of the related property and equipment during the period. Assets of property and equipment are based upon location of physical ownership. Goodwill is presented in the same geographic area as the underlying acquired assets. The geographic classification of statements of operations amounts listed below is based upon location of performance or, in the case of MultiClient seismic data sales, the area where the survey was physically conducted.

| **Revenues external customers** | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Americas (excluding Brazil) | 185,126 | 177,732 | 144,129 |
| Brazil | 173,321 | 177,196 | 238,076 |
| UK | 102,150 | 73,088 | 156,286 |
| Norway | 169,851 | 151,813 | 194,990 |
| Asia/Pacific | 252,160 | 245,798 | 288,408 |
| Africa | 235,615 | 215,164 | 200,904 |
| Middle East/Other | 135,077 | 94,343 | 127,409 |
| Total | 1,253,300 | 1,135,134 | 1,350,202 |

| **Revenues, including inter-area** | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Americas (excluding Brazil) | 186,993 | 182,924 | 144,129 |
| Brazil | 173,321 | 177,196 | 238,076 |
| UK | 115,600 | 80,998 | 164,167 |
| Norway | 173,910 | 152,500 | 195,398 |
| Asia/Pacific | 252,160 | 245,798 | 290,848 |
| Africa | 239,856 | 219,030 | 200,904 |
| Middle East/Other | 135,476 | 94,560 | 127,593 |
| Elimination inter-area revenues | (24,016) | (17,872) | (10,913) |
| Total | 1,253,300 | 1,135,134 | 1,350,202 |

| **Total non-current assets (a)** | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010(b) |
| Americas (excluding Brazil) | 175,573 | 201,035 |
| Brazil | 36,268 | 12,494 |
| UK | 676,933 | 618,436 |
| Norway | 335,311 | 311,394 |
| Asia/Pacific (excluding Singapore) | 99,566 | 93,499 |
| Singapore | 564,875 | 501,376 |
| Africa | 37,988 | 31,290 |
| Middle East/Other | 23,288 | 21,494 |
| Total | 1,949,802 | 1,791,018 |

(a) Consists of Property and equipment, MultiClient library, Investment in associated companies, Goodwill and Other intangible assets.
(b) Restated, see note 2

In 2011, the Company's two most significant customers accounted for 11.0% and 7.0% of the Company's consolidated revenues, compared to 12.7% and 7.5% in 2010 and 16.1% and 6.7% in 2009, respectively (excluding discontinued operations).

## Note 7 - Depreciation and Amortization and Impairments of Long-Term Assets

Depreciation and amortization consist of the following for the years presented:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 Restated(a) | 2009 Restated(a) |
| Gross depreciation and amortization | (210,842) | (189,955) | (175,153) |
| Depreciation capitalized to MultiClient library (Note 19) | 49,966 | 42,507 | 30,995 |
| Amortization of MultiClient library (Note 19) | (237,005) | (197,460) | (159,625) |
| Total | (397,881) | (344,908) | (303,783) |

(a) See note 2

Impairments and reversal of impairments of long-term assets consist of the following for the years presented:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Property and equipment; impairment (Notes 16 and 18) | (4,582) | (94,312) | (153,615) |
| Property and equipment; reversal of impairment (Note 18) | 1,999 | 15,176 | --- |
| Total | (2,583) | (79,136) | (153,615) |

## Note 8 - Interest Expense

Interest expense consists of the following:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Interest expense, gross | (50,459) | (55,425) | (70,472) |
| Interest capitalized in MultiClient library (Note 19) | 6,409 | 5,894 | 6,000 |
| Interest capitalized in construction in progress (Note 18) | 1,880 | 2,535 | 19,240 |
| Total | (42,170) | (46,996) | (45,232) |

The average interest rate used to determine the amount of interest expense eligible for capitalization was 6.1%, 5.9% and 5.9% for the years ended December 31, 2011, 2010 and 2009 respectively.

## Note 9 - Other Financial Income and Expense

Other financial income consists of the following:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Gain from sale of shares (Note 13 and 20) | 10,985 | 6,483 | 8,671 |
| Interest income | 7,617 | 5,728 | 7,238 |
| Gain on investments in shares available-for-sale (Note 13) | 162 | 711 | 3,749 |
| Gain on repurchase of convertible notes (Note 25) | --- | --- | 3,778 |
| Other | 5,687 | 938 | 1,053 |
| Total | 24,451 | 13,860 | 24,489 |

Other financial expense consists of the following:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Fair value adjustments on derivatives | (11,595) | --- | --- |
| Impairment of shares available-for-sale (Note 13) | (9,567) | (1,742) | --- |
| Loss on repurchase of convertible notes (Note 25) | (5,678) | --- | --- |
| Amendment fees USD 950 million Credit Facilities (Note 25) | --- | (7,029) | --- |
| Fee in connection with redemption of 8.28% Notes (Note 25) | --- | (1,229) | --- |
| Instruction fee convertible notes (includes professional fees) (Note 25) | --- | --- | (6,895) |
| Other | (6,891) | (7,580) | (4,222) |
| Total | (33,731) | (17,580) | (11,117) |

## Note 10 - Income Taxes

The net income tax expense (benefit) from continuing operations consists of the following:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Current taxes | 1,238 | 18,868 | 50,066 |
| Deferred taxes | 28,806 | (4,965) | 1,876 |
| Total income tax expense (benefit) | 30,044 | 13,903 | 51,942 |

The net income tax expense (benefit) from discontinuing operations consists of the following:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Current taxes | --- | 6,677 | (108) |
| Deferred taxes | (307) | (5,360) | 6,221 |
| Total income tax expense (benefit) | (307) | 1,317 | 6,113 |

The deferred tax liability (asset), recognized in the consolidated statement of comprehensive income, is as follows:

| | Years ended December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| Interest rate hedging (Note 26) | (7,150) | (7,873) |

The income tax expense differs from the amounts computed when applying the Norwegian statutory tax rate to income (loss) before income taxes as a result of the following:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Income before income tax expense from continuing operations | 64,513 | (8,598) | 216,522 |
| Norwegian statutory rate | 28% | 28% | 28% |
| Provision for income taxes at statutory rate | 18,064 | (2,407) | 60,626 |
| Increase (reduction) in income taxes from: | | | |
| Effects of tax rates other than statutory tax rate in Norway | (1,177) | (2,865) | (5,323) |
| Tax exempt income inside tonnage tax regimes | 1,101 | (5,631) | (49,999) |
| Effects on tax expense from tonnage tax regime entry/exit old tonnage tax regime dispute | --- | 986 | (31,617) |
| Impairment Arrow vessels which are non-deductible | --- | 23,107 | 45,186 |
| Change in assessment on recoverability of prepaid income tax in Brazil | (7,889) | (12,332) | 21,000 |
| Foreign taxes not deductible or subject to credit | 4,293 | 5,857 | 7,775 |
| Currency effects (a) | 971 | 2,622 | 2,261 |
| Change in tax contingencies recognized as tax expense (benefit) | (5,352) | 1,926 | (7,311) |
| Change in unrecognized deferred tax assets including current year losses where no benefit was provided | 7,085 | 2,805 | 18,955 |
| Prior period adjustments | 7,444 | (2,678) | (7,446) |
| Other permanent items | 5,504 | 2,513 | (2,165) |
| Income tax expense | 30,044 | 13,903 | 51,942 |

(a) Relates to changes in tax positions in local currency for US Dollar functional currency companies.

Comments on selected line items in the preceding table:

*Norway – exit old tonnage tax regime – tax dispute*
Until 2002, PGS Shipping AS and PGS Shipping (Isle of Man) Ltd. were taxed under the Norwegian tonnage tax regime. In 2003 it was decided to exit with effect from January 1, 2002. The issue with the Norwegian Central Tax Office for Large Enterprises ("CTO") was related to the assessment of the fair value of the shares in PGS Shipping (IoM) Ltd. upon exit in 2002. In 2010, the dispute was settled, increasing deferred tax expense by approximately $1.0 million.

*Impairment Arrow vessels*
The net impairments relating to the Arrow vessels (see Note 18), which are under the UK tonnage tax regime, are non-deductible and have as such not benefited the reported income tax expense.

*Prepaid income tax in Brazil*
In 2009, the Company introduced a valuation allowance relating to prepaid income tax expense in Brazil, amounting to $21.0 million, due to uncertainty of future utilization of these prepaid taxes. In 2011 and 2010, the Company re-assessed the recoverability of $7.9 million and $12.3 million, respectively, of the prepaid income tax, since it was more likely than not that the amount will be utilized.

Tax effects of the Company's temporary differences are summarized as follows:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Deferred tax assets | | |
| MultiClient library | (27,898) | (105,590) |
| Derivatives | --- | (7,882) |
| Employee benefits | (20,205) | (23,740) |
| Tax loss carry-forwards | (223,983) | (244,509) |
| Tax credits | (18,069) | (28,921) |
| Other | (33,752) | (49,423) |
| Income tax assets, gross | (323,907) | (460,065) |
| | | |
| Deferred tax liability | | |
| Property and equipment | 29,885 | 26,047 |
| Intangible assets | 21,425 | 17,417 |
| Derivatives | 4,146 | 11,749 |
| Current accruals/liabilities | 7,898 | 14,873 |
| Deferred taxable gain/revenue | 30,887 | 77,895 |
| Other | 2,344 | 18,925 |
| Deferred tax liabilities, gross | 96,585 | 166,906 |
| | | |
| Deferred tax assets, net | (227,322) | (293,159) |
| Deferred tax assets not recognized in the consolidated statements of financial position | 66,533 | 103,150 |
| Net recognized deferred tax assets | (160,789) | (190,009) |

Net deferred tax (assets) in the consolidated statements of financial position is presented as follows:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Deferred tax assets | (177,923) | (210,766) |
| Deferred tax liabilities | 17,134 | 20,757 |
| Net deferred tax (assets) | (160,789) | (190,009) |

The Company has substantial recognized deferred tax assets in different jurisdictions, predominantly in Norway. Available evidence, including recent profits and estimates of projected future taxable income, has supported a more likely than not conclusion that the related deferred tax assets would be realized in the future. The Company also has substantial deferred tax assets, predominantly in Brazil and the UK, which have not been recognized because the future utilization is uncertain.

Tax losses carried forward both recognized and unrecognized and expiration periods as of December 31, 2011 are summarized as follows:

| (In thousands of dollars) | | |
|---|---|---|
| Brazil | 76,407 | No expiry |
| Norway | 410,143 | No expiry |
| Singapore | 174,982 | No expiry |
| UK | 136,289 | No expiry |
| Other | 64,876 | 2012 - No expiry |
| Losses carried forward | 862,697 | |

It is the Company's current view that unremitted earnings from international operations are expected to be reinvested indefinitely, and as a result, no Norwegian taxes have been provided for unremitted earnings.

With its multi-national operations, the Company is subject to taxation in many jurisdictions around the world with increasingly complex tax laws. The Company has possible issues (mostly related to uncertain tax positions like permanent establishment issues) in several jurisdictions that could eventually make it liable to pay material amounts in taxes relating to prior years. The Company recognizes liabilities for uncertain tax positions if it is considered more likely than not that additional tax will be due, based upon management's assessment of the most likely outcome. Total accrued contingent tax liabilities as of December 31, 2011 was \$8.0 million, of which \$0.8 million is recorded as income taxes payable and \$7.2 million as other long-term liabilities. As of December 31, 2010, such amount totalled \$13.3 million, of which \$1.6 million recorded as income taxes payable and \$11.7 million as other long-term liabilities.

## Note 11 - Earnings Per Share

Earnings per share, to ordinary equity holders of PGS ASA, were calculated as follows:

| (In thousands of dollars) | Years ended December 31, 2011 | 2010 Restated(c) | 2009 Restated(c) |
|---|---|---|---|
| Net income (loss) from continuing operations | 34,469 | (22,501) | 164,580 |
| Net income (loss) from discontinued operations | 589 | 8,548 | (8,248) |
| Non-controlling interests | (1,367) | (67) | (2,094) |
| Net income (loss) to equity holders of PGS ASA | 33,691 | (14,020) | 154,238 |
| Effect of interest on convertible notes, net of tax | --- | --- | --- |
| Net income (loss) for the purpose of diluted earnings per share | 33,691 | (14,020) | 154,238 |
| **Earnings per share** | | | |
| - Basic | $ 0.16 | $ (0.07) | $ 0.82 |
| - Diluted | $ 0.15 | $ (0.07) | $ 0.82 |
| **Earnings per share from continuing operations** | | | |
| - Basic | $ 0.15 | $ (0.11) | $ 0.86 |
| - Diluted | $ 0.15 | $ (0.11) | $ 0.86 |
| **Earnings per share from discontinued operations** | | | |
| - Basic | $ 0.01 | $ 0.04 | $ (0.04) |
| - Diluted | $ 0.00 | $ 0.04 | $ (0.04) |
| Weighted average basic shares outstanding (a) | 217,238,666 | 200,052,867 | 189,061,076 |
| Dilutive potential shares (b) | 879,061 | --- | 499 |
| Weighted average diluted shares outstanding | 218,117,727 | 200,052,867 | 189,061,575 |

(a) Weighted average basic shares outstanding for all the years have been reduced by the average numbers of treasury shares owned by the Company during the period (see Note 31).

(b) For the years ended December 31, 2011, 2010 and 2009, respectively, share options equivalent to 6,358,530, 7,679,975 and 7,480,708 shares, were excluded from the calculation of diluted earnings per share as they were anti-dilutive. In addition 8.0 million, 8.8 million and 8.8 million shares related to the convertible notes (see Note 25) were excluded from the calculation for the years ended December 31, 2011, 2010 and 2009, respectively, due to the anti-dilutive effect.

(c) See note 2.

## Note 12 - Restricted Cash

Restricted cash consists of the following:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Current | | |
| Restricted payroll withholding taxes | 3,777 | 3,887 |
| Restricted under contracts (guarantees) | 353 | 356 |
| Restricted for health insurance | 203 | 204 |
| Deposits | 192 | 217 |
| Bid/performance bonds | 39 | 65 |
| Other | 41 | 44 |
| Total restricted cash, current | 4,605 | 4,773 |
| Long-term | | |
| Deposit ISS dispute (Note 27) | 89,051 | 66,395 |
| Total current and long-term | 93,656 | 71,168 |

## Note 13 - Available-For-Sale Investments

The components of available-for-sale investments contain of shares available-for-sale and debt instruments available-for-sale.

Shares available-for-sale are summarized as follows:

| (In thousands of dollars) | 2011 | 2010 |
|---|---|---|
| Balance as of January 1, | 33,282 | 12,043 |
| Investment, cash | --- | 15,354 |
| Investment, non cash (a) | 16,455 | 4,137 |
| Gain on investments | 162 | 711 |
| Unrealized gain (loss) recognized in the consolidated statement of comprehensive income | (11,404) | 12,438 |
| Reclassified (gain) loss to consolidated statement of operations | (1,418) | (492) |
| Sale of shares | (19,731) | (9,167) |
| Impairments | (9,567) | (1,742) |
| Balance as of December 31, | 7,779 | 33,282 |

(a) Shares received in exchange for providing acquisition services and licenses.

Fair value of shares available-for-sale is as follows:

| | December 31, 2011 | | December 31, 2010 | |
|---|---|---|---|---|
| (In thousands of dollars) | Fair value | Ownership | Fair value | Ownership |
| **Current** | | | | |
| San Leon Energy Plc | 2,727 | 1.8% | --- | --- |
| Providence Resources Plc | 2,206 | 1.4% | --- | --- |
| Ithaca Energy Inc | 1,272 | 0.2% | --- | --- |
| Total current | 6,205 | | --- | |
| **Long-term** | | | | |
| Cove Energy Plc | --- | --- | 11,149 | 1.5% |
| San Leon Energy Plc | --- | --- | 3,540 | 1.2% |
| Providence Resources Plc | --- | --- | 4,639 | 3.6% |
| Ithaca Energy Inc | --- | --- | 8,649 | 1.3% |
| Northern Petroleum Plc | --- | --- | 3,652 | 2.4% |
| Other | 1,574 | --- | 1,653 | --- |
| Total long-term | 1,574 | | 33,282 | |
| Total | 7,779 | | 33,282 | |

Mainly all shares available-for-sale are listed shares (AIM list at London Stock Exchanges) and the fair value is based on quoted prices at end of the relevant years.

Debt instruments available-for-sale are summarized as follows:

| (In thousands of dollars) | 2011 | 2010 |
|---|---|---|
| Balance as of January 1, | --- | --- |
| Investment, non-cash | 30,812 | --- |
| Fair value adjustment at initiation | (7,522) | --- |
| Balance as of December 31, | 23,290 | --- |

In February 2011 SeaBird Exploration PLC issued a convertible loan of $42.9 million directed towards the Company. In December 2011 the instrument was partially repaid and partially restructured as a Senior Secured Bond (Coupon rate 6%) with a nominal value of $31.7 million. A loss of $7.5 million was recognized in the consolidated statement of operations in 2011 as the fair value of the new bond was lower than the nominal value.

Fair value of debt instruments available-for-sale are summarized as follows:

| | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| **Long-term** | | |
| SeaBird Exploration Plc. Bonds | 23,290 | --- |
| Total | 23,290 | --- |

## Note 14 - Accounts Receivable

Accounts receivable consist of the following:

| | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| Accounts receivable – trade | 222,441 | 226,678 |
| Allowance for doubtful accounts | (1,676) | (1,377) |
| Total | 220,765 | 225,301 |

The change in allowance for doubtful accounts is as follows:

| (In thousands of dollars) | 2011 | 2010 |
|---|---|---|
| Balance as of January 1, | (1,377) | (1,969) |
| New and additional allowances | (812) | (48) |
| Write-offs and reversals | 513 | 640 |
| Balance as of December 31, | (1,676) | (1,377) |

Aging analysis of accounts receivable is as follows:

| | | | Past due, but not impaired | | | | |
|---|---|---|---|---|---|---|---|
| (In thousands of dollars) | Total | Not due | <30d | 30-60d | 60-90d | 90-120d | >120d |
| December 31, 2011 | 220,765 | 178,479 | 20,934 | 9,775 | 2,822 | 2,869 | 5,886 |
| December 31, 2010 | 225,301 | 147,092 | 63,232 | 4,155 | 619 | 3,986 | 6,217 |

## Note 15 - Accrued Revenues and Other Receivables

Accrued revenues and other receivables consist of the following:

| | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| Accrued revenue | 91,673 | 122,284 |
| Other receivables | 17,774 | 19,961 |
| VAT receivable | 920 | 2,942 |
| Total | 110,367 | 145,187 |

## Note 16 - Assets and liabilities classified as Held-for-Sale

In December 2009 the Company entered into an agreement to sell Onshore, see Note 4. The transaction was closed in February 2010. The assets and liabilities of Onshore was classified as held-for-sale as of December 31, 2009.

In 2008, the Company decided to sell *Polar Pearl,* a vessel under conversion in the Marine segment that was acquired as part of the acquisition of Arrow in 2007 (see Note 18). The vessel was classified as held-for-sale until it was sold at end of 2010. The Company recognized a loss of $0.6 million on this transaction. In 2009, the Company recognized an impairment of $2.2 million in the consolidated statements of operations (see Note 7).

## Note 17 - Other Current Assets

Other current assets consist of the following:

| | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| Spare parts, consumables and supplies | 41,476 | 32,408 |
| Prepaid operating expenses | 16,768 | 23,324 |
| Withholding taxes and taxes receivable | 15,599 | 22,566 |
| Deferred steaming expenses | 13,586 | 5,108 |
| Deferred project costs | 10,133 | 1,345 |
| Prepaid reinsurances | 2,695 | 2,809 |
| Fair value adjustment of firm commitments | 1,564 | --- |
| Unrealized gain forward exchange contracts (Note 26) | 170 | 4,366 |
| Other | 2,885 | 6,506 |
| Total | 104,876 | 98,432 |

## Note 18 - Property and Equipment (including finance leases)

The components of property and equipment, including property and equipment under finance leases, are summarized as follows:

| (In thousands of dollars) | Construction of vessels in progress | Con-versions | Seismic vessels and equipment | Fixtures, furniture and fittings | Buildings and other | Total |
|---|---|---|---|---|---|---|
| **Purchase costs** | | | | | | |
| Purchase costs as of January 1, 2010 | 294,571 | 60,677 | 1,683,994 | 63,916 | 26,928 | 2,130,086 |
| Effect of policy change (Note 36) | --- | --- | 87,147 | --- | --- | 87,147 |
| Restated purchase cost as of January 1, 2010 | 294,571 | 60,677 | 1,771,141 | 63,916 | 26,928 | 2,217,233 |
| Capital expenditures | 15,724 | --- | 200,194 | 6,393 | 1,200 | 223,510 |
| Capitalized interest | 2,535 | --- | --- | --- | --- | 2,535 |
| *PGS Apollo* delivered | (182,586) | --- | 182,586 | --- | --- | --- |
| Sale of asset | --- | --- | (10,468) | --- | --- | (10,468) |
| Retirements | --- | --- | (76,402) | (3,816) | (3,115) | (83,333) |
| Reclassified assets to other receivables (NB 535) | (129,960) | --- | --- | --- | --- | (129,960) |
| Other/translation adjustments | 377 | (149) | (1,454) | (508) | (91) | (1,825) |
| Restated purchase costs as of December 31, 2010 | 661 | 60,528 | 2,065,597 | 65,985 | 24,922 | 2,217,693 |
| Capital expenditures/recoveries | 52,847 | (1,700) | 221,633 | 5,102 | 2,049 | 279,931 |
| Capitalized interest | 1,880 | --- | --- | --- | --- | 1,880 |
| Sale of asset | --- | --- | (1,522) | (46) | --- | (1,568) |
| Retirements | --- | --- | (50,066) | (1,020) | (40) | (51,126) |
| Other/translation adjustments | 1,887 | --- | (1,652) | (505) | 243 | (27) |
| Purchase costs as of December 31, 2011 | 57,275 | 58,828 | 2,233,990 | 69,516 | 27,174 | 2,446,783 |

| (In thousands of dollars) | | | | | | |
|---|---|---|---|---|---|---|
| **Accumulated depreciation and impairments** | | | | | | |
| Depreciation as of January 1, 2010 | --- | --- | 607,223 | 45,990 | 9,405 | 662,618 |
| Effect of policy change (Note 36) | --- | --- | 47,263 | --- | --- | 47,263 |
| Restated accumulated depreciation as of January 1, 2010 | --- | --- | 654,486 | 45,990 | 9,405 | 709,881 |
| Impairments as of January 1, 2010 | --- | 33,030 | 149,385 | 391 | 1,200 | 184,006 |
| Depreciation | --- | --- | 170,697 | 8,134 | 2,614 | 181,445 |
| Impairments | 79,594 | --- | 14,718 | --- | --- | 94,312 |
| Sale of asset | --- | --- | (9,171) | --- | --- | (9,171) |
| Retirements | --- | --- | (69,114) | (3,692) | (3,079) | (75,885) |
| Reclassified assets to other receivables (NB 535) | (79,594) | --- | --- | --- | --- | (79,594) |
| Other/translation adjustments | --- | --- | (377) | (159) | 29 | (507) |
| Restated depreciation as of December 31, 2010 | --- | --- | 746,521 | 50,273 | 8,969 | 805,763 |
| Impairments as of December 31, 2010 | --- | 33,030 | 164,103 | 391 | 1,200 | 198,724 |
| Depreciation | --- | --- | 193,269 | 6,467 | 2,503 | 202,239 |
| Impairments | 4,582 | --- | (1,999) | --- | --- | 2,583 |
| Sale of asset | --- | --- | (955) | (26) | --- | (981) |
| Retirements | --- | --- | (48,280) | (1,028) | (40) | (49,348) |
| Reclassified assets to other receivables (NB 532 and 533) | (4,582) | --- | --- | --- | --- | (4,582) |
| Other/translation adjustments | --- | --- | (250) | 43 | 9 | (198) |
| Depreciation as of December 31, 2011 | --- | --- | 890,305 | 55,729 | 11,441 | 957,475 |
| Impairments as of December 31, 2011 | --- | 33,030 | 162,104 | 391 | 1,200 | 196,725 |
| **Restated balance as of December 31, 2010** | **661** | **27,498** | **1,154,973** | **15,322** | **14,753** | **1,213,206** |
| **Balance as of December 31, 2011** | **57,275** | **25,798** | **1,181,581** | **13,396** | **14,533** | **1,292,583** |

In fourth quarter 2011, the Company recorded impairments on vessels and equipment of $2.6 million which consists of adjusted estimates of impairment on the cancelled Arrow new builds in Spain of $4.6 million and reversal of impairment on previously impaired equipment to be used on the vessels in construction of $2 million. See also below “Arrow vessels”.

In 2010, the Company recorded impairments on vessels and equipment of $94.3 million as a result of identifying impairment indicators, including adjusting the carrying amount of the NB 535 to estimated recoverable amount upon cancellation of the shipbuilding contract. In addition, the Company recognized a reversal of previously recognized impairments of $15.2 million related to NB 532 and 533, partly included as long-term asset at December 31, 2010 (see Note 21).

In 2009, the Company recorded impairments on vessels and equipment of $151.2 million as a result of identifying impairment indicators including adjusting the carrying amounts for Geo Atlantic (held–for-sale) to estimated market value and adjusting the carrying amount for NB’s 532 and 533 to estimated recoverable amount. See also Note 16 for the impairment recognized in 2009 on Polar Pearl.

The net book value of property and equipment under UK leases were $91.1 million and $145.9 million at December 31, 2011 and 2010, respectively. See Note 27 for further description of these leases and the accounting impact of certain lease terminations.

For details of the estimated useful lives for the Company's property and equipment at December 31, 2011, see Note 2.

**New-build program - Ramform vessels**
In April 2011, the Company ordered two Ramform Titan-class vessels, with an option for another two vessels, from Mitsubishi Heavy Industries Ltd. The vessels are the first in a new generation of Ramform vessels. Agreed deliveries of the two first vessels are in 2013, and progress is according to plan. The options for delivery of the two additional vessels in 2015 are valid to mid April 2012.

The estimated total cost for each of the Ramform Titan-class is approximately $250 million, including commissioning and a comprehensive seismic package, but excluding capitalized interest. The agreement with the shipyard provides for payment based on five defined milestones, with 50% payable at delivery. Seismic equipment is procured by PGS separately from the shipbuilding contract. Per December 31, 2011, the Company has paid $53.2 million in installments and equipment purchases.

**New-build program – Arrow vessels**
Upon the acquisition of Arrow in 2007, the Arrow Group was constructing four 10-12 streamer seismic 3D vessels at the Factorias Vulcano shipyard group in Spain (the Arrow NB’s). The first two vessels (NB 532 and 533) were chartered to WesternGeco (“WG”), whereas the other two (NB 534 and 535), were intended to be a part of PGS seismic operations when completed.

The Arrow Group cancelled the contracts for NB’s 532 and 533 in March and August 2009, respectively due to delays. In March 2010, the Company took delivery of the NB 534 *PGS Apollo* and in the third quarter NB 535 was cancelled.

WG was released from its obligations under the charter in connection with these cancellations of NB’s 532 and 533. The yard disputed the Arrow Group’s right of termination of NB’s 532 and 533, and initiated arbitration proceedings in Norway against the Arrow companies holding each shipbuilding contract. In both arbitration cases, the yard was ordered to pay the respective Arrow companies the full amount claimed of EUR 39.7 million per vessel, as well as interest and legal costs. The portion of the awarded amounts covered by the bank refund guarantees, approximately EUR 32 million plus interest of approximately EUR 5 million on each vessel were received in 2010.

In 2010, Arrow received approximately EUR 45 million as repayment of all prepaid instalments on NB 535 with addition of interest. The payment was made by the bank of the Spanish shipyard Factorias Juliana following an undisputed cancellation of the vessel.

For the cancelled Arrow vessels, NB 532 and NB 533, approximately EUR 7 million per vessel with the addition of interest, is still outstanding from Factorias Vulcano. Factorias Vulcano has entered into Spanish bankruptcy proceedings and the outcome of these proceedings is still not decided. Arrow is currently taking steps to recover the values. The net book value of PGS exposure to the Spanish yard is approximately $9 million.

Upon delivery of *PGS Apollo* the Company entered into a Spanish lease structure which expired in 2011, see Note 27.

## Note 19 - MultiClient Library

The components of the MultiClient library are summarized as follows:

| (In thousands of dollars) | December 31, 2011 | 2010 Restated(a) |
|---|---|---|
| Balance as of January 1, | 310,843 | 293,238 |
| Cash investments | 203,922 | 166,711 |
| Capitalized interest | 6,409 | 5,894 |
| Capitalized depreciation | 49,966 | 42,507 |
| Amortization expense | (237,005) | (197,460) |
| Other | --- | (47) |
| Balance as of December 31, | 334,135 | 310,843 |

(a) See note 2

Amortization expense for the year ended December 31, 2011 includes $19.5 million of additional non-sales related amortization. This amount includes $17.0 million in minimum amortization and $2.5 million of impairments to reflect the fair value of future sales on certain individual surveys. For the year ended December 31, 2010 the additional non-sales related amortization totalled $26.6 million, of which $13.5 million in minimum amortization, $13.8 million of impairments and $0.7 million in reversal of previous recorded impairments. For the year ended December 31, 2009, the additional non-sales related amortization totalled $24.7 million, of which $10.1 million in minimum amortization and $15.0 million of impairments and $0.4 million in reversal of previous recorded impairments.

The net carrying value of the MultiClient library, by the year in which the surveys were completed, is summarized as follows:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| **Completed surveys** | | |
| Completed during 2006 and prior years | --- | 348 |
| Completed during 2007 | 664 | 4,627 |
| Completed during 2008 | 24,986 | 31,380 |
| Completed during 2009 | 92,925 | 120,618 |
| Completed during 2010 | 36,590 | 48,082 |
| Completed during 2011 | 63,333 | --- |
| Completed surveys | 218,498 | 205,055 |
| Surveys in progress | 115,637 | 105,788 |
| MultiClient library | 334,135 | 310,843 |

For information purposes, the following shows the hypothetical application of the Company's minimum amortization requirements to the components of the existing MultiClient library. These minimum amortization requirements are calculated as if there will be no future sales of these surveys.

| (In thousands of dollars) | December 31, 2011 Future minimum amortization |
|---|---|
| During 2012 | 35,142 |
| During 2013 | 70,286 |
| During 2014 | 69,600 |
| During 2015 | 46,225 |
| During 2016 | 72,182 |
| During 2017 | 40,700 |
| Future minimum amortization | 334,135 |

Because the minimum amortization requirements generally apply to the MultiClient library on a survey-by-survey basis rather than in the aggregate, the Company may incur significant minimum amortization charges in a given year even if the aggregate amount of ordinary amortization charges recognized exceeds the aggregate minimum amortization charges above.

## Note 20 - Investments in Joint Ventures and Associated Companies

The components of investments in joint ventures and associated companies are summarized as follows:

| (In thousands of dollars) | 2011 | 2010 |
|---|---|---|
| Balance as of January 1, | 24,523 | 7,043 |
| Share of income/ (loss) | (12,389) | (10,183) |
| Investment, cash | 81 | 5,865 |
| Investment, non cash (a) | 36,015 | 21,798 |
| Other | 291 | --- |
| Balance as of December 31, | 48,521 | 24,523 |

(b) Shares received as part of the Azimuth transaction ($33.7 million), exchange of receivables ($1.0 million) and accrued interest ($1.3 million).

Specification by investment:

| (In thousands of dollars) | Net book value December 31, 2010 | Investment | Other | Share of income/ (loss) | Net book value December 31, 2011 | Ownership as of December 31, 2011 |
|---|---|---|---|---|---|---|
| Corporations and limited partnerships | | | | | | |
| Azimuth Ltd. | --- | 33,808 | --- | (5,392) | 28,416 | 45.1% |
| Geokinetics Inc. (a) | 11,883 | 1,255 | --- | (6,154) | 6,984 | 11.4% |
| PGS Overseas Operation (Cyprus) Ltd. | 10,276 | --- | 242 | 250 | 10,768 | 50.0% |
| Fortis Petroleum Corporation AS. | 2,185 | --- | --- | (680) | 1,505 | 20.0% |
| Other | 179 | 1,033 | 49 | (413) | 848 | --- |
| Total | 24,523 | 36,096 | 291 | (12,389) | 48,521 | |

(a) Includes investment in preferred shares of $7.0 million which are not recognized as part of the equity method recognition.

In third quarter 2011, the Company participated in the establishment of the Exploration & Production (E&P) focused investment company Azimuth primarily by contributing existing equity holdings in smaller E&P companies. This transaction resulted in a net gain on sale of shares of $2.9 million and other operating income of $4.4 million. The Company owns 45.1% of Azimuth and has entered into a cooperation agreement whereby the Company provides certain services to Azimuth and whereby Azimuth has the right to buy, for cash and at fair value, up to 50% of any future equity settlement that PGS may receive as payment for its library or services. The Company has no obligation to provide further funding of Azimuth and has no guarantees outstanding.

The following table summarizes unaudited financial information of the Company's share of joint ventures and associated companies on a combined basis.

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| **Statements of operations data** | | | |
| Revenue | 36,206 | 70,975 | 7,731 |
| Share of income (loss) | (12,389) | (10,183) | 634 |
| Sale of shares | --- | --- | 1,267 |
| Gain (loss) from equity investments | (12,389) | (10,183) | 1,901 |

| | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| **Statements of financial position data** | | |
| Total assets | 127,803 | 101,500 |
| Total liabilities | (86,266) | (76,977) |
| Net assets | 41,537 | 24,523 |

## Note 21 - Other Long-Lived Assets

Other long-lived assets consist of the following:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Claims towards yard (NB's 532 and 533) (Note 18) | 9,518 | 14,904 |
| Prepaid foreign income tax and withholding tax | 6,671 | 1,696 |
| Loan to associated company | 3,243 | 3,132 |
| Prepaid expenses and deposits | 1,481 | 1,524 |
| Warrants Geokinetics Inc. (Note 20) (a) | 507 | 4,070 |
| Fair value adjustment of firm commitments | 298 | --- |
| Unrealized gain forward exchange contracts (Note 26) | --- | 21 |
| Other long-term receivables | 2,269 | 1,898 |
| Total | 23,987 | 27,245 |

(a) PGS own $10 million in 40,000 preferred shares and 1,165,000 warrants in Geokinetics as of December 31, 2011 and 2010 (see Note 20). Based on the Black-Scholes option price model, the warrants has been valued to $ 0.5 million and $ 4.1 million as of December 31, 2011, and 2010, respectively. The remaining value has been allocated to the preferred shares and has been included as part of the investment in Geokinetics.

## Note 22 - Goodwill

The Company tests goodwill annually for impairment or whenever there is an indication that goodwill might be impaired.

The carrying amount of goodwill of $139.9 million relates to the 2007 acquisitions of MTEM, AGS and Roxicon. Effective from May 1, 2010 the Company changed its organization where Marine Contract and MultiClient were established as operating segments. Accordingly goodwill was reallocated to these two segments based on the relative values.

A summary of goodwill allocated to individual cash-generating units for impairment testing is as follows:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Marine Contract | 97,897 | 97,897 |
| MultiClient | 41,955 | 41,955 |
| Total | 139,852 | 139,852 |

Key assumptions used in the calculations of value in use are growth rates, revenues, EBITDA, operating profit, capital expenditures and discount rates. The recoverable amounts are determined based on a value-in-use calculation using after tax cash flow projections based upon financial projections approved by executive management and an after tax discount rate of 8.8% as of December 31, 2011 and 9.9% as of December 31, 2010. The nominal growth rate used to extrapolate cash flows beyond the initial 5 years projection period as of December 31, 2011 and 2010 was 2.5%.

Hydrocarbons continue to be a primary source of global energy in virtually all countries. Seismic services continue to be fundamental in the exploration for hydrocarbons. Countries with known or prospective hydrocarbons continue to have long term exploration and development plans extending well into the future.

Management believes that any reasonably possible change in key assumptions underlying the calculations of the recoverable amount of the Marine segment would not trigger any impairment as of December 31, 2011.

## Note 23 - Other Intangible Assets

The components of other intangible assets are summarized as follows:

| (In thousands of dollars) | Patents and licenses | Development cost | Technology and other | Exploration expenditures | Total |
|---|---|---|---|---|---|
| **Purchase costs** | | | | | |
| Purchase costs as of January 1, 2010 | 186,175 | 33,124 | 22,129 | --- | 241,428 |
| Additions to costs | 55 | 12,559 | --- | --- | 12,614 |
| Other/ translations adjustments | (4,483) | --- | --- | --- | (4,483) |
| Purchase costs as of December 31, 2010 | 181,747 | 45,683 | 22,129 | --- | 249,559 |
| Additions to costs | 952 | 19,008 | --- | 20,764 | 40,724 |
| Other/ translations adjustments | (1,051) | --- | --- | --- | (1,051) |
| Purchase costs as of December 31, 2011 | 181,648 | 64,691 | 22,129 | 20,764 | 289,232 |
| | | | | | |
| **Accumulated amortization** | | | | | |
| Amortization as of January 1, 2010 | 132,564 | 1,604 | 8,770 | --- | 142,938 |
| Amortization expense | 3,262 | 1,481 | 3,763 | --- | 8,506 |
| Other/ translations adjustments | (4,479) | --- | --- | --- | (4,479) |
| Amortization as of December 31, 2010 | 131,347 | 3,085 | 12,533 | --- | 146,965 |
| Amortization expense | 3,304 | 1,538 | 3,763 | --- | 8,605 |
| Other/ translations adjustments | (1,049) | --- | --- | --- | (1,049) |
| Amortization as of December 31, 2011 | 133,602 | 4,623 | 16,296 | --- | 154,521 |
| | | | | | |
| **Balance as of December 31, 2010** | **50,400** | **42,598** | **9,596** | **---** | **102,594** |
| **Balance as of December 31, 2011** | **48,046** | **60,068** | **5,833** | **20,764** | **134,711** |
| Estimated useful life | 1 to 20 years | 10 years (a) | 1 to 12 years | (b) | |

(a) Estimated useful life from completion of development project.
(b) Capitalized exploration expenditures are not amortized until the exploration is complete and the results have been evaluated at which the asset is evaluated for de-recognition or tested for impairment.

The intangible assets have finite useful lives over which the assets are amortized. There were no impairment indicators in 2011, 2010 and 2009, see note 2 for additional information on impairment of intangible assets.

## Note 24 - Short-Term Debt and Current Portion of Long-Term Debt

Short-term debt and current portion of long-term debt consist of the following:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Current portion of long-term debt (Note 25) | 183,000 | --- |
| Short-term debt | 11 | --- |
| Total | 183,011 | --- |

## Note 25 - Debt and Guarantees

### Long-term debt

Long-term debt consists of the following:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| **Secured:** | | |
| Term loan B, Libor + margin, due 2015 | 470,533 | 470,533 |
| Senior notes, due 2018 | 300,000 | --- |
| **Convertible notes:** | | |
| Convertible notes, due 2012 | 183,785 | 319,633 |
| Total | 954,318 | 790,166 |
| Less current portion | (183,785) | --- |
| Less deferred loan costs | (17,119) | (6,473) |
| Total long-term debt | 753,414 | 783,693 |

Aggregate maturities of long-term debt, expected interest payments (excluding interest rate swaps) and finance lease obligations are as follows:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Year of repayment: | | |
| 2011 | --- | 20,873 |
| First quarter 2012 | 2,771 | 3,603 |
| Second quarter 2012 | 18,491 | 8,342 |
| Third quarter 2012 | 3,467 | 3,909 |
| Fourth quarter 2012 | 201,167 | 328,524 |
| 2013 | 33,984 | 18,798 |
| 2014 | 31,431 | 24,332 |
| 2015 | 499,327 | 484,410 |
| 2016 | 22,125 | --- |
| 2017 and thereafter | 344,250 | --- |
| Total | 1,157,013 | 892,791 |
| Interest portion (a) | (202,695) | (102,625) |
| Total long term debt (including current portion) | 954,318 | 790,166 |

(a) Calculation of expected interest payments are based on forward interest rates as of December 31, 2011 and 2010, respectively.

All of the trade payables per December 31, 2011 of $61.7 million mature the first quarter of 2012.

In 2011 the company made optional repurchases of the Convertible notes for a nominal amount of $153.9 million at an average price of 98.83%. In 2010, the Company made debt repayments of $139.2 million, of which $100.0 million was an optional prepayment of the Term Loan B (“Term Loan”) and $17.5 million was an optional prepayment of a scheduled 2011 final repayment of the 8.28% mortgage note.

In 2011 there were no repayments of the Term Loan. In 2010, the Company made repayments of $101.5 million of the Term Loan of which $100.0 million was optional (see above. The Company has hedged the interest rate on 64% of the borrowings under the Term Loan (64% in 2010) by entering into interest rate swaps where the Company receives floating interest rate based on 3 months LIBOR and pays fixed interest rate between 4.62 to 5.34% per December 31, 2011 with a remaining life of 0.5 to 2.7 years. See Note 26 for further information.

The Company’s senior secured credit facility of $950 million consists of at inception an eight-year $600 million ($470.5 million outstanding) Term Loan (maturing 2015) and at inception a five-year $350 million Revolving Credit Facility (“RCF”) (originally maturing 2012 and extended to 2015 in January 2011). The Term Loan, which has no financial maintenance covenants, has a floating interest rate of LIBOR + 175 basis points. The credit agreement generally requires the Company to apply 50% of excess cash flow to repay outstanding borrowings for financial years when the total leverage ratio exceeds 2.5:1 or the senior leverage ratio exceeds 2:1 (see Note 26 for definitions of leverage ratios). Excess cash flow for any period is defined as net cash flow provided by operating activities less capital expenditures and scheduled debt services during that period, minus capital income taxes to be paid in the next period and capital expenditure committed in the period but to be paid in future periods. The Company can make optional prepayments to reduce the outstanding principal balance at no penalty. The Term Loan is an obligation of PGS ASA and PGS Finance Inc. as co-borrowers, is secured by pledges of shares of material subsidiaries and is guaranteed by the same material subsidiaries. In addition, the Company may also under the $950 million credit agreement be able to borrow an additional $400 million either as a term loan or as an RCF. Such additional borrowing would be secured by the same collateral that secures the Term Loan and borrowings under the existing RCF.

The $400 million convertible notes ($190.6 million outstanding per December 31, 2011) were issued in December 2007 and are due in December 2012. The convertible notes are convertible into ordinary shares of PGS ASA. The total number of shares to be issued if all convertible notes are converted at the conversion price is 10.2 million ordinary shares, representing 4.68% of the Company’s current issued ordinary share capital. Due to repurchases, 4.9 million shares are issuable if all the notes were converted at December 31, 2011. The conversion price is NOK 216.19 per share and is fixed in USD based upon the fixed exchange rate, which represented a 40% premium over the volume weighted average price of the Company’s ordinary shares at the time of offering. The fixed rate of exchange is 5.5188 NOK per 1.00 USD and the coupon has been set at 2.7% per

annum payable semi-annually in arrears. The equity element of the convertible notes was calculated to 17.1% of the nominal value ($68.4 million) and was recorded to shareholders' equity, net of allocated portion of loan costs and taxes.

In November 2011 the company issued $300 million Senior notes which are due in December 2018. The Senior notes were issued at 98.638% of the principal amount with a coupon of 7.375%. The Senior notes are ranked as senior obligations of the company and rank equally in right of payment with all other existing and future senior debt. At any time prior to December 15, 2015, the Company may redeem the Notes at its option, in whole or in part, at a redemption price equal to 100% of the principal amount thereof plus the Applicable Premium as of, and accrued and unpaid interest to, the date of redemption. Applicable Premium means the greater of (i) 1.0% of the principal amount of the Senior notes; and (ii) the excess of (a)the present value at such Redemption Date of the Redemption Price of the Note at December 15, 2015 (such Redemption Price being set forth in the table appearing below plus all required interest payments due on the Note during the period from such Redemption Date through December 15, 2015 (excluding accrued but unpaid interest), computed using a discount rate equal to the Treasury Rate as of such Redemption Date plus 50 basis points, over (b)the principal amount of the Note, if greater. The Notes will also be redeemable at the Company's option on or after December 15, 2015, in whole or in part, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest thereon to the applicable redemption date, if redeemed during the 12-month period beginning December 15 of the years indicated below:

| Year | Percentage |
|---|---|
| 2015 | 103.688% |
| 2016 | 101.844% |
| 2017 and thereafter | 100.000% |

**Bank credit facilities**

Under the senior secured credit facility established in June 2007 the Company has an RCF of $350 million originally maturing in 2012. In January 2011 the maturity was extended to 2015. The RCF has a $45 million sub-limit for issuance of letter of credits, whilst the bonding facility (for issuance of bid and performance bonds) included in this sub-limit under the previous RCF was in June 2007 replaced by a separate $15 million bonding facility (later increased to $30 million). The Company may borrow USD, or any other currency freely available in the London banking market to which the lenders have given prior consent, under the RCF for working capital and for general corporate purposes. Borrowings under the RCF bear interest at a rate equal to LIBOR plus a margin of 1.5% increased to 2.25% from January 25, 2011.

At December 31, 2011 and 2010, the Company had zero outstanding in cash advances, and zero and $3.6 million, respectively, of standby letters of credit were outstanding under the RCF with an applicable margin of 1.5% per annum, and $0.1 million and $2.3 million, respectively, of bid and performance bonds were drawn under the separate committed bonding facility of $30 million, with an applicable margin of 1.4%. The Company has further a smaller $2 million and $10 million uncommitted bid and performance bond facilities intended for regional use.

The Company also has an overdraft facility of NOK 50 million as part of our Norwegian cash pooling arrangement. This facility will continue until cancelled.

**Covenants**

The June 2007 credit facility contains financial covenants and negative covenants that restrict the Company in various ways. The facility provides that:

- for the RCF part the total leverage ratio (see Note 26 for definitions of leverage ratios) may not exceed 3.00:1.0 in 2010 and 2.75:1.0 thereafter (maintenance covenant). The Term Loan has an incurrence test saying the Company cannot increase total leverage above 3.25:1.0 in 2010 and 3.00:1.0 in later test periods (rolling last 4 quarters).

In addition, the credit agreement restricts or could restrict our ability, among other things, to sell assets without the sales proceeds being reinvested in the business or used to repay debt; incur additional indebtedness or issue preferred shares; prepay interest and principal on our other indebtedness; pay dividends and distributions or repurchase our capital stock; create liens on assets; make investments, loans, guarantees or advances; make acquisitions; engage in mergers or consolidations; enter into sale and leaseback transactions; engage in transactions with affiliates; amend material agreements governing our indebtedness; change our business; enter into agreements that restrict dividends from subsidiaries; and enter into speculative financial derivative agreements.

The Company is in compliance with the covenants in its loan and lease agreements as of December 31, 2011.

**Pledged assets**

Certain seismic vessels and seismic equipment with a net book value of $55.1 million at December 31, 2010 were pledged as security under the Company's short-term and long-term debt. As per above the mortgage note was repaid in 2010 and the mortgages were discharged in 2011. In addition shares in material subsidiaries have been pledged as security.

**Letters of credit and guarantees**

The Company had aggregate outstanding letters of credit and related types of guarantees, not reflected in the accompanying consolidated financial statements, of $11.9 million and $63.7 million as of December 31, 2011 and 2010, respectively.

## Note 26 - Financial Instruments

**Fair values of financial instruments**
The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable, accrued revenues and other receivables, other current assets, accounts payable and accrued expenses approximate their respective fair values because of the short maturities of those instruments.

The carrying amounts and the estimated fair values of debt and derivatives instruments are summarized as follows:

| | December 31, 2011 | | | December 31, 2010 | | |
|---|---|---|---|---|---|---|
| (In thousands of dollars) | Carrying amounts | Notional amounts | Fair values | Carrying amounts | Notional amounts | Fair values |
| Loans measured at amortized cost: | | | | | | |
| Long-term debt, current portion of long-term debt and deferred loan cost (Note 25) | 954,318 | --- | 939,011 | 790,166 | --- | 768,718 |
| Derivatives measured at fair value through consolidated statement of comprehensive income: | | | | | | |
| Interest rate swaps/future interest rate agreements, net unrealized (loss) gain (a) | (25,535) | 500,000 | (25,535) | (28,117) | 300,000 | (28,117) |
| Derivatives measured at fair value through consolidated statement of operations: | | | | | | |
| Forward exchange contracts, net unrealized (loss) gain (a) | (4,552) | 139,472 | (4,552) | (35) | 240,457 | (35) |
| Interest rate differential UK lease (Note 27) | (2,693) | --- | (2,693) | (5,774) | --- | (5,774) |

(a) The carrying amounts of forward exchange contracts and interest rate swaps are classified in the consolidated statements of financial position as follows:

| | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| Forward exchange contracts, net (qualifying hedges) | (1,338) | --- |
| Interest rate swaps, net (qualifying hedges) | (25,535) | (28,117) |
| Forward exchange contracts, net | ( 3,214) | (35) |
| Total | (30,087) | (28,152) |
| Classified as follows: | | |
| Other current asset (short-term unrealized gain) (Note 17) | 170 | 4,366 |
| Other long-lived assets (long-term unrealized gain) (Note 21) | --- | 21 |
| Accrued expenses (short-term unrealized loss) (Note 28) | (10,226) | (4,075) |
| Other long-term liabilities (long-term unrealized loss) (Note 29) | (20,031) | (28,464) |
| Total | (30,087) | (28,152) |

**Fair value hierarchy**
As at 31 December 2011 and 2010, the Company held the following financial instruments carried at fair value on the statement of financial position:

The Company is required to disclose the hierarchy of how fair value is determined for financial instruments recorded at fair value in the consolidated financial statements:
Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities
Level 2: assets and liabilities whose values are based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly
Level 3: techniques for which all inputs which have a significant effect on the recorded fair value that are not based on observable market data.

**Assets measured at fair value**

| (In thousands of dollars) | 31 December 2011 | Level 1 | Level 2 | Level 3 |
|---|---|---|---|---|
| *Financial assets at fair value through profit or loss* | | | | |
| Forward exchange contracts (non-hedge) | 170 | --- | 170 | --- |
| Debt instruments | 507 | --- | 507 | --- |
| *Available-for-sale financial assets* | | | | |
| Equity shares | 7,779 | 6,205 | --- | 1,574 |
| Debt securities | 23,290 | --- | 23,290 | --- |

**Liabilities measured at fair value**

| (In thousands of dollars) | 31 December 2011 | Level 1 | Level 2 | Level 3 |
|---|---|---|---|---|
| *Financial liabilities at fair value through profit or loss* | | | | |
| Interest rate swaps (hedge) | (25,535) | --- | (25,535) | --- |
| Forward exchange contracts (hedge) | (1,338) | --- | (1,338) | --- |
| Forward exchange contracts (non-hedge) | (3,384) | --- | (3,384) | --- |

**Assets measured at fair value**

| (In thousands of dollars) | 31 December 2010 | Level 1 | Level 2 | Level 3 |
|---|---|---|---|---|
| *Financial assets at fair value through profit or loss* | | | | |
| Forward exchange contracts | 4,387 | --- | 4,387 | --- |
| Debt instruments | 4,070 | --- | 4,070 | --- |
| *Available-for-sale financial assets* | | | | |
| Equity shares | 33,282 | 31,629 | --- | 1,653 |

**Liabilities measured at fair value**

| (In thousands of dollars) | 31 December 2010 | Level 1 | Level 2 | Level 3 |
|---|---|---|---|---|
| *Financial liabilities at fair value through profit or loss* | | | | |
| Interest rate swaps (hedge) | (28,117) | --- | (28,117) | --- |
| Forward exchange contracts | (4,422) | --- | (4,422) | --- |

The fair values of the long-term debt instruments, forward exchange contracts and interest rate swaps are estimated using quotes obtained from dealers in such financial instruments or latest quoted prices or indexes at Reuters or Bloomberg. Where market prices are not observed or quotes form dealers not obtained an indirect method is used by use of implied credit spread from debt instrument with similar risk characteristics. The fair value of the liability component of convertible notes is determined by obtaining quotes from dealers.

In February 2011 SeaBird Exploration PLC issued a convertible loan of $42.9 million directed towards the Company. In December 2011 the instrument was partially repaid and partially restructured as a Senior Secured Bond (Coupon rate 6%) with a nominal value of $31.7 million. A loss of $7.5 million was recognized in the consolidated statement of operations in 2011 as the fair value of the new bond was lower than the nominal value. The carrying amount of the Bond at December 31, 2011 is equal to the fair value of $23.9 million.

**Financial risk management policies**
As a worldwide provider of seismic data the Company is exposed to market risks such as exchange rate risk and interest rate risk, credit risk and liquidity risk. The Company has established procedures and policies for determining appropriate risk levels for the main risks and monitoring these risk exposures.

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The management of the capital structure involves active monitoring and adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure the Company may refinance its debt, buy or issue new shares or debt instruments, sell assets or return capital to shareholders.

The Company monitors debt on the basis of the leverage ratio and other covenants in credit agreements. This ratio is calculated as gross indebtedness divided by EBITDA less non pre-funded MultiClient library investments. At 31 December 2011 the gross indebtedness was $978.8 million and EBITDA less non pre-funded MultiClient library was $544.0 million. In addition the Company monitors a leverage ratio based on net debt. Net debt is calculated as total indebtedness (including "current and long-term debt" as shown in the consolidated statement of financial position) less cash and cash equivalents. The Company generally seeks to keep net debt below 1 or 2 times EBITDA dependent on where we are in the business cycle. It implies below 1 times EBITDA in strong market and below 2 times EBITDA in weak part of the cycle. The Company is of the opinion that the policy would generally satisfy the requirements for a BB –rating (Standard and Poor's)/Ba2-rating (Moody's). The gross leverage ratio at December 31, 2011 and 2010 was 1.80 and 1.92, respectively while the net leverage ratio was 1.02 and 0.99, respectively.

The Company's treasury function monitors and manages the financial risks related to the operations of the Company. The treasury function may seek to manage the effect of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivates is governed by the Company policies approved by the Board of Directors, which provide written principles on foreign exchange rate risk, interest rate risk, credit risk and the use of financial derivative and non-derivative instruments.

The treasury function continuously monitors counterparties to mitigate funding, excess cash investment, cash in operation and derivative risks. Guidelines are set out in the Company policies to provide limits in respect of exposure to individual counterparties and monitoring procedures are in place to identify risk factors as they arise.

The treasury function reports regularly to the Company management and any breach of limits set in the policy shall be reported to the Board of Directors.

**Interest rate exposure**

The Company is subject to interest rate risk on debt, including finance leases. The risk is managed by using a combination of fixed- and variable- rate debt, together with interest rate swaps, where appropriate, to fix or lower the borrowing costs.

As of December 31, 2011, the Company has outstanding interest rate swaps in the aggregate notional amount of $500 million, of which $200 million are forward starting swaps, ($300 million as of December 31, 2010) relating to the Term Loan established in June 2007 (see Note 25). Under the interest rate swap agreements the Company receives floating interest rate payments and pays fixed interest rate payments. The weighted average fixed interest rates under the contracts are as follows:

| | December 31, 2011 | | December 31, 2010 | |
|---|---|---|---|---|
| Matures in: | Notional amounts ($ thousands) | Weighted average fixed interest rate | Notional amounts ($ thousands) | Weighted average fixed interest rate |
| 1 year | 200,000 | 5.13% | --- | --- |
| 1 – 2 years | --- | --- | 200,000 | 5.05% |
| 2 – 3 years | 200,000 | 3.93% | --- | --- |
| 3 – 4 years | 100,000 | 2.64% | 100,000 | 5.18% |
| 4 – 5 years | --- | --- | --- | --- |
| Total | 500,000 | 4.15% | 300,000 | 5.09% |

The aggregate negative fair value of these interest rate swap agreements at December 31, 2011 and 2010 was approximately $25.5 million and $28.1 million, respectively.

The following table indicates the maturity analysis of the interest rate swaps as at reporting date:

| | | | | Cash flow matures in, | | | | |
|---|---|---|---|---|---|---|---|---|
| (In thousands of dollars) | Notional amount | Discounted carrying amount | Total expected cash flow (gross) | <1 year | 1-2 years | 2-3 years | 3-4 years | 4-5 years |
| December 31, 2011: | | | | | | | | |
| Interest rate swaps | 500,000 | (25,535) | (27,113) | (11,149) | (8,001) | (7,478) | (485) | --- |
| December 31, 2010: | | | | | | | | |
| Interest rate swaps | 300,000 | (28,117) | (28,452) | (14,354) | (9,714) | (3,028) | (1,356) | --- |

The following table shows the gross amounts of debt with fixed and variable interest (including finance lease obligations):

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Debt at fixed interest rate | 483,785 | 319,633 |
| Debt at variable interest rate (a) | 470,533 | 470,533 |
| Total interest bearing debt | 954,318 | 790,166 |

(a) Interest based on US dollar LIBOR plus a margin.

The weighted average interest rate on the variable rate debt, inclusive finance leases, as of December 31, 2011 and 2010 was approximately 2.3% and 2.1%, respectively. As indicated above, through interest rate swaps the Company have effectively fixed the interest rate on $300 million of this floating rate debt as of December 31, 2011, with the remaining $170.5 million of the floating rate debt continuing to bear interest at a variable rate. As of December 31, 2010, the Company had fixed the interest rate on $300 million through interest rate swaps, with the remaining $170.5 million continuing to bear interest at a variable rate. After giving effect to the Company's interest rate swaps, for every one-percentage point hypothetical increase in LIBOR, our annual net interest expense on our variable rate debt, inclusive finance leases and cash holdings, will decrease by approximately $1.0 million and increase by approximately $2.6 million at December 31, 2011 and 2010, respectively.

**Interest rate hedge accounting**

As of December 31, 2011 100% out of the total notional amount of interest rate swaps of $500 million were accounted for as cash flow hedges (100% out of the total notional amount of interest rate swaps of $300 million as of December 31, 2010). In the years ended December 31, 2011 and 2010, the fair value of these instruments were recorded in the consolidated statement of comprehensive income as the effective portion of the designated and qualifying hedging instrument.

Changes in the fair value of interest swaps contracts designated as cash flow hedges are as follows (recognized in the consolidated statement of comprehensive income):

| (In thousands of dollars) | Years ended December 31, 2011 | 2010 |
|---|---|---|
| Amounts transferred from the consolidated statement of comprehensive income to the consolidated statement of operations | 14,734 | 18,288 |
| Effective portion of fair value recognised in the consolidated statement of comprehensive income | (12,152) | (15,587) |
| Total change in fair value (loss) | 2,582 | 2,701 |

The Company has not excluded any components of the derivative instruments' gain or loss from the assessment of hedge effectiveness with respect to the qualifying interest rate hedges.

The following table indicates the periods in which the cash flow associated with derivatives, which are cash flow hedges, are expected to occur:

| | | | | Cash flow matures in, | | | | |
|---|---|---|---|---|---|---|---|---|
| (In thousands of dollars) | Notional amount | Discounted carrying amount | Total expected cash flow (gross) | <1 year | 1-2 years | 2-3 years | 3-4 years | 4-5 years |
| December 31, 2011: | | | | | | | | |
| Interest rate swaps | 500,000 | (25,535) | (27,113) | (11,149) | (8,001) | (7,478) | (485) | --- |
| December 31, 2010: | | | | | | | | |
| Interest rate swaps | 300,000 | (28,117) | (28,452) | (14,354) | (9,714) | (3,028) | (1,356) | --- |

The profit and loss impact of the cash flow hedges are estimated to be in the same year as the effect of the cash flows.

**Interest rate sensitivity**

The following table demonstrate the sensitivity to a reasonably possible change in interest rates on the Company's loans and borrowings, after the impact of hedge accounting. The change in fair value of the derivatives used for cash flow hedges will be effected by a change in the interest rate and is shown as the effect on equity. All other variables are held constant and the effect is calculated based on the Company's financial instrument at 31 December.

| (In thousands of dollars) | Increase/(decrease) in basis points | Effect on profit before tax | Effect on equity |
|---|---|---|---|
| 2011 US dollar | 100 | (1,705) | 8,339 |
| 2010 US dollar | 100 | (1,705) | 6,459 |

**Foreign exchange rate exposure**
The Company is exposed to currency fluctuation due to a predominantly USD based revenue stream, while the Company's expenses are incurred in various currencies. The larger expense currencies other than the USD are GBP, NOK and EUR. The Company maintain a foreign-currency risk management strategy that uses foreign currency exchange contracts to protect against fluctuations in cash flow caused by volatility in currency exchange rates.

In 2011, the Company continued a foreign currency hedging program by entering into NOK, GBP, SGD, EUR, and BRL on forward contracts.

As of December 31, 2011, the Company had open forward contracts to buy and sell GBP, NOK, BRL and EUR amounting to approximately $139.5 million (notional amount) with a negative fair value of $4.6 million. As of December 31, 2010, the Company had open forward contracts to buy and sell GBP, NOK, SGD, BRL and EUR amounting to approximately $240.5 million (notional amount) with a negative fair value of $0.1 million.

The following table indicates the maturity analysis of the derivates foreign currency forward contracts as at reporting date:

| | | | Total expected cash flow | | |
|---|---|---|---|---|---|
| | Notional | Carrying | | Matures in | |
| (In thousands of dollars) | amount | amount | Gross | <1 year | 1-2 years |
| December 31, 2011: | | | | | |
| Forward exchange contracts: | | | | | |
| Positive market value | 5,984 | 170 | 170 | 170 | --- |
| Negative market value | 133,488 | (4,722) | (4,722) | (4,551) | (171) |
| | 139,472 | (4,552) | (4,552) | (4,381) | (171) |
| December 31, 2010: | | | | | |
| Forward exchange contracts: | | | | | |
| Positive market value | 91,310 | 4,387 | 4,395 | 4,373 | 22 |
| Negative market value | 149,147 | (4,422) | (4,430) | (4,080) | (350) |
| | 240,457 | (35) | (35) | 293 | (328) |

A further 10% depreciation of the USD against all the currencies the Company have derivative contracts in, would have decreased the fair value of these contracts by approximately $3.1 million. The effect on the consolidated statements of operations would have been $4.3 million. The analysis of change in fair value and effect on consolidated statements of operations is based on the Company's mix of foreign exchange contracts as of December 31, 2011, and the assumption that hedged currencies appreciate equally against USD. Figures calculated in the analysis of change in fair value and effects on consolidated statements of operations are before tax. All of the Company's debt and other financial instruments are denominated in USD.

**Foreign exchange rate hedge accounting**
In 2011, the Company entered into derivatives to hedge the NOK exposure arising from a contract to supply equipment for the Ramform new build program. The derivatives entered into to hedge the exposure have, where applicable, been designated as fair value hedges. Of the total notional amounts of forward exchange contracts as per table above, $23.7 million were accounted for as fair value hedges as of December 31, 2011 and none were accounted for as fair value hedges as of December 31, 2010. The negative fair value of these contracts was $1.3 million as of December 31, 2011. Only the spot element of the forward exchange contracts has been designated as effective hedging instruments and has been included in the assessment of hedge effectiveness.

There was no foreign exchange derivatives designated as cash flow hedges outstanding at December 31, 2011 or December 31, 2010.

The change in fair value of foreign currency derivatives used in fair value hedges of firm commitments were $1.5 million (loss), $0.3 million (gain) and $0.9 million (gain) in the years ended December 31, 2011, 2010 and 2009, respectively. The corresponding change in fair value of firm commitments were $2.1 million (gain), $0.6 million (loss) and $0.1 million (loss) for the years ended December 31, 2011, 2010 and 2009, respectively. The difference between the change in the value of the derivatives and the change in the fair value of the firm commitment is primarily caused by the fact that only the spot element of the derivative is designated to hedge the object and that in previous years derivatives at the hedge designation date were already carrying a fair value. The change in foreign currency derivates (not designed as hedges) for the years ended December 31, 2011, 2010 and 2009 was $3.2 million (gain), $0.8 million (gain) and $24.0 million (gain), respectively. The changes described above (net effect) are included in foreign currency (loss) gain.

**Exposure to credit risk**
The Company's financial assets that are exposed to concentration of credit risk consist of trade receivables from clients, liquidity cash investment and derivative financial instruments. Trade receivables are primarily multinational integrated oil companies and independent oil and natural gas companies, including companies owned in whole or in part by governments. The Company manages its exposure to credit risk through ongoing credit evaluations of customers and has provided for potential credit losses through an allowance for doubtful accounts. The allowance for doubtful accounts reflects management's best estimate of probable losses inherent in accounts receivable from trade customers and is based on a number of factors consisting mainly of aging of accounts, historical experience, customer concentration, customer creditworthiness and current industry and economic trends.

The Company is exposed to certain credit risk related to off-balance items such as long-term agreements entered into with customers and suppliers. The Company manages its exposure to such risks through continuously monitoring of counterparties. The Company also monitors the counter party risk of its banking partners, including counterparties on derivatives and where cash is held on deposits.

The carrying amount of financial assets represents the maximum credit exposure. The Company is exposed to credit risk on certain off-balance sheet items. In addition the Company has outstanding guarantees (see Note 25).

As described above, the Company's treasury function continuously monitors counterparties to mitigate credit risk. As of December 31, 2011, the Company is not aware of any specific credit risk related to counterparties other than those described.

**Exposure to liquidity risk**
The Company is exposed to liquidity risk related to the payment of debt and derivatives with negative value. The Company tries to minimise liquidity risk through ensuring access to a diversified set of funding sources, and management of maturity profile on debt and derivatives (see Note 25 and tables above for maturity profile on debt and above for derivatives with negative value).

## Note 27 - Leases, Commitments and Provisions

**Leases**
The Company has operating lease commitments expiring at various dates through 2023. Future minimum payments related to non-cancellable operating and finance leases were as follows:

| | December 31, 2011 | | December 31, 2010 | |
|---|---|---|---|---|
| (In thousands of dollars) | Operating leases | Finance leases | Operating leases | Finance leases |
| 2011 | --- | --- | 63,816 | --- |
| 2012 | 69,790 | 107 | 37,332 | --- |
| 2013 | 45,453 | 62 | 28,428 | --- |
| 2014 | 29,740 | --- | 21,678 | --- |
| 2015 | 18,025 | --- | 17,076 | --- |
| 2016 | 6,523 | --- | --- | --- |
| Thereafter | 5,256 | --- | 10,986 | --- |
| Total | 174,787 | 169 | 179,316 | --- |
| Imputed interest | | (13) | | --- |
| Net present value of finance lease obligations | | 156 | | --- |
| Current portion of finance lease obligations | | 96 | | --- |
| Long-term portion of finance lease obligations | | 60 | | --- |

The Company had no finance lease arrangements for the year ended December 31, 2010.

The future minimum payments under the Company's operating leases relate to the Company's operations as follows:

| | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| Marine seismic and support vessels | 88,040 | 82,826 |
| Buildings | 70,992 | 77,285 |
| Data processing operations equipment | 2,915 | 5,493 |
| Other | 12,840 | 13,712 |
| Total | 174,787 | 179,316 |

Rental expense for operating leases, including leases with terms of less than one year, was $103.3 million, $73.5 million and $89.5 million for the years ended December 31, 2011, 2010 and 2009, respectively.

**Claim towards a Polish yard**
In 2008, PGS subsidiary Arrow Seismic Invest IV LTD ("Arrow IV") terminated a contract with Polish yard Stocznia Marynarki Wojennej S.A. (the "yard") for conversion works on the vessel *Southern Explorer.* The yard has subsequently detained the vessel as security for alleged claims against Arrow IV, whereas Arrow IV has in December 2009 initiated a law suit against the yard in which Arrow IV claims damages and repossession of the vessel. The yard is now in bankruptcy proceedings and the estate is party to the dispute which is pending before Danish courts. PGS does not consider it probable that the outcome will have any adverse effect on the Company's business, results of operation or financial condition.

**Spanish leases**
In connection with the purchase of Arrow (see Note 18) the Company became party to Spanish lease structures for the construction of four high capacity seismic vessels (NB's 532, 533, 534 and 535). The contracts for NB's 532 and 533 were cancelled in 2009 due to delays and the NB 535 was cancelled in 2010. The NB 534 (named *PGS Apollo*) was delivered in 2010. See Note 18.

Under the tax lease scheme, the *PGS Apollo* was initially owned by a Spanish leasing company, which acquired and took delivery of the PGS Apollo from the shipyard in April 2010. Arrow Seismic Invest V Limited (Arrow V) chartered the vessel under a bareboat charter party. The bareboat charter hire was paid by another lease company on behalf of Arrow V as part of the tax lease arrangement. Upon expiry of the bareboat charter period, which took place in 2011, ownership of the *PGS Apollo* was transferred to Arrow V without any further payment from Arrow V.

**UK leases**
The Company entered into finance leases from 1996 to 1998 relating to *Ramforms Challenger, Valiant, Viking, Victory* and *Vanguard.* The terms for these leases ranged from 15-25 years. In 2007, the Company terminated the lease for *Ramform Victory* and took formal ownership of the vessel. The leases for *Ramform Viking* and *Ramform Vanguard* were terminated in 2006.

The Company has indemnified the lessors for the tax consequences resulting from changes in tax laws or interpretations thereof or adverse rulings by the tax authorities and for variations in actual interest rates from those assumed in the leases. The interest rate differentials are accounted for at fair value with corresponding changes in fair values reported through the consolidated statements of operations. The fair value is calculated using the forward market rates for Sterling LIBOR and a corresponding discount rate.

The remaining liability for interest rate differential on UK leases, which is accounted for at fair value, at December 31, 2011 and 2010, relates to *Ramform Valiant* and was approximately $2.7 million (1.7 million British pounds) and approximately $5.8 million (3.7 million British pounds), respectively.

**Brazil service tax claim**
The Company has an ongoing dispute in Brazil related to municipal services tax (“ISS”) on sale of MultiClient data. The municipality has contended that licensing of MultiClient data is equal to providing a service to PGS’ clients. ISS is a local service tax and the Company’s primary view is that licensing of MultiClient data held by the Company should be treated as rental of an intangible asset, which is clearly not a service under the relevant provisions, and therefore not be subject to ISS. This has been confirmed by several external advisors and the Company intends to vigorously defend its view. The maximum theoretical exposure including all years at December 31, 2011 amounts to $161 million of ISS tax, including interest charges and penalties. In 2010 the Company also presented a bank guarantee of Brazilian real 49 million (approximately $29 million) following an ISS foreclosure presented by the tax office in Rio de Janeiro for the earliest exposure years. The bank guarantee was required in connection with the lawsuit filed by the Company on 4 February 2010 to challenge the assessment. The Company decided to replace the guarantee with a deposit to reduce cost in February 2011. In October 2010, the Company deposited 110 million Brazilian real (approximately $65 million) with the Rio de Janeiro court so as to be able to file a lawsuit to seek confirmation that the sale of MultiClient data is not subject to ISS. The lawsuit relates to periods after 2005, which have not yet been assessed, as well as to future transactions. Going forward, the Company will continue depositing amounts relating to future transactions. Because the Company considers it more likely than not that the contingency will be resolved in its favor, no accruals have been made for any portion of the exposure. Amounts deposited are held on an interest bearing bank account with Banco do Brazil and will be released to the Company if and when a positive final ruling is awarded, which may take several years. The deposit is presented as long-term restricted cash in the statement of positions.

**Petrojarl**
Following the demerger of Petrojarl in 2006, the Company retained a joint secondary liability for certain obligations of Petrojarl. Petrojarl has agreed to indemnify the Company from liabilities related to its operations. Such liabilities include liabilities related to the floating production, storage and offloading units (“FPSOs”), that the Company transferred to Petrojarl in connection with the demerger. With respect to *Petrojarl Foinaven* FPSO, PGS has provided a separate on demand guarantee. The guarantee is made in relation to the FPSO service agreement and is for the benefit of the Foinaven co-ventures and is capped at $10 million. With respect to *Petrojarl Banff* FPSO, the Company remains with a joint secondary liability with Petrojarl under their FPSO service agreement with the Banff group. The guarantee is not capped. If these claims are made and Petrojarl does not honor its obligation to indemnify PGS, it could adversely affect the Company’s business, results of operation or financial condition.

**Onerous contracts**
The Company has a provision for onerous contracts in connection with office lease agreements in the UK. As of December 31, 2011 this relates to minimum operational lease provision of $1.8 million for offices that is no longer in use and provisions for dilapidation of $2.5 million. In total this was $6.2 million as of December 31, 2010.

## Note 28 - Accrued Expenses

Accrued expenses consist of the following:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Accrued employee benefits | 57,874 | 67,008 |
| Customer advances and deferred revenue | 56,274 | 39,388 |
| Accrued revenue share | 40,673 | 22,598 |
| Accrued vessel operating expenses | 38,508 | 31,155 |
| Received, not invoiced, property and equipment | 14,420 | 17,286 |
| Accrued sales tax and VAT | 13,204 | 18,871 |
| Unrealized loss interest swaps/forward exchange contracts (Note 26) | 10,226 | 4,075 |
| Accrued commissions | 8,653 | 8,725 |
| Accrued office cost | 7,311 | 8,755 |
| Accrued interest expenses | 4,440 | 2,918 |
| Accrued project cost | 3,142 | 4,204 |
| Accrued legal, audit and consulting fee | 2,597 | 3,803 |
| Accrued onerous contracts (Note 27) | 1,532 | 2,422 |
| Accrued liabilities UK leases (Note 27) | 714 | 889 |
| Other | 6,435 | 12,841 |
| Total | 266,003 | 244,938 |

## Note 29 - Other Long-Term Liabilities

Other long-term liabilities consist of the following:

| (In thousands of dollars) | December 31, 2011 | 2010 |
|---|---|---|
| Pension liability (Note 30) | 29,676 | 37,539 |
| Unrealized loss interest swaps/forward exchange contracts (Note 26) | 20,031 | 28,464 |
| Tax contingencies | 7,182 | 11,731 |
| Accrued liabilities UK leases (Note 27) | 1,979 | 4,885 |
| Accrued onerous contracts (Note 27) | 259 | 3,789 |
| Other | 3,613 | 4,423 |
| Total | 62,740 | 90,831 |

## Note 30 - Pension Obligations

**Defined benefits plans**

The Company has historically had defined benefit pension plans for substantially all of its Norwegian and UK employees, with eligibility determined by certain period-of-service requirements. In Norway these plans are generally funded through contributions to insurance companies. In the UK, the plans are funded through a separate pension trust. It is the Company's general practice to fund amounts to these defined benefit plans at rates that are sufficient to meet the applicable statutory requirements. As of January 1, 2005, the Norwegian defined benefit plans were closed for further entrants (except for seismic crew) and new defined contribution plans were established for new employees. As of March 31, 2006, the UK defined benefit plan was closed for new entrants. As of January 1, 2008, the Norwegian defined benefit plan for seismic crew were closed for further entrants, and new defined contribution plans were established for new seismic crew members. At December 31, 2011, 448 employees were participating in these plans.

*Actuarial valuations and assumptions*

The actuarial valuations were carried out by independent actuaries in Norway and UK.

Reconciliation of the plans' aggregate projected benefit obligations and fair values of assets are summarized as follows:

Change in projected benefit obligations (PBO)

| (In thousands of dollars) | 2011 | 2010 |
|---|---|---|
| Projected benefit obligations (PBO) at January 1, | 155,794 | 134,510 |
| Service cost | 2,808 | 8,721 |
| Interest cost | 7,797 | 7,093 |
| Employee contributions | 1,373 | 1,261 |
| Social security tax | 192 | 73 |
| Actuarial loss, net | 26,011 | 8,627 |
| Benefits paid | (1,082) | (643) |
| Exchange rate effects | (7,573) | (3,848) |
| Projected benefit obligations (PBO) at December 31, (a) | 185,320 | 155,794 |

(a) $3.5 million and $2.8 million arise from unfunded plans per December 31, 2011 and 2010, respectively.

Change in pension plan assets

| (In thousands of dollars) | 2011 | 2010 |
|---|---|---|
| Fair value of plan assets at January 1, | 109,789 | 96,531 |
| Expected return on plan assets | 8,075 | 6,378 |
| Employer contributions | 10,105 | 6,229 |
| Employee contributions | 1,373 | 1,261 |
| Actuarial gain (loss), net | (6,386) | 3,217 |
| Benefits paid | (1,080) | (697) |
| Exchange rate effects | (3,528) | (3,130) |
| Fair value of plan assets at December 31, | 118,348 | 109,789 |

The aggregate funded status of the plans and amounts recognized in the Company's consolidated statement of financial position are summarized as follows:

| | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| Funded status (a) | 66,972 | 46,005 |
| Unrecognized actuarial gain (loss) | (37,296) | (8,466) |
| Net pension liability | 29,676 | 37,539 |

(a) Includes social security tax on net pension liability.

Net amount recognized as accrued pension liability is presented as other long-term liabilities (see Note 29).

Net periodic pension cost for the Company's defined benefit pension plans are summarized as follows:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Service cost | 6,755 | 6,458 | 6,843 |
| Interest cost | 7,797 | 7,093 | 5,824 |
| Expected return on plan assets | (8,193) | (6,378) | (5,451) |
| Adjustments to prior service cost | (3,947) | 2,263 | 310 |
| Amortization of actuarial loss | (120) | (230) | (33) |
| Administration costs | 118 | 53 | 48 |
| Social security tax | 595 | 525 | 551 |
| Net periodic pension cost | 3,005 | 9,784 | 8,092 |

Assumptions used to determine periodic pension cost:

| | 2011 | | 2010 | | 2009 | |
|---|---|---|---|---|---|---|
| | Norway | UK | Norway | UK | Norway | UK |
| Discount rate | 4.00% | 5.50% | 4.50% | 5.80% | 3.80% | 6.00% |
| Return on plan assets | 5.40% | 7.02% | 5.70% | 7.68% | 5.80% | 7.42% |
| Compensation rate | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% |
| Annual adjustments to pensions | 1.30% | (a) | 1.40% | (a) | 1.50% | (a) |

Assumptions used to determine benefit obligations at end of years presented:

| | December 31, 2011 | | December 31, 2010 | |
|---|---|---|---|---|
| | Norway | UK | Norway | UK |
| Discount rate | 2.60% | 4.90% | 4.00% | 5.50% |
| Compensation increase | 4.00% | 4.00% | 4.00% | 4.00% |
| Annual adjustment to pensions | 0.10% | (a) | 1.30% | (a) |
| Mortality table | K2005 | SAPS Light BY Medium cohort | K2005 | SAPS Light BY Medium cohort |

(a) 3.30% for services up to July 2010 and 2.30% for services thereafter.

The discount rate assumptions used for calculating pensions reflect the rates at which the obligations could be effectively settled. Observable long-term rates on governmental bonds are used as a starting point and matched with the Company's expected cash flows under the Norwegian plans. Observable long-term rates on corporate bonds are used for the UK plans. The expected long-term rate of return on plan assets is based on historical experience and by evaluating input from the trustee managing the plan's assets.

*Historical information*

The net pension liability for the past five years were as follows:

| (In thousands of dollars) | December 31, 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|
| Projected benefit obligation | 185,320 | 155,794 | 134,510 | 108,882 | 135,437 |
| Fair value of plan assets | 118,348 | 109,789 | 96,531 | 69,870 | 98,409 |
| Net funded status (incl. payroll tax) | 66,972 | 46,005 | 37,979 | 39,012 | 37,028 |

The following table show the experience adjustment from actuarial gain and losses (the effects of differences between the previous actuarial assumptions and what has actually occurred) of the Projected benefit obligation and plan assets for the years displayed:

| | 2011 | 2010 | 2009 | 2008 | 2007 |
|---|---|---|---|---|---|
| Projected benefit obligation (PBO) | (5.90)% | (0.55)% | 2.0% | 3.0% | 1.2% |
| Fair value of plan assets | (5.82)% | 3.33% | 1.9% | (35.5)% | (1.0)% |

*Sensitivity*

The following table show the sensitivity of pension cost (excluding amortization of actuarial gains and losses) and benefit obligation (including payroll tax) related to change in discount rate, compensation level and USD:

| (In thousands of dollars) | 1% increase in discount rate | 1% decrease in discount rate | 1% increase in annual compensation increase | 1% decrease in annual compensation increase | 10% appreciation of USD (a) |
|---|---|---|---|---|---|
| Increase (decrease) in pension cost | (4,000) | 6,432 | 2,377 | (2,458) | (258) |
| Increase (decrease) in benefit obligation (PBO) | (38,389) | 52,316 | 18,966 | (19,722) | (16,742) |

(a) Based on the Company's mix of Norwegian plans (NOK denominated) and UK plans (GBP denominated) as of December 31, 2011.

*Plan asset allocation*

The Company's pension plan asset allocations, by asset category, are presented by major plan group as follows:

| | December 31, 2011 | | December 31, 2010 | |
|---|---|---|---|---|
| (In thousands of dollars) | Norway | UK | Norway | UK |
| Fair value of plan assets | 32,207 | 86,141 | 32,279 | 76,782 |
| Debt securities | 73% | 31% | 64% | 26% |
| Equity/diversified growth funds | 6% | 66% | 15% | 71% |
| Real estate | 18% | --- | 20% | --- |
| Other | 3% | 3% | 1% | 3% |
| Total | 100% | 100% | 100% | 100% |

Management of plan assets must comply with applicable laws and regulations in Norway and the UK where the Company provides defined benefits plans. Within constraints imposed by laws and regulations, and given the assumed pension obligations and future contribution rates, the majority of assets are managed actively to obtain a long-term rate of return that at least reflects the chosen investment risk.

The Company expects to contribute approximately $9.8 million to its defined benefit pension plans in 2012.

**Defined contribution plans**

Substantially all employees not eligible for coverage under the defined benefit plans in Norway and the UK are eligible to participate in pension plans in accordance with local industrial, tax and social regulations. All of these plans are considered defined contribution plans.

The Company's contributions to the Norwegian defined contribution plans for the year ended December 31, 2011, 2010 and 2009 were $1.7 million, $1.4 million and $1.4 million, respectively.

Under the Company's U.S. defined contribution 401(k) plan, substantially all US employees are eligible to participate upon completion of certain period-of-service requirements. The plan allows eligible employees to contribute up to 100% of compensation, subject to IRS and plan limitations, on a pre-tax basis, with a 2011 statutory cap of $16,500 ($22,000 for employees over 50 years). Employee pre-tax contributions are matched by the Company as follows: the first 3% are matched at 100% and the next 2% are matched at 50%. All contributions vest when made. The employer matching contribution related to the plan was $1.5 million, $1.6 million and $1.8 million for the years ended December 31, 2011, 2010 and 2009, respectively. Contributions to the plan by employees for these periods were $4.0 million, $4.2 million and $4.6 million, respectively.

Aggregate employer and employee contributions under the Company's other plans for the years ended December 31, 2011, 2010 and 2009, were $1.6 million and $0.7 million (2011), $1.7 million and $0.8 million (2010) and $2.3 million and $1.0 million (2009).

## Note 31 - Shareholder Information

As of December 31, 2010 and 2011, Petroleum Geo-Services ASA had a share capital of NOK 653,399,991 divided on 217,799,997 shares of par value NOK 3 each, all fully paid.

At the Annual General Meeting (AGM) held on May 11, 2011, authority was given for the Board of Directors to acquire treasury shares at a maximum face value of the shares of NOK 65,339,999. Such shares can be disposed off to satisfy existing or future employee incentive schemes, as part of the consideration payable for acquisitions made by the Company, or use as consideration in connection with mergers, demergers or acquisitions involving the Company, by way of cancellation of the shares in part or in full, to raise funds for specific investments, for the purpose of paying down loans (including convertible bonds), or in order to strengthen the Company's capital base. The Board of Directors was further authorised to increase the share capital with a maximum of NOK 15,000,000 to meet obligations under the share option programs for employees. The Board was also authorized to issue convertible bonds at a total amount of NOK 3,500,000,000. These authorizations are valid until June 30, 2012.

All shares have equal voting rights and equal rights to dividends. Any distribution of the Company's equity is dependent on the approval of the shareholders, and the ability to make distributions is limited by certain debt covenants and Norwegian Corporate Law. The ordinary shares are listed on the Oslo Stock Exchange.

The Board of Director will propose to the Annual General Meeting in 2012 a dividend for the year ended December 31, 2011 of NOK 1.10 per share (NOK 240 million in total). The proposed dividend is not recognized as a liability in the financial statements until it is approved by the AGM.

The Company's holding of treasury shares reconciles as follows:

| | Treasury shares | % of total shares outstanding |
|---|---|---|
| Balance at January 1, 2010 | --- | --- |
| Acquired in 2010 | 900,000 | |
| Used to fulfil employee share option program in 2010 (Note 33) | (359,536) | |
| Transfer of excess shares | 3,517 | |
| Balance at December 31, 2010 | 543,981 | 0.25% |
| Acquired in 2011 | 1,243,000 | |
| Used to fulfil employee share option program in 2011 (Note 33) | (553,213) | |
| Used to fulfil share bonus program in 2011 | (9,847) | |
| Balance at December 31, 2011 | 1,223,921 | 0.56% |

The 20 largest shareholders in Petroleum Geo-Services ASA were as follows:

| | December 31, 2011 | |
|---|---|---|
| | Total shares | Ownership percent |
| Folketrygdfondet | 21,498,610 | 9.87 |
| State Street Bank & Trust (nominee) | 17,728,269 | 8.14 |
| Euroclear Bank (nominee) | 6,770,384 | 3.11 |
| State Street Bank & Trust Co. (nominee) | 5,968,116 | 2.74 |
| Clearstream Banking (nominee) | 5,777,215 | 2.65 |
| State Street Bank & Trust Co. (nominee) | 4,517,352 | 2.07 |
| JP Morgan Chase Bank (nominee) | 4,289,453 | 1.97 |
| State Street Bank & Trust Co. (nominee) | 3,830,016 | 1.76 |
| Danske Bank (nominee) | 3,565,554 | 1.64 |
| Tapiola | 3,000,000 | 1.38 |
| Citibank N.A. (nominee) | 2,655,692 | 1.22 |
| Citibank N.A. (nominee) | 2,620,485 | 1.20 |
| Caceis Bank (nominee) | 2,579,304 | 1.18 |
| The Northern Trust (nominee) | 2,412,335 | 1.11 |
| Bank of New York (nominee) | 2,362,845 | 1.08 |
| Morgan Stanley (nominee) | 2,329,795 | 1.07 |
| Pensjonskassen Statoil | 2,194,806 | 1.01 |
| Goldman Sachs (nominee) | 2,189,251 | 1.01 |
| Skandinaviska Enskilda Banken (nominee) | 2,161,950 | 0.99 |
| Vanguard Energy Fund | 2,128,238 | 0.98 |
| Other shareholders | 117,220,327 | 53.82 |
| Total | 217,799,997 | 100.0 |

Shares owned or controlled by members of the Board of Directors, Chief Executive Officer and Other Executive Officers were as follows:

| | December 31, 2011 | |
|---|---|---|
| | Total | Ownership percent |
| **Board of Directors** | | |
| Francis Gugen, Chairperson | 30,000 | (a) |
| Harald Norvik, Vice Chairperson | 8,000 | (a) |
| Holly Van Deursen | 2,000 | (a) |
| Daniel J. Piette | 7,000 | (a) |
| Annette Malm Justad | --- | --- |
| Carol Bell | 5,000 | (a) |
| Ingar Skaug | --- | --- |
| | | |
| **Chief Executive Officer and Other Executive Officers** | | |
| Jon Erik Reinhardsen, President and Chief Executive Officer | 68,632 | (a) |
| Gottfred Langseth, Executive Vice President and Chief Financial Officer | 28,752 | (a) |
| Guillaume Cambois, Executive Vice President Data Processing & Technology | 1,885 | (a) |
| Magne Reiersgard, Executive Vice President Operations | 8,678 | (a) |
| Per Arild Reksnes, Executive Vice President Marine Contract | 7,934 | (a) |
| Sverre Strandenes, Executive Vice President MultiClient | 9,330 | (a) |

(a) Less than 1% of the Company's share as of December 31, 2011.

## Note 32 - Related Party Transactions

The following transactions were carried out with related parties:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Sale of goods and services | | | |
| Associates – MultiClient data | 2,338 | 1,184 | --- |
| Associates – Administrative services | 230 | 2,783 | --- |
| Associates – Data Processing | 2,306 | 996 | --- |
| ConocoPhillips – Seismic services (a) | 17,898 | 4,188 | 13,108 |
| | | | |
| Purchase of services | | | |
| Wilh. Wilhelmsen – Maritime management services (b) | n/a | 6,415 | 6,070 |
| | | | |
| Other | | | |
| Associates – Interest income | 166 | 172 | 330 |

(a) The Director Mr. Harald Norvik is a board member of ConocoPhillips
(b) The Director Mr. Ingar Skaug (appointed in 2009) was the Group CEO of Wilh. Wilhelmsen ASA until October 1, 2010.

The table below detail the outstanding balances with related parties for the years presented:

| | December 31, | |
|---|---|---|
| (In thousands of dollars) | 2011 | 2010 |
| Loan to associate (a) | 3,243 | 3,132 |
| Receivable from associate | 2,746 | 1,211 |

(a) The loan to PGS Khazar is based on a $4.1 million frame loan agreement which can be drawn on as needed. The loan bears interest of 5% annually.

All transactions with related parties are priced on an arm's length basis.

Directors of the Company are also on the Board of certain customers and suppliers. As of December 31, 2011 and 2010, the Company did not have any significant outstanding balances with any of these companies. See also Note 34.

## Note 33 - Employee Share Option Programs

In 2006, the Company established an employee option program. Options covering 2,127,000 shares were granted to certain key employees. Additional 223,000 options and 25,000 options were granted from this plan in the years ended December 31, 2007 and 2008, respectively.

In 2008, the Company established a second employee option program. Options covering 3,060,000 shares were granted to certain key employees. Additional 40,000 options were granted from this plan in the year ended December 31, 2009.

In 2009, the Company established a third employee share option program. Options covering 3,012,500 shares were granted to certain key employees. Additional 190,000 options were granted from this plan in the year ended December 31, 2010.

In June 2010, the Company established a fourth employee share option program. Options covering 1,476,500 shares were granted to certain key employees. Additional 28,000 options were granted from this plan in the year ended December 31, 2011.

In June 2011, the Company established a fifth employee share option program. Options covering 1,469,000 shares were granted to certain key employees.

The Company's option programs are considered as equity-settled plans and the options were measured at fair value at date of grant. For the 2006, 2008 and 2009 plans one third of the options vest each of the three years subsequent to the date of grant. First possible exercise is one year after grant date. For the 2010 and 2011 plan the options will vest respectively 3 and 4 years after the date of grant for each half of the award. The options may only be exercised four times a year, during a defined period after the publication of the Company's quarterly earnings release. The latest possible exercise date for all plans is five years subsequent to the grant date.

For options granted under the 2006 employee option program, the exercise price corresponds to the weighted average trading price for the Company's ordinary shares on the Oslo Stock Exchange the week before the options were granted. For options granted under the 2008, 2009, 2010 and 2011 employee option programs the exercise price corresponds to the weighted average trading price for the Company's ordinary shares on the Oslo Stock Exchange at the date of grant.

Maximum gain on the options in the 2008, 2009, 2010 and 2011 employee option programs are subject to a cap of 1.5 times the employee's salary for each calendar year. The fair value of the cap is achieved through a reduction of the fair value of the options granted. There is no cap on the 2006 employee share option program.

The fair value determined at the grant date is expensed over the vesting period, using the accelerated method, based on the Company's estimate of the shares that will eventually vest. Fair value is measured using the Black-Scholes pricing model. The expected life used in the model has been adjusted based on management's best estimate, for the effects of non-transferability, exercise restrictions and behavioural considerations. The options include a service condition as the individuals participating in the plan must be employed by the Company for a certain period of time in order to earn the right to exercise the share options. The options include no performance conditions.

For the years ended December 31, 2011, 2010 and 2009, the Company recognized compensation cost with a corresponding increase in shareholders' equity of $5.1 million, $5.3 million and $11.8 million, respectively. Total net unrecognized compensation cost as of December 31, 2011 was $10.7 million (related to non-vested share-based options), which is expected to be recognized over a period of 3.5 years.

The tables below detail the Company's outstanding options for the years presented.

Year ended December 31, 2011

| Grant date | Options outstanding December 31, 2010 | Options granted in 2011 | Options exercised in 2011 | Options forfeited in 2011 | Options expired in 2011 | Options outstanding December 31, 2011 | Weighted-average remaining contractual term | Options exercisable December 31, 2011 |
|---|---|---|---|---|---|---|---|---|
| 2006 | 1,114,782 | --- | --- | --- | (1,114,782) | --- | --- | --- |
| 2007 | 177,000 | --- | --- | (12,000) | --- | 165,000 | 0.4 years | 165,000 |
| 2008 | 2,528,166 | --- | --- | (93,500) | --- | 2,434,666 | 1.4 years | 2,434,666 |
| 2009 | 2,243,527 | --- | (553,213) | (72,889) | --- | 1,617,425 | 2.4 years | 813,121 |
| 2010 | 1,616,500 | --- | --- | (78,000) | --- | 1,538,500 | 3.4 years | 63,334 |
| 2011 | --- | 1,497,000 | --- | (15,000) | --- | 1,482,000 | 4.4 years | --- |
| Total | 7,679,975 | 1,497,000 | (553,213) | (271,389) | (1,114,782) | 7,237,591 | 2.7 years | 3,476,121 |

Year ended December 31, 2010

| Grant date | Options outstanding December 31, 2009 | Options granted in 2010 | Options exercised in 2010 | Options forfeited in 2010 | Options outstanding December 31, 2010 | Weighted-average remaining contractual term | Options exercisable December 31, 2010 |
|---|---|---|---|---|---|---|---|
| 2006 | 1,276,788 | --- | --- | (162,006) | 1,114,782 | 0.5 years | 1,114,782 |
| 2007 | 201,000 | --- | --- | (24,000) | 177,000 | 1.4 years | 177,000 |
| 2008 | 2,965,500 | --- | --- | (437,334) | 2,528,166 | 2.4 years | 1,708,966 |
| 2009 | 3,052,500 | --- | (359,536) | (449,437) | 2,243,527 | 3.4 years | 533,840 |
| 2010 | --- | 1,666,500 | --- | (50,000) | 1,616,500 | 4.4 years | --- |
| Total | 7,495,788 | 1,666,500 | (359,536) | (1,122,777) | 7,679,975 | 2.8 years | 3,534,588 |

The following share options, granted under the share option plans, were exercised for all years presented:

| | Year ended December 31, 2011 | | | Year ended December 31, 2010 | | |
|---|---|---|---|---|---|---|
| Granted | Options Exercised | Exercise date | Share price at exercise date | Options exercised | Exercise date | Share price at exercise date |
| 2009 | 162,259 | February 23, 2011 | NOK 86.70 | | | |
| 2009 | 19,999 | May 10, 2011 | NOK 79.80 | 8,338 | June 21, 2010 | NOK 69.25 |
| 2009 | 363,038 | August 2, 2011 | NOK 83.40 | 88,465 | August 4, 2010 | NOK61.55 |
| 2009 | 7,917 | November 3, 2011 | NOK 59.45 | 262,733 | November 4, 2010 | NOK 80.60 |
| Total | 553,213 | | | 359,536 | | |

For the year ended December 31, 2011, 1,114,782 share options related to the 2006 program expired. No share options expired during the years ended December 31, 2010 and 2009.

The table below details the Company's assumptions used to calculate estimated fair value at grant date:

| Grant date | Options outstanding December 31, 2011 | Average exercise price | Risk free rate | Dividend yield | Volatility factor | Weighted average life | Estimated fair value at grant date (average NOK/USD per share option) |
|---|---|---|---|---|---|---|---|
| 2006 (a) | --- | NOK 111.50 | 3.92-4.00% | --- | 45% | 3.5 years | NOK 44.10/$7.12 |
| 2007 (a) | 165,000 | NOK 141.05 | 5.02-5.22% | --- | 43% | 3.5 years | NOK 55.20/$8.87 |
| 2008 | 2,434,666 | NOK 132.91 | 4.56-5.75% | --- | 46% | 2.5 years | NOK 35.55/$6.77 |
| 2009 | 1,617,425 | NOK 40.30 | 2.28% | --- | 55% | 2.4 years | NOK 13.25/$2.08 |
| 2010 | 1,538,500 | NOK 78.31 | 2.30-2.45% | --- | 60% | 3.5 years | NOK 28.24/$4.57 |
| 2011 | 1,482,000 | NOK 77.19 | 2.61-2.76% | --- | 60% | 3.5 years | NOK 30.35/$5.63 |
| Total | 7,237,591 | | | | | | |

(a) Exercise price is adjusted for special dividend of NOK 10 per share distributed in July 2007.

Expected volatility for all grants is based on historical volatility of the Company's shares after emerging from Chapter 11 in November 2003. As a result of unusual high volatility during the international financial distress 2008 to 2009, the Company has estimated volatility for the 2009, 2010 and 2011 grants in order to reflect the expected volatility going forward.

There are no traded options of the Company's shares and there are no post vesting restrictions included in the option plan.

## Note 34 - Salaries and Other Personnel Costs, Number of Employees, and Remuneration to the Board of Directors, Executive Officers and Auditors

Salary and social expenses that are included in cost of sales, research and development costs and selling, general and administrative costs, excluding such costs relating to discontinued operations (see Note 4) consist of:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Salaries and bonuses | 257,994 | 247,940 | 247,092 |
| Social security | 20,864 | 21,834 | 17,935 |
| Pension | 7,805 | 14,544 | 12,805 |
| Other benefits | 31,323 | 25,523 | 25,103 |
| Total | 317,986 | 309,841 | 302,935 |

The Company had an average of 2,149, 2,090 and 2,192 employees during the years ended December 31, 2011, 2010 and 2009, respectively (excluding Onshore employees).

**Chief Executive Officer (CEO) and Other Executive Officers**
In 2011, the Company paid compensation to its President and CEO and other executive officers as follows:

| Name | Position | Total compensation paid in 2011 (a) | | | | Benefits paid to pension plan (d) | Accrued target bonus at December 31, 2011 |
|---|---|---|---|---|---|---|---|
| | | Fixed salary | Bonus (b) | Other benefits (c) | Total paid salary and compensation (in dollars) | | |
| Jon Erik Reinhardsen | President and Chief Executive Officer | 899,553 | 2,041,528 | 38,535 | 2,979,616 | 59,802 | 448,138 |
| Gottfred Langseth | Executive Vice President and Chief Financial Officer | 591,409 | 319,091 | 41,417 | 951,917 | 67,210 | 194,503 |
| Guillaume Cambois | Executive Vice President, Data Processing & Technology | 541,172 | 218,992 | 191,194 | 951,358 | 43,222 | 177,540 |
| Magne Reiersgard | Executive Vice President, Operations, | 563,742 | 272,500 | 217,556 | 1,053,798 | 79,060 | 172,125 |
| Per Arild Reksnes | Executive Vice President, Marine Contract | 559,960 | 251,841 | 29,182 | 840,983 | 106,704 | 177,540 |
| Sverre Strandenes | Executive Vice President, MultiClient | 565,247 | 291,259 | 283,781 | 1,140,287 | 108,736 | 177,540 |

(a) Amounts in NOK have been translated to US Dollars using average exchange rate for 2011 of NOK/USD 5.562.
(b) Includes payments for the 2010 performance bonus plan (paid in April 2011) and the CEO deferred compensation (see below).
(c) Includes items such as car allowance, telephone, internet and other minor benefits. In addition taxable gain on exercised share options.
(d) Contribution to defined benefit plans and defined contribution plans (Norway).

Share options held by the CEO and executive officers at December 31, 2011 were as follows:

| Name | Options at December 31, 2010 | Options granted 2011 | Options forfeited 2011 | Options exercised 2011 | Average exercise price on exercised options (NOK) | Options expired 2011 | Options at December 31, 2011 | Average exercise price on outstanding options (NOK) | Weighted average remaining contractual term |
|---|---|---|---|---|---|---|---|---|---|
| Jon Erik Reinhardsen | 375,000 | 75,000 | --- | --- | --- | --- | 450,000 | 83.70 | 2.60 |
| Gottfred Langseth | 315,000 | 45,000 | --- | --- | --- | 90,000 | 270,000 | 83.70 | 2.60 |
| Guillaume Cambois | 130,000 | 45,000 | --- | 20,000 (a) | 40.29 | --- | 155,000 | 88.97 | 3.00 |
| Magne Reiersgard | 204,999 | 45,000 | --- | 20,000(b) | 40.29 | 39,999 | 190,000 | 87.33 | 2.80 |
| Per Arild Reksnes | 184,999 | 45,000 | --- | --- | --- | 39,999 | 190,000 | 87.33 | 2.80 |
| Sverre Strandenes | 275,001 | 45,000 | --- | 30,000(c) | 40.29 | 50,001 | 240,000 | 89.12 | 2.60 |

(a) $152,369 was reported as taxable income as a consequence of the exercise of share options
(b) $161,050 was reported as taxable income as a consequence of the exercise of share options
(c) $245,008 was reported as taxable income as a consequence of the exercise of share options

In 2010, the Company paid compensation to its President and CEO and other executive officers as follows:

| | | Total compensation paid in 2010 (a) | | | | | |
|---|---|---|---|---|---|---|---|
| Name | Position | Fixed salary | Bonus (b) | Other benefits (c) | Total paid salary and compensation (in dollars) | Benefits paid to pension plan (d) | Accrued compensation at December 31, 2010 (e) |
| Jon Erik Reinhardsen | President and Chief Executive Officer | 784,162 | 610,058 | 38,159 | 1,432,379 | 52,697 | 1,706,553 |
| Gottfred Langseth | Executive Vice President and Chief Financial Officer | 523,329 | 697,506 | 36,680 | 1,257,515 | 52,808 | 303,384 |
| Guillaume Cambois | Executive Vice President, Data Processing & Technology (f), | 196,857 | --- | 16,088 | 212,945 | 15,722 | 208,213 |
| Magne Reiersgard | Executive Vice President, Operations (f), | 274,999 | 124,079 | 78,100 | 477,178 | 55,146 | 270,000 |
| Per Arild Reksnes | Executive Vice President, Marine Contract (f), | 276,817 | 96,455 | 109,641 | 482,913 | 47,381 | 239,445 |
| Sverre Strandenes | Executive Vice President, MultiClient | 490,078 | 618,704 | 41,232 | 1,150,014 | 83,566 | 276,923 |
| Rune Eng | Executive Vice President, Marine Contract (g) | 451,136 | 658,708 | 231,476 | 1,341,320 | 59,585 | --- |

(a) Amounts in NOK have been translated to US Dollars using average exchange rate for 2010 of NOK/USD 6.065.
(b) Includes payments for the 2008 and 2009 performance bonus plan (paid in April 2010) and the 2008 retention bonus plan (paid in October 2010).
(c) Includes items such as car allowance, payment to defined contribution plan, telephone, internet and other minor benefits. In addition taxable gain on exercised share options (see Note 33).
(d) Contribution to defined benefit plans and defined contribution plans (Norway).
(e) Includes accruals for the 2010 performance bonus plans (total as accrued at December 31, 2010 for all executives) and CEO deferred compensation (see below).
(f) Executive officers from May 2010 (see Note 4). Compensation payments from May 1st- December 31st 2010.
(g) Rune Eng resigned in November 2010.

Share options held by the CEO and executive officers at December 31, 2010 were as follows:

| Name | Options at December 31, 2009 | Options granted 2010 | Options forfeited 2010 | Options exercised 2010 | Average exercise price on exercised options (NOK) | Options at December 31, 2010 | Average exercise price on outstanding options (NOK) | Weighted average remaining contractual term |
|---|---|---|---|---|---|---|---|---|
| Jon Erik Reinhardsen | 300,000 | 75,000 | --- | --- | --- | 375,000 | 85.01 | 3.2 years |
| Gottfred Langseth | 270,000 | 45,000 | --- | --- | --- | 315,000 | 92.58 | 2.5 years |
| Guillaume Cambois | 105,000 | 45,000 | --- | 20,000(b) | 40.29 | 130,000 | 85.59 | 3.4 years |
| Magne Reiersgard | 159,999 | 45,000 | --- | --- | --- | 204,999 | 89.70 | 2.8 years |
| Per Arild Reksnes | 159,999 | 45,000 | --- | 20,000(c) | 40.29 | 184,999 | 95.04 | 2.7 years |
| Sverre Strandenes | 230,001 | 45,000 | --- | --- | --- | 275,001 | 89.83 | 2.7 years |
| Rune Eng (a) | 240,000 | 45,000 | 195,000 | 30,000(d) | 40.29 | 60,000 | 111.50 | 0.4 years |

(a) Rune Eng resigned in November 2010 and the share options held at December 31, 2010 expired in first half 2011.
(b) $66,194 was reported as taxable income as a consequence of the exercise of share options
(c) $130,563 was reported as taxable income as a consequence of the exercise of share options
(d) $195,844 was reported as taxable income as a consequence of the exercise of share options

Eric Wersich was executive officer in Onshore, in which business operations were sold in February 2010 (see Note 4) and compensation payments for one month in 2010 are not included in above tables.

See Note 31 for shares held by the Company's CEO and other executive officers and Note 33 for further information on the share option programs.

*CEO deferred compensation*

Jon Erik Reinhardsen, President and CEO of the Company ("CEO"), had an annual fixed salary of NOK 4,702,500 in 2011. The CEO has a mutual 6-months period of notice. The CEO is, both during and after the employment, obliged to refrain from taking employment with companies that are direct or indirect competition with PGS. This prohibition applies for a period of two years from the termination date unless the Company sets a shorter period of time.

Other executive officers have similar provisions in their employment terms, with periods of notice of twelve months or less.

*Annual performance bonus scheme*

The Board of Directors has established an annual performance bonus scheme for the Company's CEO and other executive officers. In 2011 the CEO participated in a performance bonus scheme where he was entitled to a cash bonus and a share bonus provided the Company and the CEO met certain financial and non-financial performance targets. The target bonus for the CEO which assumes that the company goals and the CEO's individual goals are met is a cash bonus of 57% and a share purchase bonus of 28% of the CEO's annual base salary. These target bonuses can be increased or decreased in cases of performance above or below the targets set for the CEO and the Company. Any amount the CEO received as a share purchase bonus, on a net basis after withholding tax, are required to be used to buy PGS ordinary shares at market price and retained for a minimum of three years. Other executive officers, listed above, who were employed by the Company during 2011 and remain employed as of March 1, 2012 are participants in a bonus scheme where they are entitled to a cash bonus targeted at 38% and a share purchase bonus of 19% of the respective executive's annual base salary. The target bonus can be increased or decreased in cases of performance above or below the targets set for the executive and the Company. The CEO's performance bonus is capped at 150% of base salary, the executive officers' at 100% of base salary.

**Board of Directors**

For the years ended December 31, 2011 and 2010, compensation paid to all persons who served as Directors during any period were as follows. None of our Directors has any contract with us providing benefits upon termination of service.

The table below provides information about our Directors and compensation paid during 2011:

| Name | Position | Director since | Term expire | Compensation (In dollars) |
|---|---|---|---|---|
| Francis Gugen | Chairperson | 2003 | 2012 | 97,558 |
| Harald Norvik | Vice Chairperson | 2003 | 2012 | 91,901 |
| Holly Van Deursen | Director | 2006 | 2012 | 102,823 |
| Daniel J. Piette | Director | 2007 | 2012 | 105,547 |
| Annette Malm Justad | Director | 2008 | 2012 | 79,469 |
| Carol Bell | Director | 2009 | 2012 | 95,485 |
| Ingar Skaug | Director | 2009 | 2012 | 78,731 |
| | | | Total | 651,514 |

The table below provides information about our Directors and compensation paid during 2010:

| Name | Position | Director since | Term expire | Compensation (In dollars) |
|---|---|---|---|---|
| Francis Gugen | Chairperson | 2003 | 2011 | 97,845 |
| Harald Norvik | Vice Chairperson | 2003 | 2011 | 93,940 |
| Holly Van Deursen | Director | 2006 | 2011 | 91,439 |
| Wenche Kjølås | Director | 2006 | (a) | 48,324 |
| Daniel J. Piette | Director | 2007 | 2011 | 93,192 |
| Annette Malm Justad | Director | 2008 | 2011 | 77,114 |
| Carol Bell | Director | 2009 | 2011 | 94,237 |
| Ingar Skaug | Director | 2009 | 2011 | 60,944 |
| | | | Total | 657,037 |

(a) Resigned as Director May 2010.

See Note 31 for shares held by the Company's Board of Directors.

**Board of Directors' statement on remuneration to the CEO and the Executive Officers**

In accordance with §6-16a of the Norwegian Public Limited Companies Act, the Board of Directors has prepared a statement related to the determination of salary and other benefits for our CEO and other executive officers. The guidelines set out below for our CEO and other executive officers salary and other benefits, for the coming fiscal year, will be presented to the shareholders for their advisory vote at the May 2012 Annual General Meeting.

PGS is an international company operating in the global geophysical industry. Our operations are conducted world wide and our employment base is and needs to be largely international. The total compensation package for our CEO and other executive officers shall therefore be competitive both within the Norwegian labour market and internationally. Both the level of total compensation and the structure of the compensation package for our CEO and other executive officers shall be such that it may attract and retain highly qualified international leaders. This will require the use of several different instruments and measures also meant to provide incentives for enhanced performance and to ensure common goals and interest between the shareholders and management.

The current remuneration package for our CEO and other executive officers includes fixed elements and variable elements. The fixed elements consist of a base salary and other benefits. Other benefits include car allowance, newspaper subscription,

mobile phone, internet and similar benefits. The fixed elements also include a pension plan. The CEO and three executive officers have an early retirement plan allowing for termination of employment when the CEO or the executive officers reach the age of 62. Provided that the CEO or executive officers have been employed as a CEO or an executive officer for 10 years (or in some cases longer) the CEO or the executive officers are entitled to up to 60% of the last base salary in the period up until the CEO or the executive officers reach the age of 67.

The variable elements today consist of a performance bonus scheme and participation in our share option program.

Participation in the performance bonus scheme and the target levels and the maximum levels of the annual performance bonus scheme are determined annually. Achievement under the performance bonus scheme is based partly on achievements of agreed financial key performance indicators ("KPIs") for the group and a relevant management group, and partly on achievements of agreed operational, financial and organizational KPIs included in a personal performance contract.

The Group KPIs are financial targets set by the Board of Directors at the start of a fiscal year. The Group KPIs are thereafter broken down to business unit KPIs. The personal performance contract for our CEO and other executive officers will contain such KPI goals as well as KPI goals linked to other measures of success such as HSE, operational effectiveness and organizational development.

The CEO and other executive officers have target bonus levels and maximum bonus levels. The CEO and other executive officers will for 2011 be obliged to use one third of their annual bonus (net after withholding tax) to purchase shares in the Company and retain them for 3 years. The annual performance bonus for the CEO is approved by the Board of Directors in a meeting, based on recommendations from the Remuneration and Corporate Governance Committee. The annual performance bonus scheme for the other executive officers are reviewed and approved by the Remuneration and Corporate Governance Committee on the CEO's recommendation, and the executive officers achievements under the scheme are also reviewed by the Remuneration and Corporate Governance Committee. The Board of Directors will continue to use this scheme for determining the level of annual performance bonus in the coming fiscal year.

The Annual General Meetings in 2006, 2008, 2009, 2010 and 2011 authorized the implementation of certain share option programs. The Board of Directors will this year discontinue the implementation of new share option programs. The Board of Directors still considers it important to continue with long term incentives which are linked to the development of the Company's share price. Therefore, the Board of Directors will propose to the 2012 Annual General Meeting a Restricted Share Plan whereby each eligible employee will be granted a number of shares in the Company in 2012. Vesting of these shares and subsequent transfer to the eligible employee will take place three years later subject principally to further employment by the Company. The full Restricted Stock Plan including all terms and conditions will be presented to the Annual General Meeting in May 2012 for approval.

This statement deals primarily with the remuneration of our CEO and other executive officers. However, the above described remuneration policy is to a large extent applicable to a broad group of key employees within the Company. Enhanced performance by the management groups is not achieved by our CEO and other executive officers alone but rather is dependent on a large number of managers and key employees throughout the Company. Therefore, a large and increasing number of managers and key employees are included in performance based remuneration schemes, which contain all or some of the above mentioned elements. More than 500 employees within the Company are currently eligible for performance based remuneration. In addition all other employees may receive up to a maximum of one month salary in annual bonus. The level of this bonus is determined by the Board based on the financial results of the Company.

Remuneration of the CEO and other executive officers will be evaluated regularly by the Remuneration and Corporate Governance Committee and the Board of Directors. The Remuneration and Corporate Governance Committee has adopted a remuneration philosophy including a peer group of companies. An external consultant is used in the review of executive compensation to ensure that salary and other benefits are kept, at all times within the above adopted guidelines and principles.

The CEO received on April 1, 2011 a set retention bonus of NOK 5,000,000 with the addition of 6% annual interest from April 1, 2008. This was part of the remuneration packaged agreed with the CEO when he joined the Company on April 1, 2008. The reason for this was that the CEO had to walk away from substantial earned equity in the company where he was formerly employed. The Board of Directors considered this necessary to secure the employment of the CEO.

Since the Annual General Meeting in May 2011 the Board of Directors have followed the guidelines then approved by the Annual General Meeting with respect to remuneration of the CEO and the other executive officers.

**Remuneration of auditor**

Fees for audit and other services provided by the Company's auditor are as follows (exclusive VAT and including out of pocket expenses):

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of dollars) | 2011 | 2010 | 2009 |
| Audit fees (a) | 2,859 | 2,922 | 2,957 |
| Other attestation services (a) | 222 | 358 | 1,443 |
| Fees for tax services (b) | - | 145 | 72 |
| All other fees | 16 | - | 79 |
| Total (c) | 3,097 | 3,425 | 4,551 |

(a) Included within the totals are fees of $1.7 million in 2009 (include attestation services in connection with sale of Onshore) which are included within the result from discontinued operation.

(b) Fees for tax services consist of fees for tax filing services and other tax assistance.

(c) Total remuneration to auditor includes discontinued operation for the period up to demerger closing date (relates to 2009 only).

## Note 35 - Subsidiaries and Affiliated Companies

The ownership percentage in subsidiaries and affiliated companies as of December 31, 2011, was as follows:

| Company | Jurisdiction | Shareholding and voting rights |
|---|---|---|
| PGS Shipping AS | Norway | 100% |
| Oslo Seismic Services Ltd. | Isle of Man | 100% |
| PGS Geophysical AS | Norway | 100% |
| Multiklient Invest AS | Norway | 100% |
| Petroleum Geo-Services, Inc. | United States | 100% |
| Petroleum Geo-Services (UK) Ltd. | United Kingdom | 100% |
| Seahouse Insurance Ltd. | Bermuda | 100% |
| Dalmorneftegeofizika PGS AS | Norway | 49% |
| Calibre Seismic Company | United States | 50% |
| PGS Capital, Inc. | United States | 100% |
| PGS Exploration (Nigeria) Ltd. | Nigeria | 100% |
| PGS Data Processing Middle East SAE | Egypt | 100% |
| PGS Data Processing, Inc. | United States | 100% |
| Petroleum Geo-Services Asia Pacific Pte. Ltd. | Singapore | 100% |
| PGS Australia Pty. Ltd. | Australia | 100% |
| Atlantis (UK) Ltd. | United Kingdom | 100% |
| PGS Egypt for Petroleum Services | Egypt | 100% |
| Hara Skip AS | Norway | 100% |
| Petroleum Geo-Services Exploration (M) Sdn. Bhd. | Malaysia | 100% |
| PGS Exploration (US), Inc. | United States | 100% |
| PGS Ocean Bottom Seismic, Inc. | United States | 100% |
| PGS Exploration (UK) Ltd. | United Kingdom | 100% |
| PGS Pension Trustee Ltd. | United Kingdom | 100% |
| PGS Reservoir Ltd. | United Kingdom | 100% |
| Atlantic Explorer Ltd. | Isle of Man | 50% |
| Oslo Seismic Services Inc. | United States | 100% |
| Oslo Explorer Plc | Isle of Man | 100% |
| Oslo Challenger Plc | Isle of Man | 100% |
| PGS Shipping (Isle of Man) Ltd. | Isle of Man | 100% |
| PGS Americas, Inc. | United States | 100% |
| Seismic Energy Holdings, Inc. | United States | 100% |
| PGS Exploration (Norway) AS | Norway | 100% |
| PGS Marine Services (Isle of Man) Ltd. | Isle of Man | 100% |
| Deep Gulf LP | United States | 50.1% |
| PGS Nopec (UK) Ltd. | United Kingdom | 100% |
| PGS Nominees Ltd. | United Kingdom | 100% |
| SOH, Inc. | United States | 100% |
| PT PGS Nusantara | Indonesia | 100% |
| PGS Geophysical (Angola) Ltd. | United Kingdom | 100% |
| Seismic Exploration (Canada) Ltd. | United Kingdom | 100% |
| PGS Investigacào Petrolifera Limitada | Brazil | 100% |
| PGS Servicios C.A. | Venezuela | 100% |
| PGS Venezuela de C.A. | Venezuela | 100% |
| PGS Overseas AS | Norway | 100% |
| PGS Suporte Logistico e Servicos Ltda. | Brazil | 100% |
| PGS Finance, Inc. | United States | 100% |
| PGS Japan K.K. | Japan | 100% |
| PGS (Kazakhstan) LLP | Kazakhstan | 100% |
| PGS Eurasia LLC | Russia | 100% |
| PGS Seismic (UK) Ltd. | United Kingdom | 100% |
| PGS Data Processing & Technology Sdn. Bhd. | Malaysia | 100% |
| PGS Onshore (Algeria) EURL | Algeria | 100% |
| PGS Overseas Operation (Cyprus) Ltd. | Cyprus | 50% |
| PGS Overseas Trading (Cyprus) Ltd. | Cyprus | 100% |
| MTEM Limited | United Kingdom | 100% |

| Company | Jurisdiction | Shareholding and voting rights |
|---|---|---|
| PGS Geophysical (Netherlands) B.V. | Netherlands | 100% |
| PGS Technology (Sweden) AB | Sweden | 100% |
| Natuna Ventures Pte. Ltd. | Singapore | 100% |
| Applied Geophysical Services Corporation | United States | 100% |
| PGS Onshore do Brazil Ltda. | Brazil | 100% |
| PGS Onshore Servicos Ltda. | Brazil | 100% |
| Arrow Seismic ASA | Norway | 100% |
| Arrow Seismic Ltd. | United Kingdom | 100% |
| Arrow Seismic Invest I Ltd. | United Kingdom | 100% |
| Arrow Seismic Invest II Ltd. | United Kingdom | 100% |
| Arrow Seismic Invest III Ltd. | United Kingdom | 100% |
| Arrow Seismic Invest IV Ltd. | United Kingdom | 100% |
| Arrow Seismic Invest V Ltd. | United Kingdom | 100% |
| Arrow Seismic Invest VI Ltd. | United Kingdom | 100% |
| Arrow Seismic Invest VII Ltd. | United Kingdom | 100% |
| Petroleum Geological Services LLC | Oman | 100% |
| PGS Falcon AS | Norway | 100% |
| PGS Venture AS | Norway | 100% |
| PGS Asia Pacific Labuan Ltd. | Labuan | 100% |
| PGS Servicios de Mexico S.A. de C.V. | Mexico | 100% |
| PGS Data Processing SA de CV | Mexico | 100% |
| PGS Arabia Ltd. | Saudi Arabia | 49% |

## Note 36 - Changes in accounting policies

From January 1, 2011 the Company changed the policy for recognition of costs incurred in connection with major overhaul of vessels. The change in policy is applied for all reported periods, including periods prior to January 1, 2011. The change in accounting policies has no deferred tax impact.

The following tables present the adjustments made for periods restated:

| **Specification of restatement in the Consolidated statements of Operations** | Years ended December 31, | |
|---|---|---|
| (In thousands of dollars) | 2010 | 2009 |
| Operating profit as previously reported | 57,798 | 233,262 |
| Decrease in cost of sales | 12,139 | 6,927 |
| Increase in depreciation and amortization | (18,552) | (18,514) |
| Restated operating profit | 51,385 | 221,675 |

**Specification of restatement in the Consolidated statements of Financial Position**

| (In thousands of dollars) | December 31, 2010 | January 1, 2010 |
|---|---|---|
| Property and equipment as previously reported | 1,179,735 | 1,283,462 |
| Capitalized major overhaul | 33,471 | 39,885 |
| Restated Property and equipment | 1,213,206 | 1,323,347 |
| Accumulated earnings as previously reported | 1,133,377 | 1,147,550 |
| Capitalized major overhaul | 33,471 | 39,885 |
| Restated Accumulated earnings | 1,166,848 | 1,187,435 |

**Earnings per share (EPS)**

| **Earnings per share, to ordinary equity holders of PGS ASA** | December 31, 2010 | | December 31, 2009 | |
|---|---|---|---|---|
| (In thousands of dollars) | Basic | Diluted | Basic | Diluted |
| EPS as previously reported | (0.04) | (0.04) | 0.88 | 0.88 |
| Change due to restatement | (0.03) | (0.03) | (0.06) | (0.06) |
| Restated EPS | (0.07) | (0.07) | 0.82 | 0.82 |

| **Earnings per share from continuing operations, to ordinary equity holders of PGS ASA** | December 31, 2010 | | December 31, 2009 | |
|---|---|---|---|---|
| (In thousands of dollars) | Basic | Diluted | Basic | Diluted |
| EPS as previously reported | (0.08) | (0.08) | 0.92 | 0.92 |
| Change due to restatement | (0.03) | (0.03) | (0.06) | (0.06) |
| Restated EPS | (0.11) | (0.11) | 0.86 | 0.86 |

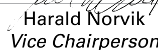
PETROLEUM GEO-SERVICES ASA
(Parent company unconsolidated financial statements)

# STATEMENTS OF OPERATIONS

| | | Years ended December 31, | | |
|---|---|---|---|---|
| (In thousands of NOK) | Note | 2011 | 2010 | 2009 |
| Revenue | 2 | 117,280 | 125,401 | 125,913 |
| Cost of sales | 2 | 2,443 | 2,691 | 2,539 |
| Depreciation and amortization | 6 | 533 | 2,134 | 5,214 |
| Selling, general and administrative costs | 2 | 135,199 | 146,288 | 164,817 |
| Total operating expenses | | 138,175 | 151,113 | 172,570 |
| Operating loss | | (20,895) | (25,712) | (46,657) |
| Interest expense, net | 2, 3 | (232,151) | (307,753) | (417,405) |
| Impairment, net of reversal of impairment on shares in subsidiaries/ intercompany receivable | 1, 7 | 6,809 | (722,393) | (75,582) |
| Impairment of investments in associated companies | 20 | (106,091) | - | - |
| Gain on sale of subsidiaries | 7 | 6,842 | 176,454 | - |
| Other financial items, net | 2, 4 | 1, 282,824 | 279,214 | 2,758,977 |
| Income (loss) before income taxes | | 937,338 | (600,190) | 2,219,333 |
| Provision (benefit) for income taxes | 5 | 299,277 | (84,620) | 314,375 |
| Net income (loss) | | 638,061 | (515,570) | 1,904,958 |

London, March 22, 2012
Board of Directors
Petroleum Geo-Services ASA

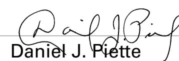
Francis Gugen
*Chairperson*


Harald Norvik
*Vice Chairperson*

Carol Bell

Holly Van Deursen

Annette Malm Justad


Daniel J. Piette

Ingar Skaug

Jon Erik Reinhardsen
*Chief Executive Officer*

## PETROLEUM GEO-SERVICES ASA
(Parent company unconsolidated financial statements)

# STATEMENT OF FINANCIAL POSITION

| (In thousands of NOK) | Note | December 31, 2011 | 2010 |
|---|---|---|---|
| ASSETS | | | |
| *Long-term assets:* | | | |
| Deferred tax assets | 5 | 802,778 | 1,105,064 |
| Property and equipment, net | 6 | 1,501 | 2,034 |
| Shares in subsidiaries | 1, 7 | 12,019,368 | 11,708,126 |
| Intercompany receivables | 1 | 5,508,299 | 3,018,755 |
| Investments in associated companies | 20 | 27,877 | 112,515 |
| Other financial long-term assets | 8, 20 | 143,427 | 23,942 |
| Total long-term assets | | 18,503,250 | 15,970,436 |
| *Current assets:* | | | |
| Short-term intercompany receivables | | 42,438 | 25,707 |
| Other current assets | 9 | 38,045 | 88,312 |
| Restricted cash | 10 | 3,018 | 2,694 |
| Cash and cash equivalents | | 2,363,863 | 2,358,867 |
| Total current assets | | 2,447,364 | 2,475,580 |
| Total assets | | 20,950,614 | 18,446,016 |
| | | | |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | | |
| *Shareholders' equity:* | | | |
| *Paid in capital:* | | | |
| Common stock; par value NOK 3; | | | |
| issued and outstanding 217,799,997 shares | | 653,400 | 653,400 |
| Own shares, par value | | (3,672) | (1,632) |
| Additional paid-in capital | | 2,319,790 | 2,181,020 |
| Total paid in capital | | 2,969,518 | 2,832,788 |
| Other equity | | 7,311,756 | 6,976,581 |
| Total shareholders' equity | 11 | 10,281,274 | 9,809,369 |
| *Long-term liabilities* | | | |
| Long-term debt | 12, 13 | 4,540,316 | 4,586,228 |
| Intercompany debt | | 4,473,981 | 3,696,603 |
| Other long-term liabilities | 14 | 145,405 | 191,713 |
| Total long-term liabilities | | 9,159,702 | 8,474,544 |
| *Current liabilities:* | | | |
| Short-term debt and current portion of long-term debt | 12 | 1,102,739 | - |
| Short-term intercompany debt | | 8,968 | 28,354 |
| Accounts payable | | 14,542 | 26,257 |
| Accrued expenses | 17 | 383,389 | 107,492 |
| Total current liabilities | | 1,509,638 | 162,103 |
| Total liabilities and shareholders' equity | | 20,950,614 | 18,446,016 |
| | | | |
| Warranties | 19 | | |

# PETROLEUM GEO-SERVICES ASA
(Parent company unconsolidated financial statements)

# STATEMENT OF CASH FLOW

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of NOK) | 2011 | 2010 | 2009 |
| Cash flows provided by operating activities: | | | |
| Net income (loss) | 638,061 | (515,570) | 1,904,958 |
| Adjustments to reconcile net income (loss) to net cash used in operating activities: | | | |
| Changes in deferred tax assets | 302,286 | (90,373) | 349,722 |
| Depreciation and amortization charged to expense | 533 | 2,134 | 5,214 |
| Impairment of shares in and loan to subsidiaries, net | (6,809) | 722,393 | 75,583 |
| Impairment of investment in associated companies | 106,091 | - | - |
| Gain on sale of subsidiaries, net | (6,842) | (176,454) | - |
| Dividend/ group contribution | (1,535,705) | (400,000) | (1,462,325) |
| Unrealized foreign exchange (gain) loss | (22,184) | 168,543 | (1,476,162) |
| Changes in current assets and current liabilities | 213,251 | 4,202 | (246,831) |
| Net (increase) decrease in restricted cash | (324) | (688) | 220 |
| Other items | 238,846 | 98,209 | 64,719 |
| Net cash provided by (used in) operating activities | (72,796) | 187,604 | (784,902) |
| Cash flows provided by (used in) investing activities: | | | |
| Investments in property and equipment | - | - | (589) |
| Proceeds from sale of subsidiaries, net | - | 179,196 | - |
| Investment in subsidiaries and changes intercompany receivables, net | (904,458) | 750,708 | 269,641 |
| Investment in long term receivables, net | (156,752) | - | - |
| Investment in associate | - | (23,832) | - |
| Net cash provided by (used in) investing activities | (1,061,210) | 906,072 | 269,052 |
| Cash flows provided by (used in) financing activities: | | | |
| Share issue | - | 1,619,503 | 635,696 |
| Proceeds from issuance of long-term debt | 1,729,230 | - | - |
| Repayment of long-term debt | (837,183) | (672,254) | (1,579,551) |
| Net increase (decrease) in bank facility and short-term debt | - | - | 143,763 |
| Investment in/ sale of own shares, net | (72,623) | (45,084) | 128,087 |
| Receipts of dividend/ group contribution from group companies | 535,705 | 400,000 | 1,462,325 |
| Other | (280,156) | - | - |
| Net cash provided by financing activities | 1,074,973 | 1,302,165 | 790,320 |
| Net increase (decrease) in cash and cash equivalents | (59,033) | 2,020,633 | 274,470 |
| Effect of exchange rate changes on cash and cash equivalents | 64,029 | (65,564) | (58,879) |
| Cash and cash equivalents at beginning of year | 2,358,867 | 403,798 | 188,207 |
| Cash and cash equivalents at end of year | 2,363,863 | 2,358,867 | 403,798 |

PETROLEUM GEO-SERVICES ASA

(Parent company unconsolidated financial statements)

# NOTES TO THE FINANCIAL STATEMENT

## Note 1 - Summary of Significant Accounting Policies

Petroleum Geo-Services Group (“the Company”) has prepared its consolidated financial statements in accordance with International Financial Reporting Standards (“IFRS”) as adopted by the European Union, while the financial statements for Petroleum Geo-Services ASA (“PGS ASA”) are prepared in accordance with accounting principles generally accepted in Norway (“N GAAP”).

PGS ASA applies the same accounting policies as described in Note 2 in the notes to the consolidated financial statements where relevant, except that unrealized foreign exchange gain (loss) on long-term intercompany loans is recognized in the statement of operations. The financial statements are presented in Norwegian Kroner (“NOK”).

Shares in subsidiaries (see Note 7) are presented at cost less any impairment. When the estimated recoverable amount (based on estimated future cash flows) is lower than the carrying value of the individual shares and net intercompany receivables in the subsidiaries, PGS ASA recognizes impairment charges. If and when estimated recoverable amounts increase, impairment charges are reversed.

Intercompany receivables are impaired when estimated recoverable amount (based on management assessment) is lower than the carrying value of the net receivable in the individual subsidiary. If and when estimated recoverable amounts increase, impairment charges are reversed. There is no fixed plan for repayment of long-term intercompany receivables.

See Note 4 to the consolidated financial statement regarding the sale of Onshore. In 2010 PGS ASA converted long term debt to equity in some of the disposed entities to fulfill the terms of the sales agreement. See Note 7 for further information.

Investment in associated companies is presented at cost less any impairment. When the estimated recoverable amount (based upon observable market price) is lower than the carrying value of the individual investment, PGS ASA recognizes impairment charges.

Proposed dividend to shareholders for the year are recognized as debt at yearend, as it is assessed as more likely than not that the dividend will be approved by the General Assembly the following year.

## Note 2 - Intercompany transactions

PGS ASA has significant intercompany transactions with its subsidiaries. Transactions with subsidiaries are mainly related to business support functions and financing activities. Intercompany transactions in the Statement of Operations consist of:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of NOK) | 2011 | 2010 | 2009 |
| Revenue | 116,633 | 125,401 | 125,913 |
| Cost of sales | 1,953 | 1,845 | 2,248 |
| Selling, General and administrative cost | 37,534 | 63,183 | 41,410 |
| Interest expense (income), net (Note 3) | (35,560) | (4,693) | 33,104 |
| Other financial items, net (Note 4) | (1,500,499) | (401,103) | (1,401,579) |
| Intercompany transactions, net | 1,613,205 | 466,169 | 1,450,730 |

## Note 3 - Interest Expense, Net

Interest expense, net, consists of:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of NOK) | 2011 | 2010 | 2009 |
| Interest income, external | 19,510 | 7,340 | 2,391 |
| Interest income, intercompany | 442,504 | 147,118 | 342,403 |
| Interest expense, external | (287,221) | (319,787) | (386,692) |
| Interest expense, intercompany | (406,944) | (142,424) | (375,507) |
| Total | (232,151) | (307,753) | (417,405) |

## Note 4 - Other Financial Items, Net

Other financial items, net, consist of:

| (In thousands of NOK) | Years ended December 31, 2011 | 2010 | 2009 |
|---|---|---|---|
| Group contribution received | 500,000 | 400,000 | 1,400,000 |
| Dividends received | 1,035,705 | --- | 62,325 |
| Amendment fees USD 950 million Credit Facilities (Note 12) | --- | (42,895) | --- |
| Instruction fee convertible note | --- | --- | (39,459) |
| Gain (loss) on repurchase of convertible bonds | (31,176) | --- | 25,471 |
| Write-down of long term receivables (Note 8) | (44,694) | --- | --- |
| Foreign currency (loss) gain | (154,774) | (63,740) | 1,318,274 |
| Other | (22,237) | (14,151) | (7,634) |
| Total | 1,282,824 | 279,214 | 2,758,977 |

## Note 5 - Income Taxes

Reconciliation of income tax (benefit) expense to taxes computed at nominal tax rate on income before income taxes:

| (In thousands of NOK) | Years ended December 31, 2011 | 2010 | 2009 |
|---|---|---|---|
| Income (loss) before income taxes | 937,339 | (600,190) | 2,219,333 |
| Norwegian statutory tax rate | 28% | 28% | 28% |
| Provision (benefit) for income taxes at the statutory rate | 262,455 | (168,053) | 621,413 |
| Increase (reduction) in income taxes from: | | | |
| Non-taxable gain on sale of shares in subsidiary, net | (1,858) | (29,368) | (1,830) |
| Impairment (reversal) of shares in subsidiaries and associated companies | 147,658 | 170,033 | (77,318) |
| Non-taxable dividends/ group contribution | (356,218) | (28,506) | (92,255) |
| Permanent difference impairment of intercompany receivables(a) | 249,433 | --- | --- |
| Other permanent items | (8,225) | (33,285) | 59,652 |
| Changes in the tax losses carried forward (b) | --- | --- | (183,559) |
| Change in deferred tax assets not recognized in balance sheet | 6,032 | 4,559 | (11,728) |
| Income tax (benefit) expense | 299,277 | (84,620) | 314,375 |

(a) With effect from October 6, 2011, Norwegian tax authorities reduced the possibility of tax deductions on impairment of intercompany receivables. As a result PGS ASA has reversed parts of temporary difference related to impairment of intercompany receivables, and charged an equal amount as permanent difference in 2011.

(b) See Note 10 Income taxes in the consolidated financial statement regarding the tax dispute related to the exit of old tonnage tax regime.

Tax reducing and tax increasing temporary differences are offset, provided the differences can be reversed in the same period. Deferred income taxes are calculated based on the net temporary differences that exist at year-end.

The tax effects of PGS ASA's temporary differences are summarized as follows:

| (In thousands of NOK) | December 31, 2011 | 2010 |
|---|---|---|
| Temporary differences relates to: | | |
| Property and equipment | 524 | 776 |
| Pension liabilities | 6,624 | 6,481 |
| Intercompany receivables | 134,920 | 504,212 |
| Unrealized (losses/accruals) gain | 18,800 | 17,409 |
| Shares in foreign subsidiaries | 96,640 | 90,608 |
| Compensation cost employee share options | 9,801 | 8,834 |
| Convertible notes valuation | (55,307) | (69,451) |
| Interest rate swaps (a) | 43,046 | 46,055 |
| Tax losses carried forward | 644,370 | 590,748 |
| Deferred tax assets | 899,418 | 1,195,672 |
| Deferred tax assets not recognized in the balance sheet | (96,640) | (90,608) |
| Deferred tax assets | 802,778 | 1,105,064 |

(a) Change in deferred tax for interest swaps are recognized in the consolidated statement of comprehensive income (see Note 10).

PGS ASA recognizes deferred tax assets when they are "more likely than not" of ultimately being realized.
As of December 31, 2011, PGS ASA has recognized deferred tax assets of NOK 0.8 billion (NOK 1.1 billion as of December 31, 2010) as available evidence, including consolidated budgets, recent profits and estimates of projected near term future taxable income, supported a more likely than not conclusion that the deferred tax assets would be realized.

## Note 6 - Property and Equipment

Property and equipment consists of fixtures, furniture and fittings and are summarized as follows:

| (In thousands of NOK) | 2011 | 2010 |
|---|---|---|
| **Purchase costs:** | | |
| Purchase costs as of January 1, | 90,974 | 90,974 |
| Additions | --- | --- |
| Purchase costs as of December 31, | 90,974 | 90,974 |
| | | |
| **Accumulated depreciation:** | | |
| Accumulated depreciation as of January 1, | 88,940 | 86,806 |
| Depreciation | 533 | 2,134 |
| Accumulated depreciation as of December 31, | 89,473 | 88,940 |
| | | |
| Balance as of December 31, | 1,501 | 2,034 |

Property and equipment is depreciated over 3 to 5 years.

## Note 7 - Shares in Subsidiaries

Shares in subsidiaries are recognized in PGS ASA' balance sheet at cost less any impairment:

| | Registered office | Number of shares | Total share capital | | Share-holding (a) | Par value | | Book value as of December 31, 2011 (In thousands of NOK) |
|---|---|---|---|---|---|---|---|---|
| PGS Geophysical AS | Oslo | 1,396,805 | NOK | 139,680,500 | 100% | NOK | 100 | 2,502,650 |
| PGS Exploration (Nigeria) Ltd. | Nigeria | 2,000,000 | USD | 2,000,000 | 100% | USD | 1 | 320 |
| Petroleum Geo-Services, Inc. | Houston | 1,000 | USD | 1,000 | 100% | USD | 1 | 23,699 |
| Petroleum Geo-Services (UK) Ltd. | London | 222,731,726 | GBP | 222,731,726 | 100% | GBP | 1 | 1,214,593 |
| Seahouse Insurance Ltd. | Bermuda | 120,000 | USD | 120,000 | 100% | USD | 1 | 8,165 |
| Multiklient Invest AS | Oslo | 100,000 | NOK | 10,000,000 | 100% | NOK | 100 | 989,727 |
| PGS Shipping AS | Oslo | 4,733,975 | NOK | 9,467,950 | 100% | NOK | 2 | 1,140,992 |
| Petroleum Geo-Services Asia Pacific Pte. Ltd. | Singapore | 100,000 | SGD | 100,000 | 100% | SGD | 1 | 2,569,207 |
| PGS Investigacào Petrolifera Ltda. | Brazil | --- | BRL | 5,000 | 99% | BRL | --- | --- |
| Hara Skip AS | Oslo | 1,066,016 | NOK | 106,601,600 | 100% | NOK | 100 | 304,866 |
| Oslo Seismic Services Ltd. | Isle of Man | 1 | USD | 1 | 100% | USD | 1 | 33,570 |
| PGS Australia Pty. Ltd. | Perth | --- | --- | --- | 100% | --- | --- | 49,633 |
| PGS Venezuela de C.A. | Venezuela | 5,015,000 | VEB | 5,015,000,000 | 100% | VEB | 1,000 | --- |
| PGS Overseas AS | Oslo | 100 | NOK | 100,000 | 100% | NOK | 1,000 | 100 |
| PGS Suporte Logistico e Servicos Ltda.( b) | Brazil | 12,088,000 | BRL | 12,088,000 | 1% | BRL | 1 | 369 |
| PGS Japan K.K. | Japan | 10,000,000 | JPY | 10,000,000 | 100% | JPY | 1 | 563 |
| PGS Exploration (Norway) AS | Oslo | 501,000 | NOK | 501,000 | 100% | NOK | 1 | 11,175 |
| PT PGS Nusantara | Indonesia | 4,675 | IDR | 4,675,000,000 | 99.6% | IDR | 1,000,000 | --- |
| Arrow Seismic ASA | Bergen | 23,500,000 | NOK | 282,000,000 | 100% | NOK | 12 | 1,602,815 |
| MTEM Ltd | Scotland | 270,000 | GBP | 270,000 | 100% | GBP | 1 | 312,316 |
| PGS Falcon AS | Oslo | 43,195 | NOK | 734,315,000 | 100% | NOK | 17,000 | 1,254,485 |
| PGS Ventures AS | Oslo | 100 | NOK | 100,000 | 100% | NOK | 1,000 | 100 |
| PGS Servicos de Mexico SA de CV | Mexico | 500 | MXN | 50,000 | 99.8% | MXN | 100 | 23 |
| Total | | | | | | | | 12,019,368 |

(a) Voting rights are equivalent to shareholding for all companies.
(b) The remaining 99% shareholding is held by PGS Overseas AS.

In 2003, PGS ASA sold its Atlantis oil and gas activities to Sinochem. In 2010 PGS ASA received $1.0 million (NOK 5.9 million) in additional proceeds.

In 2009, PGS ASA entered into an agreement to sell its Onshore business ("Onshore") to Geokinetics Inc ("Geokinetics"), see Note 4 in the consolidated statement. In 2010 PGS ASA converted long term debt to equity in some of the sold entities to fulfil the agreement. PGS ASA recognized a gain of NOK 176.5 million in 2010, mainly due to reversal of previous recognized impairments of receivables towards the sold companies. In 2011, PGS ASA recognized additional gain of NOK 6.8 million on the sale of Onshore due to derecognition of previous accruals related to the sale.

In 2011 PGS ASA recognized a NOK 421.3 million net impairment charge on shares in subsidiaries, mainly related to reduced equity in Petroleum Geo-Services Inc and other US subsidiaries. In 2010, PGS ASA recognized a NOK 607 million impairment charge on the shares in Arrow ASA (NOK 700 million in 2009). The main reason for this impairment charge was the cancellation of the new build contracts and impairment charges in the subsidiaries of Arrow ASA (see Note 18 to the consolidated financial statement). In 2009, PGS ASA also recognized a NOK 500 million impairment on shares in MTEM Ltd, due to the restructuring of the EM business in MTEM Ltd in 2008 and 2009 and NOK 1.4 billion in reversal of previous recognized impairment charges,

mainly related to Multiklient Invest AS and PGS Geophysical AS due to no impairment indicators at year-ended December 31, 2009.

As of December 31, 2011, PGS ASA has accumulated impairment charges related to shares in subsidiaries totalling NOK 4.4 billion.

In 2011 PGS ASA reversed previous recognized impairment charges on intercompany receivables of NOK 428 million. In 2010 and 2009 PGS ASA recognized an impairment charge on intercompany receivables of NOK 115 million and NOK 352 million, respectively.

For additional information on impairment of shares in subsidiaries and intercompany receivables, see Note 1.

## Note 8 - Other Financial Long-Term Assets

Other financial long-term assets consist of:

| | December 31, | |
|---|---|---|
| (In thousands of NOK) | 2011 | 2010 |
| Long-term receivables | 140,377 | 8 |
| Warrants Geokinetics Inc. (Note 20) | 3,050 | 23,810 |
| Unrealized gain hedge contracts (Note 13) | --- | 124 |
| Total | 143,427 | 23,942 |

In February 2011 SeaBird Exploration PLC issued a convertible loan of NOK 240.0 million ($42.9 million) directed towards the Company. In December 2011 the instrument was partially repaid and partially restructured as a Senior Secured Bond (Coupon rate 6%) with a nominal value of $31.7 million. A loss of NOK 44.7 million was recognized in 2011 as the fair value of the new bond was lower than the nominal value. As of December 31, 2011, the SeaBird Exploration Plc bonds has a book value of NOK 140.2 million ($23.3 million) and is presented as Long-term receivables. The book value of the secured bonds equals estimated market value of the bond.

## Note 9 - Other Current Assets

Other current assets consist of:

| | December 31, | |
|---|---|---|
| (In thousands of NOK) | 2011 | 2010 |
| Short term receivables | 32,004 | 59,592 |
| Prepaid expenses | 2,101 | 2,294 |
| Unrealized gain hedge contracts (Note 13) | 1,021 | 25,541 |
| Other | 2,919 | 885 |
| Total | 38,045 | 88,312 |

## Note 10 - Restricted Cash

Restricted cash as of December 31, 2011 and 2010 consists of payroll withholding taxes.

## Note 11 - Shareholders' Equity

Changes in shareholders' equity for the years ended December 31, 2011 and 2010 are as follows:

| (In thousands of NOK) | Paid-in capital Common stock | Own shares, par value | Additional paid-in capital | Other equity | Shareholders' equity |
|---|---|---|---|---|---|
| Balance as of January 1, 2010 | 594,000 | --- | 614,684 | 7,524,568 | 8,733,252 |
| Share issue; November 17, 2010 | 59,400 | --- | 1,560,103 | --- | 1,619,503 |
| Acquired treasury shares | --- | (2,711) | --- | (56,858) | (59,569) |
| Exercise employee share options | --- | 1,079 | --- | 13,407 | 14,486 |
| Employee share options | --- | --- | 6,233 | --- | 6,233 |
| Interest rate swaps/forward exchange contracts (net of tax) | --- | --- | --- | 11,034 | 11,034 |
| Net income | --- | --- | --- | (515,570) | (515,570) |
| Balance as of December 31, 2010 | 653,400 | (1,632) | 2,181,020 | 6,976,581 | 9,809,369 |
| Acquired treasury shares | --- | (3,729) | --- | (92,111) | (95,840) |
| Exercise employee share options | --- | 1,689 | --- | 21,528 | 23,217 |
| Employee share options | --- | --- | 4,356 | --- | 4,356 |
| Employee share options recharged to subsidiaries (a) | --- | --- | 134,414 | --- | 134,414 |
| Interest rate swaps/forward exchange contracts (net of tax) | --- | --- | --- | 7,277 | 7,277 |
| Dividend to shareholders | --- | --- | --- | (239,580) | (239,580) |
| Net income | --- | --- | --- | 638,061 | 638,061 |
| Balance as of December 31, 2011 | 653,400 | (3,672) | 2,319,790 | 7,311,756 | 10,281,274 |

(a) In 2011 PGS ASA recharged accumulated share option cost to subsidiaries.

PGS ASA completed a private placement of NOK 1,643,399,834 (approx $274 million) in November 2010 by issuing 19,799,998 new shares at the price of NOK 83 per share. The shares issue increased the equity by NOK 1,620 million, net of transaction costs of NOK 23.9 million (net of tax).

As of December 31, 2011 and 2010, Petroleum Geo-Services ASA had a share capital of NOK 653,399,991 divided on a total of 217,799,997 shares, of par value NOK 3, each fully paid in. See Note 31 to the consolidated financial statement for further information about the share capital and authorizations.

All shares have equal voting rights and are entitled to dividends. Any distribution of PGS ASA's equity is dependent on the approval of the shareholders, and the ability to make distributions is limited by certain debt covenants and Norwegian Corporate Law (see Note 25 to the consolidated financial statements). A listing of PGS ASA's largest shareholders is provided in Note 31 to the consolidated financial statements.

PGS ASA's holding of treasury shares reconciles as follows:

| | Treasury shares | % of total shares outstanding |
|---|---|---|
| Balance at January 1, 2010 | --- | --- |
| Acquired treasury shares | 903,517 | |
| Used to fulfil employee share option program in 2010 (a) | (359,536) | |
| Balance at December 31, 2010 | 543,981 | 0.25% |
| Acquired treasury shares | 1,243,000 | |
| Used to fulfil employee share bonus program in 2011 | (9,847) | |
| Used to fulfil employee share option program in 2011 (a) | (553,213) | |
| Balance at December 31, 2011 | 1,223,921 | 0.56% |

(a) See Note 33 to the consolidated financial statements.

The average number of treasury shares in the years ended December 31, 2011 and 2010 were 561,331 and 388,228 respectively.

For the year ended December 31, 2011, PGS ASA will distribute a dividend of NOK 239.6 million. No dividend was distributed for years ended December 31, 2010 and 2009.

## Note 12 - Debt and Guarantees

### Long-term debt

Long-term debt consists of the following:

| (In thousands of NOK) | December 31, 2011 | 2010 |
|---|---|---|
| **Secured:** | | |
| Term Loan, Libor + margin, due 2015 | 2,832,893 | 2,752,618 |
| High yield bond $300 million, 7,375%, due 2018 | 1,806,180 | --- |
| **Convertible notes:** | | |
| Convertible notes, 2,7%, due 2012 | 1,106,497 | 1,869,853 |
| Total debt | 5,745,570 | 4,622,471 |
| Less current portion (incl. capitalized loan cost) | (1,102,739) | --- |
| Less capitalized loan cost | (102,515) | (36,243) |
| Total long-term debt | 4,540,316 | 4,586,228 |

Aggregate maturities of long-term debt are as follows:

| (In thousands of NOK) | December 31, 2011 |
|---|---|
| Year of repayment: | |
| 2012 | 1,106,497 |
| 2013 | --- |
| 2014 | --- |
| 2015 | 2,832,893 |
| 2016 | --- |
| Thereafter | 1,806,180 |
| Total | 5,745,570 |

In 2011 PGS ASA made optional repurchases of the Convertible notes for a nominal amount of NOK 847.0 million ($153.9 million) at an average price of 98.83% of nominal value. In 2010 PGS ASA made debt repayments of NOK 672.0 million ($105.3 million), of which NOK 639.0 million ($100.0 million) was an optional prepayment of the term loan B ("Term Loan") and NOK 24.6 million ($3.8 million) a repayment of the 10% Senior Notes.

In 2011 there were no repayments of the Term loan. In 2010, PGS ASA made repayments of NOK 648.0 million ($101.5 million) of the Term Loan, of which NOK 639.0 million ($100.0 million) was optional (see above). The Company has hedged the interest rate on 64% of the borrowings under the Term Loan (64% in 2010) by entering into interest rate swaps whereby the Company receives floating interest rate based on 3 months LIBOR and pays fixed interest rate between 4.60 to 5.34% with a remaining life of 0.5 to 3.3 years. See Note 13 for further information.

PGS ASA senior secured credit facility of NOK 5.7 billion ($950 million) consists at inception of an eight-year NOK 3.6 billion ($600 million) Term Loan (maturing 2015) and a five-year NOK 2.1 billion ($350 million) Revolving Credit Facility (RCF) (originally maturing 2012 and extended to 2015 in January 2011). The Term Loan, which has no financial maintenance covenants, has a floating interest rate of LIBOR + 175 basis points. The credit agreement generally requires PGS ASA to apply 50% of excess cash flow to repay outstanding borrowings for financial years when the total leverage ratio exceeds 2.5:1 or the senior leverage ratio exceeds 2:1 (see Note 26 to the consolidated financial statement). Excess cash flow for any period is defined as net cash flow provided by operating activities less capital expenditures and scheduled debt services during that period, minus capital income taxes to be paid in the next period and capital expenditure committed in the period but to be paid in future periods. PGS ASA can make optional prepayments to reduce the outstanding principal balance at no penalty. The Term Loan is an obligation of PGS ASA and PGS Finance Inc. as co-borrowers, is secured by pledges of shares of material subsidiaries and is guaranteed by the same material subsidiaries. In addition, the Company may also under the $950 million credit agreement be able to borrow an additional $400 million either as a term loan or as an RCF. Such additional borrowing would be secured by the same collateral that secures the Term Loan and borrowings under the existing RCF.

The NOK 2.4 billion ($400 million) convertible notes were issued in December 2007 and are due in December 2012 (as of December 31, 2011, NOK 1.1 billion ($190.6 million) remains outstanding). The convertible notes are convertible into ordinary shares of PGS ASA. The total number of shares to be issued if all convertible notes are converted at the conversion price is 10.2 million ordinary shares, representing 4.68% of the Company's current issued ordinary share capital. Due to repurchases, 4.9 million shares are issuable if all the notes were converted at December 31, 2011. The conversion price is NOK 216.19 per share and is fixed in USD based upon the fixed exchange rate, which represented a 40% premium over the volume weighted average price of the Company's ordinary shares at the time of offering. The fixed rate of exchange is 5.5188 NOK per 1.00 USD and the coupon has been set at 2.7% per annum payable semi-annually in arrears. The equity element of the convertible notes was calculated to 17.1% of the nominal value (NOK 375.7 million/$68.4 million) and was recorded to shareholders' equity, net of allocated portion of loan costs and taxes (NOK 8.2 million/$1.5 million).

In November 2011 PGS ASA issued NOK 1.8 billion ($300 million) Senior notes which are due in December 2018. The Senior notes were issued at 98.638% of the principal amount with a coupon of 7.375%. The Senior notes are ranked as senior obligations of the company and rank equally in right of payment with all other existing and future senior debt. At any time after December 2015 the company may redeem part or all of the notes on payment of a specified premium contained in the Offering Memorandum.

**Bank credit facilities**
Under the senior secured credit facility established in June 2007, PGS ASA had a RCF of NOK 2.1 billion ($350.0 million) maturing in 2012. In January 2011 the maturity of the RCF was extended to 2015. The RCF has a NOK 270.9 million ($45.0 million) sub-limit for issuance of letter of credits, whilst the bonding facility (for issuance of bid and performance bonds) included in this sub-limit under the previous RCF was in June 2007 replaced by a separate NOK 90.3 million ($15.0 million) bonding facility (later increased to NOK 180.6 million ($30 million)). PGS ASA may borrow USD, or any other currency freely available in the London banking market to which the lenders have given prior consent, under the RCF for working capital and for general corporate purposes. Borrowings under the RCF bear interest at a rate equal to LIBOR plus a margin of 2.25% from January 25, 2011.

At December 31, 2011 and 2010, PGS ASA had zero outstanding in cash advances, and zero and NOK 21.7 million ($3.6 million), respectively, of standby letters of credit were outstanding under the RCF with an applicable margin of 1.5% per annum, and NOK 0.6 million ($0.1 million) and NOK 13.8 million ($2.3 million), respectively, of bid and performance bonds were drawn under the separate committed bonding facility of NOK 180.6 ($30 million), with an applicable margin of 1.4%. PGS ASA has further smaller NOK 12.0 million ($2 million) and NOK 60.2 million ($10 million) bid and performance bond facilities intended for regional use.

PGS ASA has also an overdraft facility of NOK 50.0 million as part of the Norwegian cash pooling arrangement. This facility will continue until cancelled.

**Long-term intercompany debt**
There is no fixed plan for repayment of long-term intercompany debt.

**Covenants**
In addition to customary representations and warranties, PGS ASA's loan and lease agreements include various covenants. See Note 25 to the consolidated financial statements for additional information.

**Letters of credit and guarantees**
PGS ASA had aggregate outstanding letters of credit and related types of guarantees (incl. counter guarantees), not reflected in the accompanying financial statements, of NOK 22.3 million ($3.7 million) and NOK 227.6 million ($38.1 million) as of December 31, 2011 and 2010, respectively.

## Note 13 - Financial Instruments

**Fair values of financial instruments**

The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable, accrued revenues, other current assets, accounts payable and accrued expenses approximate their respective fair values because of the short maturities of those instruments. The carrying amounts and the estimated fair values of debt instruments are summarized as follows:

| | December 31, 2011 | | | December 31, 2010 | | |
|---|---|---|---|---|---|---|
| (In thousands of NOK) | Carrying Amounts | Notional amounts | Fair values | Carrying amounts | Notional amounts | Fair values |
| Loans measured at amortized cost: | | | | | | |
| Long-term debt (Note 12) | 5,745,570 | --- | 5,653,409 | 4,622,471 | --- | 4,497,002 |
| Derivatives measured at fair value through shareholders' equity: | | | | | | |
| Interest rate swaps/future interest rate agreements, net unrealized (loss) gain (a) | (153,736) | 3,010,300 | (153,736) | (164,484) | 1,755,000 | (164,484) |
| Derivatives measured at fair value through statement of operations: | | | | | | |
| Forward exchange contracts, net unrealized (loss) gain (a) | (27,406) | 839,705 | (27,406) | (205) | 1,406,673 | (205) |

(a) The carrying amounts of forward exchange contracts and interest rate swaps are classified in the balance sheet as follows:

| | December 31, | |
|---|---|---|
| (In thousands of NOK) | 2011 | 2010 |
| Interest rate swaps, net (qualifying hedges) | (153,736) | (164,484) |
| Forward exchange contracts, net | (27,406) | (205) |
| Interest rate swaps, net | --- | --- |
| Total | (181,142) | (164,689) |
| Classified as follows: | | |
| Other financial long-term assets (long-term unrealized gain) (Note 8 ) | --- | 124 |
| Other current asset (short-term unrealized gain) (Note 9) | 1,021 | 25,541 |
| Other long-term liabilities (long-term unrealized loss) (Note 14 ) | (120,599) | (166,518) |
| Accrued expenses (short-term unrealized loss) (Note 17) | (61,564) | (23,836) |
| Total | (181,142) | (164,689) |

The fair values of the long-term debt instruments, forward exchange contracts and interest rate swaps are estimated using quotes obtained from dealers in such financial instruments or latest quoted prices at Reuters or Bloomberg.

The fair value of the liability component of convertible notes is determined by either obtaining quotes from dealers in the instrument or discounting the contractual stream of future cash flows (interest and principal) to the present value at the current rate of interest applicable to instruments of comparable credit status and providing substantially the same cash flows on the same terms, but without the equity component.

**Interest rate exposure**

PGS ASA is subject to interest rate risk on debt, including finance leases. The risk is managed through using a combination of fixed- and variable-rate debt, together with interest rate swaps and future interest rate agreements, where appropriate, to fix or lower the borrowing costs.

As of December 31, 2011, the Company has outstanding interest rate swaps in the aggregate notional amount of NOK 3.0 billion ($500 million), of which NOK 1.2 billion ($200 million) are forward starting swaps, (NOK 1.8 billion ($300 million) as of December 31, 2010) relating to the Term Loan established in June 2007 (see Note 12). Under the interest rate swap agreements the Company receives floating interest rate payments and pays fixed interest rate payments. The weighted average fixed interest rates under the contracts are as follows:

| | December 31, 2011 | | December 31, 2010 | |
|---|---|---|---|---|
| Matures in: | Notional amounts ($ thousands) | Weighted average fixed interest rate | Notional amounts ($ thousands) | Weighted average fixed interest rate |
| 1 year | 200,000 | 5.13% | --- | --- |
| 1 – 2 years | --- | --- | 200,000 | 5.05% |
| 2 – 3 years | 200,000 | 3.93% | --- | --- |
| 3 – 4 years | 100,000 | 2.64% | 100,000 | 5.18% |
| 4 – 5 years | --- | --- | --- | --- |
| > 5 years | --- | --- | --- | --- |
| Total | 500,000 | 4.15% | 300,000 | 5.09% |

The aggregate negative fair value of these interest rate swap agreements at December 31, 2011 and 2010 was NOK 153.7 million ($25.5 million) and NOK 164.5 million ($28.1 million), respectively.

**Interest rate hedge accounting**
As of December 31, 2011 and 2010, all of the interest rate swaps, notional amount of NOK 3.0 billion ($500.0 million) and NOK 1.8 billion ($300.0 million) were accounted for as cash flow hedges, respectively. In the years ended December 31, 2011 and 2010, the value of these instruments were recorded as a reduction in other equity as the effective portion of the designated and qualifying hedging instrument (see Note 11).

**Foreign exchange rate exposure**
PGS ASA is exposed to currency fluctuation due to a predominantly USD-based revenue stream, while the expenses are incurred in various currencies. The larger expense currencies other than the USD are GBP, NOK and EUR. PGS ASA maintain a foreign-currency risk management strategy that uses foreign currency exchange contracts to protect against fluctuations in cash flow caused by volatility in currency exchange rates.

In 2011, PGS ASA continued a foreign currency hedging program by entering into NOK, GBP, SGD, EUR and BRL on forward contracts.

As of December 31, 2011, PGS ASA has open forward contracts to buy and sell GBP, NOK, SGD, BRL and EUR with a notional amount of NOK 0.8 billion ($139.5 million) and a negative fair value of NOK 27.4 million ($4.6 million). As of December 31, 2010, PGS ASA had open forward contracts to buy GBP, NOK, SGD, BRL and EUR with a notional amount of NOK 1.4 billion ($241 million) and a negative fair value of NOK 0.2 million ($0.1 million).

**Foreign exchange rate hedge accounting**
As of December 31, 2011 and 2010 none of the total notional amount of foreign exchange contracts in PGS ASA was accounted for as fair value hedges.

## Note 14 - Other Long-Term Liabilities

Other long-term liabilities consist of:

| | December 31, | |
|---|---|---|
| (In thousands of NOK) | 2011 | 2010 |
| Unrealized loss hedge contracts (Note 13) | 120,599 | 166,518 |
| Pension liability (Note 15) | 23,657 | 23,147 |
| Other long-term liabilities | 1,149 | 2,048 |
| Total | 145,405 | 191,713 |

## Note 15 - Pension Obligations

**Defined benefit plan**
PGS ASA sponsors a defined benefit pension plan for its Norwegian employees, comprising 6 persons. This plan is funded through contributions to an insurance company, after which the insurance company undertake the responsibility to pay out the pensions. It is PGS ASA's general practice to fund amounts to this defined benefit plan, which is sufficient to meet the applicable statutory requirements. As of January 1, 2005, the defined benefit plan was closed for further entrants and a new defined contribution plan was established for new employees (see separate section below).

PGS ASA is required to maintain a pension plan in accordance with the Norwegian Pension Benefit Act. The pension plans of PGS ASA comply with the requirements set forth in the Norwegian Pension Benefit Act.

Net periodic pension costs for PGS ASA's defined benefit pension plan are summarized as follows:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of NOK) | 2011 | 2010 | 2009 |
| Service costs | 2,514 | 2,857 | 3,052 |
| Interest cost | 608 | 833 | 658 |
| Expected return on plan assets | (659) | (763) | (668) |
| Amortization of actuarial gain | (1,441) | (1,254) | (1,010) |
| Adjustment prior service cost | --- | --- | 710 |
| Administrative costs | 73 | 41 | 39 |
| Payroll tax | 370 | 419 | 434 |
| Net periodic pension costs | 1,465 | 2,133 | 3,215 |

The pension liability has been calculated based on the underlying economic realities. The aggregate funded status on the plan and amounts recognized in PGS ASA's balance sheet is as follows:

| | December 31, | |
|---|---|---|
| (In thousands of NOK) | 2011 | 2010 |
| Funded status | 10,493 | 3,642 |
| Unrecognized actuarial gain | 11,684 | 18,862 |
| Accrued payroll tax | 1,480 | 643 |
| Net pension liability | 23,657 | 23,147 |

Net amount recognized as accrued pension liability is presented as other long-term liabilities (see Note 14).

Assumptions used to determine benefit obligations:

| | December 31, | |
|---|---|---|
| | 2011 | 2010 |
| Discount rate | 2.6% | 4.0% |
| Return on plan assets | 4.1% | 5.4% |
| Compensation increase | 4.0% | 4.0% |
| Annual adjustment to pensions | 0.1% | 1.3% |

**Defined contribution plan**

As described above under "Defined Benefit Plan", as of January 1, 2005, PGS ASA closed the defined benefit plan for further entrants and a new defined contribution plan was established for new employees. PGS ASA's contributions to this plan for the years ended December 31, 2011 and 2010 was NOK 1.3 million and NOK 1.1 million, respectively.

## Note 16 - Commitments

PGS ASA's operating lease commitments relates to corporate administration and expires on various dates through 2024. Future minimum payments related to non-cancelable operating leases existing at December 31, 2011 are as follows:

| (In thousands of NOK) | December 31, 2011 (a) |
|---|---|
| 2012 | 4,885 |
| 2013 | 5,173 |
| 2014 | 2,647 |
| 2015 | 2,282 |
| 2016 | 2,282 |
| Thereafter | 16,553 |
| Total | 33,822 |

(a) Includes estimated office lease for the periods displayed.

Total rental expense for operating leases, including leases with terms of less than one year, was NOK 8.3 million, NOK 11.2 million and NOK 11.2 million for the years ended December 31, 2011, 2010 and 2009, respectively.

## Note 17 - Accrued Expenses and Other Short Term Liabilities

Accrued expenses consist of the following:

| | December 31, | |
|---|---|---|
| (In thousands of NOK) | 2011 | 2010 |
| Dividend to shareholders | 239,580 | --- |
| Accrued unrealized loss hedging (Note 13) | 61,564 | 23,836 |
| Foreign taxes | 29,614 | 46,401 |
| Accrued interest expense | 18,932 | 4,906 |
| Accrued salary (including bonus) | 15,668 | 23,362 |
| Other | 18,031 | 8,987 |
| Total | 383,389 | 107,492 |

## Note 18 - Salaries and Other Personnel Costs, Number of Employees, and Remuneration to the Board of Directors, Executive Officers and Auditors

Salary and social expenses that are included in cost of sales and selling and general and administrative costs consist of:

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of NOK) | 2011 | 2010 | 2009 |
| Salaries and bonus | 53,982 | 58,880 | 53,148 |
| Social security | 7,969 | 9,632 | 7,484 |
| Pension | 2,770 | 4,349 | 3,994 |
| Other benefits | 4,668 | 379 | 4,030 |
| Total | 69,389 | 73,240 | 68,656 |

As of December 31, 2011, PGS ASA had 32 full time employees. Average labor years for the years ended December 31, 2011 and 2010 were 31 and 28, respectively.

**Compensation to Board of Directors, CEO and Other Executive Officers**
For a full listing of Board of Directors, CEO and Other Executive Officers and their compensation, see Note 34 to the consolidated financial statements.

As of December 31, 2011 and 2010, no loans or guarantees are given to neither Board of Directors, CEO nor Other Executive Officers.

**Share option programs**
In the third quarter of 2006, second quarter of 2008, second quarter of 2009, second quarter of 2010 and second quarter of 2011 PGS ASA established employee share option programs and granted options to certain key employees, see Note 33 to the consolidated financial statements. For the years ended December 31, 2011, 2010 and 2009, PGS ASA recorded compensation costs of NOK 4.4 million, NOK 6.2 million and NOK 9.8 million, respectively, recognized in additional paid-in capital. Total net unrecognized compensation cost as of December 31, 2011 was NOK 9.1 million (related to non-vested share-based options), which is expected to be recognized over a period of 3.5 years (main portion within 1 year).

In 2011 and 2010, 553,213 and 359,536 options, respectively, were exercised under the PGS Group share option programs. PGS ASA used own treasury shares to facilitate these transactions and recognized NOK 23.2 million and NOK 14.5 million in shareholders' equity in 2011 and 2010, respectively.

**Remuneration of auditor**
Fees for audit and other services provided by PGS ASA's auditor are as follows (exclusive VAT and inclusive out of pocket expenses):

| | Years ended December 31, | | |
|---|---|---|---|
| (In thousands of NOK) | 2011 | 2010 | 2009 |
| Audit fees | 3,288 | 3,435 | 3,548 |
| Other attestation services (a) | 1,955 | 817 | 8,331 |
| Fees for tax services (b) | --- | 35 | --- |
| All other fees | 269 | 142 | 398 |
| Total | 5,512 | 4,429 | 12,277 |

(b) Other attestation services for 2009 include fees related to attestation services in connection with the sale of Onshore completed in 2010.
(c) Include fees for tax filing services and other tax assistance.

## Note 19 - Warranties

Petroleum Geo-Services ASA provides letters of credit and related types of guarantees on behalf of subsidiaries, which normally are claimed in contractual relationships were subsidiaries are contracting parties. These guarantees are considered to be ordinary in contractual relationships, as well as in PGS ASA's ordinary operations. See also Note 25 to the consolidated financial statements.

## Note 20 - Investment in Associated Company

Investments in associates are recognized in PGS ASA's balance sheet at cost less any impairment:

| | Registered office | Ownership as of December 31, 2011 | Share of income/(loss) in year ended December 31, 2011 (In thousands) | Equity as of December 31, 2011 (In thousands) | Book value as of December 31, 2011 (In thousands) |
|---|---|---|---|---|---|
| Geokinetics Inc | United States | 11.4% | NOK 92,738 ($16,500) | NOK (663,470) ($(110,200)) | NOK 27,877 |

The Geokinetics investment was a part of the Onshore transaction closed at February 12, 2010, see Note 4 to the consolidated financial statement for further information. The fair value of the shares received was NOK 112.5 million. At inception the investment was assessed as an associated company based on the Company's total ownership and board representation. For the year ended December 31, 2011 PGS ASA has recognized an impairment charge on shares of NOK 84.6 million, in order to reflect estimated fair value of the shares.

In fourth quarter 2010, the PGS group invested additional NOK 58.5 million ($10 million) in 40,000 preferred stocks and 1,165,000 warrants in Geokinetics. The warrants was initially valued to NOK 23.8 million ($4.1 million) using a Black-Scholes option price model. The remaining value was allocated to the preferred shares and has been included as part of the investment in Geokinetics held by a subsidiary of PGS ASA. For the year ended December 31, 2011 PGS ASA has recognized an impairment on the warrants of NOK 21.5 million in order to reflect estimated fair value of the warrants.

As of December 31, 2011 and 2010, the warrants was valued to NOK 3.1 million and NOK 23.8 million, respectively, and presented as other financial long-term assets (see Note 8).

## Note 21 - Subsequent events

During 2012 the Company made optional repurchases of the Convertible notes for a nominal amount of $144.0 million at an average price of 100.67%. Following the transactions the Company owns $353.4 million of the Convertible notes representing 88.4% of the total outstanding issue. According to the loan agreement the Company can redeem all of the Notes outstanding at their principal amount if it has repurchased and cancelled more than 85% of the principal amount issued. On February 20, 2012 the Company announced its intention to exercise the option to redeem the remaining outstanding Notes, including accrued but unpaid interest up until the redemption date set to March 16, 2012. On March 16, 2012 note holders for a nominal amount of $1.1 million requested that their notes were converted to shares. This was effectuated on March 20, 2012 when the Company transferred 28,079 of its treasury shares as settlement. The remaining outstanding amount was redeemed and cancelled on March 22, 2012.

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To the Annual Shareholders' Meeting of Petroleum Geo-Services ASA

INDEPENDENT AUDITOR'S REPORT

**Report on the Financial Statements**

We have audited the accompanying financial statements of Petroleum Geo-Services ASA, which comprise the financial statements of the parent company Petroleum Geo-Services ASA and the consolidated financial statements of Petroleum Geo-Services ASA and its subsidiaries. The parent company's financial statements comprise the statement of financial position as at 31 December 2011, the statement of operations and statement of cash flow for the year then ended, and a summary of significant accounting policies and other explanatory information. The consolidated financial statements comprise the statement of financial position as at 31 December 2011, and the statement of operations, the statement of comprehensive income, statement of changes in shareholder's equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

*The Board of Directors and the Chief Executive Officer's Responsibility for the Financial Statements*

The Board of Directors and the Chief Executive Officer are responsible for the preparation and fair presentation of the parent company financial statements in accordance with the Norwegian Accounting Act and generally accepted accounting standards and practices in Norway and for the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the EU, and for such internal control as the Board of Directors and the Chief Executive Officer determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

*Auditor's Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

KPMG AS, a Norwegian member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Statsautoriserte revisorer - medlemmer av Den norske Revisorforening

Offices in:

Oslo, Alta, Arendal, Bergen, Bodø, Elverum, Finnsnes, Grimstad, Hamar, Haugesund, Kristiansand, Larvik, Mo i Rana, Molde, Narvik, Røros, Sandefjord, Sandnessjøen, Stavanger, Stord, Tromsø, Trondheim, Tønsberg, Ålesund

***Independent auditor's report***
*Petroleum Geo-Services ASA*

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

*Opinion on the separate financial statements*

In our opinion, the parent company's financial statements are prepared in accordance with the law and regulations and give a true and fair view of the financial position of Petroleum Geo-Services ASA as at 31 December 2011, and of its financial performance and its cash flows for the year then ended in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway.

*Opinion on the consolidated financial statements*

In our opinion, the consolidated financial statements are prepared in accordance with the law and regulations and give a true and fair view of the financial position of Petroleum Geo-Services ASA and its subsidiaries as at 31 December 2011, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the EU.

**Report on Other Legal and Regulatory Requirements**

*Opinion on the Board of Directors' report and Report on corporate governance*

Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Board of Directors' report and Report on corporate governance concerning the financial statements, the going concern assumption and the proposal for the allocation of the profit is consistent with the financial statements and complies with the law and regulations.

*Opinion on Accounting Registration and Documentation*

Based on our audit of the financial statements as described above, and control procedures we have considered necessary in accordance with the International Standard on Assurance Engagements (ISAE) 3000, «Assurance Engagements Other than Audits or Reviews of Historical Financial Information», it is our opinion that the management has fulfilled its duty to produce a proper and clearly set out registration and documentation of the company's accounting information in accordance with the law and bookkeeping standards and practices generally accepted in Norway.

Oslo, 22 March 2012
KPMG AS

Arne Frogner
*State authorized public accountant*

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