

oil & gas

Russian Partnerships in the High North



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facts:

Norway in Brief

Size: 385,155 sq. km
(including the islands of Svalbard and Jan Mayen)

Population 4.7 million

Main Cities	Population (incl. suburbs)
Oslo	811,688
Bergen	213,585
Stavanger/Sandnes	173,132
Trondheim	147,139

GDP 2006 USD \$261.7 billion

Exchange Rate:

NOK/USD 6.42 (average 2006)
NOK/EUR 8.05 (average 2006)

Exports and Imports 2006

	NOK bill.	USD bill.	Amount of GDP
Total Exports	1,002	156	46.6%
Total Imports	610	95	28.3%

Main Export Commodities

Oil & gas, metals, machinery, chemical products, fish & fish products,
pulp & paper and ferro alloys

Main Import Commodities

Transport equipment, machinery, chemicals, textiles and metal products



Distribution

Norway Exports – Oil & Gas is distributed through the following channels:

- Innovation Norway's offices and Norwegian embassies and consulates abroad
- The Norwegian Ministry of Foreign Affairs' offices abroad
- The Norwegian Ministry of Petroleum and Energy
- The Norwegian Ministry of Trade and Industry
- INTSOK's (Norwegian Oil & Gas Partners) contacts and network
- The Association of Norwegian Students Abroad's (ANSA) contacts and network
- Norwegian Chambers of Commerce worldwide
- Official state delegations in Norway and abroad

The following trade fairs:

- OTC, Houston, 5-8 May 2008
- NEFTEGAZ, Moscow, 23-27 June, 2008
- ONS, Stavanger 26-29 August 2008
- RIO OIL & GAS, Rio de Janeiro, 15-18 September 2008
- KIOGE, Kazakhstan, 2-5 October 2008
- ADIPEC, Abu Dhabi, 3-6 November 2008
- OSEA, Singapore, 2-5 December 2008

Recipients of Norway Exports – Oil & Gas will include:

- Relevant industry contacts in both the public and private sectors in Norway and abroad
- Relevant departments, politicians, and county and township offices in Norway
- Norwegian maritime companies
- International oil companies
- Rig owners, managers, shipowners, shipyards, consultants and engineers worldwide
- Attendees of international events, meetings and trade shows where Innovation Norway or Norwegian embassies are represented

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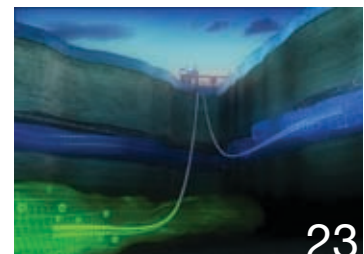
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SPECIAL THANKS TO:

Jens Stoltenberg (The Norwegian Prime Minister), Jonas Gahr Store (The Norwegian Minister of Foreign Affairs), Gulbrand Wangen (INTSOK), Håkon Skretting (INTSOK), Åse Solberg (The office of the prime minister), and Kristin Melsom (The Norwegian Ministry of Foreign Affairs)



Even if Shtokman is a huge contract for StatoilHydro, Norwegian offshore companies have gained a strong reputation in Russia that has been built on decades of offshore experience in rough and harsh conditions.



CO₂ is one of the biggest causes of global warming, and therefore CO₂ capture and storage (CCS) is vital to solve these humongous challenges. Norwegian companies and scientists are world leading in offshore CO₂ CCS



Norway is possibly the leading offshore petroleum producer in the world, and one of the reasons for this leading role is the Norwegian petroleum cluster taking advantage of synergies. In this cluster, companies compete when they have to and cooperate when they can.

alphabetical listing

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prime minister jens stoltenberg congratulates statoilhydro on shtokman



On 25 October 2007, StatoilHydro signed a framework agreement with Gazprom to become a partner in the Shtokman project. The agreement gives the company a share of 24 percent in the Shtokman Development Company (SDC), in which other partners include the Russian company Gazprom having 51 percent and French Total with 25 percent.

SDC is responsible for the planning, financing and construction of the infrastructure in the first phase of Shtokman, and it will own the infrastructure for 25 years from the beginning of commercial production. The estimate for the total amount of gas in the Shtokman field is about 3,700 standard cubic metres (Sm³), making it one of the world's biggest gas fields. In other words, this amount is equivalent to about 35 years of gas consumption in Great Britain.

Even if it is not exactly clear today what this means for StatoilHydro's production and reserves, we can presume that this will give the company access to large long-term gas resources, and it will be an important part in the company's international long-term product growth.

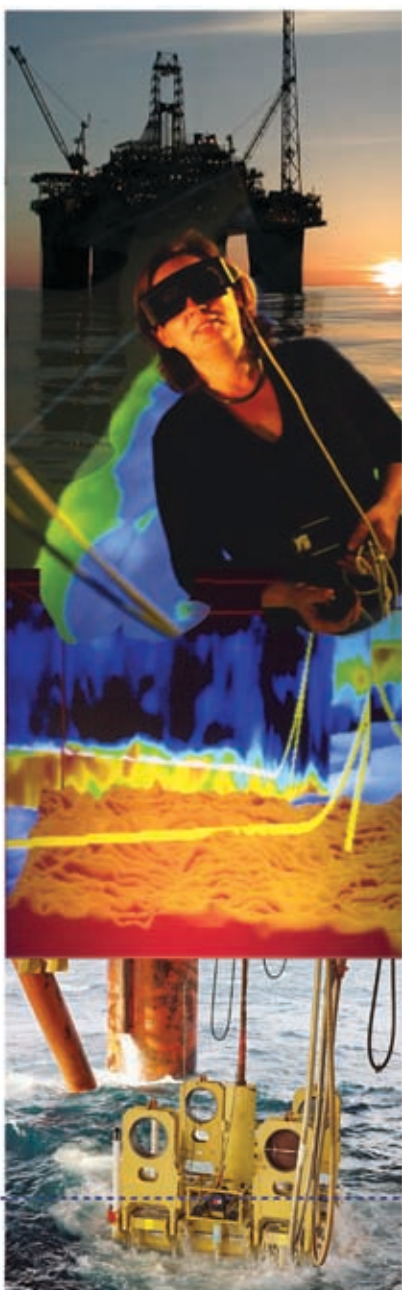
Technologically, the project represents great challenges, and when Gazprom chooses StatoilHydro as a partner in this project, then the company's credibility as a world class technology company is boosted and reinforced. The work ahead will be demanding, but at the same time it will give the company the unique possibility to join the project at an early stage and thus gain valuable experience from the beginning of the lifecycle of the project.

I know that the Shtokman project has been an important area of focus for both Hydro and Statoil for a long time, and this decision symbolizes a belief in StatoilHydro that internationally has been built up over a long period of time. I send my congratulations to StatoilHydro and wish them all the best in the future!

jens stoltenberg
The Norwegian Prime Minister

intsok – the norwegian oil & gas partners

INTSOK – the Norwegian Oil and Gas Partners – was established in 1997 with the objective of assisting in the internationalization of the industry. Today, INTSOK represents some 270 partner companies, including subsidiaries. These companies have proven their competitiveness by winning international contracts in supply chains for the petroleum sector.



The collaborating partners of INTSOK consist of the following:

Norwegian Government

- Ministry of Petroleum and Energy
- Ministry of Trade and Industry
- Ministry of Foreign Affairs

Partner companies

- Oil companies
- Main contractors
- Technology suppliers
- Service companies

Professional organizations

- Norwegian Shipowners' Association
- The Norwegian Oil Industry Association
- Federation of Norwegian Industries

INTSOK works to:

- **Assess** market opportunities and enhance the ability of the partners to compete in the global marketplace
- **Build** relations with clients and government representatives abroad
- **Provide** information about Norway's achievements in enhanced recovery, cost reduction strategies and health, environment and safety measures
- **Support** INTSOK partners in achieving their business goals through a network of local oil and gas advisors in Beijing, Houston, Lagos, Luanda, Mexico City, Moscow, Perth, Rio de Janeiro and St. John's



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internationalization of the norwegian petroleum cluster – a new drive



The StatoilHydro merger marks a new drive in the development of the Norwegian petroleum cluster. Its first major success was the Shtokman agreement with Gazprom which will allow StatoilHydro a significant role in the development of the giant Arctic gas field. Shtokman can be the catalyst for developing and adopting technologies that will ensure safe and environmentally sound operations in the sensitive Arctic region. The agreement signed with Gazprom is the result of long and determined efforts from both Statoil and Hydro, actively supported by Norwegian authorities and the Norwegian supplier and service industry that has provided Gazprom with valuable information and an understanding of the challenges of developing the field 550 kilometres from shore. The importance

of INTSOK's Russian – Norwegian partnership program will only be strengthened as a result.

Statoil and Hydro have been partners and competitors on the Norwegian continental shelf for more than 30 years. They have challenged each other and worked closely with Norwegian and international supplier and service companies in developing new technologies. The two companies have been instrumental in supporting the development of 3D, 4D and 4C seismic, tools for horizontal drilling, subsea installations and processing, 3-phase flow simulations and meters, boosting and pumping, intelligent wells and digital oil field technologies.

Hydro's success in developing the thin oil layer in the Troll Field and the considerable investments in enhanced oil recovery technologies have resulted in substantial financial benefits for the Norwegian society. This experience certainly has a great value for clients and societies abroad. One area of major concern is global climate change where StatoilHydro can build on its success in separating CO₂ from the Sleipner gas and storing it in an under ground reservoir. The removal of CO₂ and even the use of it for enhanced oil recovery could become an important tool for battling climate change.

The Norwegian continental shelf has become a test ground for new technological solutions which have become benchmarks and are being used worldwide.

For the last 10 to 15 years Statoil and Hydro have been pursuing opportunities abroad. Their merger has strengthened their joint position in West Africa as well as in North Africa. Brazil can become a stronghold for the new company, both in exploration and development. StatoilHydro has also built an exciting portfolio in the Gulf of Mexico. StatoilHydro should have the best foundation for further international growth.

The Norwegian supplier and service industry is well established in Russia and several other markets and has aggressive plans to continue its expansion abroad. With one major Norwegian oil company present internationally, INTSOK will work together with the industry to present our experiences and our technological and environmentally friendly solutions abroad. Good governance, transparency and accountability and a strong stand against corruption will have to be on top of the agenda – in StatoilHydro as well as the rest of the Norwegian petroleum industry.

gulbrand wangen

Managing Director – INTSOK
(Norwegian Oil & Gas Partners)

products / equipment/ materials

ARCHITECTURAL/BUILDING MATERIALS

Doors, Windows & Shutters

Rapp Bomek AS	94
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CHEMICALS/OILS/PAINTS

Simtronics ASA	106
----------------	-----

COMPRESSORS/EXPANDERS/ BLOWERS & ACCESSORIES

Blowers & Fans

ABB AS	45
Novenco AS	89

Compressors

Aibel AS	49
Framo Engineering AS	71
IKM Testing AS	77
National Oilwell Norway AS	86
AS Trans Construction	114

Gas Expanders

AS Trans Construction	114
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COMPUTER & COMMUNICATION EQUIPMENT

Audio/Video Equipment & Accessories

Semco Maritime AS	101
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Communication Equipment & Accessories

FMC Kongsberg Subsea AS	69
Semco Maritime AS	101

Databases, Software Development Tools

FMC Kongsberg Subsea AS	69
National Oilwell Norway AS	86
Semco Maritime AS	101
Tektonisk	110

Technical Oil/Gas-Related Software Systems (Reservoir, Geological, Drilling, etc.)

ABB AS	45
Aker Kværner ASA	50
FMC Kongsberg Subsea AS	69
MARINTEK	82
National Oilwell Norway AS	86
Odfjell Drilling AS	91

Telecommunication Equipment & Systems

ABB AS	45
Miros AS	84
National Oilwell Norway AS	86
Semco Maritime AS	101

Utility Software

National Oilwell Norway AS	86
Optimum Production AS	92

COOLING/HEATING/VENTILATION/AIR CONDITIONING EQUIPMENT

Air Fans

IKM Testing AS	77
Novenco AS	89
Semco Maritime AS	101
AS Trans Construction	114

Cooling & Refrigeration Units

Novenco AS	89
Semco Maritime AS	101
AS Trans Construction	114

Dampers & Accessories

Novenco AS	89
Semco Maritime AS	101
AS Trans Construction	114

Ducting, etc.

Novenco AS	89
Semco Maritime AS	101
AS Trans Construction	114

Filters, Coalescers & Accessories

Novenco AS	89
Semco Maritime AS	101
AS Trans Construction	114

Heating Coils/Units (Electric, Steam, Water, etc.)

ENWA AS	65
IKM Testing AS	77
Nexans Norway AS	88
Novenco AS	89
Semco Maritime AS	101
AS Trans Construction	114

Humidifiers, Driers, etc.

ENWA AS	65
Novenco AS	89
Semco Maritime AS	101
AS Trans Construction	114

HVAC System Packages

ENWA AS	65
National Oilwell Norway AS	86
Novenco AS	89
Semco Maritime AS	101
AS Trans Construction	114

DRILLING EQUIPMENT

BOP & Accessories

Aker Kværner ASA	50
National Oilwell Norway AS	86
Sense EDM AS	102

Coil Tubing Tools & Accessories

Tomax AS	112
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Casing, Tubing, Liner, Connectors & Accessories (OCTG)

Aker Kværner ASA	50
FMC Kongsberg Subsea AS	69
National Oilwell Norway AS	86

Cementing Equipment & Line Hanger Systems

National Oilwell Norway AS	86
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Coil Tubing Tools & Accessories

Aker Kværner ASA	50
National Oilwell Norway AS	86
Tomax AS	112

Derricks & Accessories

Aker Kværner ASA	50
National Oilwell Norway AS	86
Sense EDM AS	102

Down Hole Pressure Control Equipment

FMC Kongsberg Subsea AS	69
National Oilwell Norway AS	86

Drilling & Mud Control Instruments

Aker Kværner ASA	50
National Oilwell Norway AS	86
Sense EDM AS	102
Thermtech AS	112

Drilling Machinery, Mud Equipment & Accessories

Aker Kværner ASA	50
National Oilwell Norway AS	86
Sense EDM AS	102

Drilling Tools & Retrievable Production Tools

Aker Kværner ASA	50
National Oilwell Norway AS	86
Tomax AS	112

Fishing & Repair Tools

Aker Kværner ASA	50
National Oilwell Norway AS	86

Pipe Handling & Lifting Equipment

Aker Kværner ASA	50
Ferguson Norge AS	68
National Oilwell Norway AS	86
READ ASA	95
Sense EDM AS	102
AS Trans Construction	114

Production String Components

Aker Kværner ASA	50
FMC Kongsberg Subsea AS	69
National Oilwell Norway AS	86

Production Surface Equipment

Aker Kværner ASA	50
FMC Kongsberg Subsea AS	69
National Oilwell Norway AS	86

Production Well Test & Monitoring Instruments

ABB AS	.45
Aker Kværner ASA	.50
National Oilwell Norway AS	.86

Subsea Equipment

Aker Kværner ASA	.50
IKM Testing AS	.77
Nexans Norway AS	.88
Oceaneering Rotator AS	.90
AS Trans Construction	.114

Wellhead Equipment, X-Mas Trees & Accessories

Aker Kværner ASA	.50
National Oilwell Norway AS	.86

Wireline Equipment & Accessories

Aker Kværner ASA	.50
National Oilwell Norway AS	.86

DRIVERS & ACCESSORIES

Engines

ABB AS	.45
National Oilwell Norway AS	.86
Rolls-Royce Marine	.96

Gear Boxes, Gear Units, Couplings

National Oilwell Norway AS	.86
Rolls-Royce Marine	.96

Hydraulic Drivers

ABB AS	.45
Aker Kværner ASA	.50
National Oilwell Norway AS	.86
Semco Maritime AS	.101

Propulsion Units & Accessories

Rolls-Royce Marine	.96
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Turbines

Rolls-Royce Marine	.96
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ELECTRICAL EQUIPMENT & MATERIALS

Cables, Cords, Wires & Accessories

Bennex AS	.54
Nexans Norway AS	.88
Semco Maritime AS	.101
TESS	.111

Cable Racks & Trays

Semco Maritime AS	.101
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Cathodic Protection Equipment

Semco Maritime AS	.101
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Distribution Equipment & Materials (Circuit Breakers, Junction/Terminal Boxes, etc.)

ABB AS	.45
National Oilwell Norway AS	.86
Semco Maritime AS	.101

Electrical Connectors – Subsea

ABB AS	.45
Aker Kværner ASA	.50

Generators, Power Sources, Units & Accessories

ABB AS	.45
Bennex AS	.54
National Oilwell Norway AS	.86
Rolls-Royce Marine	.96
Semco Maritime AS	.101

Lamps, Lighting Fixtures, Lighting Equipment, etc.

Jotron AS	.79
Semco Maritime AS	.101

Rectifiers, Inverters & Converters

Semco Maritime AS	.101
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Switch/Control Equipment, Plugs, Connectors, etc.

ABB AS	.45
Bennex AS	.54
Semco Maritime AS	.101

Transformers & Accessories

Bennex AS	.54
National Oilwell Norway AS	.86
Semco Maritime AS	.101

Transits & Glands

Semco Maritime AS	.101
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ENVIRONMENTAL EQUIPMENT/ PRODUCTS

Fresh Water Integrity

ENWA AS	.65
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Oil Recovery Equipment & Accessories

Aker Kværner ASA	.50
Miros AS	.84
TESS	.111

Waste Gas Treatment/Recovery Equipment

Aibel AS	.49
ProPure AS	.93

Wastewater Disposal/Recovery Equipment

Aibel AS	.49
Hamworthy	.74
ProPure AS	.93

HEATERS/FURNACES/BOILERS, ETC.

IKM Testing AS	.77
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HEAT EXCHANGERS/HEAT TRANSFER EQUIPMENT

Closed Loop Water Treatment

ENWA AS	.65
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Hamworthy	.74
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INSTRUMENTATION/COMMUNICATION & PROCESS CONTROL EQUIPMENT/ MATERIALS

Acoustic Equipment

Semco Maritime AS	.101
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Semco Maritime AS	.101
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Control Panels & Control Stations

ABB AS	.45
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ABB AS	.45
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ABB AS	.45
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Semco Maritime AS	.101

Instrument Tubing & Fittings

ABB AS	.45
National Oilwell Norway AS	.86
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TESS	.111

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Ship Gears

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Nemo Engineering AS	.87

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National Oilwell Norway AS	.86
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Framo Engineering AS	.71
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Ballast Pumps

Aker Kværner ASA	.50
Hamworthy	.74

Centrifugal Pumps			
Aibel AS	49		
Aker Kværner ASA	50		
Hamworthy	74		
IKM Testing AS	77		
Deepwell Cargo Pumps			
Hamworthy	74		
Fire Pumps			
Aker Kværner ASA	50		
Hamworthy	74		
SAFETY/PROTECTION/SECURITY/ FIRE-FIGHTING EQUIPMENT			
Escape Tools/Equipment			
VIKING Life-Saving Equipment Norway AS	118		
Fire-Fighting Equipment/Products			
EAS-Automation AS	63		
Semco Maritime AS	101		
Simtronics ASA	106		
TESS	111		
Trelleborg Viking AS	115		
VIKING Life-Saving Equipment Norway AS	118		
Fire/Gas Detection/Protection Systems			
ABB AS	45		
EAS-Automation AS	63		
Semco Maritime AS	101		
Simtronics ASA	106		
Trelleborg Viking AS	115		
Flame-Retardant Work Wear			
Helly Hansen Pro AS	76		
Inert Gas Systems/Nitrogen Systems			
Hamworthy	74		
Semco Maritime AS	101		
Simtronics ASA	106		
Safety & Protection Equipment/ Products, Life Boats & Life Rafts			
Helly Hansen Pro AS	76		
Jotron AS	79		
Maritime Partner AS	83		
Miros AS	84		
National Oilwell Norway AS	86		
Rapp Bomek AS	94		
VIKING Life-Saving Equipment Norway AS	118		
STEEL/METAL MATERIALS			
National Oilwell Norway AS	86		
TANKS/VESSELS/COLUMNS, ETC.			
Columns & Accessories			
Aibel AS	49		
Aker Kværner ASA	50		
Pressure Vessels, Drums, Accumulators			
Aibel AS	49		
Aker Kværner ASA	50		
IKM Testing AS	77		
National Oilwell Norway AS	86		
Storage Tanks incl. Spheres & Accessories			
Ferguson Norge AS	68		
AS Trans Construction	114		
VALVES & ACCESSORIES			
Actuators & Various Valve Instrumentation			
Ahlsell Oil & Gas AS	46		
Haakon Ellingsen AS	73		
IKM Testing AS	77		
National Oilwell Norway AS	86		
Valves			
Ahlsell Oil & Gas AS	46		
Haakon Ellingsen AS	73		
National Oilwell Norway AS	86		
TESS	111		
VESSELS			
Diving Support Vessels			
Acergy Norway AS	48		
Aker Kværner ASA	50		
Rolls-Royce Marine	96		
ROV Support Vessels			
Acergy Norway AS	48		
Aker Kværner ASA	50		
DeepOcean ASA	59		
Rolls-Royce Marine	96		
Stand-by Vessels			
Rolls-Royce Marine	96		
Supply Vessels			
DeepOcean ASA	59		
National Oilwell Norway AS	86		
Rolls-Royce Marine	96		
Tug Vessels			
Aker Kværner ASA	50		
National Oilwell Norway AS	86		
Rolls-Royce Marine	96		
WORKSHOP & HAND TOOLS			
AS Trans Construction	114		
OTHER PRODUCTS/ EQUIPMENT & MATERIALS			
LNG Liquefaction Plants			
ABB AS	45		
Aker Kværner ASA	50		
Hamworthy	74		
LNG Regasification Plants			
Aker Kværner ASA	50		
Hamworthy	74		
Trio AF Teknikk AS	116		
LNG Reliquefaction Plants			
ABB AS	45		
Hamworthy	74		
LPG Cargo Handling Systems			
Hamworthy	74		
Uniforms & Other Types of Clothing			
Helly Hansen Pro AS	76		
VOC Recovery Systems			
Hamworthy	74		
services			
CERTIFICATION SERVICES			
Det Norske Veritas (DNV)	61		
IKM Testing AS	77		
West Contractors AS	119		
CLASSIFICATION			
Det Norske Veritas (DNV)	61		
West Contractors AS	119		
CONSTRUCTION/MODIFICATION/ REPAIR/MAINTENANCE SERVICES			
Semco Maritime AS	101		
West Contractors AS	119		
CONSULTANCY SERVICES			
Advertising/PA/PR			
Maritime Colours AS	120		
Asset Valuation			
Det Norske Veritas (DNV)	61		
Odfjell Drilling AS	91		
Optimum Production AS	92		
Cost & Planning			
Acergy Norway AS	48		
Aibel AS	49		
Aker Kværner ASA	50		
Dovre International AS	62		
Odfjell Drilling AS	91		
Design Services (Industrial Design, Web Design, etc.)			
Acergy Norway AS	48		
Aker Kværner ASA	50		
Dovre International AS	62		
Maritime Colours AS	120		
National Oilwell Norway AS	86		
Odfjell Drilling AS	91		
Disposal of Redundant Installations/Units			
Acergy Norway AS	48		
Aker Kværner ASA	50		
Det Norske Veritas (DNV)	61		
Dovre International AS	62		
West Contractors AS	119		
Energy Conservation Services			
Aibel AS	49		
SINTEF	104		
General Management Consultancy Services			
Acergy Norway AS	48		
Aker Kværner ASA	50		
Det Norske Veritas (DNV)	61		
Dovre International AS	62		
Falck Nutec Crisis Management AS	67		

Maritime Colours AS	120	Dovre International AS	62	Welding & Other Jointing Services	
MULTICONSULT/NORPLAN	85	MULTICONSULT/NORPLAN	85	Aceryg Norway AS	48
National Oilwell Norway AS	86	National Oilwell Norway AS	86	Det Norske Veritas (DNV)	61
West Contractors AS	119	Odfjell Drilling AS	91	Odfjell Drilling AS	91
		Scandpower	99		
Geological Consultancy Services		Reservoir Consultancy Services		DRILLING SERVICES	
SINTEF	104	Aker Kværner ASA	50	Cased Hole Logging (Gyro, Perforation, PLT, Gauges)	
University of Oslo, Faculty of Mathematics and Natural Sciences	117	Optimum Production AS	92	Aker Kværner ASA	50
		SINTEF	104		
Geophysical Consultancy Services		Risk Analysis		Drill Pipe Rental	
Aker Kværner ASA	50	Aker Kværner ASA	50	Odfjell Drilling AS	91
SINTEF	104	Det Norske Veritas (DNV)	61		
University of Oslo, Faculty of Mathematics and Natural Sciences	117	Dovre International AS	62	Drilling Fluids/Mud Services	
		Falck Nutech Crisis Management AS	67	Aker Kværner ASA	50
Health, Safety & Environment		MARINTEK	82		
Aceryg Norway AS	48	National Oilwell Norway AS	86	Drilling Semi-Submersibles/ Jackups	
Aibel AS	49	Odfjell Drilling AS	91	Aker Kværner ASA	50
Akvaplan-Niva AS	51	Scandpower	99	Odfjell Drilling AS	91
Det Norske Veritas (DNV)	61				
Dovre International AS	62	Simulation Services		Exploration & Development Services	
Falck Nutech Crisis Management AS	67	Aibel AS	49	DNO ASA	60
National Oilwell Norway AS	86	Complex Flow Design AS	57	FMC Kongsberg Subsea AS	69
Odfjell Drilling AS	91	Marine Cybernetics AS	81		
Scandpower	99	MARINTEK	82	Mud Logging	
SINTEF	104	Odfjell Drilling AS	91	FMC Kongsberg Subsea AS	69
		Optimum Production AS	92		
Legal Services		SINTEF	104	Production Drilling	
Dovre International AS	62			Odfjell Drilling AS	91
Wikborg Rein	123	Staff Search, Staff Selection Service			
		Odfjell Drilling AS	91	Reservoir Services	
Market Research				Aker Kværner ASA	50
Dovre International AS	62	Technical Documentation/Document Control		READ ASA	95
Maritime Colours AS	120	Aceryg Norway AS	48		
		Aibel AS	49	Snubbing & Coiled Tubing	
Material Administration		Aker Kværner ASA	50	Aker Kværner ASA	50
Aceryg Norway AS	48	Dovre International AS	62		
Dovre International AS	62	EAS-Automation AS	63	Well Completion Services	
Tektonisk	110	J. Martens AS	78	Aker Kværner ASA	50
Odfjell Drilling AS	91	Tektonisk	110	FMC Kongsberg Subsea AS	69
West Contractors AS	119	Odfjell Drilling AS	91		
				Well Overhauling/Stimulation Services	
Meteorological Services		Third-Party Evaluation/Verification Services		Aker Kværner ASA	50
SINTEF	104	Aibel AS	49	FMC Kongsberg Subsea AS	69
		Det Norske Veritas (DNV)	61		
Petrophysical Consultancy Services		Dovre International AS	62	Well Testing	
SINTEF	104	EAS-Automation AS	63	FMC Kongsberg Subsea AS	69
		Falck Nutech Crisis Management AS	67		
Purchasing & Contract Services		Marine Cybernetics AS	81	Wellhead Services	
Aceryg Norway AS	48	MARINTEK	82	Aker Kværner ASA	50
Aker Kværner ASA	50	Odfjell Drilling AS	91	FMC Kongsberg Subsea AS	69
Dovre International AS	62	SINTEF	104		
National Oilwell Norway AS	86			Wireline Services	
Odfjell Drilling AS	91	Training, Personnel Systems		Aker Kværner ASA	50
West Contractors AS	119	Autronica Fire and Security AS, Div. Oil & Gas	53	FMC Kongsberg Subsea AS	69
		Falck Nutech Crisis Management AS	67	Odfjell Drilling AS	91
Quality Assurance QA/QC		MARINTEK	82		
Aceryg Norway AS	48	Odfjell Drilling AS	91	Workover	
Aibel AS	49			Aker Kværner ASA	50
Aker Kværner ASA	50			FMC Kongsberg Subsea AS	69
Det Norske Veritas (DNV)	61			Odfjell Drilling AS	91

ENGINEERING SERVICES

Civil Engineering/Concrete Structures

Aker Kværner ASA	.50
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
MULTICONSULT/NORPLAN	.85
National Oilwell Norway AS	.86

Construction Management & Supervision

Aibel AS	.49
Aker Kværner ASA	.50
Dovre International AS	.62
MULTICONSULT/NORPLAN	.85
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Semco Maritime AS	.101
West Contractors AS	.119

Drilling/Mud Engineering Services

Aker Kværner ASA	.50
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
SINTEF	.104
West Contractors AS	.119

Electro/Instrumentation

ABB AS	.45
Aibel AS	.49
Aker Kværner ASA	.50
Bennex AS	.54
Dovre International AS	.62
EAS-Automation AS	.63
MULTICONSULT/NORPLAN	.85
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Semco Maritime AS	.101
SINTEF	.104
West Contractors AS	.119

Equipment/Mechanical

Aibel AS	.49
Aker Kværner ASA	.50
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
EAS-Automation AS	.63
MULTICONSULT/NORPLAN	.85
National Oilwell Norway AS	.86
Nemo Engineering AS	.87
Odfjell Drilling AS	.91
Semco Maritime AS	.101
AS Trans Construction	.114

Fire & Gas Protection Systems

ABB AS	.45
Aibel AS	.49
Aker Kværner ASA	.50
Autronica Fire and Security AS, Div. Oil & Gas	.53
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
EAS-Automation AS	.63
MULTICONSULT/NORPLAN	.85

National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Semco Maritime AS	.101
Simtronics ASA	.106

Marine Technology/ Hydro-/Aerodynamics

Aker Kværner ASA	.50
Boa Group	.56
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
MARINTEK	.82
Odfjell Drilling AS	.91

Material Technology/Anti-Corrosion/

Surface Protection

Aker Kværner ASA	.50
D&F Group AS	.58
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
MULTICONSULT/NORPLAN	.85
Odfjell Drilling AS	.91
Semco Maritime AS	.101
SINTEF	.104
Trelleborg Viking AS	.115
West Contractors AS	.119

Pipelines

Acery Norway AS	.48
Aker Kværner ASA	.50
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
MARINTEK	.82
National Oilwell Norway AS	.86
Nemo Engineering AS	.87
Odfjell Drilling AS	.91
SINTEF	.104
West Contractors AS	.119

Process/Utilities/Piping/HVAC

Aibel AS	.49
Aker Kværner ASA	.50
D&F Group AS	.58
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Semco Maritime AS	.101
West Contractors AS	.119

Produced Water Treatment

Aker Kværner ASA	.50
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
SINTEF	.104

Production/Petroleum Engineering Services

ABB AS	.45
Aibel AS	.49
Aker Kværner ASA	.50
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
National Oilwell Norway AS	.86
Nemo Engineering AS	.87
Optimum Production AS	.92

Project Administration

ABB AS	.45
Acery Norway AS	.48
Aker Kværner ASA	.50
Autronica Fire and Security AS, Div. Oil & Gas	.53
Bennex AS	.54
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
FMC Kongsberg Subsea AS	.69
MULTICONSULT/NORPLAN	.85
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Semco Maritime AS	.101
SINTEF	.104
West Contractors AS	.119

Steel/Construction/Architectural

Acery Norway AS	.48
Aibel AS	.49
Aker Kværner ASA	.50
D&F Group AS	.58
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
MARINTEK	.82
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Semco Maritime AS	.101
AS Trans Construction	.114
West Contractors AS	.119

Subsea/Diving/ROV Technology

Acery Norway AS	.48
Aker Kværner ASA	.50
Bennex AS	.54
Det Norske Veritas (DNV)	.61
Dovre International AS	.62
Nemo Engineering AS	.87
SINTEF	.104

Telecommunications

ABB AS	.45
Aibel AS	.49
Dovre International AS	.62
National Oilwell Norway AS	.86
Semco Maritime AS	.101

Wastewater Treatment

Aker Kværner ASA	.50
Dovre International AS	.62
SINTEF	.104

Weight Control

Dovre International AS	.62
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91

FINANCIAL & INSURANCE SERVICES

Eksportfinans ASA	.64
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INFORMATION SYSTEMS/INFORMATION TECHNOLOGY/COMMUNICATION SERVICES

CAD/CAP Services

National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Semco Maritime AS	.101

Computer-Based Modelling

Odfjell Drilling AS	.91
Optimum Production AS	.92
MARINTEK	.82
Maritime Colours AS	.120
SINTEF	.104
University of Oslo, Faculty of Mathematics and Natural Sciences	.117

**Computer-Based Simulation/
Training Programs**

Complex Flow Design AS	.57
MARINTEK	.82
Maritime Colours AS	.120
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Optimum Production AS	.92

Data Management Services

Dovre International AS	.62
FMC Kongsberg Subsea AS	.69
National Oilwell Norway AS	.86
Optimum Production AS	.92
Tektonisk	.110

Data & Message Transmitting Services

FMC Kongsberg Subsea AS	.69
National Oilwell Norway AS	.86
SINTEF	.104

Telecommunication Installation/Support

ABB AS	.45
National Oilwell Norway AS	.86
Semco Maritime AS	.101

**INSPECTION/CONTROL & TESTING
SERVICES**

ABB AS	.45
Aibel AS	.49
D&F Group AS	.58
Det Norske Veritas (DNV)	.61
IKM Testing AS	.77
Marine Cybernetics AS	.81
MARINTEK	.82
West Contractors AS	.119

**INSTALLATION SERVICES/
ABANDONMENT SERVICES/
MARINE CONTRACTING****Cranes/Crane Barges**

Acery Norway AS	.48
Aker Kværner ASA	.50
Boa Group	.56
Det Norske Veritas (DNV)	.61
National Oilwell Norway AS	.86

Diving/ROV

Acery Norway AS	.48
Boa Group	.56
DeepOcean ASA	.59

Dredging

Acery Norway AS	.48
DeepOcean ASA	.59
Nexans Norway AS	.88
Scan Mudring AS	.98

Floating Storage Unit (FSU)

Aker Kværner ASA	.50
Det Norske Veritas (DNV)	.61
National Oilwell Norway AS	.86

Gravel & Rock Dumping

Aker Kværner ASA	.50
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**Hook-Up/Commissioning/
Decommissioning Services**

Acery Norway AS	.48
Aibel AS	.49
Aker Kværner ASA	.50
D&F Group AS	.58
DeepOcean ASA	.59
Det Norske Veritas (DNV)	.61
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Scan Mudring AS	.98

Installation of Subsea Packages

Acery Norway AS	.48
Aker Kværner ASA	.50
Bennex AS	.54
Boa Group	.56
DeepOcean ASA	.59
Det Norske Veritas (DNV)	.61
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91

Mobile Production Units

Bennex AS	.54
Det Norske Veritas (DNV)	.61
National Oilwell Norway AS	.86

Pipelining

Acery Norway AS	.48
Aker Kværner ASA	.50
Det Norske Veritas (DNV)	.61
National Oilwell Norway AS	.86

**Removal & Disposal of Redundant
Installations/Units**

Acery Norway AS	.48
Aker Kværner ASA	.50
DeepOcean ASA	.59
Det Norske Veritas (DNV)	.61

Subsea Pipeline Protection

Acery Norway AS	.48
Det Norske Veritas (DNV)	.61
IKM Testing AS	.77
Nemo Engineering AS	.87
Scan Mudring AS	.98
Trelleborg Viking AS	.115

Trenching & Excavation

Aker Kværner ASA	.50
DeepOcean ASA	.59
Nexans Norway AS	.88
Scan Mudring AS	.98

PETROLEUM TECHNOLOGY SERVICES**Biostratigraphy Services**

University of Oslo, Faculty of Mathematics and Natural Sciences	.117
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Core Analysis, Flooding Services

Aker Kværner ASA	.50
SINTEF	.104

Fluid Characterization, incl. PVT Services

SINTEF	.104
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Organic Geochemistry Services

University of Oslo, Faculty of Mathematics and Natural Sciences	.117
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Petrology, Diagenesis Services

Aker Kværner ASA	.50
SINTEF	.104
University of Oslo, Faculty of Mathematics and Natural Sciences	.117

Reservoir Evaluation

Aker Kværner ASA	.50
READ ASA	.95
SINTEF	.104

RESEARCH & DEVELOPMENT (R&D)**Drilling**

Aker Kværner ASA	.50
DNO ASA	.60
MARINTEK	.82
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
SINTEF	.104

Engineering

ABB AS	.45
Acery Norway AS	.48
Aibel AS	.49
Aker Kværner ASA	.50
Bennex AS	.54
FMC Kongsberg Subsea AS	.69
MARINTEK	.82
National Oilwell Norway AS	.86
Nemo Engineering AS	.87
Oceaneering Rotator AS	.90
Odfjell Drilling AS	.91
READ ASA	.95

Geological & Geophysical

Acery Norway AS	.48
Aker Kværner ASA	.50
READ ASA	.95
SeaBed Geophysical AS	.100
SINTEF	.104
University of Oslo, Faculty of Mathematics and Natural Sciences	.117

Information Technology

ABB AS	.45
FMC Kongsberg Subsea AS	.69
MARINTEK	.82
National Oilwell Norway AS	.86
SINTEF	.104
University of Oslo, Faculty of Mathematics and Natural Sciences	.117

Materials

SINTEF	.104
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Oil & Gas Production

ABB AS	.45
Aibel AS	.49
Aker Kværner ASA	.50
DNO ASA	.60
SINTEF	.104

Petrochemicals

Aibel AS	.49
Aker Kværner ASA	.50

Refinery & Other Downstream Technology

Aker Kværner ASA	.50
SINTEF	.104

Safety & Environmental

Akvaplan-Niva AS	.51
Complex Flow Design AS	.57
Det Norske Veritas (DNV)	.61
MARINTEK	.82
National Oilwell Norway AS	.86
Odfjell Drilling AS	.91
Scandpower	.99
SINTEF	.104

Subsea

Acergy Norway AS	.48
Aker Kværner ASA	.50
MARINTEK	.82
Nemo Engineering AS	.87
Nexans Norway AS	.88
Oceaneering Rotator AS	.90
Scan Mudring AS	.98
SINTEF	.104

University Education

University of Oslo, Faculty of Mathematics and Natural Sciences	.117
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SEISMIC SERVICES

EMGS ASA	.65
READ ASA	.95
University of Oslo, Faculty of Mathematics and Natural Sciences	.117

SURVEYING/POSITIONING SERVICES

Chart & Map Production	
Acergy Norway AS	.48
DeepOcean ASA	.59

Geophysical Services

Acergy Norway AS	.48
DeepOcean ASA	.59
EMGS ASA	.65
READ ASA	.95
University of Oslo, Faculty of Mathematics and Natural Sciences	.117

Geotechnical Services

DeepOcean ASA	.59
EMGS ASA	.65
SeaBed Geophysical AS	.100
University of Oslo, Faculty of Mathematics and Natural Sciences	.117

Navigation Systems

DeepOcean ASA	.59
Semco Maritime AS	.101

Oceanographic Services

Acergy Norway AS	.48
DeepOcean ASA	.59
EMGS ASA	.65
University of Oslo, Faculty of Mathematics and Natural Sciences	.117

Rig Positioning

Acergy Norway AS	.48
Aker Kværner ASA	.50

Soil Investigation

DeepOcean ASA	.59
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TRANSPORT TECHNOLOGY

Det Norske Veritas (DNV)	.61
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TRANSPORTATION/SUPPLY/ DISPOSAL SERVICES

Boa Group	.56
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multi-discipline/ combined supplies and/or services (packages)

COMMISSIONING

Aibel AS	.49
Aker Kværner ASA	.50
EAS-Automation AS	.63
FMC Kongsberg Subsea AS	.69
IKM Testing AS	.77
National Oilwell Norway AS	.86
Semco Maritime AS	.101
West Contractors AS	.119

CONSTRUCTION

Aibel AS	.49
Aker Kværner ASA	.50
FMC Kongsberg Subsea AS	.69
National Oilwell Norway AS	.86
Nemo Engineering AS	.87
Semco Maritime AS	.101
AS Trans Construction	.114
West Contractors AS	.119

ENGINEERING

Aibel AS	.49
Aker Kværner ASA	.50
Det Norske Veritas (DNV)	.61
FMC Kongsberg Subsea AS	.69
National Oilwell Norway AS	.86
Nemo Engineering AS	.87
Semco Maritime AS	.101
AS Trans Construction	.114
West Contractors AS	.119

INSTALLATION

Aibel AS	.49
Aker Kværner ASA	.50
FMC Kongsberg Subsea AS	.69
National Oilwell Norway AS	.86
Semco Maritime AS	.101
West Contractors AS	.119

INTEGRATED SERVICES

Extended Well Test/Early Production Services	
Aker Kværner ASA	.50
FMC Kongsberg Subsea AS	.69
Optimum Production AS	.92

Hydrocarbon Reservoir Development & Production Services

Aker Kværner ASA	.50
FMC Kongsberg Subsea AS	.69
Optimum Production AS	.92

Integrated Operations

Odfjell Drilling AS	.91
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Well Management/Construction Services

Aker Kværner ASA	.50
FMC Kongsberg Subsea AS	.69
Odfjell Drilling AS	.91
Optimum Production AS	.92

PROCUREMENT

Aibel AS	.49
Dovre International AS	.62
West Contractors AS	.119

strengthening the strategic high north partnerships

By Kristian Kahrs

When StatoilHydro won the contract to take part in the development of the enormous Shtokman gas field, which has enough gas for the entire European Union for seven years, it did not come as a surprise for the players in the Norwegian petroleum industry. StatoilHydro and numerous Norwegian companies with great experience in operating the rough and ice-cold arctic waters have already made their reputations in Russia, and they had won important contracts with the Russians before.

Still, the Shtokman contract is important to showcase that Norwegians are world leading in developing petroleum resources in the High North where there is a fragile environment and ecosystem. StatoilHydro's contract was the result of a combined competence and long-term efforts from the Norwegian petroleum industry.

On the morning of October 25th Norwegian Prime Minister Jens Stoltenberg received a phone call from his Russian colleague, President Vladimir Putin. In this conversation President Putin informed the Prime Minister that StatoilHydro was to have a 24 percent share in the company that is to develop the Russian Shtokman field – the Shtokman Development Company (SCD).

The agreement gives StatoilHydro a 24 percent equity interest in Shtokman Development Company in which Gazprom (51 percent) and Total (25 percent) are the two other partners.

It is vital for the Norwegian Minister of Foreign Affairs, Jonas Gahr Støre (right) to have a strong strategy for the High North. "The networks between Norway and Russia will be expanded, first and foremost in areas connected with energy and management of the Barents Sea," he tells Norway Exports.

Shtokman Development Company will be responsible for the planning, financing and construction of the infrastructure necessary for the first phase of the Shtokman development and will own the infrastructure for 25 years from the start of commercial production. This includes offshore installations, pipeline to shore and the onshore processing plants for both liquefied natural gas (LNG) and piped gas.

Sharing the Barents Sea

Jonas Gahr Støre, the Norwegian Minister of Foreign Affairs, recognizes the Norwegian petroleum industry's Russian efforts through many years, but the

Shtokman contract could be a substantial door opener for other fields.

"We already have a good relationship to Russia in many fields. Thus the doors are already open," Gahr Støre says to Norway Exports. Final investment decisions will be made in 2009, and if StatoilHydro ends up investing substantial amounts in Shtokman, this is a ground breaking industrial project.

"This would engage new and important milieus on the Norwegian side. The networks between Norway and Russia will be expanded, first and foremost in areas



© Trym Ivar Bergsmo/ StatoilHydro



connected with energy and management of the Barents Sea,” Gahr Støre says.

Since Norway and Russia are sharing the Barents Sea, there is a great responsibility for both countries. “We have the same need to make sure that petroleum activity and shipping do not harm the environment and the rich fishing resources in the ocean. We have this on our daily agenda, and more topics will come as the contacts develop,” the foreign minister tells Norway Exports.

Even if relations between Norway and Russia are strong, the Shtokman agreement could boost cooperation further.

“Cooperation contributes to create and strengthen trust. And increased trust reduces tensions. Norway and Russia are already dependent on having a cooperative relationship about many matters in the north in areas like petroleum development, the marine environment and the management of fish resources. The cooperation between StatoilHydro and Gazprom contributes to strengthening these relations,” Gahr Støre says.

High North Strategy

For the Norwegian Government a coordinated strategy for the high north is of vital strategic importance, and therefore the Shtokman contract was welcome news for Prime Minister Stoltenberg.

“I’m very happy about the Shtokman contract because it fills our High North Strategy with definite content, and it is a big recognition of the knowledge and competence which is found in StatoilHydro and the ability this company has in developing big offshore gas fields,” Stoltenberg says.

In the Shtokman field there is enough gas to supply the entire European Union for seven years, and Stoltenberg is very happy that a Norwegian company is taking part in the development of this field.

“This is important for the energy security in Europe and the world; it is important for the environment, and not in the least it is important because it is a big recognition of Norway’s biggest company. And it is also important because this will develop the neighbourliness and cooperation between Russia and Norway,” Stoltenberg says.

Russia’s President Vladimir Putin has emphasized the importance of a strategic partnership between Norway and Russia for many years, and when StatoilHydro and Gazprom signed their agreement, it emphasized the patient building of trust over a long period of

time. “This gives concrete content to the strategic partnership between Norway and Russia,” Stoltenberg says.

The Norwegian Prime Minister also thinks it is important for StatoilHydro to be present in the Shtokman field because of the considerable Norwegian expertise in environmental exploitation of petroleum resources. “The participation also underlines our joint responsibility to ensure a sustainable management of the resources in the Barents Sea,” says Stoltenberg.

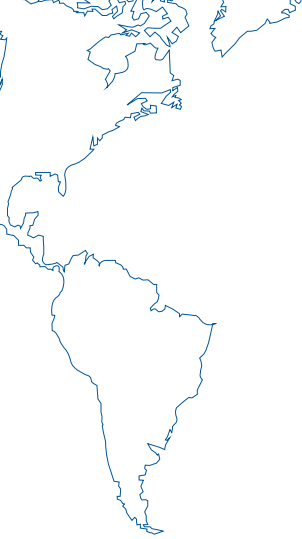
For over 30 years, Norway has acquired massive competence as the world’s leading offshore petroleum producer.

“StatoilHydro has gained an exceptional level of competence and experience from working offshore under demanding conditions on the Norwegian Continental Shelf. In addition, the company has worked in Russia for a long time. I share the expectations of the company that its participation will contribute to the

StatoilHydro has massive experience from petroleum exploration in harsh and arctic waters, and the Eirik Raude drilling rig has served them well.



© Øyvind Hagen/ StatoilHydro



successful development of the Shtokman field. This participation also shows that StatoilHydro is successful in competing for the major tasks internationally," says Minister of Petroleum and Energy Åslaug Haga.

Statoil-Hydro Merger a Key

The Shtokman field was discovered 18 years ago, and Norwegians with Statoil, Hydro and the Government have had a constant dialogue with the Russians, but Gazprom and Russian authorities never considered Statoil and Hydro as separate companies.

"It was demanding to explain in Moscow and to Russian authorities that Norway wanted to participate in Shtokman but that we had two companies that wanted to take part in Shtokman. Now we have one coordinated Norwegian effort through StatoilHydro. That was some of the reason why our government supported the merger, and therefore I am happy to see this," explains Stoltenberg.

The talks Jens Stoltenberg and the Norwegian Government have had with Russian authorities have been very important. The dialogue between the Bondevik Government and President Putin had earlier in the process has also been important. StatoilHydro is very satisfied with the support and backing it has received both from the Prime Minister and others.

StatoilHydro's experience with production of Liquefied Natural Gas (LNG) on the Snøhvit field in the Barents Sea made them a natural partner for Gazprom on the Shtokman field.

"This agreement represents an opportunity for StatoilHydro to participate in the development of Shtokman phase 1," says Helge Lund, CEO of StatoilHydro. "We are looking forward to cooperating with Gazprom and Total to realize this frontier project."

"The agreement signed today will open a new page in our cooperation with the merged StatoilHydro," says Alexei Miller, Chair of Gazprom. "We have giant reserves of gas in the Barents Sea, while our partners from Norway have good experience in the production and transportation of gas in harsh arctic conditions. Our joint efforts will be the keystone of success in the Arctic."

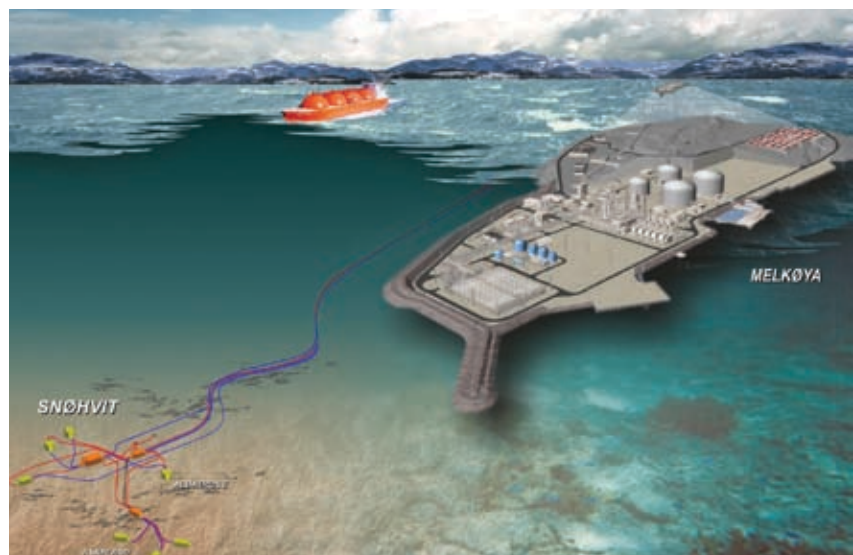
The agreement is the result of long and determined work from both Statoil and Hydro.

"Leveraging our technology, industrial experience and expertise from large offshore developments can provide long-term growth opportunities in Russia,"

Mr Lund adds. "We believe Shtokman can be a catalyst for developing and adopting technologies capable of operating efficiently and environmentally-safely in cold and harsh conditions. The entering into of this agreement is a strong demonstration of the joint capabilities of the merged company StatoilHydro."

The project planning phase aims at establishing an acceptable technical and commercial basis for the final investment decision, which is expected to take place in the second half of 2009. Until the final investment decision is made, StatoilHydro's exposure is limited to the company's share of the cost of planning and studies.

The Shtokman field, located in the Russian part of the Barents Sea, is the world's largest undeveloped offshore gas field with gas initially in place (GIIP) at around 3,700 billion cubic metres (bcm). The annual production is estimated to be 23.7 bcm for the first phase. The basis for phase 1 includes both LNG and piped gas.



© Even Emlandt/ StatoilHydro

norwegian companies

attractive for russian partnerships

By Kristian Kahrs

Even if the focus has been on the giants StatoilHydro and Gazprom after the Shtokman contract, there are numerous other players in the extensive Norwegian petroleum cluster to take market shares in Russia. Their combined efforts over several decades have made profitable partnerships between Russian and Norwegian companies possible.

INTSOK, the Norwegian Oil and Gas Partners, has a strong focus on the Russian markets, and they have worked hard to strengthen the ties between the Russian and Norwegian petroleum industry. Håkon Skretting is INTSOK's Regional Director for Australia, China and Russia, and he has the strong belief that a cooperative effort between Russian and Norwegian companies will benefit both parties greatly.

"We want to structure, increase the efficiency and motivate increased cooperation between Russian and Norwegian petroleum contractors. Norwegian companies will in many cases increase the possibilities to win new market shares in Russia if they can find the proper partners for cooperation," he says.

Twenty-five Percent of the World's Petroleum Resources

The Barents Sea could become Europe's most important petroleum region in the foreseeable future with estimates indicating that 25 percent of the world's undiscovered petroleum resources could be found in the Arctic. The Barents Sea is an area where many fields have been discovered and mapped.

The Prirazlomnoye oilfield south of Novaya Zemlya in Russia is ice-free for 110 days a year and the cold period lasts 230 days. In this area Norwegian offshore companies have utilized their thorough knowledge of offshore petroleum exploration.

While the Shtokman field is the most famous, Skretting believes that other petroleum fields in the Barents region and the Norwegian supply industry successes so far in Russia have been underestimated. One example could be the Prirazlomnoye oilfield located south of Novaya Zemlya in northern Russia on the Pechora sea shelf, at a distance of 60 kilometres from the shore.

"INTSOK has been working together with Sevmorneftegaz to search for potential suppliers to this field. The first time the management of Sevmorneftegaz visited Norway to meet the industry was back in 2002," he says.

Three dedicated workshops have been carried out and several of the suppliers who participated in the workshops have ended up as suppliers to Prirazlomnoye. "In this field Norwegian companies are the largest international contractors with a 25 percent share of all technology deliveries. Several of these contracts are the result of cooperation with Russian industry. Furthermore, two ice breakers have been constructed in Norway for this field," Skretting explains.

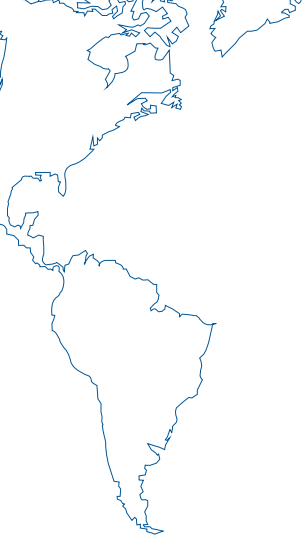
The Prirazlomnoye field will probably start producing oil in 2010. Further east of Novaya Zemlya in the Kara Sea and the Yamal Peninsula, there are tremendous possibilities for offshore companies with arctic competence for petroleum exploitation. Yamal holds Russia's biggest natural gas reserves, and in 2007 Gazprom invested considerable amounts of money to develop the Kharasavey and Bovanenko fields.

These fields were discovered in the late 1960s, but a lack of infrastructure has prevented the Russians from exploiting them. Skretting believes these extreme fields at 71° north could be a golden opportunity for the Norwegian petroleum industry in the long future.

"Operating in these rough conditions, Norwegian offshore technology and experience is very attractive for the Russians," he says. Norway has utilized the massive offshore experience and competence as a spearhead to enter the Russian markets.



© Sevmorneftegaz



But investment in the Russian offshore industry is not only going north. Sakhalin has been the main investment area so far, and the investment in the Far East will continue at a high level for the next 30 years at least. In the Caspian Sea Lukoil is developing Yuri Korchagin, and two more projects are in the pipeline.

Russian Partnership Programme

The project for Partnership between the Russian and Norwegian Oil and Gas Industries is the most comprehensive INTSOK has ever done. The objective of this project is to:

1. Support increased partnership between Russian and Norwegian oil and gas industry
2. Support Russia to reach its target for local content in offshore projects
3. Support the internationalization of Norwegian and Russian technology and services

“Several Russian companies want to have contact with Norwegian companies with specific offshore technology and experience. Thus, they could come in a position for the development of both Russian and Norwegian offshore fields,” he says, adding that INTSOK has included 240 Russian companies in a database for companies with a capacity and willingness to cooperate with Norwegian partners. These companies can be studied at a database on website: www.intsok.ru

Twenty-five percent of the world's petroleum resources could be found in the Arctic, and the Barents Sea could become Europe's most important petroleum region in the foreseeable future

“These companies' names and contact details are given to INTSOK by the Russian operators who are partners in the project. We don't want to have as many companies in the database as possible, but the companies who can be the right partners for the Norwegian companies,” says Skretting.

INTSOK has mapped the Russian and Norwegian companies under www.intsok.ru as a part of Part 1 of the project.

Part 2 of the project has the following elements:

1. Maintain and update the information on Web
2. Arrange meeting places, “Match making workshops”
3. Assist the companies individually

StatoilHydro, Gazprom, Sevmorneftegaz and Rubin are important partners in INTSOK's efforts to promote more interaction between Russian and Norwegian companies, but its main target group is small and medium enterprises (SMEs) within the petroleum cluster with specialized competence and possibilities to succeed in the Russian market. However, the project has also attracted larger enterprises who are also welcomed into the project.

St. Petersburg is the administrative centre for northern and western Russia, and the region is very central when it comes to engineering and choosing technology. However, while Russia is the world's largest gas producer in the world, the north western regions of Russia do not have a well developed infrastructure for the contractors in the oil



© Norwegian Petroleum Directorate



and gas sector. Skretting believes this is a great opportunity for Norwegian companies to offer their considerable competence to the Russians.

Project sponsors:

- StatoilHydro
- Ministry of Foreign Affairs
- Ministry of Petroleum and Energy
- INTSOK, The Norwegian Oil and Gas Partners
- The Barents Secretariat
- Greater Stavanger Economic Development
- Finnmark County
- Troms County
- Nordland County
- Hordaland County
- Rogaland County
- Innovation Norway (main office)
- Innovation Norway Finnmark
- Innovation Norway Troms
- Innovation Norway Nordland
- Innovation Norway Hordaland
- Innovation Norway Rogaland

Russian partners

- Gazprom
- Gazflot
- Sevmorneftegaz
- Lukoil
- Arktikshelfneftegaz
- CKB Rubin
- Krylov Institute
- Association of Manufacturers of Oil and Gas Equipment

Aker Kværner Pusnes has been a major player in the Russian offshore fields for a number of years, and the Arctic Bow Loading System can load oil in temperatures as low as -46 degrees C.

- Union of Oil and gas Industrialists of Russia
- Russian Union of Oil and Gas Service Companies

“We think Development of the Shtokman development will be a key project for cooperation between Russian and Norwegian industries,” Skretting says.

Proven North Sea Solutions

Siemens in Norway is the global leader of Siemens’ operations in the oil and gas fields, and it is also a part of INTOK’s partnership programme. Since the very beginning of the oil age on the Norwegian Continental Shelf (NCS), Siemens has been a supplier of innovative products and solutions. Siemens aims to capitalize further on the unique competence in the Norwegian offshore sector in order to reach its objectives of being a global leader in the fields of oil, gas and marine solutions.

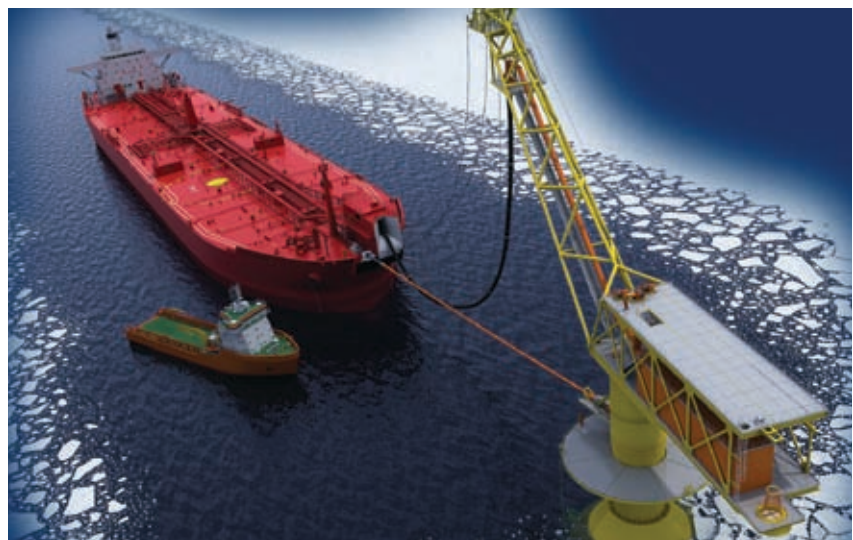
Dagfinn Wanderaas, Vice President for Siemens Oil & Gas Offshore, is Siemens’ foremost expert for the Russian petroleum markets, and he is seeing the Russian markets expanding rapidly as the Russians seek to increase their offshore petroleum production.

“We’re all over Russia, north and south, east and west, in the Barents Sea, the Baltic shelf, the Caspian Sea and in eastern Russia on the Sakhalin field,” Wanderaas says.

Siemens has built a solid reputation in Russia for 150 years, and combined with decades of strong Norwegian offshore competence on the NCS, this is quite interesting for the Russian offshore markets.

“The keyword is well-proven North Sea solutions. We started our activity in Russia in 1992, and we were not sure what this would give us. However, we met a competent and attentive audience, even if they did not know how to realize this into offshore technology,” says Wanderaas.

“We are delivering system solutions, not products, and we have taken over responsibility from the customers steering the projects in the right direction,” says Wanderaas, adding that he has been impressed with the thorough knowledge of basic science from Russian petroleum scientists. Siemens is always considering good engineers and scientists for its offshore petroleum efforts.



© Aker Kværner Pusnes

statoilhydro – a new chapter in the norwegian offshore industry

By Edward Milsom

The Norwegian Prime Minister, Jens Stoltenberg, has described the merger between oil giants Hydro and Statoil as “the start of a new era”. The start, perhaps, but it is also the end of a long process that has required the blessing of both the European Union, which approved the deal on 03 May this year, and the Norwegian Parliament, which completed its own scrutiny on 08 June. By the time StatoilHydro came into being on 01 October, the global petroleum industry was well aware of just how impressive this new giant would come to be.

StatoilHydro’s estimated revenue of NOK 480 billion places it on the Fortune Global 500 list at number nine in the world, if one is to include oil companies alone. Already the world’s leading offshore petroleum company, StatoilHydro also boasts being the world’s largest operator in deepwater fields, the third-largest net seller of crude oil, and arguably in possession of the most advanced technology for carbon capture and storage and deepwater operations. StatoilHydro aims to produce, on average, 1.7 million barrels of oil per day, and has a proven equivalent reserve of at least 6 billion barrels.

StatoilHydro is undisputedly a Scandinavian giant, but its focus is increasingly international. As it is, StatoilHydro has 31,000 employees working in more than 40 countries, and it is committed to long-term expansion. On 25 October 2007, StatoilHydro won a 24 percent ownership in the development company responsible for the development of the Shtokman field in the Barents Sea,

Statfjord A. Statoil has long had operations on the Norwegian Continental Shelf. The NPD emphasises that continuing operations on the NCS are vital for Norway’s socio-economic health.

and further acquisitions, especially in the Gulf of Mexico, seem likely. But, for the industry as a whole, it is hoped that the merger will also provide a higher profile for other Norwegian companies that stimulates their market potential.

Implications for the Industry and Subcontractors

The simple fact of StatoilHydro’s size is not the only factor contributing to its potential as a market leader. The whole may be worth more than the sum of its parts in the case of this merger, at least according to the Norwegian Petroleum Directorate’s Bente Nyland, who cautiously notes on NPD’s website that “The companies have justified their merger plan by a desire to become stronger internationally in the

fight over resources. Should StatoilHydro succeed in this ambition on the basis of its domestic operations, value creation could be higher than the two companies would have generated separately.” (27.4.2007, ‘Big Events’).

There are indeed notes of caution to be sounded. In light of the merger, one of the biggest challenges will be to maintain general activity levels on the Norwegian Continental Shelf (NCS), which is vital to Norway’s socio-economic health. If StatoilHydro’s foreign commitment and international growth potential have been enhanced by the merger, the advantages of focused strategies and specialisation remain with smaller companies.



© Øyvind Hagen / StatoilHydro



The NPD in particular has been keen to emphasise the importance of competition in the drive to stimulate a dynamic domestic industry. Over forty small to medium-sized companies have been pre-qualified for operations on the NCS since the turn of the century, and the Norwegian authorities are cautiously optimistic that the unification can provide certain advantages, not just for StatoilHydro, but also for more efficient industry-wide usage of human resources on the NCS.

Industry leaders, including Remi Eriksen, Chief Operating Officer of Det Norske Veritas (DNV), concur that the act of merging will itself create interest and opportunities in the industry that are beneficial to the Norwegian state and to company shareholders. “In the short term the number of key players in the Norwegian oil and gas industry is one down. However, more important is the general activity level which is influenced by many other factors such as access to acreage, license awards, stability in fiscal and tax conditions, investment in research, innovation and more. The StatoilHydro merger will create new opportunities for other oil companies – old and new – which are in for the long term and are committed to safely and responsibly creating value for their shareholders and the Norwegian State.”

Eriksen clearly believes that new opportunities for subcontractors are not about to disappear quickly. “The

The In salah project in Krechba, Algeria. StatoilHydro has 31,000 employees working in over 40 countries. The merger could open up further opportunities for international development.

Norwegian contractor and equipment supplier industry has been active and well positioned outside the Norwegian Continental Shelf for many years. With a stronger and bigger Norwegian player in the international arena, the totality of future opportunities for the Norwegian subcontractors can only be bigger,” he says.

StatoilHydro and Norwegian Foreign Policy

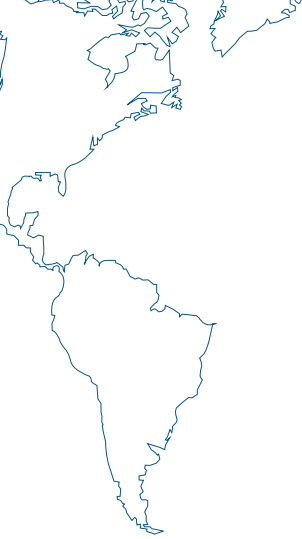
Public ownership of StatoilHydro is high, and is likely to remain so. The Norwegian Foreign Minister, Jonas Gahr Støre, addressed the StatoilHydro leadership forum, G-500, in Stavanger before the merger. “As Norwegians, we are, in effect, both shareholders and stakeholders of the company. How you manage the business – how you find, produce, transport and consume energy – is important to us, from both perspectives: the shareholders’ and the stakeholders’,” he explained (28.06.07). The high level of interest taken by the Norwegian government in the merger between StatoilHydro confirms not only

the size and importance of the unification, but in some ways reflects an implicit confidence that it is of benefit not just to individual parties, but to all Norwegians – and that includes the smaller companies operating on the NCS that are so important to the economy of the country as a whole.

“You will also bring the Norwegian oil and gas cluster, and the petroleum industry as a whole, to new levels of excellence with regard to value creation, technology and sustainability,” Støre added. Emphasising StatoilHydro’s responsibilities, he challenged the new company to fulfil both “industrial” and “social licenses” – the “industrial” being connected to excellence and natural growth as a company, while the “social license” refers to a more general responsibility to the Norwegian people, including environmental policy. StatoilHydro may not be a state company, but, in Støre’s eyes, it represents Norwegian values in its role as the country’s biggest energy exporter. “StatoilHydro is not just any company,”



© Øyvind Hågen / StatoilHydro



said Store. “No matter how we define it, it will stand out as Norway’s flagship and an industrial and technological locomotive. This flag will be easily seen in Norway – and worldwide.”

Nevertheless, excellence in the twenty-first century oil industry is not simply defined on the basis of production alone, but also on attitudes towards emissions and a perceived willingness to confront the environmental conundrums faced by all energy producers. Store is clear that Norway must be firm as a leader in environmental responsibility, and StatoilHydro is naturally a large part of that. “On climate change, the Government has already signalled that it will lead the efforts to mitigate the negative effects of Norway’s oil and gas production,” he said.

An Integrated Environmental Policy

StatoilHydro, however, is already taking its responsibilities seriously. DNV is an independent, knowledge-based organisation founded to safeguard life, property and the environment, offering wide-ranging services and proposing industry standards throughout the world, with operations in around a hundred countries. DNV has a long history stretching back to 1864, when it came into being with the objective of regulating the condition of Norwegian merchant vessels. DNV has contributed to discussions involving the Norwegian offshore industry

that have established rules and practices designed to manage the environmental effect of the industry.

DNV’s Energy division has also worked regularly with both Hydro and Statoil, and Remi Eriksen is confident that both companies take their environmental policies seriously. “Both Statoil and Hydro have pioneered a cadre of initiatives benefiting the environment. Environment has been an integrated part of the way they have conducted their business – not as a separated, isolated activity,” he says.

According to Eriksen, both companies have been credited with significant achievements in preventing and preparing for oil spill scenarios. Additionally, Hydro and Statoil have continued to exceed regulatory and legislative requirements in relation to biodiversity at the site of operations in North Norway, to name one example. “In relation to biodiversity, innovative measures have been taken to ensure minimum impact on the environment,” Eriksen confirms.

He believes that these successful environmental policies will continue after the merger. In fact, the emergence of a larger market force can only improve the efforts of the industry as a whole. “The environment was high on the agenda for both Statoil and Hydro. We believe it will be strong also in the new merged company. The merger of StatoilHydro will

create a new stronger international player, which will create opportunities for further positive influence in other important oil and gas regions where the environment traditionally has been lower on the agenda,” he says.

As environmental policies play an increasingly important role in global oil and gas initiatives, StatoilHydro at least has an integrated policy that addresses its corporate responsibilities in a way that can be a beacon to other operators in the global market. It is as such – as a beacon or flagship company – that the Norwegian government, and the oil and gas industry as a whole, hope that StatoilHydro will act. The merger provides an opportunity for Norway to present itself to the world as a dynamic leader in offshore technology and an environmentally responsible, but at the same time highly productive, energy supplier. Whilst a level of activity must be maintained on the Norwegian Continental Shelf in order to secure the health of the industry, both the government and the NPD are well placed to encourage competition and ensure that smaller companies benefit from the profile-boost that the merger has already generated. The future of StatoilHydro, and of the entire Norwegian oil and gas industry, looks bright indeed.

in pursuit of green energy excellence

by Nancy Bazilchuk

The rich petroleum resources in the North Sea have provided Norway enormous benefits, but Norwegians have also accepted that there are important responsibilities coupled with these resources. As scientists have come to understand the urgency with which society must curb CO₂ emissions in order to control climate change, Norwegian politicians, scientists, engineers and industries have taken a pioneering role in developing the technology and know-how to capture climate-damaging carbon dioxide and lock it away from the Earth's atmosphere in deep reservoirs under the ocean.

By the year 2030, global energy demand will increase by 60 percent, according to the International Energy Agency, most if not all of which will be powered by fossil fuels. If no steps are taken to control the carbon dioxide from these power plants, "we will have stolen our children's future," says Tom Burke, a visiting professor at Imperial and University Colleges, London, and the co-founder of E3G, an independent not-for-profit environmental consulting organisation based in England.

Burke says Norway's groundbreaking work in the capture and control of CO₂ has been critical in developing the world's ability to address the problem of climate change. "Norway is turning the key in the lock of the door that we have to open" in developing carbon dioxide control technologies, he says. "It is not an exaggeration to say that the future prosperity and well-being of the 6.5 billion people on this planet relies on our ability to make this technology work, and to work well."

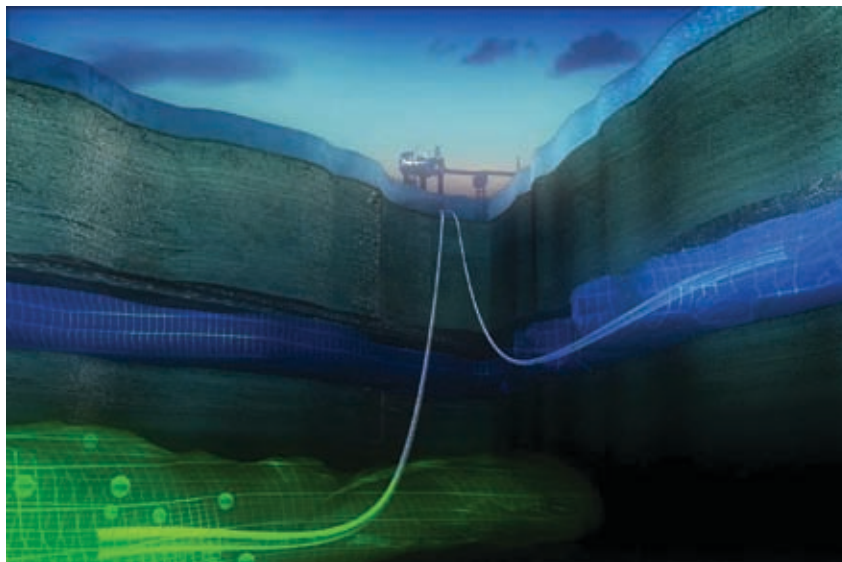
StatoilHydro's Sleipner field is the largest and longest running carbon dioxide capture and storage project in the world. Excess carbon dioxide from the natural gas taken from the field is extracted and pumped into a sandstone formation 1,000 metres below the sea floor.

Norway's commitment to developing carbon dioxide capture and control technologies is both broad and deep. Since 1996, Statoil (now StatoilHydro) has been capturing and storing one million tonnes of CO₂ a year from the Sleipner field in a sandstone formation nearly 1000 metres under the North Sea, in the world's first and largest test of this approach to locking CO₂ away from the Earth's atmosphere. In 2006, the Stoltenberg government committed to building a pioneering combined heat and power plant at StatoilHydro's Mongstad refinery that will include carbon capture. Other Norwegian industries have also taken a lead, with companies such as Aker Kværner, Det Norske Veritas (DNV), Gassco and Sevan Marine all developing techniques and technologies that will help lead Norway – and the world – to a carbon-free future.

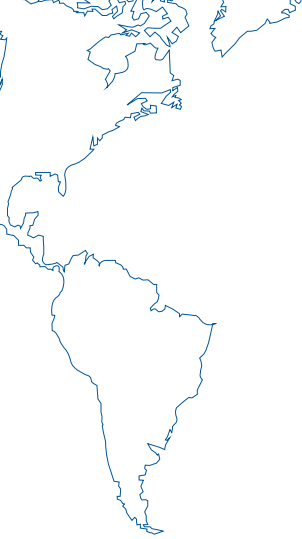
A Mythical Beast & Pioneering Technology

StatoilHydro's Sleipner field is named after a mythical eight-legged horse that was the fleetest animal on Earth, and that carried the Norse god Odin. Now the Sleipner experiment will help carry forward the knowledge needed to understand how underground storage of CO₂ can contribute to solving the Earth's climate problems.

The Sleipner project began because of another Norwegian environmental commitment: in 1991, the Norwegian Government imposed one of the world's first taxes on carbon emissions. Natural gas from Sleipner field contains high amounts of carbon dioxide, enough so that some must be removed before the natural gas can be shipped to European buyers. Ordinarily, CO₂ would be extracted



© Alligator film /BUG / StatoilHydro



from the gas and released to the air. But Norway's carbon tax made that a very expensive option. Deep sea storage seemed like a perfect answer, and the Sleipner experiment began in 1996. Nearly 10 million tonnes of CO₂ have now been safely stored away under the sea in the Utsira formation, nearly 1000 metres below the seabed.

The success of the Sleipner effort subsequently led Statoil to apply this approach to the In Salah field in Algeria beginning in April 2004, where 17 million metric tonnes of CO₂ will be stored in the underground reservoir over the life of the project. More recently, as gas from the giant Snøhvit gas field in northern Norway has begun to flow, StatoilHydro is storing 700,000 tonnes of CO₂ annually in a formation 2,600 metres under the seabed.

Helge Lund, CEO of StatoilHydro, says that he and his company are committed to helping solve global environmental problems like climate change. "We must contribute to finding solutions which can help to reduce greenhouse gas emissions. That's essential for the global environment and important for the confidence we enjoy in the community," Lund says.

The Post-Combustion Problem

Capturing carbon dioxide from fossil fuel emissions is plagued by a simple fact: CO₂ is produced in huge quantities when fossil fuels are burned, so the sheer volume of exhaust gas that must be treated to remove the substance is staggering. And currently, in most parts of the world, it is still cheapest to dump CO₂ into the atmosphere without capturing and storing it, because capture technologies cost money. In the end, however, the control of greenhouse gas emissions must first include retrofitting existing power plants, simply because there isn't enough time to build new plants with built-in technologies. New technologies must also be developed to remove carbon dioxide before a fuel is burned – a process that can be more efficient, but that is technologically more challenging.

Both these areas are where SINTEF, Scandinavia's largest independent research institute, and the Norwegian University of Science and Technology (NTNU) have taken a

leadership role. Together, NTNU and SINTEF are participants in 14 European Union research projects concerning CO₂ capture and storage. One of the largest of these was just awarded under the EU's 7th Framework Programme, when in mid-October 2007 SINTEF Energy Research was named leader of a project on capturing CO₂ from coal- and gas-fired power plants. The NOK 120 million, four-year project, called DECARBit, involves 14 partners from eight lands. NTNU and SINTEF together were awarded approximately one-third of the project's EU research funds, which involves developing the next generation of CO₂ capture technologies that can be employed before a fuel is burned.

The Gas Technology Center, a cooperative between the Norwegian University of Science and Technology and SINTEF, is leading an effort called BIGCO₂ to further develop carbon capture and storage technologies.



© NTNU Info/G.K.



The two research institutes are also leaders in Norway's largest research project on CO₂ capture technologies, called BIGCO₂. StatoilHydro, Statkraft, Alstom, Aker Kværner, Shell, Total, ConocoPhillips and GE Global Research have joined forces with six research co-operators, including NTNU, SINTEF and researchers from the University of Oslo, CICERO, the German Aerospace Center, and the Munich University of Technology. Basic funding for the project has been provided by the Research Council of Norway and Gassnova, which is the Centre for Gas Power Technology, a subsidiary of the Norwegian Ministry of Petroleum and Energy.

The German research institutes are new partners that can conduct testing that Norwegian institutions cannot, says Nils A. Røkke, director for gas technology at SINTEF and co-director of the joint SINTEF-NTNU Gas Technology Center. "They are providing infrastructure that is not available in Norway, such as high-pressure facilities. It is simply cheaper and better to use those facilities in Europe, and to team up with some of the best research institutions in this area," Røkke says.

The goal of BIGCO₂, which has had a NOK 200 million budget over nine

years, is to pave the way for gas-fired power plants that include CO₂ capture and storage technologies that give a 90 percent CO₂ capture rate. This technology would also have to result in a 50 percent cost reduction and a fuel-to-electricity penalty that is less than seven percent as compared to state-of-the-art gas-fired power plants, Røkke says.

"I have strong hopes for this," he says. "Carbon capture and storage can contribute to more than 25 percent of the emission cuts that we need to achieve by 2100. You simply cannot reach these goals without CCS."

New Approaches

The Norwegian industry giant Aker Kværner is also an active participant in helping to solve the CO₂ problem, with the development of a technology called Just Catch. Aker Kværner began working on carbon dioxide capture as early as 1991, says Oscar Graff, director for gas

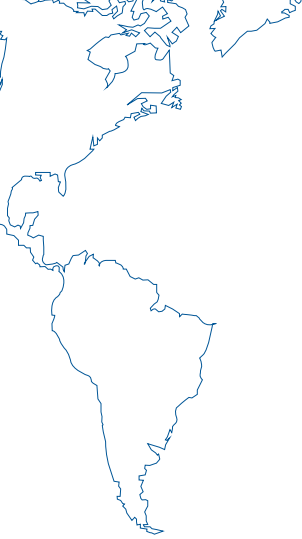
technology at Aker Kværner Engineering and Technology. Work on the Just Catch technology began in 2004 with a small study that was so promising that it was quickly ramped up in 2005 with 50 percent funding from Gassnova. The budget for the project is NOK 32 million, making it the largest development project funded by Gassnova, Graff says. One of the key aspects of the technology is that it is independent of the kind of combustion involved, and so can be applied to coal- or gas-fired power plants, and other industrial emissions, such as cement factories. The Just Catch technology is being developed in cooperation with 12 other industrial partners, including Vattenfall, StatoilHydro, Gassco and Statkraft.

In April 2007, Aker Kværner and its partners tested a new variation of the Just Catch technology, with the addition of a biomass component as the heat and power source to heat the carbon capture equipment. That means there is no loss

Aker Kværner's Just Catch technology is designed to cut the cost of capturing carbon dioxide from gas and coal fired power plants. The technology is now ready to be tested in a demonstration project.



© Aker Kværner



of energy from the power plant, and CO₂ can also be captured from the emissions caused by burning the biomass itself. Biomass also consumes carbon dioxide as it grows, making the benefit of using the Just Catch-bio technology an actual decrease in the total amount of carbon dioxide emitted by the plant. “By using this technology, we capture 100 percent of the CO₂ from the gas-fired power plant, and another 16 percent from the (carbon neutral) biomass, so that you will actually have a reduction of CO₂ in the atmosphere,” Graff says. Roughly 40 engineers are at work on the Just Catch technologies, with the budget for the biomass component at about NOK 24 million, he says.

Aker Kværner also joined forces with SINTEF and NTNU in late October 2007 to form a joint company to develop new chemicals for CO₂ capture. The market is considerable – by the year 2100, coal- and gas-fired power plants built to meet the world’s demand for energy will require an estimated 7,500 CO₂ emissions control systems. Just one percent of that market could be worth as much as NOK 240 billion to Norwegian businesses, says SINTEF’s Røkke. “That’s considerable payback for the public research kroner that have been invested in this field,” he says.

StatoilHydro’s Mongstad refinery will be home to a new carbon capture facility that will be built in stages along with a new combined heat and power station at the complex.

A European Test Centre

One of the most intriguing carbon capture efforts under development on Norwegian soil is a power project at StatoilHydro’s Mongstad refinery. Due to be operational in 2014, the combined heat and power plant project will be the world’s largest with full-scale CO₂ capture and storage. “With this project we are writing industrial and environmental history,” says Prime Minister Jens Stoltenberg.

The Mongstad facility will also be home to a European Test Centre for CO₂ capture and storage. DONG Energy, Shell, StatoilHydro and Vattenfall are all partnering with the Norwegian Ministry of Petroleum and Energy on the project; the companies involved all have different CO₂ capture technologies that can be tested at the facility.

The timetable for the Mongstad plant is ambitious, and calls for the new gas-fired power plant to be constructed by 2010, with a smaller-scale CO₂ absorption plant that will capture 100,000 tonnes per year. The capture of the plant’s estimated 1.3 million tonnes of CO₂ is planned by 2014.

While the technical challenges posed by capturing and storing CO₂ are considerable, other, more peripheral challenges are also vital. For example, what is the best way to safely and securely transport CO₂? Gassco, a Norwegian company that is responsible for transporting Norwegian gas to continental Europe and the UK through a 7,800-kilometre pipeline network, is examining this issue. The company is looking at what will be needed for the CO₂- related projects at the Mongstad test centre and industrial complex, as well as at a gas-fired power station at Kårstø north of Stavanger, where the hope is to have a carbon capture facility in place by 2011-12. “We regard transport studies for this greenhouse gas as highly interesting,” says Sigve Apeland, Gassco’s project manager. “It’s a development job in which we want to participate.”

From Problem to Solution

With all the troubles projected to result from climate change, it’s hard to think of CO₂ as anything other than a problem. But carbon dioxide can be valuable if it is used to boost oil recovery from mature oil fields



© Oyvind Hagen/StatoilHydro



in a process called EOR, or enhanced oil recovery. That's the thinking of the Norwegian Petroleum Directorate, which is hoping that CO₂ in offshore reservoirs will actually create a value chain for the transport and injection of the substance.

Typically, the continued tapping of a petroleum field reduces pressure in the reservoir, which drillers counteract by injecting water or natural gas. But CO₂ could provide the same service, as has been shown in onshore fields in the United States. Norwegians are interested in another benefit of the technology – disposal of CO₂. A coalition of businesses and research institutes has been exploring this possibility in the Halten CO₂ project, a cooperative between Shell and StatoilHydro, which would involve the Draugen and Heidrun fields. The goal is to use CO₂ from an integrated gas-fired 860 MW power plant at Tjeldbergodden in mid-Norway. While technical research has shown the project is feasible, government involvement is necessary, Kai Bjarne Lima, the Halten CO₂ project manager told the Norwegian Oil Industry Association in Molde in May 2007. Nevertheless, "the Halten project can lead to a paradigm shift in the capture and storage of CO₂, along with the use of CO₂ for enhanced oil recovery" he says.

A gas-fired power station in Kårstø, north of Stavanger, is due to be operational in November 2007, with CO₂ removal technologies due to be in place by 2011–2012.

Sevan Marine and Siemens AG's Norwegian unit are also testing interest in a possible floating electricity generating platform that could power oil and gas fields while providing CO₂ for enhanced oil recovery and storage. Given sufficient interest, these combined cycle plants could be in production as early as 2010, according to the vice president of business development for Sevan Marine, Fredrik Major.

Assuring Safe Technologies, Spreading the Word

It's one thing to develop new technologies – but it's equally important to assure they work the way they should. That's the job that Det Norske Veritas (DNV) is undertaking for the oil and gas industry. DNV will qualify the carbon capture technology that will be used in the Just Catch Bio Demo plant, and is conducting three joint projects to develop international standards for CO₂ capture, transmission and storage.

"This is not a typical certification," says Kaare Helle, the DNV project manager for the capture section of the new standards.

"We want to focus on the functionality of the technology, to show that the technology will function reliably and that it will deliver what they say it can deliver."

All this technology will be for naught without the environmental awareness to encourage individuals to lower their carbon footprint and politicians to support programmes to control carbon dioxide. That's the reasoning of the Bellona Foundation an Oslo-based NGO that has devoted considerable resources to the challenge, including substantial participation in ZEP, the Europe Union's multidisciplinary effort under the 6th Framework Programme to enable European fossil fuel power plants to have zero CO₂ emissions by 2020. Both Bellona's president Fredrik Hauge and staff members have been active in the programme. In ZEP's recently published strategic overview, Hauge features prominently, warning, "The immediate and wide implementation of CCS is vital if we are to avoid the devastating – and irreversible – consequences of climate change."



© Gassco

the easy barrels are gone

By David John Smith

Exploration is moving progressively to deeper waters and more distant locations than in times gone by. In response, the oil and gas industry is turning to floating production storage and offloading (FPSO) technology. Together with FSO (floating storage and offloading), FPSO holds the keys to future productivity, and Norwegian companies are in the thick of the competition.

Norwegian strength can often be found in tradition, combined with excellent modern technology and service. Fred Olsen Production is one of Norway's most respected and solidly established floating production operators, coming from a group of companies known as the backbone of Norwegian shipping for over 150 years. With offices in Norway, United States, Singapore and several in Africa, the company is well positioned to operate their fleet of seven FPSO and FSO units on an international basis as the need arises.

Currently in a period of expansion, Fred Olsen Production is now setting its sights on Southeast Asia and South America. According to Chief Operating Officer Paal Hylin, "We see an ongoing growth of the FPSO and FSO activities worldwide, and our company is well positioned as a strong competitor in the future."

The Global Perspective

StatoilHydro is a Fortune 500 company, and fully understands the importance of being on technology's cutting edge. The company has numerous international

projects involving FPSO technology, including the Nigerian Agbami field, developed with subsea wells tied back to an FPSO vessel. With a storage capacity of over two million barrels and an oil processing capacity of 250,000 barrels of oil per day, the Agbami FPSO is among the biggest of its kind in the world. This cooperative project with Chevron as the chief operator will begin production in 2008.

Nexus Floating Production, located in Singapore with its project office in Norway, recently entered into a turnkey contract with Samsung Heavy Industries for construction of a complete advanced FPSO. This FPSO will be operationally equipped to meet the most demanding operational situations, and is scheduled to be delivered in 2009. This FPSO will be joined by a second vessel, also ordered by Samsung, to be delivered in 2010.

Solid as a Rock

Prosafe ranks as the world's leading owner and operator of semi-submersible accommodation/service rigs, and as a leading owner and operator of FPSOs. The company's floating production division owns and operates seven vessels, and additionally, three tankers are being converted to FPSOs with production beginning in early 2009. Specializing in the supply, lease and operation of cost-effective vessels, Prosafe is widely known for its innovative turret mooring system designs and a solid proven track record.

Prosafe recently announced the extension of the FPSO *Petróleo Nautipa* contract until 2015 for operations at the Etame field offshore Gabon, West Africa. This is the latest in a series of successes for this global company, and as Karine Cosemans, Director of Communication for Prosafe indicates, "Oil and gas companies

Prosafe's FPSO *Polvo* commenced operations at the Polvo field in Brazil for Devon in July 2007.



© Prosafe



worldwide have understood that Prosafe delivers solid performance over the long run. This combined with in-house technology and innovative solutions give the company a very optimistic view of the future.”

Safety First

FPSO safety is a regulatory requirement taken very seriously by Norway’s Petroleum Safety Authority (PSA). This supervising body is mandated the authority by Norwegian Parliament to oversee, stipulate policy and evaluate, making certain that all companies, their facilities, their products, and activities maintain high standards of health, environment, safety and emergency preparedness.

According to PSA’s press spokesperson Inger Anda, safety can never be compromised, “Norwegian oil and gas companies have the ambition of leading the world in HSE. To continue improvements within this area, we need novel and creative thinking, and the PSA is working closely with the industry to continually move in the direction of the highest levels of health and safety.”

No Boundaries

Aker is a name known throughout the world for its ship-building prowess, and recently Aker Floating Production was

awarded yet another large contract in India. This USD 100 million five-year contract will be managed by subsidiary Aker Borgestad Operations, and according to President Svein Olsen, “This contract marks the achievement of yet another milestone.” This agreement with the India-based Reliance Industries is in addition to an earlier USD 750 million contract between the companies for the chartering of the Aker Smart 1 FPSO.

Sevan Marine ASA specializes in building, owning and operating floating units for offshore applications. As of the autumn 2007, Sevan had one production unit, the FPSO SevanPiranema, in operation and has four other Sevan units contracted, including one drilling unit to begin drill operations in 2009. Considering that five Sevan platforms are currently contracted, in addition to four Sevan 300 floating, production and storage units (FPSOs), and one drilling unit, all based on the Sevan technology, the future looks bright for both the company and its customers.

Presently Sevan Marine is focusing on two application types for its cylinder platform, floating production and drilling. “We believe in a strong market for Sevan units in the years ahead. The industry is looking for cost-effective solutions that can optimize their production and drilling campaigns, and we would like to help them,” says Jan Erik Tveteraas, CEO of Sevan Marine ASA.

Towards a Bright Future

Norwegian industry is noted for an innovative culture that produces ambitious new companies, and the FPSO sector is no exception. These include FPSOcean, established in 2005, and Kanfa, a company delivering EPC contracts to the offshore oil and gas industry, primarily to the global FPSO market.

Modern technology, good business sense and a strong emphasis on environmental awareness are the trademarks of the Norwegian oil and gas industry. Although the easy oil may be gone, that doesn’t deter the FPSO companies in Norway. They are prepared for your future.

FPSO Sevan Piranema making its arrival at Salvador, Brazil.



© Sevan Marine

a national perspective

with global focus

By David John Smith

The Norwegian oil and gas industry has come far in the past half century. From a time when it played no role in the country's economy and society, it is now the largest industry in a country that ranks as the fifth largest oil exporter and the tenth largest oil producer. Not only that, Norway is the third largest gas exporter and the seventh largest gas producer.

Today, there are 52 fields in production on the Norwegian Continental Shelf (NCS). In 2006 these fields produced 2.8 million barrels of oil and 88 billion standard cubic meters (scm) gas, for a total production of saleable petroleum of 249 million scm in oil equivalents. These numbers only begin to tell the story of the strength of the Norwegians, who are recognized today as world leaders within a wide range of oil and gas activities.

Norway has much to offer, both at home and abroad. The NCS has remained a popular target for both oil and gas companies as well as suppliers, and the country's industry as a whole is competing and succeeding nationally and on the international level like never before. This is all being done in close cooperation with the Norwegian Government, whose solid management of the country's natural resources combines a visionary environmental policy with practical measures geared towards reducing CO₂ emissions.

Norwegian companies offer excellent products and support over the entire spectrum of Oil and Gas Cluster activities.

Taking Care of the Earth

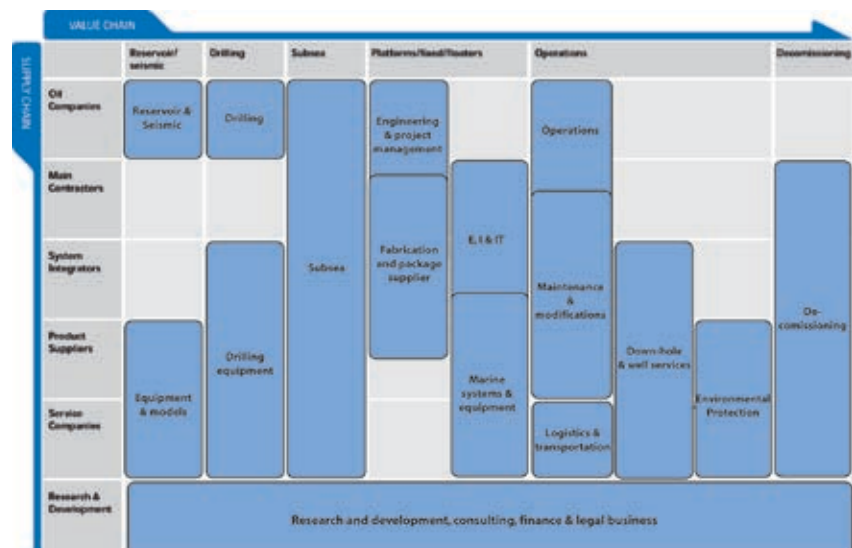
Environmental initiatives are a top priority of the Norwegian Government, with research, development and implementation taking place on all levels of society. This focus is especially true with regard to the global oil and gas industry and the carbon footprints that are created as part of the production process. In a proactive environmental move, the Norwegian Government has proposed to grant over USD 250 million to research, technology development and work with carbon capture, transport and storage in 2008.

This initiative, led by The Minister of Petroleum and Energy Åslaug Haga, shows the commitment of the Norwegian Government and its people to a clean planet: As Ministry Haga indicates, "The

Government places great emphasis on developing carbon capture and storage as an option for mitigating climate change. To achieve this it is necessary with a comprehensive commitment over several years on research, development and demonstration of CCS technology."

Working Together

Cooperating closely with the Ministry of Petroleum and Energy is the Norwegian Petroleum Directorate, an organization focusing upon resource management and administration on behalf of the Ministry. The role of the Directorate is to maintain up to date information concerning all petroleum activity in Norway, laying the basis for sound resource management, safety and preparedness.





This perspective ties in well with OG₂₁ – the National Technology Strategy, which is the national strategy for research and development in the oil and gas sector. OG₂₁ has five focus areas: environment, increased recovery, deep water, small fields and the gas value chain. This commitment combines long-term goals with short-term projects that help guide Norway towards an increasingly world-class level of excellence as a leader in this global industry.

The Oil & Gas Cluster

The Norwegian oil and gas cluster covers the entire value chain, from exploration and development, production and operation, to decommissioning. This industry is the largest employer in Norway, with over 80,000 personnel directly working with petroleum-related activities. With the far-ranging successes being achieved, it is clearly evident that the skills, experience and technology developed here are being utilised by the international oil and gas industry all over the world.

A healthy cluster is integral to a healthy Norwegian economy, and to maintain this momentum an ongoing multi-level cooperative effort has evolved. This cooperation is known as the “Norwegian Model” and includes a wide range of joint government-business sector initiatives that have been instrumental in Norway’s ongoing success. Examples of these initiatives include organizations such as INTSOK, Kon-Kraft, OG₂₁ and Demo 2000.

Close Cooperation

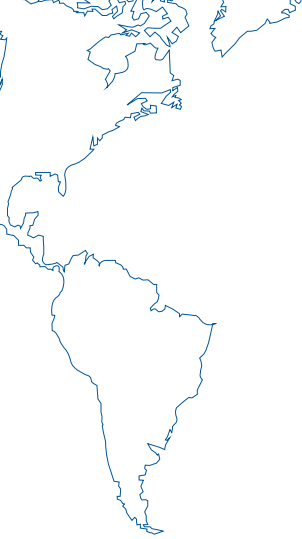
The importance of this cooperation cannot be underestimated. According to INTSOK’s Werner Karlsson, “The success of the Norwegian oil and gas cluster is rooted in the expertise of the individual companies, and the fact that the entire spectrum of upstream oil and gas activities are covered by these companies. This, combined with close cooperation with the Norwegian government, provides excellent future opportunities.”

INTSOK promotes the Norwegian oil and gas industry, emphasising Norway’s role as an integrated element of the international industry. By monitoring global market conditions, INTSOK assists companies with marketing activities, targeting of key countries, as well as providing guidance to these partner companies in helping them access international markets.

Another hub for dialogue is the Norwegian Petroleum Society (NPF), an important meeting place for people working in the industry. Communication is essential in ensuring that Norwegian companies meet the needs of the international oil and gas market, and Secretary General Gro Mjellum, emphasises its importance, “The NPF represents an industry which poses major technological and professional challenges. At the same time, this sector plays a substantial economic and political role in Norway. Network building and exchange of current knowledge is essential for the sector’s continued success.”

On Time & Within Budget

Norwegian companies in the oil and gas industry are renowned for bringing home projects on time and under budget. These include well-known international companies such as StatoilHydro, Aibel and Aker-Kværner, FMC, as well as numerous other professional companies such as AGR Group. This oil services company headquartered in Norway offers a wide range of services ranging from constructing and managing drilling programs to providing services and technologies for exploration, production and maintenance.



With over 40 patents in commercial use, AGR Group prides itself on bringing cutting edge oil and gas technologies to market. CEO Sverre Skogen comments, "It has been a rewarding journey for AGR Group, utilizing North Sea tested skills and technologies around the globe. We see the future for AGR Group as one deeply enmeshed in the global oil and gas business and being where our clients need us."

Heavily involved in rig projects in China, Scandpower combines the effort of Chinese staff and western experts in a balance that has shown to be a success for rig owners building for Norwegian waters. Scandpower has a long track record of top performance in a wide range of projects within the oil and gas industry, serving customers all over the world with support encompassing the entire spectrum from early concepts to detailed engineering, operational development and, finally, decommissioning.

Helifuel is onsite supporting some of the thousands of oil platforms in the Gulf of Mexico.

Below the Surface

Success certainly rings true within the subsea sector, with Norwegian companies enjoying a large share of the global market in this area of operation. Success stories abound, including Subsea 7, a world leader in subsea engineering and construction, which recently announced a USD 125 million contract with BP for installation works in the northern North Sea. Other companies with a far reaching impact on activities below the surface include StatoilHydro, Vetco, FMC Kongsberg Subsea and Aker Kværner, all of whom are taking the lead in a way that is making its mark far outside of the Norwegian borders.

A leading provider of subsea systems for energy production, Aker Kværner also excels in services related to design, construction, maintenance, modification, and operation of industrial facilities. VetcoGray's product offering covers the spectrum from single well onshore drilling projects to multiple well deepwater facilities and subsea production.

FMC is a leading manufacturer and supplier of subsea production systems, including subsea trees, controls and manifold and tie-in systems.

GTO Subsea has produced the most powerful Subsea dredge available, the new 350 HP GTO dredge capable of dredging rock dump up to 370 mm. The dredge system is unrestricted, which means that any rock up to 16 inches in diameter can be shifted without causing any problems. With its unmatched power, the dredge is also ideal for long distance shifting of material of all kinds, such as drill-cut, sand and clay.

Finding What You Are Looking For

For the past 20 years, the world's population has been consuming oil faster than replacement reserves can be found. Oil consumption, currently at approximately 85 million barrels per day, is expected to rise to 120 million barrels per day by 2030. At the same time, the world's established oil provinces are expected to



©Helifuel



decline. This combination clearly shows the need for better technology to find and secure oil and gas, and the Norwegians are in place and prepared to provide assistance wherever the need may arise. Seabed logging technology developed by EMGS plays an important role in improving the efficiency of frontier exploration. Achieving optimal resource use, operators can begin to redress the reserves-replacement deficit. Seabed logging also helps operators find missed opportunities in mature regions where infrastructure is already in place. This extends field life and leverage from existing assets and can defer abandonment. Seabed logging can also directly reveal the presence of commercial hydrocarbon reserves and identify reservoirs before seismic surveys are conducted.

Petroleum Geo-Services (PGS) is a leading worldwide geophysical company that provides an extensive range of seismic services and products for the petroleum industry, including data acquisition, processing, reservoir analysis and interpretation. The company also possesses the world's most extensive multi-client data library, and numerous international companies turn to PGS for assistance in securing necessary data.

Companies such as SeaBed Geophysical supplies expertise in all aspects of the marine multi-component seismic sector. Providing feasibility studies, modelling, survey planning and acquisition, SeaBed processes and interprets seismic data with an acquisition method based entirely on the autonomous node system called the CASE system. This scalable, flexible and highly efficient system has the capability to work in very congested areas. A dedicated Hugin Explorer is currently being rigged for node handling and source system enabling a single vessel operation and is scheduled to be operation in Q1 2008.

Support When You Need It

Few industries are more complicated than oil and gas, and Norwegian companies are prepared to provide support and expertise where and when needed. Companies such as IKM, Norse Group, Nexans, Siemens, AS Trans Construction, AC Marine, Aarbakke and many others

provide quality support and products to this demanding industry.

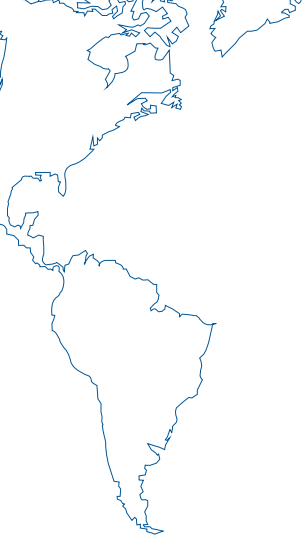
The Norwegian group TTS has a strong presence within offshore oil and gas, with subsea load handling and drilling among their focus areas. TTS supplies floating units with motion-compensated equipment, decks, cranes and winches capable of working with loads to 3000 metre depths. Also, an active roll compensated helideck has been developed, enlarging 'weather windows' for take-offs and landings.

Specializing in helicopter refueling systems, Helifuel has become one of the world leaders in manufacturing and supply of this niche product. Dependability and 24/7 response are critical to the international oil industry, and Helifuel finds that operators worldwide appreciate their capabilities. The company is now also well represented in the Gulf of Mexico, says

© Petroleum Geo-Services (PGS)



TTS Active Roll is a motion-compensated helideck system that improves helicopter access to moving sea vessels.



Marketing Manager Jorunn Håvardsholm, “After several years of working towards the US market testing the ground for possibilities, we now had a major breakthrough in that region.”

Rigging It Up

Rig expertise runs deep in Norway, with successful companies such as Sense EDM supplying intelligent rigs, innovative tubular handling systems and world class control systems and products that are used to drill the most challenging wells around the globe. Other companies offering top quality rigging and equipment include Aibel, a leading provider of services, products and technologies to the global upstream oil and gas industry, as well as GS-Hydro, PetroJack, Seadrill and Novenco.

Novenco is delivering HVAC systems to harsh environment self-elevating jack-up rigs. When completed, they will be the largest jack-up rigs ever to be built in Singapore, and will also be among

the world’s largest jack-up rigs to be constructed for the North Sea. With living quarters designed to accommodate 120 persons, these rigs have combined drilling and production facilities; they will normally operate in 120-meter water depths and are capable of drilling depths down to 10,600 metres. According to Bredo Hagberg, Novenco’s CEO in Norway, “These rigs meet the increasing demand for more sophisticated and innovative rigs to meet new challenges in the development of oil and gas fields in harsh environments.”

Down in the Well

Change requires improved and more innovative technology, with Aker Drilling, Fred Olsen Energy, Smedvig and others leading the way in offshore drilling and well services. Smedvig operates a fleet of mobile drilling units, tender rigs and a deepwater drill-ship. National Oilwell Varco is continuing to make its mark as a worldwide leader in the design, manufacture and sale of drilling and production equipment, the provision

of oilfield inspection, and supply chain integration services to the upstream oil and gas industry.

Companies such as Peak Well Solutions have found international success with their ISO certified casing suspension plugs, also providing products, technology, services and solutions within well construction, intelligent cementing and temporary abandonment areas. Other companies such as TCO have found their niche with tubing disappearing glass plugs used for completion and well intervention.

When the Going Gets Tough

StatoilHydro is internationally known for its cutting-edge technology and high return on investment. Benchmarks show that the company uses the most innovative solutions and is highly cost efficient due to the technology employed. One reason is the company’s ability to work closely with other companies as well as the Norwegian government. Another is StatoilHydro’s large and demanding portfolio in the harsh environment of the NCS, an area that demands nothing less than excellence.

© Øyvind Hagen/ StatoilHydro



StatoilHydro have gained valuable expertise in the ever-changing conditions of the Norwegian Continental Shelf.



The NCS serves as a laboratory for StatoilHydro and has facilitated ongoing technological development, an increase in production effectiveness and implementation of environmentally friendly solutions globally. The employment of technology developments from Tordis, Snøhvit, Tyrihans, Ormen Lange, Lufeng (China) and other fields has paved the way for deepwater developments in the Gulf of Mexico.

The conditions in the Gulf of Mexico are some of the most demanding on earth. Challenges include water depth, hurricanes, strong underwater currents, deep reservoirs with extremely high pressure and layers of salt on the gulf floor that measure up to 6,000 metres in thickness, making seismic measurement difficult. Technology that has been successfully developed and implemented on the NCS is now being put to good use by StatoilHydro in the Gulf of Mexico as subsea solutions, FPSOs and long distance tiebacks. These are areas of expertise that must be mastered to achieve successful development in these ultra deep waters.

Working closely together with companies such as FMC, Aker-Kværner and many others, StatoilHydro knows the importance of ongoing communication

MARINTEK and Petrobas enjoy a productive alliance in the LabOceano facility, Brazils new test laboratory.

and cooperation. According to Arnt Olufsen, StatoilHydro's Senior Advisor for Deep Water Technology in the Gulf of Mexico, "The easy barrels are gone, and new technology is required to unlock the deepwater frontier areas. The new company will build on our pioneering spirit and cooperation models to move faster."

Taking Care of Business & People

The oil and gas industry demands nothing less than the highest safety precautions, while planning for cost and environmental efficiency when decommissioning. As Knut Erik Bang, CEO of Norse Cutting & Abandonment (NCA) says, "A large number of the world's oil and gas installations are now approaching the end of their economic life. NCA has invested in new technologies for conducting these operations in a more cost-efficient way, and at the same time fulfilling the strictest safety and environmental standards that we are faced with in the North Sea...it is very rewarding to see that our well

abandonment and decommissioning services have proven to be very attractive also outside the North Sea basin."

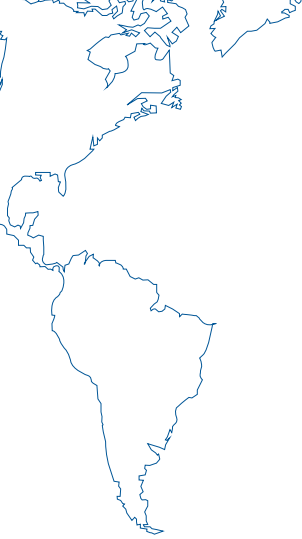
Companies such as Novenco and Frank Mohn focus on safety and prevention. Frank Mohn supplies water injection pumps and systems, fire water pumps, seawater lift pumps, cavern pumps, portable pumps, oil recovery equipment and pumping systems for subsea applications, offering assistance during all project phases and needs. Novenco develops and manufactures high-quality ventilation and fire-fighting systems marketed and distributed worldwide through subsidiaries and agents. The company has become a world-leading supplier that symbolizes quality and environmentally friendly products.

Asking the Questions & Finding the Answers

SINTEF Petroleum Research is internationally respected for research and development in creating technology for



© MARINTEK



exploration solutions, field development and production. The list of successful projects and programs is long, including SmartPipe, Deepline, and the Cold Flow project currently under development. ColdFlow uses hydrates as a resource, not a problem. This patent pending technology transports hydrates as a powder, resulting in more stable production, and represents potentially huge savings and environmental benefits. Increased safety is also achieved, as ColdFlow does not require chemical additives.

Jon Harald Kaspersen, Research Director of SINTEF's Wellstream Department comments, "The ColdFlow concept will enable multiphase transport of unprocessed well fluids over long and ultra-long distances, which will be in demand when hydrocarbons are going to be retrieved from the Arctic."

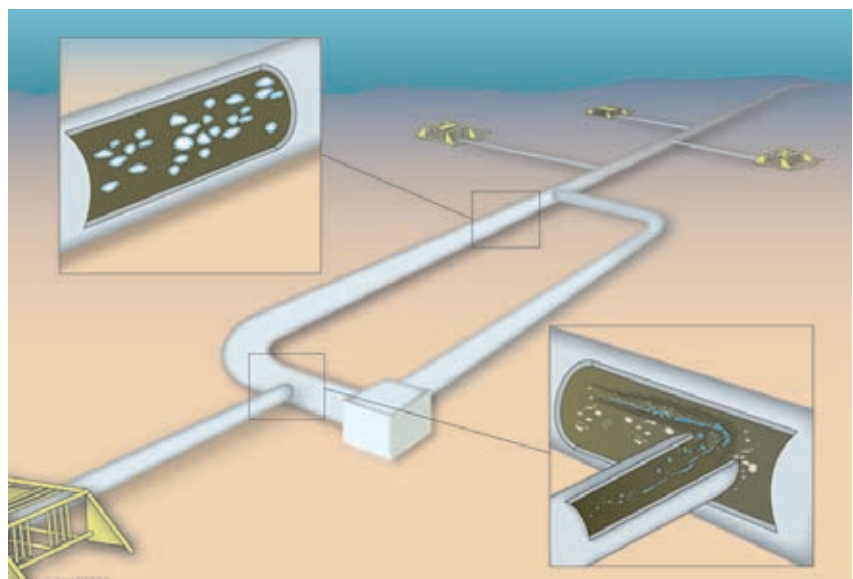
The Norwegian Marine Technology Research Institute (MARINTEK) is a SINTEF Group company offering research, development and research-based advisory services in the maritime sector for industry and the public sector. The Institute develops and verifies technological solutions for the shipping and maritime equipment industries and for offshore petroleum production. Typical research projects include the collaborative effort with Chevron Texaco studying floaters in ultra deep waters, as well as cooperation with LabOceano, Brazil's new test laboratory, with a project aiming to validate procedures for model testing for ultra-deep waters.

Oddvar Aam, President of MARINTEK, says, "The world is crying out for solutions, and research and innovation by people with knowledge are keys to secure a future for us all. Our organization intends to do its

best to encourage the coming generation to take part in a sustainable utilisation of the oceans, with regard to good and environmentally appropriate solutions for oil and gas production, increased food production from the sea and clean, efficient marine transportation."

Norway has traditionally been keenly interested in the world around them, exploring and finding new solutions. Look to the north and Norwegian oil and gas expertise as it reaches out globally with innovation, knowledge, technology and a hard-working attitude looking to support and improve, always with a thought towards cost control and the environment. Look to Norway for their strong role in the future of the oil and gas industry.

Transporting hydrates as a powder, SINTEF's ColdFlow allows more stable production without adding chemicals.





INNOVATION NORWAY

– We give local ideas global opportunities

Innovation Norway offers products and services to increase innovation in industry throughout Norway, to help develop the regions and promote Norwegian industry and internationalization, and to promote Norway as a tourist destination.

With offices in more than 30 countries worldwide and in all Norwegian counties, Innovation Norway is easy to reach. Our staff has knowledge of local and international factors that will help turn our customers' ideas into business successes.

Products Tailor-Made to Customers' Requirements

Innovation Norway assists the entirety of Norwegian industry, but has particular responsibility for aiding entrepreneurs and assisting small and medium-sized companies with an ambition and potential for growth.

We offer:

- Funding provided as loans, guarantees and equity capital programmes
- Advisory and expertise development measures

- National and international network-building and technology transfer
- Marketing of Norwegian industry and Norway as a tourist destination

With these measures as a point of departure, Innovation Norway customizes its products and services according to the needs of each individual client. Through our offices in Norway and abroad, our clients also gain access to services from other public agencies – such as the Research Council of Norway, the Norwegian Design Council and the Industrial Development Corporation of Norway (SIVA).

Dynamic and Result-Oriented

Innovation Norway supports the profitable development of industry in both individual companies and in society at large:

- Innovation Norway contributes to the creation and securing of 9,000 jobs annually

- Customer surveys show that 90 percent of Innovation Norway's funds have been allocated to projects viewed as important to companies' survival and profit growth

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Innovation Norway took over the tasks of the Norwegian Trade Council, the Norwegian Industrial and Regional Development Fund, the Govt. Consultative Office for Inventors and the Norwegian Tourist Board on January 1, 2004.

new opportunities for an old resource

By Edward Milsom

A recent report by the Norwegian Petroleum Directorate estimates that there could still exist between 1.6 and 5.8 billion standard cubic metres (Sm³) of oil equivalents left to discover on the Norwegian shelf. The possibility is both tantalising and challenging for the Norwegian offshore industry. In a sense, this is old news – overall estimates as to the total of undiscovered resources have not changed since 2003. However, one thing remains constant: oil and gas are resources that will not be around forever. For the Norwegian industry, easily attainable oil on the Norwegian Continental Shelf (NCS) is becoming scarcer. Consequently, subsea boosting technology, which allows marginal and mature fields to be exploited, is not simply an interesting alternative, but is increasingly an essential investment for the future of petroleum in Europe.

Speaking at the Offshore Europe Oil and Gas Conference in Aberdeen, September 2007, Malcolm Brinden, Executive Director of E&P, suggested that new technology could prolong the life of the North Sea fields and thus increase the potential of the area for international oil and gas companies. "If you look at the history, this industry has been incredibly successful at extending the life of the North Sea fields. In actual fact, when we first started in the late seventies, we thought we'd be out of here by 2000, rather than reaching a peak in production – and that was all about technology," he said.

Technology is the key to the exploitation of marginal and mature fields. Investment throughout the nineties has brought with it the potential to extend the value of what remains. It is a key issue for the Norwegian government and industry. The

fact must be faced that oil and gas are not renewable resources, and subsea boosting technology is the future. How long that future lasts will depend on how readily the opportunity to invest and utilise new technologies is embraced. Brinden admitted that steps must be taken in the next decade if they are to secure the resources whilst the infrastructure is available to do so. Time, like oil and gas, is not in endless supply, and Brinden explained that the fiscal and regulatory policies covering the industry must reflect the urgency of the situation.

Subsea boosting pumps and systems being manufactured in Norway are a key to the exploitation of these fields. The new

technology additionally allows an optimistic view to be taken of potential oil discoveries in the Barents Sea. The NPD's report, 'Maintain Oil and Gas Estimates' (24.9.07) predicts that around 30 percent of total petroleum volumes lie in the Barents Sea, 35 percent in the Norwegian Sea, and 35 percent in the North Sea. The report finds that "recent years' exploration results in the Barents Sea have increased expectations for oil discoveries here, in part at the expense of expectations for gas." Potential discoveries, combined with sensible investment and research in subsea boosting infrastructure, should prolong Norway's position as a major petroleum power.

Market-Leading Subsea Boosting Technology

Norway's pioneering status in the offshore industry has already naturally extended to subsea boosting technology, as efforts continue to exploit marginal and mature fields on its continental shelf. Framo Engineering and Aker Kværner are amongst those that can claim a worldwide market for their subsea boosting technology. "We have several products and solutions and we work worldwide. What we have is not just for Norway," says Framo Engineering's Helge Dale. "We

Malcolm Brinden, speaking to the Offshore Europe 2007 conference in Aberdeen, explained that steps must be taken in the next decade to secure resources through subsea boosting technology.



© Greymbardesign, <http://www.offshore-europe.co.uk/>



have sold products on the Norwegian Continental Shelf, although that is not our main market," he adds.

Bergen-based Framo Engineering, which was established in 1983, produces a range of products for the offshore industry, and works closely with oil and gas companies such as StatoilHydro, Shell and Mobil as it aims to provide total system solutions for the exploitation of marginal and mature fields. A healthy competition with Aker Kværner – the companies share a common Norwegian subsea academic research culture – has seen Framo excel in the production of Helicoaxial Multiphase Pumps, amongst other subsea technologies. The pumps are available in a number of configurations, but for subsea use, the pumps are generally vertically mounted with electric and hydraulic drive.

"We have industrial owners," Dale explains. "We believe in having control over all stages of production and manufacturing all our own parts." Framo thus offers complete systems, which are available to the market as inclusive packages, including subsea power and distribution systems, umbilical and topside power and control systems.

But, whilst the common perception of working in mature and marginal fields hardly inspires confidence in a long-term sales strategy, Dale is confident that

in reality the opposite is the case. "It is definitely a long term market, and it is also a growing market. We too are expanding rapidly – in fact it is hard to expand ourselves as rapidly as the market is expanding," he explains.

Not only is Framo Engineering producing quality technology, but they are part of an industry with years of experience. It is, in some ways, a race to produce pumps that prolong the life of an energy source that is, ultimately speaking, disappearing. "We have a long experience in the market. We started very early," reflects Dale on the key to Framo's success.

Framo is not the only Norwegian subsea company with international achievements. Aker Kværner is also a dominant player in the world market, boasting experience in design, manufacture and installation of subsea products stretching back more than forty years. Amongst Aker Kværner's achievements are successful deepwater solutions, which have been demonstrated effective for Total in their Dalia development, in 1,500 metres in offshore Angola, and for Reliance's K6-D6 deepwater gas development project in 1,200 metres in offshore East India. In both cases, Aker Kværner's robust and reliable products have withstood the pressure in dangerous marine environments.

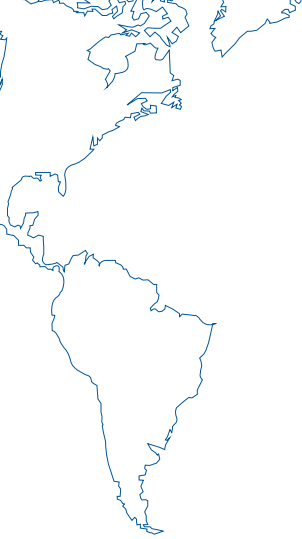
An exciting recent contract won by Aker Kværner will see them produce three subsea pumping systems for BP in the King Field, Gulf of Mexico. This ongoing project, due late 2007, is one of many firsts. At 29 kilometres from the host platform, it is the longest booster subsea tieback recorded. With five deepwater wells installed at an average depth of 1,700 metres, it is also the deepest installation of its type. Aker Kværner's multi-phase pump system will attempt to increase production in the King Field, and, when two existing wells are fitted with the pumps, it will be the first commercial use of the innovation.

The pumps, known as MultiBoosters, won the Spotlight on New Technology Award at the Offshore Technology Conference in Houston. They are flexible in their usage, according to engineering manager Gunder Homstvedt, and can be used either early or late in a project. "By boosting pressure an operator can deliver added production from the outset of a project and help deplete a field quickly, reducing overall

Statoil used the services of drilling contractor Prosafe and manufacturer FMC Kongsberg Subsea to produce a cost-cutting solution allowing downhole tools to be used under pressure from the seabed at Statfjord.



© Øyvind Hagen/StatoilHydro



opex, or it can be applied later to defer initial capex and extend producing life. Either way it can be a winner,” he said (*Offshore Engineer* 12.07.2007).

The systems, to be manufactured by Aker Kværner in Tranby, Norway, are hoped to be a shining example of how subsea boosting technology – as showcased by Norway’s offshore equipment industry – can significantly boost production and prolong the life of fields irrespective of difficult maritime environments.

A Range of Subsea Technologies

Norway’s long experience as an oil nation has led to close cooperation between leading players in the maritime and petroleum industries, and between authorities and research institutions, such as the Centre for Integrated Petroleum Research (CIPR) in Bergen. Competition, such as that between Aker Kværner and Framo Engineering, has also allowed the industry to move forward because of a common understanding that “two heads are better than one”. It is evident that Norway’s mature attitude towards research

explains its continuing success as a pioneer of innovative technologies.

One such technology is currently being utilized by StatoilHydro to cut costs in subsea intervention by up to a third. Before the recent merger, it was Statoil who employed the services of drilling contractor Prosafe and manufacturer FMC Kongsberg Subsea to produce a cost-cutting solution allowing downhole tools to be used under pressure from the seabed. The need for a drilling rig and riser is eliminated, and costs consequently cut drastically. Success on the Statfjord satellites and Visund in the North Sea, as well as Åsgard in the Norwegian Sea confirmed that the technology was a success.

An intelligent cost-cutting measure like this throws up endless possibilities for more efficient and expansive infrastructure usage and investment, which in turn makes dreams become realities in Norwegian subsea fields. StatoilHydro’s ambition to increase the average recovery in this area from 43 to 55 percent is built on the success of the new infrastructure. “That’ll help to cut operating costs, extend producing life and improve recovery from subsea fields. The resulting increase in activity will help to safeguard jobs for the future,” said Øivind Reinertsen, senior vice president for the North Sea Tampen area. (*Cheaper Subsea Intervention*, Statoil, 20.11.2003).

StatoilHydro has also been active in pursuing deals with FMC Technologies, Vetco Gray Scandinavia and Aker Kværner Subsea to produce additional subsea equipment over the next five years. StatoilHydro’s policy is to offer contracts to a number of suppliers, keeping abreast of as many subsea technologies as possible. Atle Rettedal, acting senior vice president of Technology and Projects (T&P), admitted that “The suppliers find it attractive working with Statoil because the company is leading in employing new technology,” (*Frame Agreement for Subsea Equipment*, Statoil, 24.08.2007).

The significance of these agreements is telling, especially since the merger between Statoil and Norsk Hydro created the biggest offshore oil company in the world. The continuing investment of such a world leader in new technology is not only a boost for the Norwegian subsea equipment industry, but is also a gesture of confidence. Continuing operations on the NCS are of paramount importance to Norway’s socio-economic health, and, despite the potential for greater foreign expansion, StatoilHydro is still a huge part of the future of the shelf. The North Sea, the Norwegian Sea and the Barents Sea are still rich in resources, but as time goes on, investment in subsea boosting technology is more and more important. The exploitation of marginal and mature fields here is the future, and, for the time



Åstad. StatoilHydro’s extensive operations on the NCS are important for Norway’s economy. Investments in subsea boosting technology suggest that they are likely to continue in the long-term.



being, StatoilHydro has declared itself a part of that future.

What Can Subsea Boosting Pumps Achieve?

The range of solutions that the Norwegian subsea industry provides is significant. There are a number of different pumps on the market, and whilst their structure and profile may vary, there is a common aim: to provide strength and maximum retrievability in one unit. Framo's Multiphase pump, for example, is based on their existing architecture developed in worldwide waters since 1994 and on Poseidon helicon-axial technology developed by Statoil, IFP and Total. The multistage pump is fitted onto a stiff diameter shaft assembly. The patented Framo Flow Mixture creates a homogenous mixture to provide stable operating

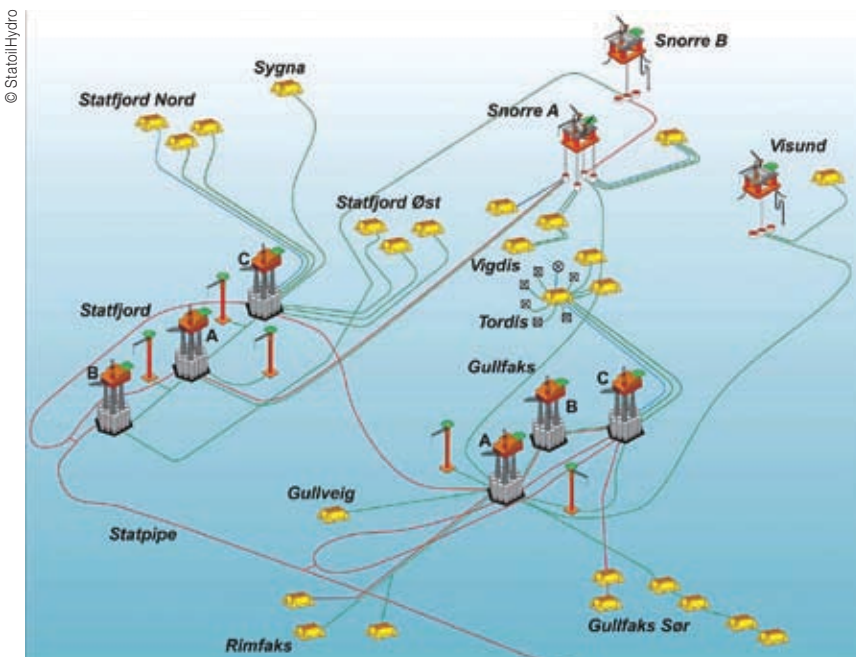
conditions and eliminates transients from slug flow. Other advantages provided by Framo include internally pressurised mechanical seals, which both protect the environment and enhance safety. The retrievable cartridges are built strong enough to withstand harsh environments. Deployment of multiphase booster pumps has resulted in total recovery rates and cost-effective operations that have paved the way for further deepwater field developments.

Simply put, a subsea boosting pump such as Framo's Multiphase pump, or Aker Kværner's MultiBooster, can mean the difference between success and failure in mature and marginal fields. B.P.'s investment in the MultiBooster could increase oil recovery by up to 20 percent, which means up to 6 million barrels per

well in the US Gulf. It is an investment worth taking seriously, and Norway's market advantages put them in a prime position to capitalise on an ever-growing need to efficiently recover oil in locations around the world.

For the oil companies operating on the NCS, subsea boosting pumps open up a wealth of heretofore untapped opportunities to extend the usefulness of fields that might, if not for sound investment and long-term planning on the part of the oil companies involved, be coming to the end of their commercial feasibility. The future, for the Norwegian petroleum industry, is allied to these pumps and subsea boosting technologies. "Today's global energy sector is truly interconnected, with international oil companies making significant contributions to the development of national resources," Chairman Robert Olsen of ExxonMobil International told the Offshore Europe Conference (4.09.2007). Norway has the advantage of having put that concept of interconnection to good use over a number of years, as the industry has worked together in researching and developing subsea infrastructure that has secured not only Norway's immediate future as an oil nation with exploitable fields, but also as an international leader in a vital – and highly exportable – technology.

The North Sea Tampen area. Øivind Reinertsen, senior vice president for the area is confident that StatoilHydro's plans to increase average recovery from 43 percent to 55 percent will result from the careful utilisation of subsea technology, and will help to cut costs.



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the research council of norway

The Research Council of Norway offers project support to companies that invest in innovation through research and development. Industry projects are financed via the tax deduction scheme SkatteFUNN and within research programmes such as the User-driven Research-based Innovation programme (BIA). Long-term research projects are funded through the Centres for Research-Driven Innovation. Project support also can be found in thematic programmes such as PETROMAKS, DEMO 2000, RENERGI, and CLIMIT.

PETROMAKS – A Large Programme for Optimal Management of Petroleum Resources

With the introduction of PETROMAKS, the Norwegian Government sent the message that strong public support of petroleum R&D was necessary.

PETROMAKS focuses on basic and applied research and technological development. The supply and service industries are given special attention since globalization and worldwide participation are vital for maintaining Norway's leading position. Support from the PETROMAKS programme involves forging alliances, creating networks and facilitating different types of cooperation with the world's foremost science and technology institutions.

For more information, visit
www.PETROMAKS.no

Future Clean Energy Systems (RENERGI)

RENERGI finances projects that develop knowledge and solutions as the basis for the environmentally-friendly, efficient and effective management of the country's energy resources along with the security of supply and internationally competitive economic development related to the energy sector.

www.rcn.no/renergi

GASSMAKS

The goal of GASSMAKS is to increase value in the natural gas supply chain by strengthening expertise, industrial development and international competitiveness.

www.rcn.no/gassmaks

CLIMIT is the programme for the development of environmentally friendly natural gas. This programme supports sustainable natural gas power technologies and solutions for the capture and storage of CO₂.

www.rcn.no/climit

DEMO 2000 finances projects that accelerate the uptake of new technology by bridging the gap between research and development and implementation.

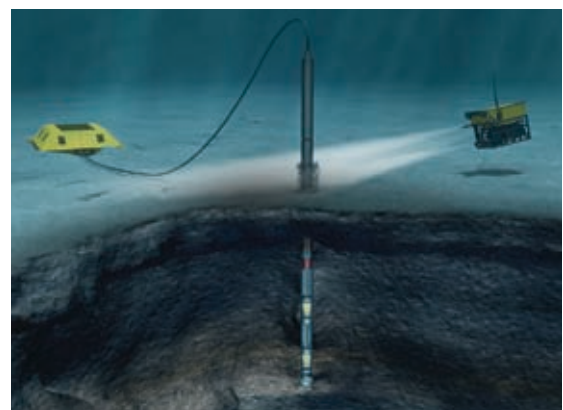
www.rcn.no/demo2000

The Research Council of Norway is a strategic body for Norwegian research run under the auspices of the Ministry of Education and Research. The Research Council develops research policy based on guidelines from the Norwegian government and the Norwegian Parliament. In 2006 the Research Council administrated some EUR 650 million, financed by 16 ministries to fund basic research, applied research and innovation-related activities.

For more information, visit
www.rcn.no/industry

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years of connecting norway to the world

Since 1957, the **Norway Exports** publication series has and continues to provide timely, in-depth information on a selection of Norwegian companies, products and services in over 15 industrial sectors. Over 80,000 copies of the publications are distributed each year to relevant importers, purchasing agents and Chambers of Commerce in cooperation with Norwegian embassies, consulates and Innovation Norway's offices abroad.

A selection of the industries covered by Norway Exports includes:

*Oil & Gas • Shipping • Defence & Space
Technology • Research & Development
Seafood, Fishing & Aquaculture • ICT
Energy & Environmental Technology*

Each Norway Exports publication features:

- Comprehensive and captivating articles by well-respected English-language writers on the state of the particular industry in Norway, along with details about the Norwegian companies, products and projects essential in each branch
- Individual profile pages providing more specific information about each of the participating Norwegian companies

- An extensive index which allows one to find the Norwegian companies offering the specific products and services one is interested in

Given the publication series' public cooperative partners and its close working relationships with the leading industry organizations in each sector, it's clear: if it's happening in Norwegian export industry, it's being covered in **Norway Exports**.



norway exports™
– marketing norway to the world
since 1957

find new business partners in norway

At www.nortrade.com you will find up-to-date information on more than 3,400 Norwegian manufacturers and exporters within 30 different industries. There you will find a search tool which allows you to perform searches for companies, products or persons in the Norwegian Export Directory.

Thirty Industry Portals

Nortrade also has 30 different industry portals containing information about companies, products and news of current interest.

Send Online Trade Requests

You can send inquiries directly to one or more companies following a product search. You will receive a reply directly from the company.

Subscribe to News Articles

You can subscribe to news from relevant industry sectors and companies free of charge.

Find Relevant Suppliers

Nortrade has a comprehensive presentation of Norwegian seafood, fishing & aquaculture companies, complete with company profile pages, product pages, industry codes and news articles, along with e-mail and website links.





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With a firm focus on research and development, more than 50 years of experience, 4,500 dedicated engineers and a track record of more than 1,000 successfully completed projects worldwide, ABB is the preferred supplier of power and automation technologies in the oil and gas industry. ABB's customers range from oil and engineering companies to machine manufacturers and OEMs.

Products & Systems

As part of the global ABB Group, ABB in Norway has access to the corporation's worldwide technology base and service network. The organization has global responsibility within the ABB Group for the following products and systems for the oil and gas industry:

- FPSOs
- Safety systems
- Terminal systems
- Electrical systems
- HVDC light systems
- Subsea drives systems
- Enhanced oil production
- AC drilling drives systems
- Telecommunication systems
- Operate IT simulation interface

Projects

Reference installations range from total automation, electrification and telecommunication solutions, to single system scope.

Sakhalin

During the Sakhalin II Telecom project in eastern Russia, ABB was responsible for project management, engineering, quality assurance, HSE, as well as the supply, installation and commissioning of all telecommunication. ABB has developed 18 different telecommunication systems for three offshore platforms, one onshore process plant, one LNG factory, one terminal, 800 kilometres of pipelines, two harbours and temporary telecom systems for six project camps.

Troll A

After 10 years of production, reservoir pressure had to be increased on the giant Troll gas field in the North Sea. Statoil chose two 40-megawatt very high voltage motors from ABB, powered by ABB's HVDC Light system, transmitting environmentally friendly power from the onshore land installation. HVDC Light eliminates the need for offshore gas turbines, reducing environmental impact significantly.

Snøhvit

StatoilHydro's LNG plant on Melkøya in the northern part of Norway has installed ABB's safety and automation systems, ensuring the safe and optimized operation of processes at all times. In addition, ABB's full range of power equipment and power management systems contribute to a reliable power supply to the largest gas treatment plant on the Norwegian continental shelf.



Ahlsell Oil & Gas AS headquarter.

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Ahlsell Oil & Gas AS is a multidisciplinary supplier to the oil and gas industry, and has one of Europe's largest stocks of pipes, fittings and flanges. The company has offices in Stavanger and Bergen in Norway and Abu Dhabi in UAE.

New Company Organization

Ahlsell Oil & Gas AS was formerly the Oil and Gas Division of Ahlsell Norge AS, which by October 1st 2007 was demerged into a separate company. Further back in time Ahlsell Oil & Gas AS was the same as former companies AS Bergens Rørhandel and AS Stavanger Rørhandel's separate divisions for the oil and gas industry.

The company's headquarters are located in Forus, outside of Stavanger, in the facilities of what was previously AS Stavanger Rørhandel. The former location of the company AS Bergens Rørhandel in Godvik, located outside of Bergen, houses a strong branch office of Ahlsell Oil & Gas AS. Additionally the company is located in Abu Dhabi through its branch office there.

Excellent Customer Value

When offshore activities began in the North Sea, former companies AS Bergens Rørhandel and AS Stavanger Rørhandel used the knowledge and financial strength they acquired from experience in the land-based and shipbuilding industries to enter the market. The companies were active in the offshore industry for 35 years. Ahlsell Oil & Gas AS now brings this one step further.

Through the NS-EN ISO 9001-2000 certification of Ahlsell Oil & Gas, the focus on proper routines and procedures for quality is maintained for all the company's processes.

Representing Europe's Best Manufacturers

Ahlsell Oil & Gas AS has developed first-class relations with manufacturers over the course of many years of doing business together. These manufacturers have a proven record of excellence. Over the past ten years, Ahlsell's manufacturers have been certified to comply with NORSOK M-650 and PED requirements.

International Presence

The company's main market has always been the North Sea and it serves all of the major oil companies and contractors. Ahlsell Oil & Gas AS has entered into several frame agreements with oil companies, as well as engineering and construction companies, ensuring safe production for operating platforms and the successful accomplishment of new projects.

The company's international presence is constantly developing and includes the markets of Europe, the United States, Australia, Russia, the Middle East and the Far East. Ahlsell Oil & Gas AS's ability to compete in the international arena is demonstrated by the number of global contracts awarded. The company's expertise in delivering complete packages for EPC/EPCI contracts is yet another one of its strengths.

Wide Range of Products

Ahlsell Oil & Gas AS offers materials in a variety of sizes in accordance with API and ASTM standards. The company keeps a full range of products and material grades, from ½ to 24 inches, in stock. The product range consists of:

- Pipes
- Elbows
- Tees
- Flanges
- Valves
- Compact flanges
- Clamp connectors
- Reducers
- O-lets
- Caps
- Stubends
- 3,000/6,000 pound fittings

In order to meet the project needs of its customers, Ahlsell offers a wide range of material grades from stock, which includes:

- Carbon steel and low-temperature carbon steel and Grade X52
- SS 316/316L
- CuNi 90/10
- 22 Cr duplex (UNS S31803)
- 25 Cr duplex (UNS S32750 and UNS S32760)
- 6Mo (UNS S31254 and UNS N08926)
- Superaustenite (UNS S34565)
- Inconel alloys (UNS N06625 and N08825)
- Titanium Gr. 2

Ahlsell's titanium stock has the reputation of being the largest stock of finished products in Europe.

Furthermore, the Electro Division of Ahlsell Norge AS has more than 200 kilometres of NEK-606 compliant cables in 120 various types and sizes, as well as the full range of electrical equipment for offshore applications in stock.



Convenient Warehouse Solution

Ahlsell Oil & Gas AS' total warehouse capacity for pipes, fittings, flanges and valves comprises 25,200 m² in addition to 12,000 m² of outdoor stock area.

Complete Service Solutions

Ahlsell Oil & Gas AS also provides additional local services through cooperation with companies like Vector International for mechanical joints and compact flanges and Sverdrup Hanssen Spesial Stål for plate and round bar availability. The company's service also includes special items, cold and induction bending and spool fabrication.





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Acergy is a seabed-to-surface engineering and construction contractor for the offshore oil and gas industry worldwide. The company plans, designs and delivers complex, integrated projects in harsh and challenging environments. Acergy operates internationally as one group – globally aware and locally sensitive, sharing its expertise and experience to create innovative solutions. The company is more than a solution provider; it is a solution partner – ready to make the long-term investments in its people, assets, know-how and relationships in support of its clients.

Acergy Know-how

Acergy partners with its clients to develop major deepwater and conventional projects in the most painstaking detail. The company leverages its know-how to execute precision operations. Acergy continually challenges the boundaries of technology to safely bring on stream production facilities with the capability to operate for decades.

Deepwater Know-how

Acergy is an expert in the design, installation and commissioning of subsea-to-surface projects. The company's extensive experience in deepwater Subsea, Umbilical, Riser and Flowline (SURF) projects has made it the preferred contractor and trusted partner for many exploration and production companies and SURF now represents the most significant proportion of the company's business.

1. Acergy Osprey.

2. Acergy Piper – Langeded Trunkline Installation
Project 2005–2007.

EPIC Delivery

Acergy delivers turnkey Engineering, Procurement, Installation and Commissioning (EPIC) seabed-to-surface projects for clients around the world, in the most challenging operating environments.

Inspection, Maintenance & Repair Expertise

Acergy plays a key role in helping its clients maintain the production of oil and gas fields at optimum capacity through the provision of a wide range of seabed-to-surface inspection, maintenance and repair services. Day and night, in oceans around the world, Acergy divers and Acergy remotely operated vehicles are at work on long-term maintenance contracts or rapid response to situations that require the company's know-how.

Trunkline Expertise

Acergy remains at the forefront of trunkline installation. The company operates the world's largest and most successful semi-submersible pipelay barge, the Acergy Piper. Acergy has an outstanding track record of achievement gained worldwide.

Acergy People

What constitutes Acergy know-how? First and foremost it is the expertise of the company's people – expertise forged through experience in harsh seabed-to-surface environments over the past four decades. Critical to this is Acergy's engineering and project management excellence. Proven time and time again and continuously developed through investment in technical, professional and safety training Acergy delivers projects safely, on time, within budget and at the highest standards of quality.





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Aibel is a leading provider of engineering, project management and technology services and products for the upstream oil and gas industry. Its customers count among the world's leading oil companies, shipowners and field operators. The company's strengths lie in its ability to single source solutions from a flexible mix of services, products and technologies while adhering to the strictest standards within value fields such as sustainability, social responsibility and business ethics.

Core Business Areas

Aibel's core business areas include:

- Engineering, procurement and construction (EPC) services for onshore and offshore production facilities, fixed and floating platforms, including project and subcontract management, detail engineering and procurement, assembly and completion
- Complete topside process modules and front-end studies
- Maintenance, modifications and operations services that include multidisciplinary studies, long-term maintenance and modifications contracts, integrated operations and modifications contracts, construction yard and in-house module/platform erection capabilities

Aibel also has leading edge technologies and products within core areas such as:

- Gas technology
- Separation technologies
- Decision making tools such as laboratory services, computational fluid dynamics and process debottlenecking studies

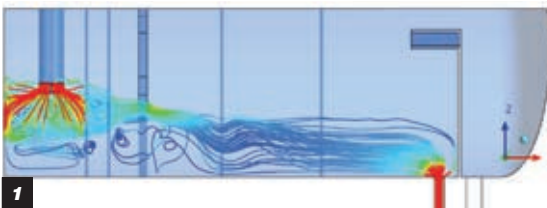
Employees & Locations

Aibel's headquarters are located in Oslo, and the company has 7,000 employees around the world. Aibel has engineering and sales centres in Norway, Australia, Brazil, Canada, Denmark, Egypt, Kazakhstan, Libya, Singapore, Thailand, the UK and the USA. The company also has two world class construction/assembly yards in Haugesund, Norway and Laem Chabang, Thailand.

over more than a century of success in both the North Sea and other key oil producing regions around the world.

Opportunities

As an expanding company in an exciting and challenging growth market, Aibel has many career openings. These are published on the company's website, which is frequently updated as Aibel is always looking for highly skilled and highly motivated team players who want to make a difference. Aibel has the global presence, financial strength and flexibility that make personal and professional growth possible.



1. CFD study of the flow pattern in the water phase of a separator.

What's in a Name?

The brand and company name, Aibel, reflects the abilities to help identify and assess customers' needs and successfully address the crux of any oil or gas production field or plant challenge. Although the brand and name are relatively new, the company isn't. Aibel is home to a vast bank of knowledge and experience built up





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Aker Kvaerner is a leading global provider of services related to the design, construction, maintenance, modification and operation of both large and small industrial facilities. In addition, the group provides advanced technology products, either on their own or as part of integrated solutions. Aker Kvaerner has more than 24,000 employees in more than 30 countries, in addition to about 9,000 agency staff and contract personnel. In 2006 operating revenues were approximately NOK 50.6 billion.

Advanced Know-How

Aker Kvaerner has advanced know-how in regards to reservoir simulation, engineering, fabrication, maintenance, modifications and operation of fixed or floating offshore or onshore production, storage and processing facilities, as well as the decommissioning and reuse of such facilities.

A World Leader

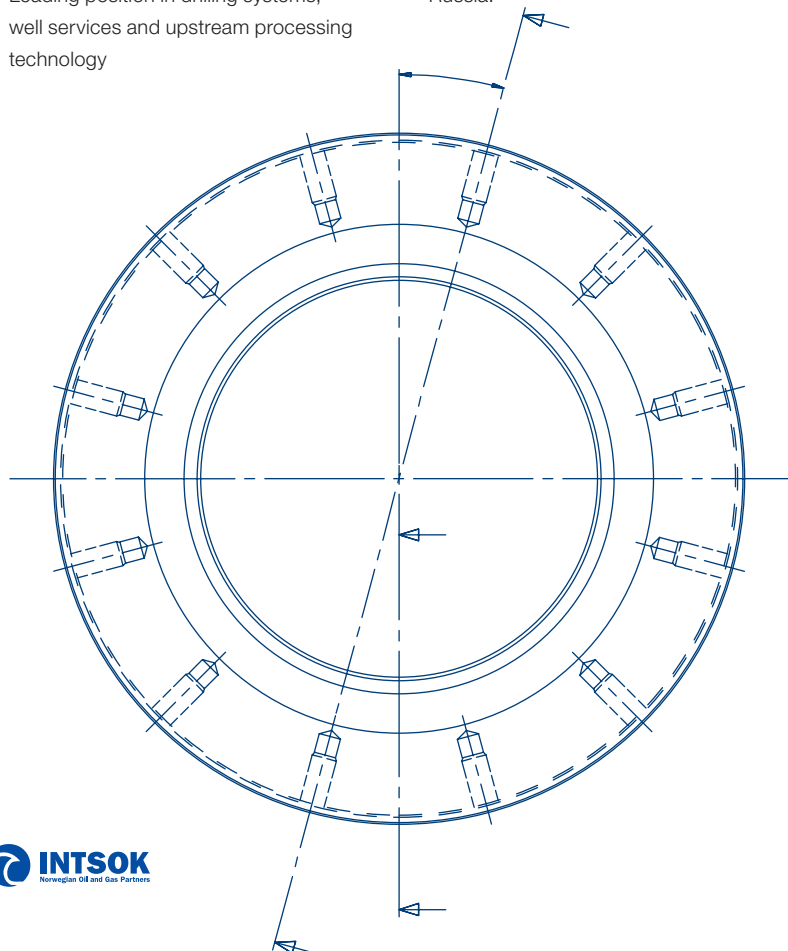
A unique combination of leading-edge expertise, products, technologies and solutions across the oil and gas value chain places Aker Kvaerner in the position of being one of the world's leading engineering and construction groups. Examples of its top tier position include:

- Design of one in five of the world's floating platforms
- Market leader in concrete gravity-based structures (GBS) for offshore facilities

- Number-one market leader in steel tube umbilicals
- Preferred contractor in the maintenance, modifications and operations market
- Leading position in drilling systems, well services and upstream processing technology

Markets

Aker Kvaerner is active in markets as diverse as the North Sea, the Gulf of Mexico, West Africa, South America, Asia Pacific and Russia.





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Akvaplan-niva offers a wide range of environmental consultancy, monitoring and research services. Services for the petroleum industry include environmental monitoring studies, survey design, impact assessments and risk analyses, ecotoxicological testing, oil spill contingency planning and sensitivity mapping.

Environmental Monitoring

Since 1989, Akvaplan-niva has carried out more than 70 major offshore monitoring surveys for oil and gas companies. These assignments include environmental baseline and monitoring surveys around offshore installations in temperate and arctic regions. Samples are processed and analysed in-house, at the company's NS-EN ISO/ISE 17025 accredited laboratories. Akvaplan-niva's survey experience ranges from coastal waters to deep (>1000m) sea areas.

Environmental Impact Assessments & Risk Analyses

Akvaplan-niva performs Environmental Impact Assessments (EIA) and Risk Analyses (ERA) related to off and onshore oil and gas activities like drilling, shipping, the construction of pipelines, decommissioning and harbour and land terminal development. The company provides environmental appraisals, pre-entry screenings and resource surveys to support oil and gas companies moving into new regions.

Oil Spill Contingency Planning & Environmental Sensitivity Mapping

The identification of sensitive areas and vulnerable resources is a major activity in EIA, ERA and oil spill contingency planning. Akvaplan-niva provides services at all levels, including field inventories, sensitivity indexing, mapping and contingency planning.

Research on Arctic Ecosystems' Sensitivity to Petroleum Activities

To provide scientific advice on the sensitivity of Arctic ecosystems to the oil and gas industry operators, Akvaplan-niva performs ecotoxicological testing of oil and chemicals on low trophic level arctic organisms including fish. Experiments are carried out at laboratory facilities on Svalbard and mainland Norway, providing test conditions that resemble as close as possible the natural environment.

Design of Guidelines

Akvaplan-niva's broad experience with environmental monitoring in marine and limnic environments is also used to assist oil and gas companies and authorities in developing and harmonizing environmental guidelines and regulations, such as standards for sampling and sample analyses, guidelines for offshore monitoring handbooks for oil spill cleanup.

Multidisciplinary Expertise and International Experience

Akvaplan-niva's head office and analytical laboratories are located in northern Norway. The company has a subsidiary based in Murmansk (Russia) and local offices in Iceland, France and Spain. It has a diversified international staff of some 50 biologists, ecologists, chemists and geologists. Akvaplan-niva has extensive experience with assignments in the North Atlantic region and northwest Russia, but is also active in other parts of the world.

1. EIA and Coastal Monitoring for Statoil's LNG plant on Melkøya.

2. Environmental monitoring around offshore installations on the Norwegian shelf.





ALUSTAR



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Alustar AS, located in Stavanger, Norway, has developed into one of Scandinavia's leading manufacturers of aluminium scaffolding. The new generation of scaffolding has focused on providing all-round cost-efficiency and a good working environment, an approach that has received the full approval of an otherwise conservative business.

Cut Costs

The basis for Alustar's scaffolding was developed during the 1990s. The starting point for the extensive development work was an analysis of heavy steel scaffolding. The aim was then to create a new aluminium system that utilized, developed and improved all the positive qualities while eliminating the negative ones.

The result is a system that has increased productivity, halved the weight and increased the strength. Assembly and dismantling times have been reduced by 40 percent compared to conventional steel systems. All in all, a technical and economic concept has been created that has made customers more efficient and reduced their total costs.

Improved Working Environment

The Alustar scaffolding system has also been developed with safety and a good working environment in mind. Its low weight and user-friendliness help to reduce industrial injuries caused by heavy lifting and difficult handling.

Alustar is used today in new construction, installation and repair work in the offshore industry, in the building industry and industrial plants. It was developed to withstand extreme conditions on offshore installations in the North Sea. Special applications for platforms, stages and spectator stands are also on the list.

Leading Scaffolding System in Scandinavia

Alustar is the leading scaffolding system in Scandinavia and interest is increasing rapidly in Europe and the rest of the world. The system is well established on Norwegian and Danish offshore platforms, and the company makes extensive deliveries to the plant where natural gas comes ashore from the Ormen Lange field.

References


Some of Alustar AS's references include:

Offshore development

- Phillips petroleum: Ekofisk 2/4j Hook-up
- Norsk Hydro: Heimdal
- Kværner Oil & Gas AS: Visund
- Statoil/Dong: Siri
- Mærsk Oil & Gas: Halfdan

Land-based projects

- Aker Kværner Verdal: Ormen Lange, Aukra
- Aker Verdal, various jackup
- Semco Maritime
- Statoil: Mongstad, Kolsnes
- Hydro: Rafnes
- Tjeldbergodden processing plant
- Shell: The refinery at Sola



AUTRONICA
FIRE AND SECURITY

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Autronica Fire and Security AS, Oil & Gas is a leading innovator, producer and international supplier of advanced sensors and systems for fire and gas detection to the petrochemical oil and gas industry. The product range includes AutoSafe® IFG (Integrated Fire & Gas Detection System) with SelfVerify®, the world's only IEC 61508 Safety Integrity Level 2 (Sil 2) approved integrated Fire & Gas Detection System. Autronica Fire and Security AS offers a full range of flame and gas detectors, high sensitive smoke detection (HSSD), alarm displays, colour-graphic presentation, alarm management and control systems. Service offered includes system design, project management, installation and commissioning, after sales service and training.

AutoSafe SelfVerify®

Autronica has developed the world's first fire and gas detection system that tests itself – AutoSafe SelfVerify®. Previously, fire and gas detection systems have always required manual inspection, which is often time-consuming, physically difficult and costly. AutoSafe SelfVerify® avoids these problems by doing the job itself. This breakthrough technology has been developed with the support of the Research Council of Norway and from three major oil companies: BP, Total and ExxonMobil. AutoSafe SelfVerify® meets worldwide industry standards and conforms to CEN regulations in EN-54. Not only does

AutoSafe SelfVerify® test whether a detector is capable of activating an alarm, it also verifies detector sensitivity with a calibrated signal, ensuring that each detector always responds to the correct alarm level. In the event of any irregularities, the operating panel display pinpoints the problem source clearly and concisely.

Simplified Updating

Since very few offshore installations remain static, upgrades or expansions are often necessary. For many systems this involves time-consuming, expensive reconfiguration, but with AutoSafe SelfVerify®, updating is extremely simple, thanks to its automatic addressing. Each detector or interface has

a unique serial number which identifies the type of unit and its default settings. When powering up the system after any modification, each detector automatically registers its position in the detector loop.

Optimal Around-the-Clock Detection

With this new technology, AutoSafe SelfVerify® is the most reliable fire and gas detection system on the market – a system that ensures optimal detection 24 hours a day.

1. AutoSafe IFG provides unprecedented compatibility with detection devices, including standard smoke and heat detectors, Multispectrum IR, Single IR, UV/IR flame detectors, Point and Open Path Gas detectors, CCTV flame detectors and aspirating systems.



BENNEX

BENNEX AS

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Bennex is a key supplier of products, systems and services to the subsea oil and gas industry, oceanographic bottom (OBS) and electromagnetic (SBL) seismic systems and products for ROV's. The Bennex group has 200 employees in Bergen and Kongsberg, Norway; Aberdeen, UK; and Houston, USA. Bennex engineers have been solving subsea technology problems for over 30 years.

Subsea Competence

Bennex's subsea competence includes:

- Electrical, fibre optical and hydraulic jumpers and terminations
- Sealing technology
- Termination and sealing capabilities for up to 50 years of design life
- Products and engineering capability to deliver complete subsea systems
- Bennex has a subsea systems track record with no failures

Bennex develops, designs, manufactures and installs subsea technology systems in the global subsea market. Bennex focuses on subsea electrical, hydraulic and fibre optical distribution systems for signals and communication (data transaction) and high voltage/power technology related to subsea distribution. In addition, Bennex develops, designs and manufactures products and systems for bottom seismic (OBS) and electromagnetic (SBL) seismic systems. In-house developed and qualified subsea sealing and termination technology is an area of expertise for the company. Bennex also delivers products to defence and research institutions. Cables and connectors, including cable/connector assemblies and ROV equipment, is another competence area within subsea distribution.

Bennex designs future technology based on the knowledge and experience the company has gained from over 30 years in the subsea business. Subsea technology customers benefit from Bennex's presence in the most important parts of the global market. Bennex's customers are the subsea oil and gas industry and defence and research institutions, such as FMC Technologies, Vetco Gray, Aker Kværner and Input/Output. Bennex is "sealing the subsea industry", assisting the oil and gas industry to go deeper.

Expertise in Subsea Engineering

Bennex has highly qualified, experienced engineers with unique expertise in developing and designing subsea distribution technology. The company has several experienced and dedicated engineering teams capable of designing any application that is needed to meet its customers' challenges. Bennex offers experienced engineering and 3D design, project management, purchase, manufacturing, assembly and testing, installation, on-site training, service and maintenance. The company's subsea distribution technology is certified down to a water depth of 4,500 metres and has a guaranteed 50 year design life.

Technor

Bennex is owned by Technor Holding AS. Technor Holding AS is a Norwegian based technology company located in Stavanger. The company holds niche positions in the international oil and gas, subsea, LNG and energy market. The enterprise has three business areas; ElectroTech, FlowTech and Subsea Division – and operations on three continents. The company is growing fast and has an expected turnover for 2007 of NOK 1 billion. The company has 710 employees.





BJØRGE ASA
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Bjørge ASA delivers high quality products and performs project and maintenance services for the oil and gas industry. The company's main references are oil companies such as ConocoPhillips, Statoil, Shell, Norsk Hydro, BP and Talisman and engineering companies such as Aker Kvaerner, Vetco Aibel, Sørco and Halliburton. Bjørge has a total of 950 employees and performs its activities through its Modification & Service, Instrumentation & Monitoring, Valves, Pumps and ISO (maintenance, insulation, scaffolding & outfitting) divisions.

Solutions & Products

Bjørge' offers the following solutions:

- Total crane management
- Instrumentation solutions
- Subsea condition monitoring
- Automation and control systems
- Fiscal metering solutions
- Oil and gas process valves
- A wide range of pumps and systems
- Total solutions provider – fabric maintenance
- High technology surface treatment

HSE&Q Policy

Bjørge maintains a strong focus on health, safety, the environment and quality assurance and has implemented the zero mind-set in its organization. This is central to all work done by Bjørge and it involves searching for methods, systems, technology and expertise which makes it possible

to conduct its operations without causing, both within and outside of the company:

- Personal injuries
- Occupational illnesses
- Unplanned discharges
- Damage to material assets or financial losses



1. Metering system for Snøhvit.



BOA GROUP
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 Taubåtkompaniet)
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The BOA GROUP of companies offer complete transport solutions and a variety of offshore and subsea construction services worldwide. The annual turnover for the BOA GROUP in 2006 was NOK 796 million. The total number of employees through the end of 2007 is estimated to be approximately 500.

Fleet

Today the BOA GROUP operates a fleet consisting of approximately 40 vessels. They are flat-top and heavy-lift semi-submersible barges, subsea construction and offshore vessels, ocean-going tugs as well as harbour and salvage tugs.

In addition to the OCV "Boa Deep C", in September 2007 the BOA GROUP became the proud owner of the newly built OCV "Boa Sub C", which today is outfitted with one of the largest heave compensated cranes (400 tonnes) and towing winches (600 tonnes) of its kind. Both OCV's are also outfitted with two WROVs each with a working depth down to 3000 metres.

In the years to come the BOA GROUP will further expand its fleet and has already realized the ordering of an extensive fleet of newbuildings consisting of four Anchor Handling Tug Supply Vessels (VS 491), four Multi-Purpose Supply Vessels (VS495), two Seabed Logging Vessels (MT6007) and one Platform Supply Vessel (MT6007-MkII).

1. Boa Sub C.

2. Transport of coolbox for the Melkøya LNG terminal.

In addition, a number of large semi-submersible barges and flat-top barges are scheduled for delivery within the next years. All barges with a new design developed by our group of in-house engineers.

The management company within the BOA GROUP is also the commercial manager for the fleet of barges within Viking Barge KS.

Services

The BOA GROUP's services today are within the following segments:

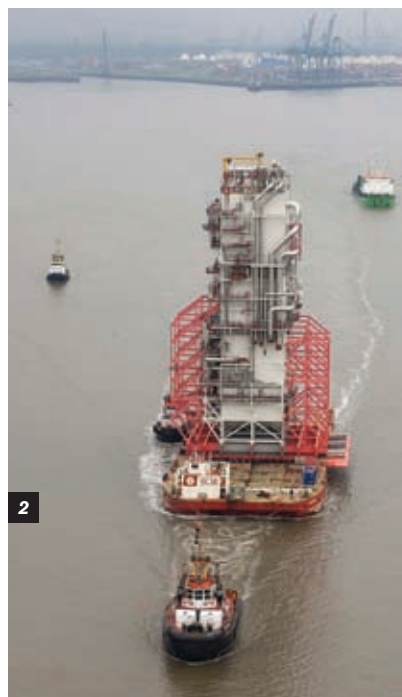
- **Subsea construction** – performance of activities such as subsea installations, ultra deepwater crane operations, ROV

operations, mooring of large FPSOs and pipe laying

- **Transport and heavy lift** – marine heavy lift, transport, engineering and operation management
- **Anchor handling and supply** – multi-functional vessels for anchor handling and supply services
- **Platform supply** – medium-sized PSV for supply services
- **Harbour, coastal and offshore towages** – both azimuth stern drive tugs as well as conventional tugs
- **Salvage**
- **Engineering** – stability calculations – ballast procedures (load-out/load-in), motion response analysis, wave statistics for determination of design sea state, seafastening/grillage design, risk analysis, lifting operations, ship and barge designs, various manuals (transport manual etc.)

Commitment to Safety, Quality & Environment

The safety of personnel and the guarding of property against health risks and damage, customer satisfaction and protection of the environment are cornerstones in the company's policies. The BOA GROUP has been certified according to the International Safety Management (ISM) Code since 2002 and its quality management system is based on the ISO 9001:2000 standard.





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Complex Flow Design AS is a provider of consulting services to the energy industry. The company provides contract research and development services within numerical simulations and analysis. Complex Flow Design develops state-of-the-art methods and software tools for making realistic numerical simulations of multi-phase flow in process, hydraulic and sedimentation engineering. The framework for these numerical simulations is based upon the general purpose computational fluid dynamics (CFD) software suite Flow-3D® developed by Flow Science Inc., USA. Complex Flow Design AS is an associate partner of Flow Science Inc. in Norway.

3D Numerical Forward Modelling

Complex Flow Design AS develops a 3D numerical forward modelling tool for numerical simulation of submarine sediment gravity flows (massflows) that serves as a robust predictive tool to:

- Test play concepts and reduce uncertainty of geological models
- Improve the understanding of massflow processes
- Simulate transport and spatial distribution of sediments
- Model complex reservoir heterogeneities
- Perform sensitivity and risk analysis



Offshore Production & Process

Complex Flow Design AS provides analysis of offshore separation and performs detailed numerical simulations of oil/water/gas separators. The CFD-based simulator SoS – Separation offshore Survey – is the basis for these specialized studies.

The services for gravity separators offshore include:

- Analysis for design or redesign of separators at fixed and floating production systems according to NORSOK Standard P-100 for separator design



- Detailed modelling and simulation of fluid-flow distribution and separation behaviour
- Verification of the efficiency of separators to avoid short-circuiting, mixing and stagnant spaces

Many practical, design and redesign applications for gravity separators may be performed by CFD modelling and simulations. Examples of these are:

- Development of vessel inlet configurations that improve the uniformity of gas and liquids flow
- Separator design sensitivity to changes in operating conditions
- Influence of internal equipment on hydraulic efficiency and separation performance





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D&F Group is one of Norway's leading suppliers of competence, services and products within the fields of surface treatment, fire proofing, insulation, architectural works and outfitting, access technologies, decommissioning and related engineering and inspection services. The company is truly international, having worked in 15 countries around the world and has an excellent reputation for quality and reliability.

Multidisciplinary Services

Experience shows that multidisciplinary activity in D&F Group's business lines of surface treatment, fire proofing, insulation, architectural works and access techniques can increase both effectiveness and profitability. D&F Group is one of the largest multidisciplinary companies in Europe. Today it has more than 1,600 employees and the number of its multidisciplinary trained staff is steadily increasing.

D&F Group's aim is to become the most sought-after partner for surface treatment, fire proofing, insulation, architectural works and outfitting, access technologies, decommissioning and related engineering services in the Northern regions as well as overseas.

D&F Group is certified according to NS-EN ISO 9001:2000 (quality management) and NS-EN ISO 14001:2004 (environmental management).

1. BENARX removable fire insulation epoxy box – maintenance-friendly, water-tight, durable and reliable.

International Operations

Through subsidiaries in Hammerfest and Murmansk, the company's expertise is being transferred to areas where oil and gas-related activities are new lines of business. D&F Group's scope will be extended to incorporate the special work conditions in the Arctic. The company has also established an office in Houston from which activities in the Gulf of Mexico and in Brazil are coordinated.

Products

D&F Group focuses strongly on research and development. In close cooperation with customers and suppliers alike, D&F Group has developed several patented insulation products that have been launched under the brand name "BENARX". One of the latest patented additions to the BENARX product range is a removable fire insulation epoxy box. This box is covered entirely with an expanding epoxy coating. In case of a fire, the epoxy mass expands, thus creating a tight barrier between the fire, the area around it and the units that have to be protected. This new solution stands out for its robustness, user-friendliness and the prevention of corrosion under the insulation. The positive pressure habitat system SVEISOLAT is another product development.

Engineering & Inspection

D&F Group offers specialist engineering services within surface treatment, fire proofing, scaffolding, architecture and insulation. The company is equipped to take on projects in all phases of its life-cycle such as newbuilding, maintenance and modification. As a supplier of niche expertise, D&F Group contributes to developing cost-effective and maintenance-friendly solutions that satisfy the highest expectations regarding quality and safety.

Inspection work is carried out according to the company's own and highly recognised quality standards. D&F Group employs more than 100 certified FROSIO inspectors. These inspectors work as project managers, foremen and supervisors.





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DeepOcean's areas of focus are IRM, survey, construction support and trenching. Using modern DP2 vessels, ROVs, trenchers and subsea equipment, and a personnel resource team of experienced staff, DeepOcean has quickly evolved into one of the growing international subsea service providers, assisting both oil companies and major contractors worldwide. DeepOcean operates a fleet of 13 vessels with 7 more (6 newbuilds) being added to our fleet from late 2007 throughout 2009.

**Seabed Mapping/
 Survey & Positioning**

DeepOcean operates complete spreads for hydrographic mapping surveys, geotechnical surveys, and route and site surveys, including vessel and ROV-mounted multibeam echosounders for various depths and data quality. The company's expertise and experience enables it to perform high-quality surveys in all water depths worldwide.

Pipeline Inspections

DeepOcean operates a modern fleet of survey ROVs and equipment specially developed for safe and cost-effective pipeline inspection work. Furthermore, DeepOcean has a large number of employees with long experience in the branch and tailor-made procedures and software systems for work of this type.



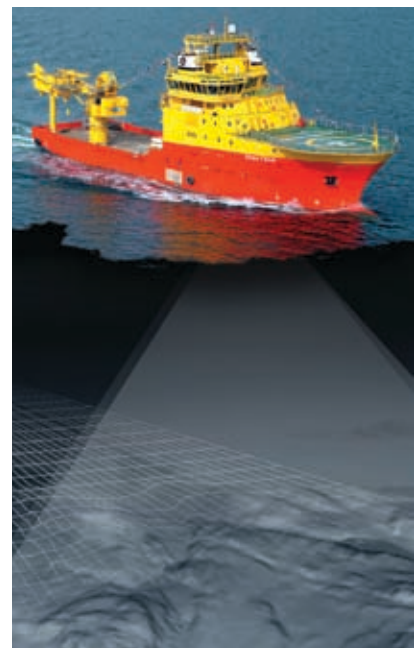
Trenching

Through its subsidiary CTC Marine Projects, DeepOcean is one of the world's leading independent marine trenching contractors, operating in the subsea oil & gas, telecommunications, military and utilities sectors of the offshore construction industry. CTC owns and operates the largest, most comprehensive and technically advanced fleet of trenching equipment in the world and provides a key component of the international subsea construction market.

Subsea Construction Support

DeepOcean's portfolio of highly specialized vessels, dedicated equipment and skilled personnel makes the company an attractive partner for subsea construction support. This niche of the industry is important to the company and DeepOcean views itself as a global provider of specialized services to

major construction contractors.





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DNO ASA, founded in 1971, was for many years a minor participant in oil and gas licences. In 1996 the company was revitalized to become a mature field operator in the North Sea. Since then the activity has steadily expanded. Today the company has a wide portfolio of licences and operator ships in several countries worldwide. The core business has been broadened to include exploration with a particular focus on low-cost reserves additions. The company employs a dedicated team of subsurface specialists and programs.

Mission & Growth Strategy

DNO's mission is to be a leading independent exploration and production company focused on transforming possible resources to reserves at low cost, generating substantial and consistent returns for shareholders. DNO's main objective is sustainable growth and value creation through risk-balanced, smart exploration, followed by cost-effective field development and high-margin production.

Assets Portfolio

DNO's exploration and production activities take place primarily in regions with established petroleum production and existing infrastructure. The company has a balanced portfolio of assets located in Yemen, Northern Iraq, the UK, Equatorial Guinea and Mozambique. The combination of low-cost producing assets and high potential exploration licenses provides a solid platform for future growth.





MANAGING RISK

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Det Norske Veritas (DNV) is a global provider of services for managing risk. Established in 1864, DNV is an independent foundation with the objective of safeguarding life, property and the environment. DNV comprises 300 offices in 100 countries and has 7,000 employees. DNV Energy is one of four business areas in DNV alongside DNV Maritime, DNV Industry and DNV IT Global Services.

Managing Risk Worldwide

DNV's services provide high quality solutions for managing business-critical risks, enhancing business performance and improving safety and environmental performance. The company's broad industrial experience extends across the following segments:

- Deep and ultra deepwater field development
- MOUs and FPSOs
- Fixed structures
- Offshore and onshore pipelines
- Natural gas/LNG
- Refining and petrochemicals
- Utilities
- Cleaner energy and renewables
- Arctic operations and technology

DNV Services to the Energy Industry

DNV's services include:

Enterprise Risk Management

- Company-wide risk management
- Integrated risk management
- Project risk management
- Change management and process improvement
- Due diligence

SHE Risk Management

- Management systems and performance standards
- Technical risk and consequence assessment
- Emergency planning, response and investigation
- Human factors and occupational health
- Environmental impact and risk assessment

Technology Qualification

- Qualification of new technical solutions
- Materials technology
- Technical analysis, methodology and tools
- Development of technical standards

Offshore Classification

- Classification related to building and operation of MOUs and FPSOs
- Classification of tanker conversions to FPSOs

Verification

- Risk-based plant verification
- Risk-based subsea verification
- Risk-based structures and facilities verification
- Risk-based pipeline verification

- Product verification
- Marine operation verification and warranty services
- Rules/standards/regulations consulting

Operations Excellence

- Investment risk and solution screening
- Asset technology and lifecycle economics
- Asset appraisal
- Operation optimization
- Lifetime extension
- Asset safety system reliability'

Training

- Risk management
- Pipelines
- Materials and corrosion
- Industry standards and recommended practices
- Safety management
- Management systems

DNV serves the energy industry from more than 40 primary locations worldwide. In addition, DNV Energy draws on DNV's entire worldwide network of 300 offices in 100 countries.



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After acquiring Fabcon Management in 2006, Dovre International AS became one of Norway's largest competence centres in project and supply chain management with its 270 employees. Through existing frame agreements and contracts, the company is recognized as a solid provider of highly skilled consultants both in Norway and internationally.

Wide Range of Experience

Dovre International has a wide range of experience from major projects and purchasing in a variety of industries and it can offer a complete range of services from strategy and analysis to complete solutions including implementation and operation.

Although the company's core business is within the Oil and Gas Industry, its activities includes a wide range of clients from land-based industry, energy, transport and communication to public services.

Dovre's consultants are highly motivated, project-oriented and know how tasks should be approached and implemented in order to achieve goals. As a result, the company's customers are always satisfied with the services it can provide.

International Representation

In 2007, one-third of Dovre's turnover will come from its international business. Dovre is represented and well-established in the following countries: USA, Canada, UK, France, Singapore, Korea, Russia and Nigeria. In Norway, its headquarters is in Stavanger and additional offices are located in Oslo and Bergen.

Career Opportunities

For positions within Dovre it is required that applicants have at least five years of experience from the oil and gas industry. An applicant should have formal education as a B.Sc/M.Sc. or the equivalent. However, relevant experience can compensate for the lack of formal education. Potential candidates are most probably very well-established within their field of work today and have an extensive network within their own field of competence.

Dovre is looking for people who are:

- Independent and resourceful
- Target driven with a focus on the finished product
- In possession of excellent social skills and a cultural awareness. This is important, as workplace and organization will vary

Dovre can offer its employees the following:

- A variety of assignments
- Strong and focused work environment, unique experience
- Competence development through educational programmes
- Assignments both in Norway and abroad
- A competitive compensation package





1

EAS-Automation AS

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Founded in 1988, EAS-Automation AS is an independent engineering company specializing in equipment and systems for the oil and gas industry. EAS-Automation is a leading supplier of advanced control panels and special switchboards for emergency generators and fire water pumping systems. The company has extensive experience from offshore projects.

Design & Engineering

EAS-Automation designs its control panels and switchboards in-house according to client specifications and based on well-known industry standards such as BS, DIN, IEC, NFPA, etc. The company supplies both engineering assistance and hardware complete with wiring diagrams, logic charts, installation instructions and operation manuals. It also offers commissioning assistance and integration with larger control systems. Quality assurance is carried out in accordance with ISO 9001 standards.

- **NFPA 20 Fire Pump Control Panel**
FPC-Maxi control and monitoring system for diesel/electric drive systems
- **Emergency Generator Control Panel**
Control and monitoring system for complete emergency generator packages that fulfil offshore specifications
- **Low-Voltage Switchboards**
Special combined switchboards for fire pump and emergency generator units

Comprehensive Services

EAS-Automation offers the following services:

- Systems engineering and equipment supply
- Testing, commissioning and service
- Upgrades and modifications
- Training

Product Range

The following products are available for a variety of diesel engines, alternators, pump motors and pumps, with a wide range of options to suit individual project requirements:

- **NFPA 20 Fire Pump Control Panel**
FPC-Mini control and monitoring system for engine-driven pump sets

1. Low-voltage switchboard.

2. Fire pump control panel.

3. Emergency generator control panel.



© West Phoenix/Seadrill



EKSPORT FINANS

NORWAY

EKSPORTFINANS ASA
PO Box 1601 Vika • NO-0119 Oslo, Norway
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Website: www.eksportfinans.no

Eksportfinans ASA – the Norwegian export credit agency – provides financing for the export of Norwegian ships, capital goods and services. Financing of deliveries to the global oil and gas industry is one of its major areas of activity. Eksportfinans structures competitive financial packages to meet the specific needs of individual clients and projects. The main purpose of Eksportfinans is to support the Norwegian export industry.

Financing the Oil & Gas Industry

Eksportfinans offers competitive medium and long-term financing for the export of equipment to:

- Drilling rigs
- Supply vessels and ships gear
- Oil and gas field developments and FPSOs
- Subsea installations

Drilling Rigs

If Norwegian equipment constitutes a significant part of the value of a drilling unit, attractive financing terms in line with OECD financing conditions apply. These include financing of 85 percent of the Norwegian contract value and loan periods of up to 8.5 years. Eksportfinans is currently involved in a significant number of international drilling rig projects. At the moment Eksportfinans is providing the financing of Norwegian deliveries to a series of jack ups, semi submersibles and drill ships under construction at major shipyards around the world. Also, Norwegian drilling contractors qualify for financing from Eksportfinans.

Oil & Gas Developments

Eksportfinans is involved in the financing of international oil and gas developments, subsea installations and complex FPSO conversions/newbuildings in which there is a significant Norwegian contribution to the projects. Several oil companies have shown great interest in Eksportfinans' competitive financing. Eksportfinans works with state oil companies as well as publicly listed companies. The company has established credit agreements with a selection of major oil companies in order to have the financial infrastructure in place when Norwegian companies bid for contracts.

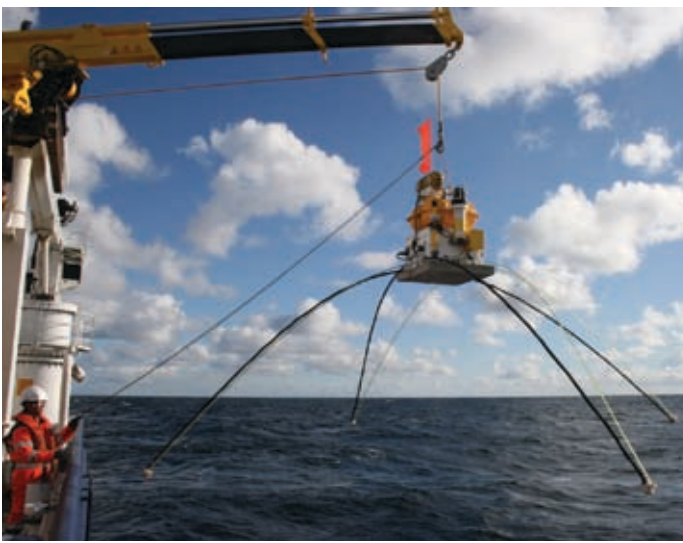
Advantages

When a buyer evaluates offers from various foreign suppliers, the financial solution may be crucial. A financial offer from Eksportfinans for tailor made medium or long-term financing is free of charge and without any obligations for the Norwegian exporter and the foreign client. Such financing has proven to be very rewarding for buyers of Norwegian capital goods and services.

Financing through Eksportfinans

Financing through Eksportfinans ensures:

- Cost-effective solutions for long-term financing
- Predictability
- Flexibility – fixed or floating interest rates and loan structures at the borrower's request
- Interest cap – free of charge
- All convertible currencies



EMGS ASA
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Electromagnetic Geoservices ASA (EMGS) is the world's leading provider of offshore electromagnetic (EM) surveys for finding hydrocarbons. The company remains at the forefront of the industry it created. EMGS has the world's largest EM surveying fleet, with five fully equipped vessels. Its principal offices are in Trondheim, Norway; Houston, USA; and Kuala Lumpur, Malaysia. The company employs over 300 people in 11 countries.

Background

EMGS is listed on the Oslo Stock Exchange. Its founders are recognized as the inventors of seabed logging, the EM technique used to find offshore hydrocarbons. The first hydrocarbon discovery based on EM surveying was made in 2001. Since then, EMGS has conducted over 250 surveys across the world for all the world's leading energy companies.

Finding Hydrocarbons

EM surveys can identify hydrocarbon accumulations directly. This means the technique is a perfect partner for seismic exploration methods, which provide a structural picture of the subsurface. Intersecting survey lines are typically used to evaluate prospects in 2D, whereas grids of survey lines are used to acquire 3D EM data for prospect validation, field appraisal and field development applications. EMGS has also developed scanning, an EM-survey application that is used as a primary

exploration technique in frontier regions and for identifying bypassed oil or satellite fields in mature provinces.

In more than 90 percent of the cases where EMGS has drilling results, its EM surveys correctly predicted the reservoir fluids. National oil and gas regulatory authorities in some countries now accept data from the technique as firm evidence for the existence, or absence, of commercial-scale hydrocarbon reserves.

Comprehensive Service

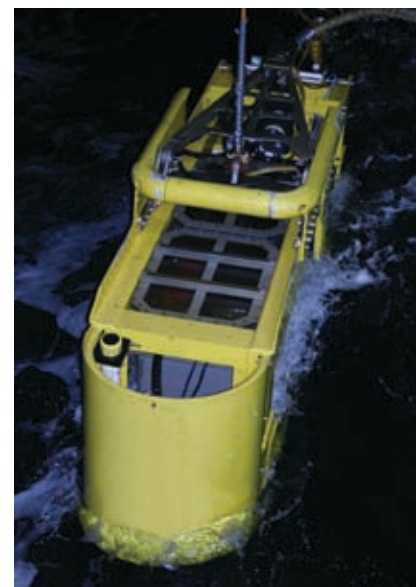
EMGS provides a comprehensive service. This includes:

- Feasibility studies
- The design of EM-survey programmes
- Data acquisition, processing and imaging
- And the final interpretation of the results

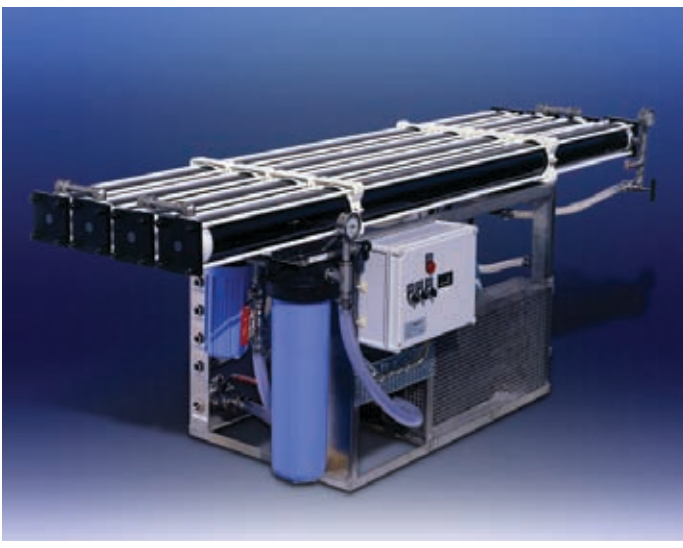
Each of these elements can be performed as a stand-alone service, although the company's strength lies in its ability to undertake the whole process as an integrated package.

Worldwide Operations

EMGS has its headquarters and its research and development department in Trondheim, Norway, and full service offices in Houston, USA, and Kuala Lumpur, Malaysia. Sales offices are located in Stavanger and Oslo, Norway; London, UK; Paris, France; Mumbai, India; Perth, Australia; Lagos, Nigeria; Rio de Janeiro, Brazil; Jakarta, Indonesia; and Villahermosa, Mexico.



Finding hydrocarbons™



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ENWA manufactures chemical-free water treatment products and systems, specializing in filtration and membrane technology. This technology has proven to be environmentally friendly and superior in terms of energy efficiency and cost-effectiveness.

Reverse Osmosis (RO) Fresh Water Maker

ENWA develops and manufactures desalination units based on Reverse Osmosis (RO). It is used on ships, yachts, offshore vessels, drilling rigs and platforms throughout the world. RO units from ENWA are also used in numerous onshore industrial applications, such as food treatment plants, refineries and terminals. The units are cost-effective and known for their reliability and user-friendliness.

The supply of fresh water is an important issue in marine environments. ENWA's products employing the RO process will, in most circumstances, be the most efficient, economical and environmentally friendly ways of safeguarding the water supply. Using ENWA's proven RO technology eliminates the

potential danger of contamination coming from bunker water. In addition, the RO Fresh Water Maker also significantly reduces the possibility of bacteriological contaminations such as, for example, Legionella and E.coli.

Green Ship Technology EnwaMatic® Chemical-Free Water Conditioner replaces chemical dosing in:

- **Comfort cooling and heating systems (HVAC)**
- **Engine cooling systems**

In any freshwater-based, closed loop, cooling or heating system, water quality is most important for protecting against corrosion and operation according to design. Corrosion, scaling and bacterial growth reduces overall capacity. Treated water protects against operational problems and high maintenance costs.

Traditionally this water treatment has been carried out using chemical injections. This is a rather expensive treatment method – as chemical and waste handling related to this method has to operate according to regulations. ENWA's DNV-approved (Report # 270113) MWT by EnwaMatic® technology provides a safe, chemical-free and environmentally friendly solution that also saves money.

ENWA BIN-X® Chemical-Free Bacteriological Barrier for Drinking Water

In drinking water systems, there are conditions that can represent a threat to the quality of the water. These can harm a person's health and even be life-threatening if outbreaks of Legionella and E.coli-related epidemics develop.

ENWA's BIN-X® is a patented, cost-effective, water treatment system used for the removal of particles and bacteria such as Legionella and E.coli from potable water/drinking water, offering maximum security against related epidemics.

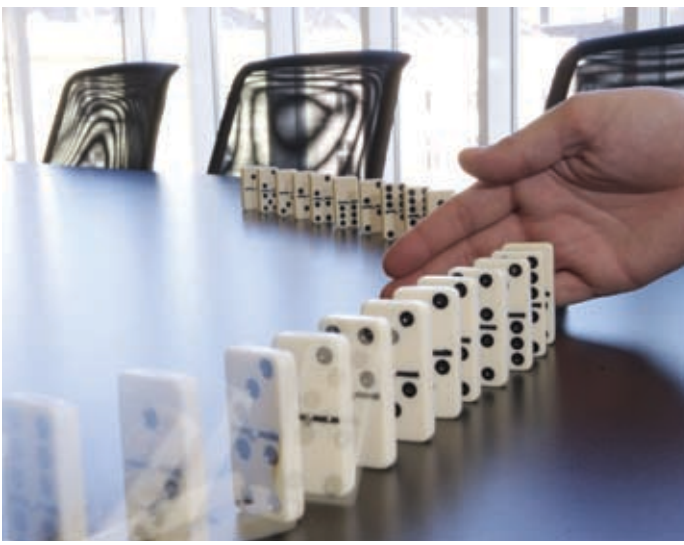
Traditionally, UV systems and chemical treatments are used to neutralize bacteria in potable water systems. The ENWA BIN-X® employs ultra-filtration to remove bacteria and the membranes are self-maintained by an automatic patented back wash/flush technique. Consequently, time spent on system maintenance is very limited.

The ENWA BIN-X® has VA (water and discharge) approval for installation in drinking water. It operates in high temperatures so that both cold and hot water systems can be treated and protected.



1

1. Maritime water treatment by EnwaMatic®. Patented worldwide.



Falck Nutec

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Falck Nutec Crisis Management AS (FNCM) is a consultancy company within the Falck Nutec Group. The company delivers advisory services, workshops and courses within security, emergency and crisis management for public and private businesses. The company's services are primarily directed towards top management and operative leaders. Falck Nutec Crisis Management aims to assist its customers in preventative HES work, as well as preparing them for specific emergency and crisis management.

From Crisis Management to Management of Media & Public Services

By focusing on both training in correct crisis management methods, and the establishment of pre-planned procedures for contact with public institutions, active management of the companies' positive reputation is facilitated.

Aside from sound preparation and training, adequate crisis management also incorporates attention to organizational aspects, psycho-social dimensions and



crisis communication. Falck Nutec Crisis Management has many years of experience in these areas. Through a dual focus on training and putting in place strategies which help to minimize the consequences of an accident, Falck Nutec CM facilitates that "business as usual" is possible during and after a crisis.

Experience & Excellence

Falck Nutec Crisis Management has, over a number of years, developed specific crisis management methodology and related concepts. The company's methods are implemented daily by major companies who are aware of the potential risks to which they may be exposed. Falck Nutec Crisis Management's customers include StatoilHydro, Avinor, ConocoPhillips, Shell, Total and BP.

Mobility Across National Borders

The head office of Falck Nutec Crisis Management is in Bergen on Norway's west coast. There is also a departmental office in Oslo. Advisors and consultants are, however, available independent of their geographical location. The company can quickly mobilize relevant personnel for tasks internationally

as well as nationally – for training or advisory work in actual crisis situations.

About Falck Nutec

Falck Nutec was established in 1976, and has since focused on developing expertise within all aspects of safety and emergency training. Falck Nutec's clients come from both the public and private sectors – from offshore and maritime companies to aerospace and onshore industries.

Centres All Over the World

There are approximately 300 employees in Falck Nutec, and centres are situated in several sites in Norway, the United Kingdom, Netherlands, Denmark, Malaysia, Trinidad and Tobago and Brazil.

Falck Nutec Evolves Constantly

In April, 2004, the Danish company Falck became Nutec's new owners. This has not only given Falck Nutec new resources but also new business areas where the company can combine its expertise and resources with Falck's knowledge and vision in order to bring about a safer environment.



FERGUSON NORGE AS

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Ferguson Norge AS has supplied a range of high-quality offshore containers to the oil and gas industry around the world since 1998. The company has more than 4,200 containers at its three operational bases in Norway. Its range of equipment includes containers, tanks, baskets, mud skips, tubular transportation frames and many others. The fleet is designed and manufactured in accordance with the DNV 2.7-1/EN 12079 standards.

Customer Service

Ferguson Norge is renowned for its excellent customer service and a friendly staff well-qualified to deal with any container hire or sales enquiry. Customers can rest assured that Ferguson Norge will deliver high-quality units as and when required to any location around the world, on time and with all the relevant required certification.

Product Range

The company's full range of products includes:

- Dry goods containers
- Mini containers
- Half-height containers
- Cargo baskets

- Open top containers
- Chemical tanks
- Skips
- Closed mud skips
- Tubular transportation frames (TTFs)

For the supply of containers and baskets Ferguson Norge also has a fleet of A60 offshore workspace modules. These include 4 m, 4.5 m and 6 m units, certified to DNV 2.7-1 and suitable for use in Zone 1 areas on platforms or vessels.

In addition to this, the company can also supply fridge/freezer modules on a hire or purchase basis.

Quality Assurance

Ferguson Norge is certified to EN ISO 9001:2000 QA system, is Achilles and FPAL registered, and is an industry benchmark in most categories.



Photo: Tor Aas-Haug, Mediarfoto



FMC Technologies

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Website: www.fmctechnologies.com/subsea

FMC Kongsberg Subsea AS is the world leader in the manufacturing and supplying of subsea production systems to the oil and gas industry. The company's history goes back to 1967 when FMC Technologies sold and delivered its first subsea tree for use in water depths of 20 metres in the Gulf of Mexico. Over the years, more than 1,200 subsea trees for more than 250 projects have been successfully delivered through frame agreements, alliances and single contracts.

Subsea Production Systems

FMC Technologies is the leading manufacturer and supplier of subsea production systems, including subsea trees, controls and manifold & tie-in systems. In addition, FMC has a complement of engineering and customer support services, such as system engineering, flow assurance, flow measurement and project management.

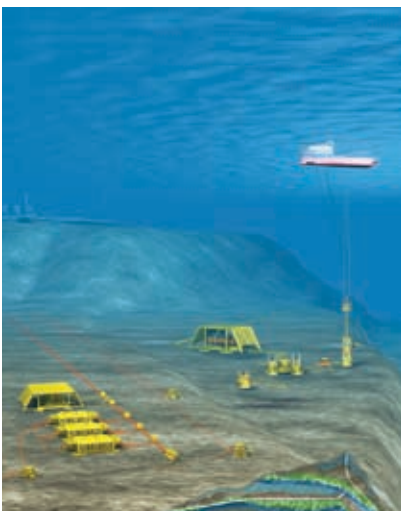
Increased Oil Recovery

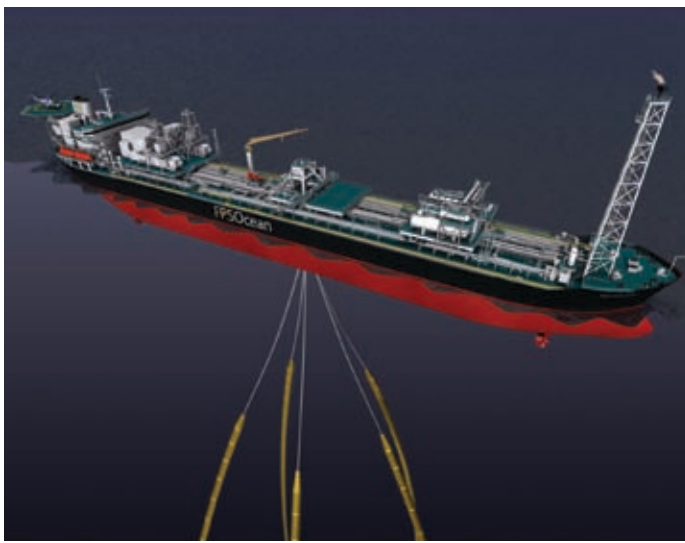
Increased oil recovery (IOR) from mature oil fields is time critical and a growing challenge. FMC Technologies has developed solutions to meet the IOR challenge; Through Tubing Rotary Drilling (TTRD), Riserless Light Well Intervention (RLWI) and Subsea Processing.

Subsea Processing

Tordis is the first commercial full field Subsea Separation, Boosting and Injection System delivered by FMC Technologies. For mature fields an investment in a subsea processing station can contribute to increased earnings, production and recovery, as well as improving and prolonging the use of existing infrastructure. For new field developments, it can provide very cost-efficient and environmentally friendly platform-less solutions. The field is then tied in to an existing offshore facility or directly to shore.

Illustrations: Indok.no





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FPSOcean was established in 2005 by people with substantial experience in the founding and running world-class oil service contracting companies. The company's business model is to build, own and operate floating production systems, including Floating Production Storage and Offloading (FPSO) units.

FPSOcean's Vision

FPSOcean's vision is to become a significant niche player in the global market for the floating production of oil and gas in the rapidly expanding deepwater areas.

The company has a solid financial position, funded by Norwegian and US shipping/offshore investors.

Commitment to Quality

The Quality Management System for FPSOcean is based on the requirements of ISO 9001:2000, and compliance with contractual requirements and statutory regulations is a minimum requirement for all areas of work.

Furthermore, the overall HSE philosophy for FPSOcean is to guarantee safety first in all operations.

FPSOs with Dynamic Positioning System

It is important for FPSOcean to develop safe, reliable and innovative technology to deliver FPSOs using Dynamic Positioning (DP) systems, including a Disconnectable Riser Buoy (DRB™). This enables the use of multiple risers in deepwater areas requiring weather-vaning technology.

FPS Ocean is currently converting two tankers into Dynamic Positioning FPSOs for extended well testing, early production and/or deepwater field developments. The first vessel, DeeP Producer 1, will be delivered in the third quarter of 2008 and will be available for producing first oil by the end of the third quarter of 2008. The second vessel, DeeP Producer 2, will be ready for first oil at the end of 2009.

Designed for the New Frontiers

FPSOcean's solutions are designed especially towards areas with deep or ultra deep waters and/or hurricanes areas such as the Gulf of Mexico, offshore Brazil, western Africa, the Mediterranean, offshore India and in the typhoon areas in Far East Asia. However, these solutions can also be competitive in shallow water, particularly when timing is a significant driver.

FPSOcean's customer base includes all majors, independent and national oil companies which have field development in the above referenced areas.

Locations

FPSOcean is in its start up phase and is growing rapidly. The company moved into newly renovated offices in the centre of Oslo in December, 2006. A sales and marketing office was opened in Rio de Janeiro on 1 April 2007, and a sales and marketing office will also be operative in Houston during the fourth quarter of 2007.

In the autumn of 2007 the group had 45 persons working in the Oslo office, at the sales offices in Rio de Janeiro or on site in Dubai for the conversion and construction of the DeeP Producer 1.





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Framo Engineering has for more than 20 years developed products and technology to assist the oil industry in the cost-efficient development of marginal and deepwater fields. The company's main products are multiphase pumps, multiphase flow meters and swivel stack systems. Framo Engineering is today established as a leading supplier of these products with unique systems benefiting its customers throughout the world.

Sound Track Record

Framo has collaborated closely with major oil companies in developing products that can meet the economic and technological challenges of the offshore sector today. Framo's product strategy is based on the company's sound track record in pioneering and developing subsea technological building blocks.

Product Range

- Subsea and topside multiphase pumps
- Subsea and topside multiphase meters
- High-pressure swivel stacks for floating production systems
- Subsea water injection pumps
- Multiport selector manifolds





GLAMOX INTERNATIONAL

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Glamox Global Marine and Offshore is among the world's leading suppliers of light fittings and lighting solutions to the global marine and offshore markets. The company's business area is represented globally through its own sales companies, agents and distributors, and it has sales units in Norway, Germany, UK, Finland, Singapore, China, USA and Canada.

Quality, Competence & Reliability

The company aims to be the first choice when quality, competence and reliability count. All together Glamox factories have many hundred years of experience with the most challenging environments. Glamox supplies a complete range of lighting equipment for marine and offshore vessels. Dedicated engineers get involved in the design process to assist engineering and installation, and to make sure lighting systems comply with the demand for HSE and quality. The emergency evacuation system and the heliport lighting system are two examples of lighting which needs to be operational at all times to maintain a safe work environment.

Total Reliability

The company's involvement in several prestigious projects is proof of its ability to plan, execute and deliver on time; this is a vote of confidence in the company's total reliability. When the industry explores deep waters off the coast of South America it selects Glamox lighting. When the industry

explores the arctic region offshore Canada or in the Barents Sea it selects Glamox lighting. And when the industry put the first FPSO in the Gulf of Mexico into operation Glamox was its choice.

In 2006 the turnover for Glamox Global Marine and Offshore was NOK 600 million, or USD 100 million. This is close to 50 percent of the turnover of lighting in the Glamox Group. The company has a strong position in Norway, UK, Russia, South Korea, China, Singapore and several other countries.

Company Focus

Glamox has a market model that enables it to serve the important sales and distribution channels aimed at shipyards, oil companies, FPSO and drilling companies, engineering consultants and installation contractors. The company strives to be known for its:

- Customer orientation
- Protection of the environment
- High level of overall quality
- Good service
- Delivery precision

The company's focus is on strengthening the organization in order to secure further growth. Glamox's plans are to increase its efforts in the oil and gas market, and

the company's technical team will use its experience with harsh environments to assist the building of floating offshore units.





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Established in 1962, Ellingsen has evolved into one of the major suppliers of high-quality products to the offshore, shipbuilding and land-based industries. The company was among the offshore pioneers for developing customized solutions in close cooperation with suppliers, contractors and oil companies. Today the company has more than 25 years of experience in the offshore market at the disposal of its customers.

Valve Automation Centre

Ellingsen is located in Bærum, near Oslo. The business premises comprise some 1,500 square metres of offices, workshop and stock areas. Ellingsen operates a Valve Automation Centre (VAC) for the complete machining, assembly and testing of valves, actuators and control systems.

Ellingsen has a wide range of pneumatic, hydraulic and field instrumentation equipment from leading international manufacturers. Ellingsen also designs and assembles control systems for the actuation of valves.

Quality Assurance & HSE

All workshop personnel have the required offshore certifications for performing maintenance, installation and commissioning services on all platforms in the North Sea. Ellingsen is certified according to NS-EN ISO 9001:2000. Ellingsen places prime importance on HSE issues and performance.



1. Ellingsen is located in Bærum – close to Oslo.

2. Valve actuator system assembled and tested by Ellingsen.



www.hamworthy.com

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HAMWORTHY MOSS AS
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Hamworthy plc has headquarters in Poole, UK, and three companies in Norway. Hamworthy designs and manufactures a wide array of products and systems for the global marine, offshore and onshore markets, and the company's well-qualified service personnel provide around-the-clock support and service worldwide.

HAMWORTHY GAS SYSTEMS AS

E-mail: gasinfo@hamworthy.com

Hamworthy Gas Systems (HGS) has 5 business units: Offshore, Onshore, Marine LPG, Marine LNG and After Market. For Offshore; HGS specializes in engineering and turnkey supply of LPG and LNG cargo systems for floaters with reference deliveries to *Escravos*, *Sanha* and *BWO*. HGS provides product designs for reliquefaction plants,

regasification plants, cooling plants, heat exchangers and VOC recovery systems for crude oil shuttle tankers. The HGS Offshore business unit is also responsible for pumping systems to the offshore market and specializes in cargo and ballast pumping systems (both electric deepwell and conventional pump room systems), fire pump packages according to NFPA 20, general service pumps and other customized pump systems for special applications.

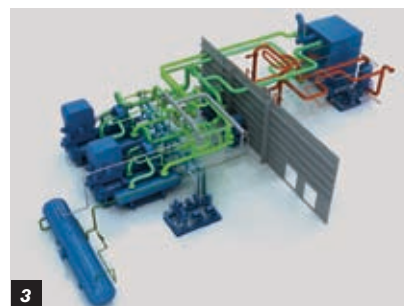
Pump deliveries have been made to a large number of FSOs and FPSOs, including *Yuum Kak Naab*, *Styrbarrow* and *Enfield*. LNG regasification plants are contracted for FSRUs and SRVs in USA and Brazil. For Onshore; HGS specializes in engineering and turnkey supply of LNG liquefaction plants with capacities up to abt. 500 t/day (already in service at LNG plants in Norway), flare solutions and VOC recovery systems for terminals.



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1. LPG cooling plant Escravos LPG FSO.

2. LPG reliquefaction plant Sanha LPG FPSO.

3. LNG reliquefaction plant Qatargas.

4. VOC recovery plant.

5. LNG liquefaction plant Kollsnes II.



4



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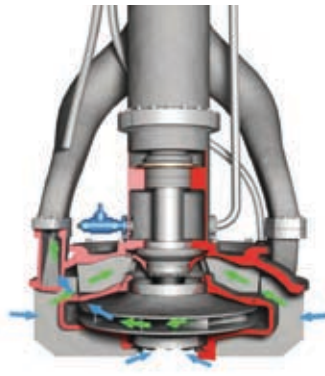
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HAMWORTHY MOSS AS

E-mail: moss@hamworthy.com

The company specializes in the development, design, manufacture, and service of inert

gas systems for use onboard ships and on offshore installations. Nitrogen generation for process use onboard FPSOs and platforms is Hamworthy Moss' latest standardized package in its wide product

range. Fabrication and full running tests of offshore equipment are carried out from the company's location in Moss, Norway.



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6. Deepwell pump test plant.

7. Fire pump skid to NFPA 20.

8. Cargo booster pump skid.

9. CKL deepwell pump.

10. CKL deepwell pump under installation.

11. IGS skid in safe area location.

12. IGS skid interface.

13. IGS dual fuel generator.

14. IGS skid in hazardous area location.



HELLY HANSEN PRO AS
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Founded in 1877 Helly Hansen ranks as one of the world's largest manufacturers of clothing and survival suits for industry, fishing fleets and the offshore petroleum industry. Headquartered in Norway, the company has manufacturing, marketing and licensee operations in Asia, Europe, North America and South America.

Helly Hansen strives to make work safer for people in the maritime industries, and the company wants to keep the users of Helly Hansen products dry and comfortable whatever the conditions. This results in having workers be more efficient and focused. The company believes increased safety will increase the joy of working.

Helly Hansen History

Users of Helly Hansen Workwear benefit from 130 years of experience. In 1877 Captain Helly Juel Hansen went ashore after working as a seaman for 20 years. He started making durable and waterproof clothes for seafarers and fishermen. His objective was to keep workers dry and warm, and his concept became an international success story.

Helly Hansen's reputation for innovative design, combined with cooperating with industry, scientists, designers and fabric manufacturers, has resulted in some of the best work wear in the world. Helly Hansen ranks as one of the world's largest manufacturers of clothing and survival suits for industry, fishing fleets and the offshore petroleum industry.

New Company in the Helly Hansen Group

In March 2007 Helly Hansen Pro was formed from a merger of Helly Hansen Spesialprodukter and Helly Hansen Workwear, and the new company includes products that focus on safety at sea and work wear. Target areas for the products are industry, fire brigades, the police force, the armed forces, fishing and offshore petroleum activities.

International Approval

Helly Hansen survival suits are approved by maritime and aviation authorities in the EU, Russia and Iceland.

Flexible Production

The flexible production system at Helly Hansen Pro enables the company to meet demands from new markets while producing its goods in accordance with both ISO 9001 requirements and various national regulations.

Export Markets

More than 250,000 suits have been exported to more than 20 countries. Furthermore, Helly Hansen divisions and licensees are located in 15 countries on four continents.





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IKM Testing is a Multi Discipline Service Company providing solutions and results within Pressure Testing, Cleaning, Pre-Commissioning and Commissioning. Since its establishment in 1992 IKM Testing has grown to become a major supplier to the Oil & Gas Industry, both Onshore and Offshore. Estimated turnover for 2008 is 115 million EURO. IKM Testing's head office is located in Stavanger, the "Oil Capital" of Norway.

Core Business

- Pressure/Vacuum Testing
- Nitrogen services
- Pre-Commissioning/ Pigging Services
- Video Inspection
- Bolt Tensioning/Torque
- Hot Oil Flushing
- Chemical Cleaning
- Hydro Jetting/Water Blasting
- Tank Cleaning
- Maintenance of Heat Exchangers
- Cleaning of HVAC Systems
- Preservation
- Labeling/Flow Coding
- Decommissioning

Equipment

IKM Testing is an emerging Company, and during the past years made massive investments in modern equipment suitable to meet today's technical requirements. With their comprehensive equipment fleet they are able to offer High profile Products and Service solutions. A complete online equipment catalogue with datasheets is available at the company's website.

Quality Assurance/HSE

IKM Testing has a certified QHSE system in conformity with EN ISO 9001:2000, EN ISO 14001:2004, OHSAS 18001:2000. The company

intends to continue focusing on improvements and measure performance.

Project Execution

IKM Testing's operations can capitalize on the vast resources, personnel and equipment available from within the Group's own infrastructure as well as through locally established partnerships, which enables it to meet client requirements and demanding schedules.

Summary of IKM Resources:

- Multi skilled personnel and engineers
- Fleet of modern and effective equipment
- Developed best work methods
- Flexible and Mobile
- Great variety in experience
- Cross Company/ Border resource to other Companies/Customers
- Integrated Services

IKM's Ambition

IKM endeavours to deliver cost-effective, high quality solutions to all clients. IKM's ambition is to ensure all clients choose IKM as their preferred supplier.

International Locations

IKM Testing operate world wide and has established the following Subsidiary Companies:

- IKM Testing Asia Pte Ltd
- IKM Testing Australia Pty Ltd
- IKM Testing UK Ltd
- IKM Testing Spain SL
- IKM Testing Canada Ltd
- IKM Testing Kazakhstan

Further details regarding Subsidiary Companies are available at www.IKM.no





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E-mail: jm.bergen@jmartens.com
Website: www.jmartens.com

J. MARTENS (ASIA PACIFIC) PTE LTD SINGAPORE
137 Telok Ayer St., # 05-07 • Singapore 068602
Tel: +65 6416 3036 • Fax: +65 6536 7972
E-mail: martin@jmartens.com.sg

J. Martens AS has provided transport solutions since 1880, and the company is renowned for reliability. From its head office in Bergen, J. Martens AS draws on in-house expertise and a worldwide network of dependable partners to provide the shipping and offshore industries with a wide range of transport and logistics services.

Vast Array of Services

From complex pre-shipment planning – including packing, stowage and securing of oversized cargos – to seamless terminal operations and more, J. Martens AS offers a full range of services comprising:

- Project forwarding worldwide
- Chartering worldwide
- Liner agencies and freight forwarding
- Agency and clearance
- Heavy lifting
- Airfreight
- International and domestic trucking
- Customs clearance and documentation

Offices Throughout Norway

In addition to its head office in Bergen, J. Martens AS has offices in Sandnes/ Stavanger, Haugesund, Mongstad, Ålesund and Kristiansund.





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JOTRON AS
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Jotron AS was established in 1967 and has 40 years of experience in the design and manufacture of radio communications equipment. The factory exports its products worldwide and is certified according to NS-EN ISO 9001:2000.

Maritime Products

Jotron is a major supplier of GMDSS-specified emergency radio equipment that fulfils IMO requirements. Its GMDSS product line includes emergency radio beacons, portable VHF transceivers and radar transponders. All are mandatory for commercial vessels, fishing vessels and large pleasure crafts. Jotron also manufactures high-intensity xenon and infrared markers, along with emergency lights.

Jotron now offers a new float-free capsule for VDR and S-VDR systems. The Tron S-VDR Capsule combines the best EPIRB features with voyage data storage media in a float-free capsule. The capsule is applicable for SOLAS ships from 2006.

AIS Transceiver

The Tron UAIS TR-2500 is a VHF transponder system continuously exchanging own ship information with information from all UAIS-equipped ships within VHF range. The AIS Transceiver is fully compliant with all IMO-relevant product standards.

sells its products through authorized agents worldwide.

Additional Products

Jotron's wide range of VHF and UHF ground-to-air radio equipment for voice communications at airports and offshore applications meets current aviation standards.

- 1. The TR-710 VHF-AM desktop transceiver and TR-7510 VHF-AM transceiver.
- 2. The Tron UAIS TR-2500 universal automatic identification system.
- 3. Jotron's new Tron S-VDR Capsule.
- 4. The Tron TR20 hand portable transceiver.
- 5. The Tron SART radar transponder.
- 6. The Tron 40S EPIRB is also available with integrated GPS.

The Jotron Group

Jotron AS has ownership in a number of technology companies that support the organization with technology, marketing know-how and products. One of these companies is Jotron Phontech AS, located in Horten, Norway.

Jotron Phontech AS

Jotron Phontech AS develops and markets intercom systems, batteryless telephone systems and integrated communications systems. Based on the latest technology, Jotron Phontech's new generation products are developed to meet international standards for all types of onboard communications systems. The company





LINJEBYGG
OFFSHORE

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Linjebygg Offshore AS is a leading supplier of maintenance, modification and removal of installations in the oil and gas industry. A highly competent staff of engineering, construction and installation specialists interact together to develop new outfits, equipment and methods. The company's vision is as simple as it is ambitious: "Understand, solve and execute the most challenging tasks high and low – the offshore industry's first choice for safety and efficiency".

Engineering & Inspection

Linjebygg's business idea is to save costs for its customers through the development and supply of smart solutions, and to offer safe and efficient operations with the most skilled personnel in the business.

In close cooperation with the company's executive staff, its engineers provide overall design, fabrication spec and installation support.

Together with the subsidiary MainTech AS, Linjebygg Offshore carries out all types of inspection services, risk-based inspection, maintenance analysis and non-destructive examination.

By emphasizing close co-operation between Linjebygg's customers, engineers and executive staff, an innovative working environment is created and forms the basis for continuous improvements.

Supply of Materials & Equipment

Linjebygg Offshore AS supplies components and prefabricated structures according to customers' specifications and requirements. Tailor made equipment is developed and supplied according to actual requirements.

Linjebygg Offshore has engineered and supplied materials and equipment for jacket reinforcement, flare modifications, cutting and removal of structures in splash zone, etc.



The company's procurement and logistical way of working is based on multidisciplinary expertise that provides optimal commodities and services.

Installation & Removal

Linjebygg Offshore AS offers the complete execution of modification work offshore, specialized in solving problems on the "inaccessible" parts of the offshore platform. The company has developed special methods through the extensive use of Rope Access Technique in combination with particular lifting and rigging arrangements.

Great efforts are put into the transfer of experience, careful planning and the training of personnel to secure the most efficient execution of all work. The activities of the company are subject to its QA programs, which are certified according to NS ISO 9001-2000.

1. Cutting device for work in splash zone.

2. Flare modification work.



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Marine Cybernetics specializes in Hardware-In-the-Loop (HIL) testing of control systems on ships and offshore installations. The HIL testing technique utilizes simulator technology to test control system software at an early stage. HIL testing is analogous to software system FMEA, where software functionality, performance and failure handling are thoroughly tested. This testing technique is far more comprehensive and relevant for the assessment and verification of control system software than traditional testing.

Hardware-In-the-Loop Testing

Marine Cybernetics assesses control systems using HIL testing, which is based on the company's unique and patented CyberSea Technology. HIL testing is accomplished by connecting the control system to a simulator representing the ship or offshore installation. The control system cannot sense any difference between the real world and the simulated world. Functionality, performance and ability to handle failure situations are then tested under realistically simulated operating conditions.

Independent HIL testing is an essential element in the work towards higher quality and improved safety for control systems in the marine and offshore industry. HIL testing reduces quality costs for control systems, and makes building, commissioning and sea trials predictable and more efficient. It also increases operational safety due to early detection and correction of software errors, and it makes systems

more cost-effective by reducing downtime and off-hire.

Marine Cybernetics offers HIL testing for the following systems:

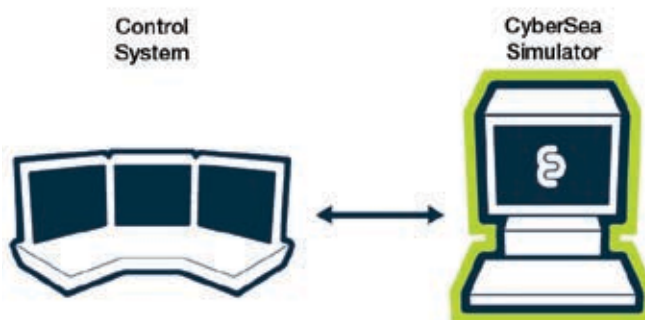
- Dynamic positioning systems
- Power management systems
- Propulsion and thruster control systems
- Drilling control systems
- Crane control systems
- Integrated automation systems

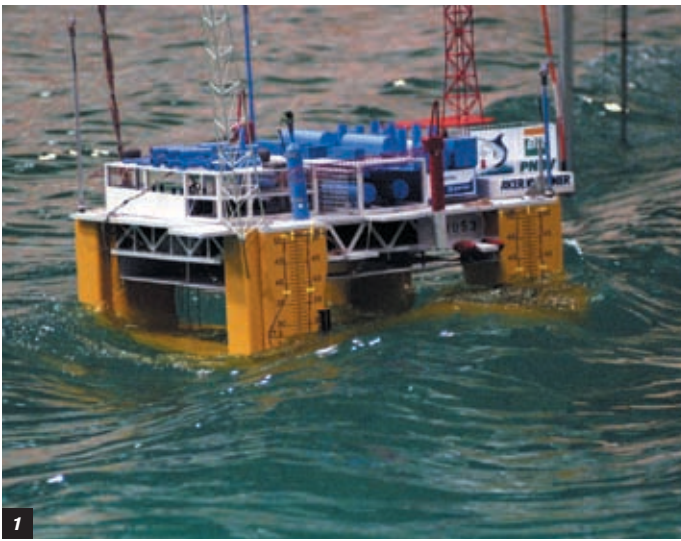
Marine Cybernetics offers HIL testing coordinated with DP System FMEA, where sea trials are accomplished within the timeframe of an ordinary FMEA. This combination secures both hardware and software.

Benefits of HIL Testing

The benefits of HIL testing include:

- Safety – The overall goal is to achieve safer operation with fewer costly incidents due to software errors
- Earlier, deeper and broader - Extensive testing early in the design and engineering process makes it possible to detect unfavourable software solutions and initiate the necessary corrections
- Gentle testing – Less use of potentially destructive testing by using simulator technology instead of pulling out cables during FMEA testing, and by simulating scenarios that are difficult or costly to reconstruct physically
- Cost reduction – Overall cost is reduced both during the new-building or upgrade phase, and also during operations due to less software errors
- New market standard - Oil companies have put HIL testing into their requirements for new charters. Up until the autumn of 2007 more than 40 offshore vessels have ordered HIL testing, and about 20 HIL testing projects have been accomplished with great success for vendors, yards, owners, class societies and end-users





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MARINTEK (the Norwegian Marine Technology Research Institute) carries out research, development and research-based advisory services in the maritime sector for industry and the public sector. The Institute develops and verifies technological solutions for the shipping and maritime equipment industries and for offshore petroleum production.

Research Activities

MARINTEK’s principal R&D activities focus on:

- Offshore hydrodynamics
- Marine operations and simulation
- Structural engineering
- Ship technology
- Maintenance technology
- Strategy and logistics
- Energy systems and environment
- e-Maritime

Design & Installation of Offshore Structures

MARINTEK carries out R&D work on operational criteria and procedures, as well as on floating systems.

Operations

The Institute offers advanced services and tools for determining the feasibility, planning and control of complex operations – such as the installation of steel jackets, large-volume structures, tension leg platforms and subsea elements. Other services and tools include:

- Positioning of surface vessels
- Force and motion studies on complex geometries when lowered through water surface

1. A deepwater semisubmersible for Brazilian waters tested at MARINTEK.

2. Visualization of pipeline installation analysis using the MARINTEK software system SIMLA.

- Heave compensation devices
- Simulation of ROV manoeuvrability for IMR
- Feasibility evaluation of operations; estimation of operational window and total economy

Floating Systems/ Offshore Loading

Minimal environmental impact and optimal motion characteristics are important for safe, efficient operations. MARINTEK offers design services and verification assistance for floating systems, conducting theoretical evaluations and/or physical model testing of:

- Loads and motion of floating support vessels
- Loads and motion of risers and other connecting elements
- Capacity of anchor systems and dynamic positioning systems
- Operational criteria and long-term operability in specified environments

Structural Analysis & Testing

MARINTEK is at the forefront of the development of advanced numerical and experimental methods for structural analysis, utilizing a unique combination of theoretical knowledge, modern laboratory facilities and extensive engineering expertise. Methods and tools are available for:

- Dynamic analysis and fatigue design
- Dynamic analysis of slender marine structures, risers and pipelines

- Stress analysis of flexible risers and umbilicals, including service life assessment
- Reliability assessment of steel structures, risers and pipelines
- Ultimate strength and collapse behaviour of steel structures
- Reassessment of ageing structures

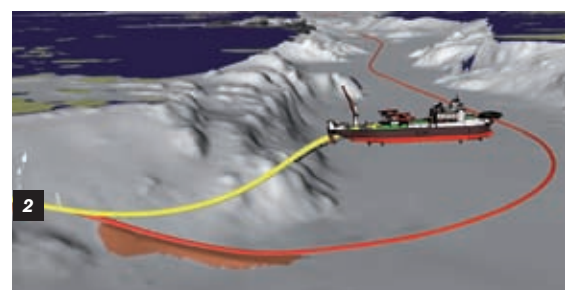
Offshore Oil & Gas Operations

MARINTEK actively develops and implements methods, tools and procedures in order to improve the safety and efficiency of offshore operations. It offers:

- Logistics support analyses
- Maintenance technology and technical condition assessment
- Decision support systems for logistics and maintenance
- Emission and environmental measurements and studies
- Integrated operations R&D and support

Laboratory Facilities

- Ocean basin
- Ship model tank
- Cavitation laboratory
- Marine structures laboratory
- Energy/machinery laboratory



2



MARITIME PARTNER

MARITIME PARTNER AS
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Founded in 1994, Maritime Partner AS is one of the world's leading designers and suppliers of work boats, fast rescue boats, patrol boats and daughter craft to the international maritime and offshore industries, as well as military and institutional users. Some 1,250 boats of Maritime Partner's designs are in service today all around the world. The company's turnover in 2006 was approximately NOK 150 million.

Product Range

Maritime Partner has a wide selection of daughter craft, rescue, patrol, pilot and work boats, including the ALUSAFE®, SEABEAR®, WEEDO® and MP® models. The craft range in size from 5 to 25 metres and are designed and constructed according to international standards, in addition to individual customer needs and requirements.

Worldwide Service

Maritime Partner places great emphasis on after-sales service. Its company service personnel undergoes continual training to ensure detailed, up-to-date product knowledge.

1. Demanding North Sea operators, from oil operators and rig owners to supply ship owners and seismic enterprises, choose MP741 Springer.
2. Highly sophisticated design for the Norwegian Navy.
3. Alusafe 2000 – designed for high speed in adverse weather conditions for rescue, patrol, ambulance, personnel transport and inspection services.
4. Fast Rescue Daughter Craft (FRDC) – setting new standards.

Export Markets

Maritime Partner exports its products around the globe through a network of representatives with major deliveries to companies in:

- Algeria
 - Angola
 - Argentina
 - Australia
 - Belgium
 - Brazil
 - Brunei
 - Canada
 - China
 - Cyprus
 - Denmark
 - Faeroe Islands
 - Finland
 - France
 - Greenland
 - Germany
 - Greece
 - Iceland
 - India
 - Indonesia
 - Italy
 - Japan
 - Latvia
 - Malaysia
 - Mauritius
 - Namibia
 - The Netherlands
 - Oman
 - Philippines
 - Poland
 - Qatar
 - Russia
 - Saudi Arabia
 - Singapore
 - South Korea
 - Spain
 - Sweden
 - Tunisia
 - Turkey
 - UK
 - United Arab Emirates
 - USA
 - Vietnam
5. Redningselskapet has worked together with Maritime Partner's specialists in developing new, lightweight, highly manoeuvrable boats.





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Miros AS is a high-tech company that provides advanced systems and remote sensing equipment sensors for the offshore and marine industries. The company's products includes Directional Wave Monitoring sensors, Oil Spill Detection systems and Met-Ocean systems.

Major Supplier

Miros is a major supplier of meteorological and oceanographic (Met-Ocean) systems for the Norwegian continental shelf and is a European leader in its field.

Met-Ocean Systems

Miros has extensive experience in delivering Met-Ocean systems and can supply and integrate any required sensor into its systems. Modular Miros systems are delivered with software and displays tailored to individual operator needs, and provide users with real-time and historic data to support:

- Helicopter traffic control
- Marine operations
- Search and rescue operations
- Crane vessel operations
- Synoptic weather reporting

Wave Sensors

Miros is a leading manufacturer of radar-based wave, surface current and air gap sensors. The Miros SM-050 Direction Wave and Surface Current Radar and the WAVEX system are sensors that measure directional wave and surface current. Both sensors are available for onshore locations, for fixed and floating platforms and FPSOs. The Wavex is also well suited for ships – even at high speed.

The Miros Range Finder is a highly accurate sensor for the measurement of non-directional waves, air gap, draught and water level. It comes in several versions covering various areas of applications and has a measurement range of up to 85 m.

Oil Spill Detection

The MIROS OSD utilizes advanced image processing algorithms for detection of oil spill. The system can detect and track oil spills in complete darkness, enabling 24-hours recovery operations. The efficiency of clean-up operations is increased, and the extent of environmental impact reduced.

- The OSD software is an add-on to the WAVEX system
- Visualises the extent and trace of an oil spill
- Enables night-time clean-up operations

References

For 20 years, Miros has delivered its Met-Ocean systems and sensors to a number of international oil companies, major contractors, shipowners, research institutes and marine authorities worldwide.



Miros sensors are renowned for reliable long-term operation under harsh conditions.



The tactical display of the Miros OSD system presenting a back scatter intensity image and the corresponding Trace image.



MULTICONCONSULT / NORPLAN 

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NORPLAN is a multidisciplinary consulting partnership that combines the resources of more than 1,150 of Norway's leading engineers, planners and management consultants. Based on the experience gained by the NORPLAN partner MULTICONCONSULT over the last 30 years, the company operates in the international market in close cooperation with the Norwegian oil and gas industry.

Complex Offshore & Onshore Projects

The company's experience from the oil and gas industry has been closely associated with the development of the North Sea oil and gas fields. Since the early 1970s, leading expertise in offshore concrete and steel design has been developed using advanced tools for the analyses and design of complex structures. The era of large, fixed concrete platforms culminated with the Troll platform, the largest concrete structure in the world.

MULTICONCONSULT'S expert teams are often integrated in a larger project organization, with staff delegated responsibility for defined project areas such as offshore components and installations, or complete civil works in the case of onshore projects.

1. Snøhvit, the world's northernmost LNG plant, Norway.

2. Kollesnes gas treatment plant, Norway.

3. Mobin seawater cooling in/outlet, Assaluyeh, Iran.

MULTICONCONSULT has wide experience from complex and challenging projects both offshore and onshore, carried out in successful participation with Norwegian and international companies.

Services Provided

- Deepwater foundation engineering and marine geo-technical engineering
- Design of concrete platforms and offshore structures
- Design of steel structures, jackets, modules, etc.
- Pipeline design, offshore, onshore and shore approaches
- Land facilities, civil layout and development planning
- Site investigations and geo-technical engineering
- Quays, export jetties, terminals
- Explosion loadings and fire safety analyses
- Noise and vibrations analyses and abatement
- Rock storage caverns and tunnels
- Environmental studies, HES

- Planning and design management
- Quantity surveying
- Contracting and procurement
- Technical supervision and verification
- Construction supervision





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National Oilwell Norway AS is a wholly owned subsidiary of National Oilwell Varco Ltd. National Oilwell Varco is a leading provider for the worldwide oil and gas industry and has been dedicated to providing the highest quality oilfield products and services for more than 140 years. National Oilwell Varco is a single source for all rig equipment, integrated systems, downhole tools and supply chain solutions, and delivers an unlimited range of customer solutions. By constantly developing and acquiring new technologies and services to better serve future customer requirements, National Oilwell Varco will continue to be one of the premier sources for diversified oilfield products and services worldwide.

Integrated Solutions

National Oilwell Varco designs, manufactures, and supports drilling and well service systems for any operating environment. The company can furnish and fully integrate a complete range of products from structures and drilling machinery to automated controls and downhole tools. Solutions include:

- Drilling solutions
- Lifting and handling solutions
- Well service and completion solutions
- Downhole solutions
- Production solutions
- Supply chain solutions
- Engineering and project management
- Tubular and corrosion control

Forward-Looking Technologies & Services

National Oilwell Varco is an established leader in supporting the world's oil and gas drilling and production industries with innovative solutions. The company is committed to the development of new technologies and services to further enhance customer operations. It continues to advance the design of familiar components – such as drawworks, travelling equipment and pumps – in order to improve performance, safety, and integration into today's automated rigs.

Integrating field-proven machinery and tools with today's advanced control systems is forging the future of drilling technology. National Oilwell Varco is committed to bringing this future to its customers. The company's expertise is concentrated on fully understanding its customers' business and improving that business through its products and services.

Additional Offices in Norway

- *Cabins & Controls*
 PO Box 8181, NO-4069 Stavanger
 Tel: +47 51 81 81 81 – Fax: +47 51 80 05 47



- *Lifting Equipment & Cranes*
 Grandfjæra 24,
 NO-6415 Molde
 Tel: +47 71 20 20 20
 Fax: +47 71 20 20 22
- *Mud Systems & Compensation*
 PO Box 168, NO-1386 Asker
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National Oilwell Varco engineers, manufactures and supports a complete line of drilling equipment for any rig configuration.



Nemo
Engineering AS

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Founded in 1989, Nemo Engineering is today an independent and experienced company in turnkey and product deliveries for the offshore industry. The majority of the company's business is within pipeline projects. Nemo's vision is that by close cooperation with its customer at an early stage, the company is then able to realize its clients' projects all the way from idea to installed product in a fast and cost-efficient manner.

Structures & Systems

Nemo Engineering has specialized in the design and delivery of small and medium-sized subsea structures. This involves all phases of a development from early phase field studies, through concept and detail design and finally fabrication, testing and delivery.

Structures supplied by Nemo include:

- Pipeline End Manifolds (PLEMs)
- Pipeline End Terminations (PLETs)
- Riser bases
- Manifold structures
- Protection structures – GRP and steel
- Pig launchers/receivers

Products

Over the years Nemo Engineering has developed several specialized products for the subsea industry and is continuously developing existing and new products within this market.

Nemo products can be delivered either as an integrated part of a subsea system package or as a stand alone delivery. Nemo Engineering offers continuous support of its products during the design, manufacturing, testing and installation of them.

Products supplied by Nemo include:

- Pipeline Hot Tap Tees/Wyes and Inline Tees/ Valves
- Repair clamp systems
- SSIV systems
- Vertical/horizontal connection systems
- Subsea tooling
- Spools

Pipeline Engineering

Nemo Engineering is currently establishing this new business area. The foundation for this is so that the company will be able to offer to its customers complete solutions for pipeline systems.

After-Market, Service & Personnel & Operations

After-Market:

- Defines and delivers tailor made solutions and systems to the subsea/pipeline market
- Provides subsea tooling and handling systems
- Performs feasibility and concept studies

Service:

- Performs refurbishment, modifications and upgrading of equipment, systems and tooling
- Provides storage facilities

Personnel and Operations:

- Plan and perform offshore operations for clients in projects where the vessel is client provided
- Provide offshore personnel to the company's partners' offshore operations in order to supervise and/or participate in the installation work
- Support the company's partners with qualified personnel/teams to compliment or replace their own resources in their project teams



1. Langeded Subsea Valve Station.

2. Tampen Link 32 inch Pipeline End Manifold.



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Nexans Norway AS is part of the Nexans Group, which is one of the world's leading cable manufacturers. The Group brings an extensive range of advanced copper and optical fibre cable solutions to the infrastructure, industry and building markets. Nexans' cables and cabling systems can be found in every area of people's lives, from telecommunications and energy networks to the aerospace industry, automobiles, railways, buildings, the petrochemical industry and medical applications. With an industrial presence in 29 countries and commercial activities worldwide, Nexans employs 21,000 people and in 2006 it had sales of €7.5 billion. Nexans is listed on the Paris Stock Exchange. The company has five factories in Norway and one in Tokyo Bay, Japan and is certified in accordance with ISO 9001 and ISO 14001.

Global Operator

Nexans Norway offers the offshore industry world wide a wide range of products and systems. This includes the production and installation of umbilicals for subsea production systems and ROV umbilicals, seismic and power cables. The company has the capability to manufacture, install and commission projects worldwide.



1. World record umbilical length for Snøhvit.

2. Power umbilicals for operation in deep and ultra-deepwater.

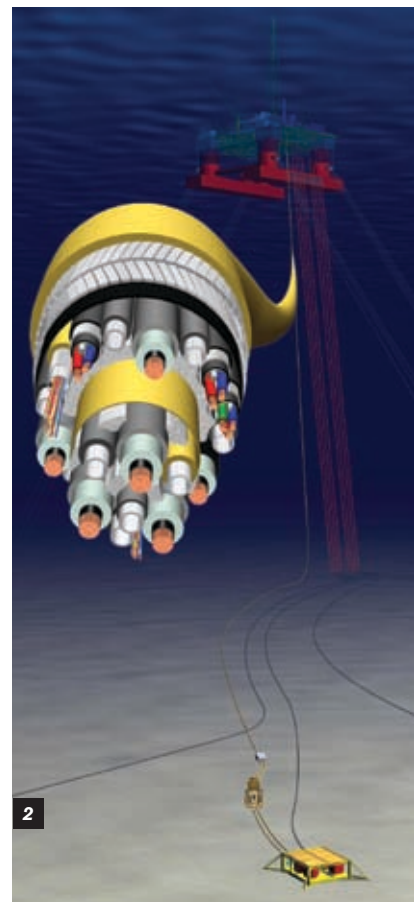
Subsea Umbilical Systems

Nexans Norway's factory in Halden is the competence centre for Nexans Group's subsea umbilical and power cable technology. Umbilicals are manufactured for installation in water depths greater than 2,300 metres, in continuous lengths of up to 145 kilometres, in weights of up to 135 kilograms per metre and with outer diameters of up to 213 millimetres.

Umbilical References

Nexans Norway has reference projects worldwide, and its most recent umbilical projects include:

- BP's King project (power umbilical)
- Norsk Hydro's Ormen Lange project in Norway
- Exxon Mobil's EHRA project in Nigeria
- Statoil's Snøhvit project in Norway
- BP's Thunder Horse project in the Gulf of Mexico
- TOTAL AKPO project in Nigeria





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Novenco AS is a global market leader with regard to the manufacture supply and installation of complete Heating, Ventilation and Air Conditioning (HVAC) systems for the offshore industry. Projects range from engineering and supply of equipment, to complete turnkey packages involving installation and commissioning. Novenco have a global network of partners and a worldwide reference list.

Recent reference projects

- 3 off Class N Jack up Platforms – Skeie group
- Ettric FPSO - Bluewater
- Gjøa Semi-sub. Topsides - Statoil
- Gjøa Semi-sub. Quarters - Statoil
- Sleipner B Compression - Statoil
- Kashagan – Agip KCO
- HALFDAN BC - Mærsk Oil & Gas
- 2 off H6e Drilling rigs - Aker drilling
- PRA-1 Modules Vetco - Petrobras
- STATFJORD Late Life - Statoil
- P-53 Accommodation + Hull - Petrobras
- OIRFP Prirazlomnaya - Sevmorneftegas
- P-51 Accommodation + Deckbox - Petrobras
- KASHAGAN Temporary Refuge Barge - AGIP
- P-54 Gas compression module - Petrobras
- P-53 Accommodation + Hull - Petrobras
- OSEBERG East PDQ Upgrade - Hydro

Main Products

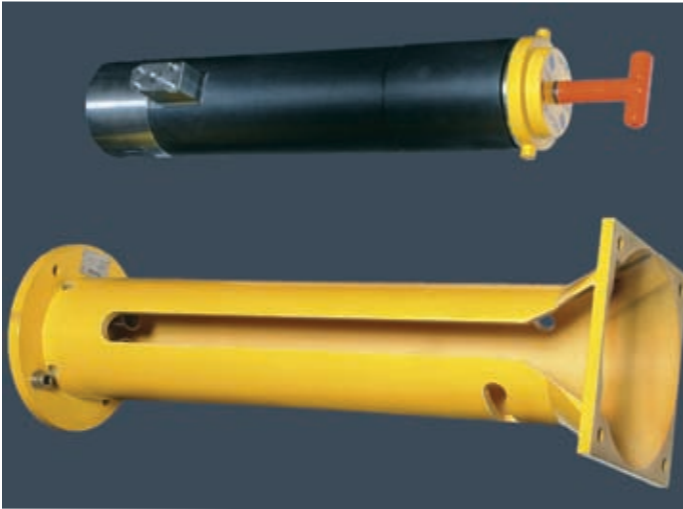
Novenco AS offers a complete range of engineered and manufactured products, including:

- Offshore Air Handling Units
- Air handling unit containerised solutions
- Fan Coils
- Axial flow fans from 250 to 1500 Ø dia
- Direct and belt driven Centrifugal fans
- All types of dampers
- Refrigeration cooling systems
- Intake drop separators and filter packages
- Sound attenuators
- Cabin units
- HVAC control systems

Quality Assurance

Novenco's quality assurance system is certified according to ISO 9001 by Det Norske Veritas (DNV).





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Over the past 40 years, Rotator has designed and manufactured over 50,000 control valves for subsea and topside applications. Many of the products are specifically designed to endure extremely high pressures in harsh environments. Products include subsea valves developed to work at pressures up to 1,380 bar, and are designed for reliable subsea application in excess of 4,000 meters water depth.

Chemical Injection Throttle Valve – CTV

Rotator subsea CTV is used for the precise injection of scale, corrosion or wax inhibitors. The larger flow versions of the company's CTV are used for injection of methanol or MEG. Rotator has the widest product range of chemical injection valves, and the biggest installed base in the industry. To ensure premium quality products, the company has in-house control of all aspects of its technology from product development and design through manufacturing and testing. Rotator CTV has several unique features such as:

- Flow ratio up to 100:1 with differential pressure typically between 60 and 200 bar

- Large internal passages which allows fluid contamination up to SAE AS45059 class 12B-F
- Integrated self-cleaning feature minimizes the risk of clogging
- Integrated flow measurement for accurate measurement of chemical injection flow rate
- No moving parts except during actuation

CTV-MEG

The Chemical Throttle Valve for Mono Ethylene Glycol (CTV-MEG) from Rotator is a custom designed valve for subsea applications. The CTV-MEG is a robust restriction type valve with no moving or stressed parts during operation.

Flow adjustments are made via an electrical stepper motor and gear enclosed in a dielectric/lubricating fluid-filled housing. Two absolute pressure transducers monitor the flow rate measuring the pressure drop across the restrictor. Loss of power does not effect flow and all previous settings are saved. Usage history is logged in memory for diagnostic use.

Rotator's "state of the art" controller module offers:

- Accurate flow
- Simple, software controlled adjustment and calibration by operator
- Remote download/upload capability
- "Set and forget" flow regulation
- Canbus, Modbus and Profibus compatible over RS-485
- Low power consumption (20-32 VDC, consumes 3w while idling)

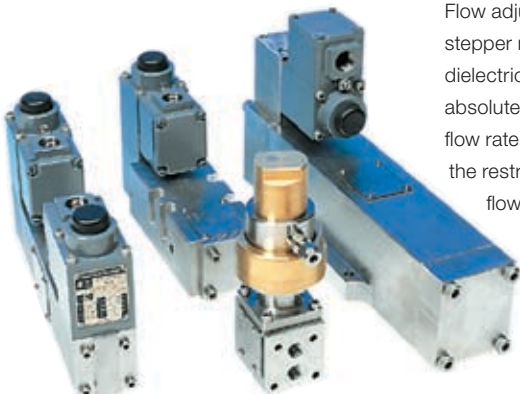
The CTV-MEG's unique feature is a stable, repeatable flow adjustable up to 240 litres per minute at 60 bar differential pressure.

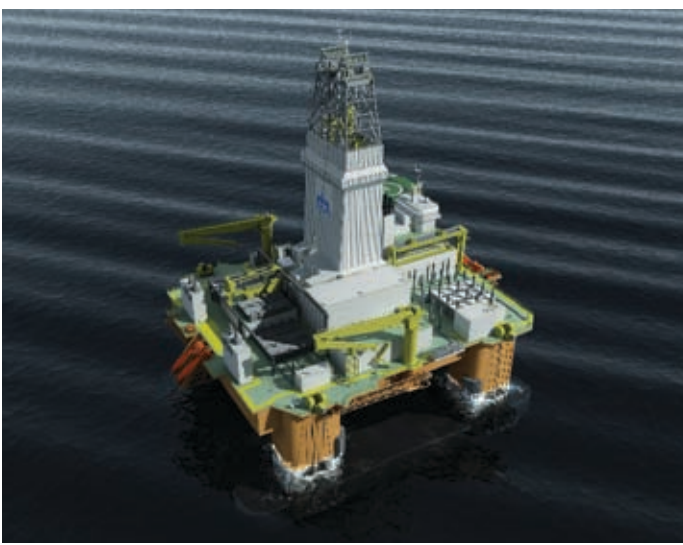
Subsea & Topside Hydraulic Control Valves – HCV

Rotator hydraulic control valves are designed according to the metal-to-metal shear-type-seal principle, which, compared to conventional ones, has negligible internal leakages and sustains high contamination.

The internal part's material is very resistant to wear. Rotator designs products for a service life of at least 30 years. The control valves can be used in most hydraulic circuits and they are qualified for all types of hydraulic fluids.

Various electric, hydraulic, pneumatic, and manual pilots may activate all control valves.





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Odfjell Drilling is a leading drilling and well service contractor in the North Sea, with presence in other selected areas internationally. Leadership is shown through the provision of modern technology, know-how and solutions as well as in the quality and competence of the company's employees. Odfjell Drilling has 35 years of experience from worldwide drilling operations, and is a major supplier of personnel for drilling operations and maintenance on fixed and floating production platforms in the North Sea. As of today the company employs 2,500 people.

Mobile Offshore Drilling Units

Odfjell Drilling operates a number of semi-submersibles in the North Sea and has more than 35 years of international experience from design, ownership and operational management of semi submersibles, drill ships, jack-ups and drilling units. Odfjell Drilling is the majority owner and manager of Odfjell Invest Ltd which has under construction two state of the art, 6th generation, dynamically positioned drilling units for operations in harsh environments at Daewoo, South Korea with delivery October 2008 and June 2010.

Platform Drilling

Odfjell Drilling is a leading platform drilling contractor in the North Sea with operations on fixed and floating production platforms.

Odfjell Drilling Technology (ODT)

Odfjell Drilling Technology has the in-house skills required to execute projects as an Engineering, Procurement, Construction and Drilling (EPCD) contractor, providing modular drilling units and platform drilling rigs on a turnkey basis from concept to operation.

Odfjell Well Services (OWS)

Odfjell Well Services supply a wide range of services to the oil industry including drill tool rental, tubular rental and casing and tubing running services.

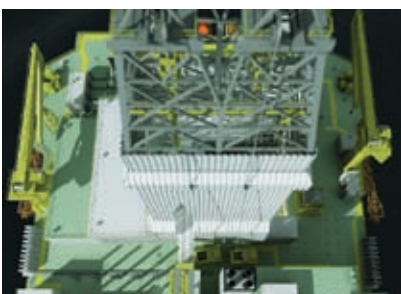
Standards & Safety

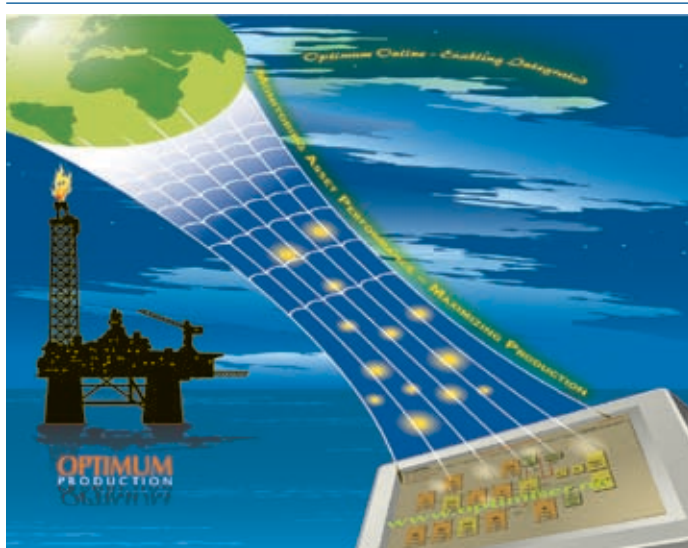
Odfjell Drilling has set a zero fault objective in the area of quality, health, safety and the environment. The company operates an integrated company management system which is based on the 2004 requirements

of ISO 9000-2000, ISO 14000 and the International Safety Management Code (ISM-code).

Odfjell Drilling has a set of QHSE Key Performance Indicators that enable the company to measure continuous improvement within selected focus areas. The Key Performance Indicators are used actively to ensure that the company delivers better QHSE results than what customers expect.

In recent years Odfjell Drilling has improved its safety results and reduced absence due to sickness. This is a credit to all Odfjell Drilling personnel who have pulled together towards achieving a common goal. Odfjell Drilling works continuously to reduce risk and hazard to the environment and the employees' health and safety.





OPTIMUM PRODUCTION

OPTIMUM PRODUCTION

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Optimum Production AS has developed OPTIMUM Online, an innovative system to process vast amounts of real-time data. OPTIMUM Online provides online production and process data from fields to a network system, achieved through dedicated data acquisition and database systems. Optimum, established in 1996, is based in Stavanger, Norway. The company's OPTIMUM Online System is one of its main products.

OPTIMUM Online

OPTIMUM Online is an open system and is able to link up and interface with any software programme. It integrates currently utilized well and process network modeling application software. The real-time mapping of process and production conditions is the first step in production optimization, and requires the modelling of wells and topside processes.

Data is collected by OPTIMUM Online through production and process sensors, well tests and other sources and then provided to the network model software for calculation of the production profile. The calculated data is then correlated against fiscal meters to ensure overall accuracy. The correlation allows precise modelling of production of each well and field even in the absence of a flow meter. The result is online mapping of production of individual wells and platforms for any given point in the network.

The calculated production profile can be used as a bench mark to assist in understanding any changes that are happening. Knowing the production in detail from the reservoir to export/sales allows

control over the complete value chain, leading to quicker identification and response to changes than previously possible. In turn, this leads to OPTIMUM Online achieving the three main objectives of production optimization:

- **Capture production opportunities –**
By taking offline a "snap shot" from the validated software models used by OPTIMUM Online, an evaluation of alternative production scenarios can take place. They may be run to investigate the expected production results from varying situations
- **Source and prevent areas of production losses –** OPTIMUM Online enables the main reasons for production losses to be broken down by platform, main component and by type of operation (planned and spontaneous)
- **Optimize the operation of the existing process plant and infrastructure –**
When essential service to equipment is to be carried out, OPTIMUM Online can identify all systems upstream that will be halted and hence co-ordinate further maintenance, preventing future disruptions in production. It can also instantly identify alternative routing to avoid disruptions and provide tuned real-time input conditions to process analysis and optimization tools

Flexibility & Continuous Development

OPTIMUM Online is a flexible system and as such allows continuous development in its monitoring and processing of online data. Planning for enhancements in data collected from offshore allows for its instant integration into the system.

OPTIMUM Online has been in operation with ConocoPhillips Norway in the Onshore Operation Centre (OOC) in Tanager since October 2004. Due to the success of the Onshore Operation Centre at ConocoPhillips, Optimum Production is now fully able to develop a graphical user interface for the clear, precise display of online data and calculations. The experience gained has also contributed to an in-depth understanding of work methods, while allowing for flexibility in satisfying the functional, organizational and any other requirements that may emerge.



PROPURE
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ProPure AS is a process equipment and system supplier for the enhanced treatment of water, gas and oil. The company's focus on equipment efficiency represents reduced operating expenditure for the customers, and lower life-cycle cost compared to conventional treatment technology. ProPure's technology is in operation in more than 20 locations worldwide, both onshore and offshore.

The Company

The company has established itself as one of the industry's foremost expertise and knowledge centres, called upon by international clients to assist with determining the best technical and economical means of realizing added value from its client process assets. ProPure develops, designs and manufactures a wide variety of specialized processing equipment.

ProPure's innovative thinking, and the transfer of these ideas into practical applications, provides its customers with direct results in reducing asset capital and/or operating expenditures, which correspondingly result in a return on investments and an increase in operating revenue.

Equipment & Systems

- Produced water treatment – C-Tour process
- EnFlot (Enhanced flotation systems)
- H₂S scavenging systems – ProScav
- Selective H₂S removal systems – ProCap
- Desalting systems – ProSalt
- Dewatering systems

Sound Track Record

ProPure has cooperated with major oil and gas companies in the industry in developing process equipment and systems that can meet today's technological challenges, both onshore and offshore. Together with a network of representative offices, ProPure has successfully carried out projects on a global scale.

Customer Support Services

ProPure provides comprehensive customer support service for all its equipment and services around the world. A combination of experienced and highly qualified in-house know-how guarantees that customers receive the highest level of client care.

ProPure is a Pure Group company, which also includes the company ProSep Inc. in Houston, Texas. Pure Group is also

represented in Aberdeen, UK and Kuala Lumpur, Malaysia.

ProPure and its sister companies ProSep (Houston) and Pure Group Asia Pacific (Malaysia) are all parts of TorrCanada.





RAPP BOMEK

COMMITTED TO INNOVATING THE INDUSTRY

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Rapp Bomek AS is Norway's largest manufacturer of advanced-technology fireproof and explosion-proof doors for the offshore petroleum industry. With origins dating back to 1864, Rapp Bomek is one of Norway's oldest companies within marine mechanical engineering. A member of the Rapp Marine Group, Rapp Bomek continues to develop new generations of advanced industrial products for demanding marine operations.

Offshore Fire Doors

Rapp Bomek fire doors are tested according to all applicable specifications and are type-approved by Det Norske Veritas, American Bureau of Shipping, Lloyd's Register of Shipping and the US Coast Guard for use on fixed and floating platforms. The doors are manufactured under a strict QA system in accordance with ISO 9001, and fire doors delivered to platforms in the North Sea continue to perform well after more than 25 years in a harsh, saline environment.

Selection

Doorleaves and frames of mild steel, stainless steel or aluminium are available, and Rapp Bomek doors include several ratings and types:

- Hinged and sliding
- Single and double-sized
- Light-duty A-0/A-60 rated

1. Rapp Bomek's blast-proof sliding doors.

2. Super Light-duty A60 fire door.

3. A60 watertight combination door. Water pressure: 5 m inside, 8.5 m outside.

- Super light-duty AO/A60 rated
- Medium-duty A-0/A-60 rated
- Heavy-duty A-0/H-120 rated
- Non-rated
- Louvered
- Combination doors, fire rated and weather/watertight
- Pneumatically operated
- Hydraulically operated
- Customer specified

References

Since 1980, Rapp Bomek has delivered nearly 15,000 doors to oil and gas platforms, ships and projects, including the following:

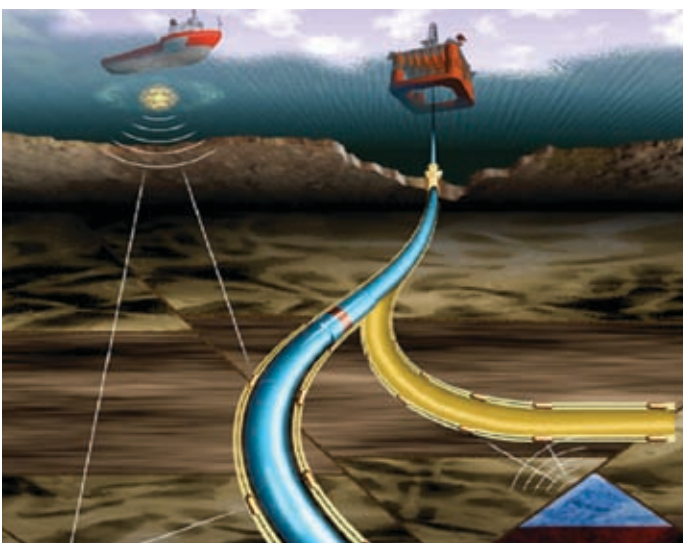
- Dalia FPSO
- Snorre B
- Valhall WHP
- Kvitebjørn
- Grane
- Kristin
- Kizomba A & B
- Ehra FPSO
- Shah Deniz
- Sakhalin
- Snøhvit
- East & West Azeri

Export Markets

Rapp Bomek exports to the following markets:

- Australia
- Brazil
- Canada
- China
- Europe
- Korea
- Middle East
- Southeast Asia
- West Africa
- United States





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READ ASA's core expertise is in the application of seismic techniques to reservoir geophysics, in cased hole logging services (particularly well integrity and production analysis), HETS solid expandable tubulars and in permanent downhole instrumentation. READ is a passionate technology developer in these areas, and provides drilling exploration, well construction and well intervention service support throughout reservoir life.

Reservoir Geophysics

Seismic Processing

- Internationally benchmarked best in class
- 3D anisotropic tomography module
- Custom processing to achieve optimal results

Borehole Seismic Data Acquisition

- Simultaneous OBC-VSP survey for improved image quality
- 32-shuttle SYGMA™ digital geophone array
- 3 m–75 m shuttle spacing for shear imaging or tomography

PerForM™ – Permanent Formation Monitoring

- Combined high-resolution 4D seismic and micro-seismic
- Multiple migration – radically expands area coverage
- Integrated pressure and temperature sensors

Cased Hole Logging Solutions

Well Integrity Analysis

- Best-in-class data processing and interpretation
- Integrated thickness data with multifinger caliper
- Answers in hours, not weeks, with SWIFT™ analysis

Caliper & Electromagnetic Inspection

- Well integrity assurance from a trusted supplier
- Widest range of logging tools, including HPHT
- Electromagnetic measurement in gas and heavy mud

Production Profile Analysis

- Multiphase analysis in partnership with a client's reservoir team
- Open-book techniques – not black-box answers
- Wide range of multiphase sensors for optimized survey design

HETS® Expandables

HETS Liner Hanger

- Metal-metal connection – no slips or moving parts
- High tensile and compressive load capability
- Gas seal to V-0 5,000 psi – ISO 14314 tested

External Casing Patch Overshot

- High performance life-of-well casing reconnection
- Metal-metal gas-tight seal with high-load HPHT capability
- No-torque connection without threads or elastomer

Internal Casing & Tubing Patch

- Metal-metal, high burst-collapse expanded steel patch
- Minimal ID reduction for optimum production
- Deployed on drill-pipe, wireline or coil

Gas & Hydraulic HP Downhole Testing

- Safe, rapid connection integrity test
- Multiple isolated test capability
- Test pressures up to 30,000 psi



Rolls-Royce

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Rolls-Royce is one of the largest international suppliers of marine technology, products and systems. The Rolls-Royce Marine division has more than 7,000 employees in 25 countries, an annual turnover of some \$1.7 billion and serves both the naval and commercial sectors. The Marine division is largely based in Scandinavia.

A Force in Marine Solutions

Rolls-Royce Marine specialises in ship design and the design and delivery of propulsion, positioning, manoeuvring, motion control and ship's systems. The company is one of the world's foremost suppliers of marine propulsion systems, deck machinery and steering and stabilising systems for the offshore, merchant and naval segments of the global marine market.

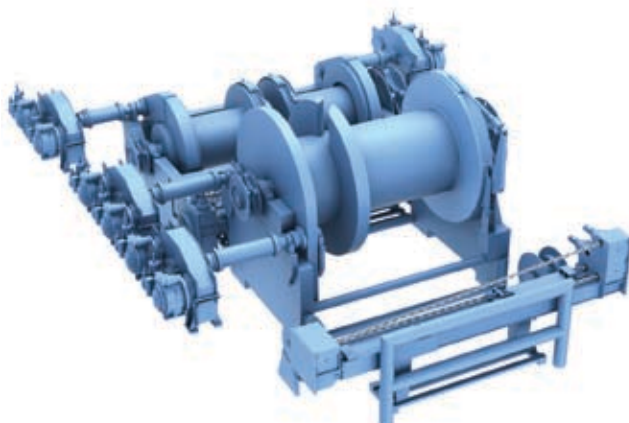
Ship Design & Ship's Systems

The company places great emphasis on fulfilling customer requirements – often designing and developing vessels before customers request them – and creating innovations that anticipate future demands. Its UT -/and NVC series ship designs are built worldwide.

Rolls-Royce system solutions include fully integrated ship's equipment packages in which the company provides designs and relevant documentation, delivery coordination, and guarantees of high quality and low life-cycle costs. It also offers a wide range of consultancy services, ranging from initial design and financing to ship's equipment supply and planned maintenance.

Rolls-Royce Product Range for the Marine Market

- Ship design
- Automation systems
- Dynamic position systems
- Diesel and gas engines
- Gas turbines
- CP and FP propellers
- Azimuth thrusters
- Tunnel thrusters
- Podded propulsors
- Reduction gears
- Anchor handling and towing winches
- Anchor and mooring winches
- Capstans and storage winches
- Safer deck operation systems
- Cargo handling systems
- Fin stabilisers
- Tank stabilisation systems
- Rotary vane steering gear
- Rudders





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SCAN Geophysical ASA, one of the newest and fastest growing players in the highly competitive international marine seismic services business, is combining strong financial backing, active recruiting and a growing demand for its services to forge a company with a bright future. With two vessels currently in operation and four new ones scheduled to enter the market within a year, SCAN is positioning itself to take on an even greater share of the expanding marine seismic market.

Significant Strides in Only Five Years

Founded in 2002, the Oslo based firm has already chalked up an enviable record. SCAN's 3D vessel, the *M/V SCAN Resolution*, converted for seismic operations in 2006, has worked for state oil and gas entities, small to medium-sized companies and super majors on three continents. The vessel is currently acquiring a large seismic program for Venezuela's PDVSA in the Caribbean. Meanwhile, SCAN's high-end 2D vessel, the *M/V Geo Searcher*, converted for seismic operations in 2005, has operated exclusively in the Asia Pacific region. Since 2006, the *Geo Searcher* has acquired more than 30,000 km of 2D for several customers. High demand for its services in this region continues.

1. Artist's conception of SCAN Geophysical's three new vessels due to enter service in 2008.

Each features the industry's latest equipment and can tow up to 10 streamers.

2. SCAN Geophysical's 3D vessel, *M/V SCAN Resolution* is now acquiring a large 2,500 km² survey for Venezuela's PDVSA. The vessel has racked up an enviable record while operating in the Caribbean region during the last year.

Four New Vessels by the End of 2008

However, it is SCAN's plans for the future that are gaining increased worldwide recognition. In 2006, SCAN acquired the *M/V SCAN Stigandi*, built in 2002. This vessel is currently in the Irving Shipyard at Halifax, Nova Scotia, where it is being converted and refitted into a combination 3D and high-end 2D vessel with long-offset, dual source capability. It is scheduled to enter the market before the end of this year.

In addition, the company is building three new world-class, high capacity 3D seismic vessels, all of which are scheduled for delivery in 2008. These three vessels are purpose-built and specifically designed for efficient 3D seismic acquisition with a 10 streamer capacity, consisting of 10 tow points, corresponding to a total capacity of 80 km of streamers

Building on a Solid Foundation

SCAN is building and organizing its business in a logical, step-by-step manner in order to efficiently and effectively handle the tripling of its fleet by the end of 2008.

Financially, the company's list of investors comprises some of the most prestigious

international funds. SCAN Geophysical is listed on Oslo Stock Exchange's Oslo Axess under ticker code SCANG, on the website www.osloaxess.no.

Operationally, SCAN has entered into two agreements this year for finance and management of its increasing fleet. In April of 2007 the company signed an agreement with V.Ships Management Limited for the marine management of SCAN's three new-build 3D vessels. The agreement calls for V.Ships to manage the SCAN vessels for 10 years, and was entered into in connection with the closing of a sale lease-back transaction with Ship Finance International Ltd. involving the new vessels.

Geographically, SCAN has placed its operating centres strategically. The company's headquarters in Oslo, Norway, also serve as the centre of SCAN's North Sea and Africa operations. Centres in Singapore, Houston and Caracas serve the growing demand for seismic services in those areas.





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Established in 1985, Scan Mudring specializes in deepwater seabed intervention and is certified according to NS-EN ISO 9001:2000. The company carries out work in the most challenging environments using remotely controlled equipment developed in-house. Scan Mudring's clients include a number of the major oil companies and subsea contractors.

Areas of Operation

Scan Mudring's core business is within subsea intervention – mainly for the offshore oil and gas industry – in connection with installation, maintenance and modification of subsea equipment, as well as decommissioning and spudcan dredging. Some of the services the company carries out include:

- Removal of drill cuttings and rock dump
- Dredging and levelling of the seabed
- Spudcan dredging – for jack-ups

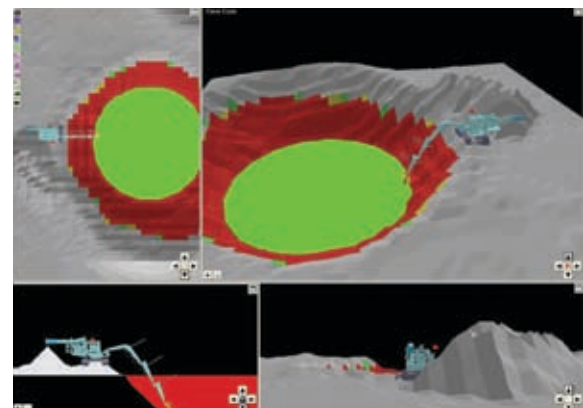
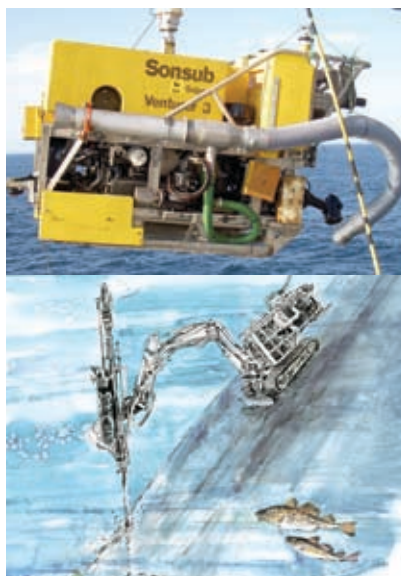
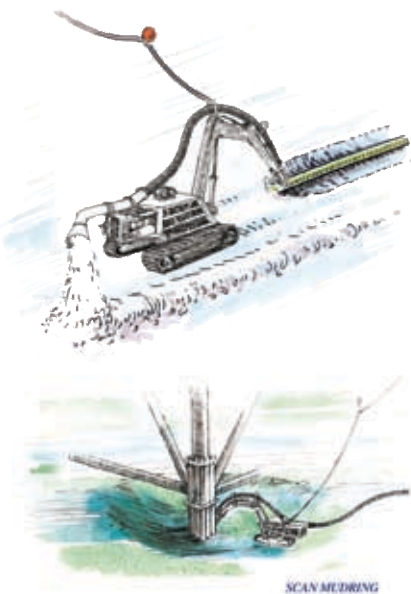
Scan Mudring performs these services with its Scanmaskin units, which combine muscle with precision. The company also has a rental service for ROV-mounted jet pumps for light dredging.

Scan Mudring has been in this special market since the early 1990s, and has made it its main area of operation since 2000. The company's special technology has proved efficient and reliable – resulting in satisfied clients calling for Scan Mudring's services again and again.

In addition to its area of specialization, Scan Mudring carries out work in other areas. Recent contracts include deepwater rock drilling for blasting and precision dredging around a WWII submarine wreck.

Research & Development

Scan Mudring constantly moves forward. Based on its in-house expertise, the company continually upgrades its equipment and engineering skills. Recent developments include Scan Mudring's special monitoring system and equipment for the dredging of very hard seabeds.





SCANDPOWER Risk Management

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Scandpower is a leading independent risk management company with three decades of experience providing consulting services and software to the international market. The company's team of professionals includes about 200 highly qualified persons with extensive experience. Scandpower offers services in the areas of risk management, health, safety, environment and quality and reliability and regularity. Scandpower offers services in the oil and gas market, the transportation market and the chemical and nuclear industry market.

Services

Scandpower performs a wide range of projects within the oil and gas industry. The company serves customers all over the world, ranging from small sub-suppliers to major oil companies. Scandpower's broad experience covers the lifecycle of oil and gas related activities. This includes all phases from early concepts, through detailed engineering, operations and finally decommissioning.

Scandpower's services include:

- **Analysis of Risk** – Identification and evaluation of hazards. Consequence analysis. QRA/PSA, HAZID, HAZOP, environmental risk, CFD analysis of fire and explosions. Cost-effective risk reducing efforts. Emergency preparedness systems
- **Management Systems** – Analysis, development and improvement of tailor made governing systems. Verification, audit and capability assessment
- **Humans & Organizations** – Interaction between people, technology, and organization. Control room analysis. Work environment. HSE culture. Assessment and improvement of organizational structures and interplay

- **Safety Systems** – Evaluation and specification of technical systems to prevent accident and losses. Assessment of technical standards of critical systems. Input to design and improvement programmes
- **Reliability & Regularity** – Reliability of safety systems as well as production facilities. Safety Integrity Level (SIL) analysis. Flow assurance
- **Training** – Tailor made training programmes in all aspects of safety and quality

- **Learning from Experience** – Incident and accident investigation. Experience databases. Improvement programmes
- **RiskSpectrum** – The world leading software for Probabilistic Safety Assessments (PSA) of nuclear power plants and other risk exposed industry

CFD Tools

Scandpower applies the 3D tool FLACS for dispersion and explosion calculations and 3D CFD tool Kamelon FireEX for fire simulations. OLGA® is applied for simulating dynamic behaviour of process systems.

Other Tools

- **BlowFAM** – (Blowout Frequency Assessment Model). For quantifying the total risk during drilling and well operations
- **COSAC** – A Computerized tool for efficient risk assessment in offshore field development
- **FIREX** – Used in the prediction of fire situations resulting from the accidental release of flammable liquid or gas and to evaluate risk
- **TRACE/BREEZE** – Additional simplified programmes used for coarse analyses

Dag Myrestrand/StatoilHydro





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SeaBed Geophysical AS is a service company that provides expertise and services to the global oil industry in all aspects of the marine multi-component seismic sector. The company provides feasibility studies, modelling, survey planning and acquisition, processing and the interpretation of seismic data. SeaBed is a Norwegian contractor that is fully owned by SeaBird Exploration.

Company Objective

SeaBed's objective is to provide first-class services to the oil industry in order to reduce the economic risks involved in the exploration phase and to reduce uncertainties related to reservoir description, fluid flow and reservoir management.

CASE System

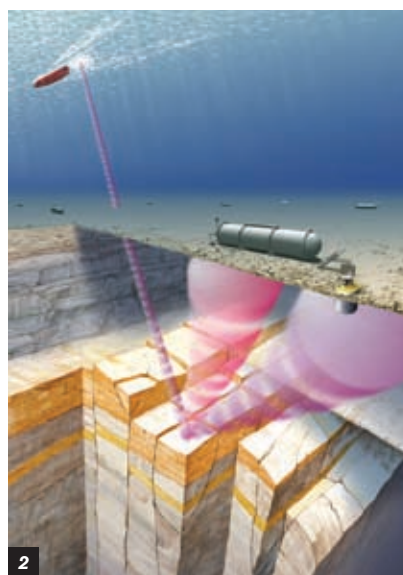
SeaBed's seismic acquisition method is based entirely on its own autonomous node system called the CASE system. This system is the result of many years of research, development and prototyping. The system is scalable, flexible and has the capability to work in very congested areas with the company's industry leading data quality and vector fidelity.

The system's capabilities, both in terms of operational efficiency and high-quality data, were proven during a survey that was done offshore off Mexico for Pemex in 2003 and 2004. This is the world's largest 4C-3D ever performed (approximately 230 square metres). The acquisition was done on the Cantarell Field, which is the world's largest offshore producing field. To be able to cover the requested area, SeaBed utilized 250

CASE units, which were deployed in seven patches totalling approximately 1,400 Node positions. The Cantarell Field has a great deal of infrastructure. Here, the benefits of using a node system without cables were distinctive.

New CASE Units

As the multi-component seismic market is moving towards greater water depths, SeaBed has developed new CASE units, which are applicable for use down to a depth of 3,000 metres. The company has already performed a successful small pilot at 2,300 metres using six prototype CASE units for BP in the Gulf of Mexico in 2004. Right now 500 units are in the production phase for ultra-deep applications that will be rigged on a dedicated vessel for nodal operations.



1. The back deck of DP vessel Normand Tonjer during the 4C-3D operation at the Cantarell Field.

2. Illustration showing the principle of Node 4C-3D technology.



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Semco Maritime is one of the leading suppliers to the marine and energy sector, and for the past 25 years it has made a focused effort to supply the best service and the best project solutions for the global market. Semco Maritime differs from other contractors because of its specialized expertise in the integration of equipment and processes. Semco Maritime is an internationally oriented company with departments in Europe, the USA, Central America and Asia.

Engineering & Contracting

Semco Maritime is one of the major contractors and engineering companies within the following market sectors:

- Floating and mobile units
- Fixed oil and gas installations
- Infrastructure

Semco Maritime has a wide range of disciplines under the same roof, including the design of steel structures and piping, electrical and instrumentation systems and communication and automation.

Fabrication

Semco Maritime operates from well equipped facilities at the port of Esbjerg with direct access to the quayside with a load-out capacity for modules of up to 1,700 tonnes. Its in-house fabrication department ensures that the company is able to optimize resources and skills during the construction of offshore modules, unit skids, etc. The company not only fabricates new equipment, it also modifies and repairs existing equipment in both carbon and stainless steel construction as well.

Quality is assured by Semco Maritime's HSE&Q system.

Service – High Flexibility

Thanks to its highly trained staff and state-of-the-art technology, Semco Maritime has achieved a leading status within service and maintenance. High flexibility in terms of both personnel and equipment enables Semco Maritime to carry out any servicing task.

Installation – Customer Needs

Semco Maritime's organization adapts to the requirements of individual projects, thus meeting customer needs. The company's involvement varies from the composition of small specialist installation teams for specific tasks to the hiring of large work forces for major reconstruction work on drilling rigs, production platforms or power plants.

Manpower Departments – Offshore Denmark & Norway

Semco Maritime's manpower division has now become even bigger; consequently it can now supply additional qualified offshore personnel within its total range of activities. The group's capacity ensures that large manpower teams – covering a wide range of disciplines – can be mobilized at a very short notice.

Products & Components

For the last 25 years, Semco Maritime has supplied the offshore and other industries with explosion-proof installations and maintenance materials. Personal contact is one of its key strengths.

Concepts & Products – Complete Solutions & Innovative Design

Semco Maritime has designed and developed a wide range of concepts and products that includes, among others, rig upgrades, power upgrades, fire fighting systems and PA/GA systems.





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Sense EDM AS is an independent supplier of unique onshore and offshore rig solutions. The company supplies specialized multifunctional rigs, drilling packages, innovative drilling equipment and advanced control systems to the oil and gas industry worldwide. Superior engineering competence, patented technology and good operational understanding enable Sense EDM to deliver unique products to its clients. Its core competence is “intelligent movement”.

Focus Areas

Sense EDM has established itself as a leading supplier of advanced drilling equipment worldwide. Its drilling systems enable drilling rigs to achieve higher efficiency and safer operations through innovative technology and advanced control systems.

Sense EDM will continue to strive to develop the best technology it can and expand internationally by developing unique, leading-edge drilling equipment and solutions within its main focus areas. These include:

- **Drilling packages** – Complete packages for semi-submersibles, jack-ups and fixed platforms
- **R&P rigs** – Patented rig technology that enables multifunctional rigs for combined drilling, workover and service work, both for onshore and offshore
- **Drilling equipment** – High-capacity heave compensating drawworks, top-drive systems and other equipment for high-spec drilling operations
- **Pipehandling** – A full range of innovative drill floor and pipe handling systems for faster and more reliable tubular handling
- **HMI & controls** – World-class driller’s cabin, operator chair and drilling instrumentation that make record-setting wells

- **Services** – Providing customer satisfaction is at the core of Sense EDM’s business and the key to new sales

Drilling Packages

Sense EDM delivers drilling packages for semi-submersibles, both for single- and dual-activity derricks, jack up rigs, floaters and for fixed platform rigs. The company’s team consists of highly skilled engineers who have many years of experience in delivering integrated drilling units to the international market. The company is able to design, deliver and support drilling packages that can be used to drill the most demanding wells.

Rack & Pinion Rigs

With their basis in the company’s patented Rack & Pinion (R & P Rigs) drive system, Sense EDM’s line of R & P multifunctional rigs are now drilling, snubbing and doing workover on challenging wells all over the globe. These rigs are unique in

terms of mobilization, operational weight, speed of operation, as well as level of automation. The company’s R & P rigs are available in various models. Some of their features include:

- Different models and sizes for onshore or offshore operation
- Driven by hydraulic or AC power
- Delivered as self-erecting land rigs, modularized or on offshore rigs
- Can be delivered with simple or advanced pipe handling systems
- Travelling rotary table or a full-top drive system, both capable of carrying out snubbing operations

A full rig support package that includes trucks, generator sets, electrical house, mud system, offices, pits, etc. can be delivered.

1. Sense EDM delivers drilling packages for semi-submersibles, jack-ups, fixed platforms and floaters.

2. A 250T land rig to be used in Canada.





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Sevan Marine ASA specializes in building, owning and operating floating units for offshore applications. The company has developed a cylinder-shaped platform type, which is suitable for applications in all offshore environments. Sevan Marine is currently focusing on two application types for its cylinder platform – floating production and drilling. Sevan Marine’s head office is in Tananger, Norway. It also has offices in Arendal and Trondheim, Norway, Rio de Janeiro, Brazil and Singapore. Its subsidiary Kanfa AS is located in Asker, Norway. The company is listed on the Oslo Stock Exchange and has the ticker code SEVAN.

Sevan Cylindric Platform

Sevan Marine has developed a new cylinder-shaped platform type suitable for use in all sea environments. Sevan’s platform is classified as an offshore installation and meets the industry’s requirements for versatility and flexibility for various applications. The primary benefits of Sevan’s technology are its high capacity for oil storage and deck load, its proven technology, low cost and short construction time.

The main features of the Sevan Cylindric Platform include:

- Scaleable for oil storage and capacity
- High deck load capacity and stability reserves
- No requirement for weathervaning, even in harsh environments
- No need for complicated and costly turret swivel system
- Standard riser connections, umbilical and power cable terminations
- Accommodates large number of risers
- Low investment for future risers
- Segregated ballast in double sides/bottom
- Excellent motion characteristics
- High safety standard
- Direct offloading to tankers

Current Sevan Projects (as of December 2006)

The first Sevan unit, the Sevan Piranema, is now being completed and will begin operations in early 2007 on the Piranema field in Brazil under a long-term contract with Petrobras. Sevan also has a contract with Venture Production for the second Sevan 300 as an FPSO on the Chestnut field in the central part of the North Sea. Two more Sevan 300 FPSO units and a drilling vessel, the Sevan Drilling Unit, are under construction with options to build an additional 10 units in place.





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SINTEF Group is the largest research organization in Scandinavia. Its vision is “Technology for a better society”. SINTEF sells research-based knowledge and associated services based on deep insight into technology, the natural sciences, medicine and the social sciences. Its 1,900 employees generated new knowledge worth NOK 2 billion in 2006. Contracts for industry and the public sector and project funding from the Research Council of Norway account for more than 90 percent of SINTEF’s income.

Services

SINTEF offers contract research and technology development for the international oil and gas industry. Flow assurance at SINTEF represents a core competence within the SINTEF pipeline technology concept, which aims at providing the industry with innovative solutions for the entire value chain of subsea pipelines. SINTEF operates the world’s largest multiphase flow assurance laboratory (SINTEF Multiphase Flow Laboratory). SINTEF offers flow assurance research and development, integrated flow assurance solutions, engineering tools and consultancy services, and advanced laboratory services. Services include 1D/3D multiphase flow modelling, medium and large-scale multiphase flow experiments (including hydrates, wax, scale and solids), real fluid high pressure characterization tests, in-situ screening of flow assurance chemicals using a high pressure multicell assembly, multiphase flow simulations and multiphase transport system analysis and medium and large-scale instrument and equipment testing.

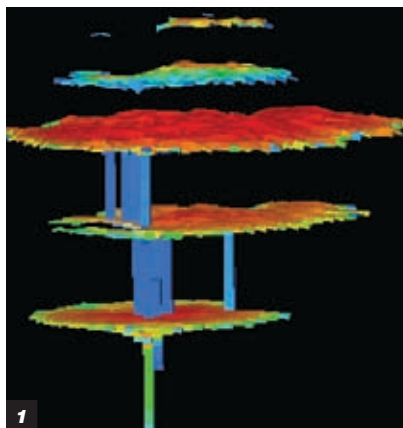
SINTEF carries out research and offers expert services related to subsea electrical components and systems. Its specialists have decades of experience working as an independent third party; for new installations and during service failure discussions. SINTEF’s subsea electrotechnical laboratories offer development and type tests of electrical equipment.

CO₂

The increasing level of atmospheric CO₂ is an important cause of global climate change. Many years of target-oriented research have given SINTEF the status as one of the world’s

leading research centres for dealing with CO₂ from coal and gas-fired power stations. This has been accomplished in close cooperation with The Norwegian University of Science and Technology (NTNU). Scientists at SINTEF are competent throughout the value chain related to the capture, transport and subsequent storage of CO₂ in geological formations. In 2006, these research groups were allocated a significant number of competence-building projects by the Research Council of Norway, Gassnova and industry. SINTEF is also one of the most important research centres in the field of CO₂ capture and storage in the EU’s Framework Programmes for research. CO₂ research is one of many examples of cooperation among several disciplines at SINTEF, all aimed at supplying the clients with holistic solutions. Some reference projects:

- BIGCO₂ – competence building research and development project funded by The Research Council of Norway (RCN) and Gassnova together with key industrial players
- BIGH₂ – enabling next generation H₂ fired gas turbines – basic funding from Gassnova



1. CO₂ plume saturations after three years of injection on Sleipner (modelled by SINTEF).

- DYNAMIS – EU FP6 – paving the ground for the world’s first integrated CCS plant with H₂ production
- DECARBit – EU FP7, pre-combustion technologies and CO₂ separation
- ENCAP – Enhanced Capture of CO₂- EU FP6 – pre-combustion and oxy-fuel type of capture processes research and development including pilots
- CO₂fieldlab – Gassnova funded project together with industrial companies monitoring and modelling of CO₂ migration/integrity
- CO₂ReMoVe – EU FP6 – research into monitoring and verification technology
- CASTOR – EU FP6 – CO₂ from capture to storage – SINTEF is involved in CO₂ storage performance and risk assessment studies
- CO₂GeoNet – EU FP6 – network of excellence on geological sequestration of CO₂
- ULCOS – EU FP6 – ultra low CO₂ steelmaking

Flow Assurance

Dealing with heavy oil represents a major challenge for oil and gas industry worldwide. SINTEF offers the possibility for research and development studies that cover the range from the fundamental understanding of fluid behaviour and small-scale experiments to the up-scaled industrial perspective. SINTEF is a partner in the FACE (Flow Assurance Centre) initiative, which holds status as

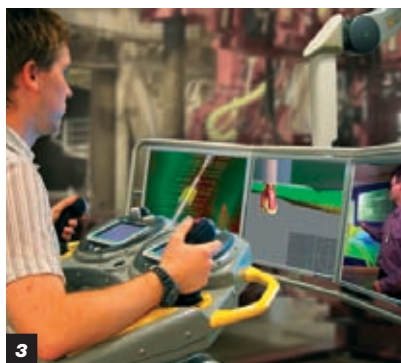


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a Centre of Research based Innovation in Norway. SINTEF operates a unique world class multiphase laboratory for flow assurance studies of live hydrocarbon fluids and gases at high pressure. During more than 20 years of experience, the laboratory has gained a unique understanding of multiphase behaviour. SINTEF’s ColdFlow solution enables long distance transport of hydrate and wax containing petroleum streams. Large scale experiments have been conducted in SINTEF’s industrial scale facilities to understand complex multiphase flows. These experiments have been the basis for the development of the next generation multiphase flow simulation tool, LedaFlow.

Integrated Operations

SINTEF has ongoing project activities for approximately NOK 150 million (USD 30 million) per year within integrated operations. SINTEF is a partner in the “Center for Integrated Operations in the Petroleum Industry” that focuses on drilling, production and reservoir, maintenance and operations and cross discipline activities. SINTEF is active in technology developments within eDrilling, eControl (drilling), SmartPipe, fast reservoir simulations, fast 4D seismic



3

2. From understanding heavy oil characteristics on a small scale to industrial scale flow assurance experiments

3. eDrilling; real time simulations, decisions support and 3D visualization

4. Installation of an oil pipe with a piggybacked high voltage cable intended for direct electric heating (DEH). The DEH system is used to prevent hydrate formation inside the oil pipe.

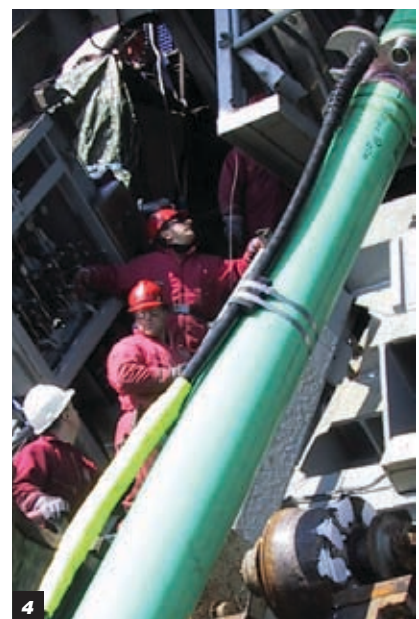
processing, high reliability downhole instrumentation, remote condition monitoring, work process transformations and new work process implementation as well as many other areas.

Subsea Power Supply

The supply of electric power is a key structural issue for any oil or gas field when applying subsea processing such as pumping, boosting or direct electrical heating of pipelines. Research efforts are needed in order to have reliable subsea power supply components and systems for relevant water depths and step-out distances. The Research Council of Norway has allocated heavy funding to a cluster of three JIPs that were started in 2006 with partners among the international oil companies and supplier industries:

- Feasible power electronics for demanding deepwater applications
- Electric power systems for subsea processing and transportation of oil and gas
- Electrical insulation materials and insulation systems for subsea high-voltage power equipment

Applications for participation by potential new partners are welcomed. SINTEF has excellent laboratory facilities to support the projects while also being available for industrial verification and qualification purposes.



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The SIMTRONICS group is a world class provider of sophisticated gas and flame detection systems and extinguishing solutions. The products are used worldwide to provide early detection of hazardous events.

The company was publicly listed in January 2007 and has more than 20 years experience in supplying gas detection for the use in applications ranging from plant boiler rooms to offshore petrochemical facilities. The SIMTRONICS group is now comprised in two divisions, Extinguishing Solutions and Detection Systems.

Extinguishing Solutions was formed in April 2007 with the acquisition of Water Mist Engineering (WME). WME design and assemble a full range of active fire fighting systems, such as low pressure water mist, deluge, sprinkler, etc. Each system is tailored to match the individual protection requirements. WME is also heavily involved in research and development of water mist nozzles and systems.

Detection Systems focus on gas and flame detection equipment, and is formed from the former Fire & Gas Division of the Norwegian company Simrad Optronics and the former detection specialist company ICARE in France. The TV63 flame detector family has been supplied for numerous projects ranging from FPSOs to gas turbine enclosures and aircraft hangars. The TV63-3IR has a wide field of view with a detection range of up to 80m, allowing for a better coverage as more flexible location of the detectors.

The Simrad GD10P infrared point detector is the benchmark for combustible gas detection on offshore installations. These infrared gas detectors differ from all other models, because they use silicon based solid-state infrared sources. The complete optomechanical design and construction is so stable that an ultra fast speed of response can be achieved whilst providing unparalleled service life and detector stability, thus saving on maintenance and service costs.

Simtronics has also developed a specialist hydrogen sulphide detector for arid locations, such as in the Middle East. The TT63ES detector uses a semiconductor sensor and advanced onboard signal processing. The TT63ES has higher reliability and lower maintenance, needing recalibration just once a year.

Simtronics' large range of conventional toxic, oxygen and catalytic detectors are widely used in demanding industrial applications

where the built-in flexibility and easy maintenance are important features. All of these units can be commissioned using a wireless hand-held communicator by a single person. In addition, the detector heads for most of our toxic and oxygen detectors are "hot" swappable reducing the permit demands for maintenance.

Simtronics' products and solutions are available worldwide, supported by regional sales offices in Norway, France and the Middle East and a network of dedicated distributors and agents.



The detectors for combustible gases, flame and H₂S are the most important for the oil and gas industry.



subsea 7

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Subsea 7 is one of the world's leading engineering and construction companies, offering all the expertise and assets that make Subsea Umbilical, Riser and Flowline (SURF) field development and operation possible. With a multinational workforce in excess of 5,000 personnel, the company's offshore operations are supported out of Norway, UK, the Netherlands, Africa, Brazil, the Gulf of Mexico and Asia Pacific.

Experienced Personnel in all Disciplines

Subsea 7 was created in 2002 by the merger of Halliburton's Subsea Division with a Norwegian Subsea construction company called DSND. Subsea 7's heritage brings with it experienced project managers and engineers that offer all the disciplines that make subsea oil and gas development and operation possible, supported by a modern fleet of pipelay, construction, diving and ROV support vessels and a portfolio of pipeline construction yards. Embedded in all their activities is a deep-rooted health, safety, environmental and quality culture.

Full Range of Services

Subsea 7 carries out its Subsea field development business in all the major offshore oil and gas markets globally. The company installs infield rigid and flexible pipelines up to 16 feet in diameter, riser systems and umbilicals connecting production facilities on the seabed to fixed or floating platforms.

Subsea 7 provides a full range of complementary design, fabrication and installation services for related subsea hardware in order to offer a total subsea field development package.

The inspection, repair and maintenance of this infrastructure throughout the producing life of the oil and gas fields is critical in order to protect the operators' investment. Subsea 7 offers the experienced personnel, the right assets and equipment for deployment, such as state of the art ROVs, and expert manned and unmanned intervention technology, that are very critical to this market.

The Latest Technology

Subsea 7 uses the latest technology and techniques to undertake survey, positioning and inspection services to produce high quality processed information. The company works with its clients to analyse survey results, help them develop maintenance plans and then execute the plans on their behalf.

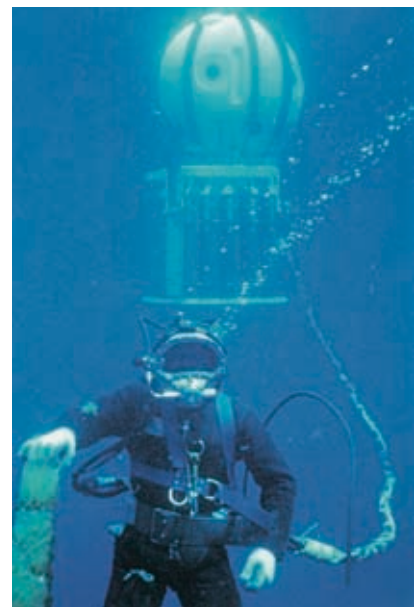
As water depths increase, so too do the costs of intervention and repair. Therefore, effective IRM becomes much more important. Subsea 7's track record of performance in the North Sea is now being recognized globally with the recent Life-of-Field award in Angola by BP.

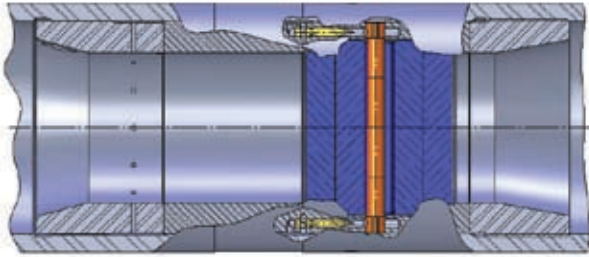
Complimentary Business Lines

The company has two business lines that are directly related to Subsea activities but sit

outside their core Subsea field development and IRM business. i-Tech provides ROV services specifically to the drill rig market and operates in all the major deepwater markets globally. Veripos is a specialist precise positioning service business for the oil and gas industry that allows ships and vessels to operate and install assets in all water depths globally.

It is against this background that Subsea 7 will continue to look at advancing intervention and deepwater technology through sponsorship of an aggressive research and development programme and participation in joint industry projects that address a wide range of deepwater production issues.





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At first, the use of glass may have appeared to be the antithesis of good oilfield practise; however, the singular properties of the TCO glass pack have allowed the development of a unique and proven range of isolation plugs.

Some of its features include:

- TCO glass can withstand phenomenal forces and pressure
- Totally unaffected by known corrosive influences
- Reduced to silicate sand on demand
- TCO provides a guaranteed contingency option that requires that the client never be exposed to the risks or time involved with milling metal or other high tensile mechanical parts

TCO is a technological solutions provider that exceeds the requirements for the most challenging projects and demanding clients worldwide.

TDP

TDP, Totally Disappearing glass Plug, is a proven concept and design.



It comes in a range of sizes or is custom designed to meet individual needs and project challenges, whether they require extreme pressure or temperature tolerances.

Every TDP is provided with a unique glass pack that can withstand the harshest environment, yet return to the base material of silicate sand on demand.

IDSP

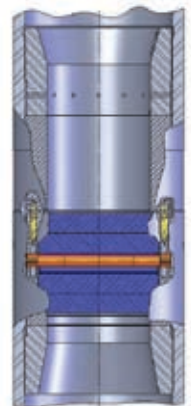
IDSP, Intervention Disappearing Smart Plug, is combined with a pack of the client's choice, a simple trouble free solution to intelligent intervention programs. Activation systems can be tailored to meet client requirements. It is V0 approved with a guaranteed full bore access, throughout the plug.



TDP2

TDP2 is the future of trouble free completion. It is V0 approved at the Stavanger IRIS test centre. This new generation of glass plug technology provides:

- ISO 14310 V0 gas seal accredited
- TCO safe fire multi step activation system
- Minimum moving parts
- Full bore access
- No debris from the remote operated activation system left in the well bore
- Simple debris and intervention tolerant system, all parts hidden from the well bore, safe from debris, and well bore clean out procedures





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Techno Dive is an international partner for safe and efficient surface supplied air diving and dry habitats, and the company aims to become the preferred supplier of inspections, maintenance and repair in the offshore industry. Techno Dive has developed solutions for 30 years for efficient dry and wet mechanical work underwater, and the company performs all its operations worldwide, using portable diving stations and equipment and personnel.

Special Periodic Surveys (SPS)

On a regular basis any classified vessel needs to perform routine inspections and repairs. Techno Dive is the perfect partner for all underwater inspections, maintenance, cleaning, repair work and thruster replacements. The company has top of the range film equipment allowing them to record and document any underwater inspection task.

Underwater Inspections

Through the use of its cameras Techno Dive can record any scope related to classification requirements or other needs, and it has all equipment needed to perform first cleaning and afterwards do inspections of welds, thickness, paint, anodes, thrusters, propulsion and more.

Thruster Replacement, Work & Change-Outs

Techno Dive has extensive competencies and systems and procedures for how to change all different types of thrusters. The company performs all underwater inspections, lifting de-installation and installation operations of thrusters, and it can also assist in performing thruster maintenance and repairs.

Structural Repairs & Upgrades (Underwater Welding, Sandblasting & Painting)

The company has a wide range of equipment for performing underwater work like welding, cutting, corrosion control, grinding and water blasting, and it can also perform underwater paint (corrosion) control.

Anode Replacement in Wet or Dry Conditions

Techno Dive changes all types of anodes (including ICCP) using divers or cofferdams, and it performs all tasks involved for installing new anodes including cleaning, corrosion control, u/w or dry painting and installation.

Blinding of Valves & Sea Chests, Overhaul of Valves

Techno Dive has a wide range of smaller cofferdams to blank of any type of valve or transducer or other subsea equipment. The company also assists in overhauling any type of underwater equipment like valves, transducers, etc.

Hull Cleaning & Polishing

Through the use of "scrubbers" or manual work Techno Dive cleans hulls or structures (pontoons, sea chests, propellers and more).

Pulling of Tail Shaft

Techno Dive performs all tasks involved in pulling out tail shafts. This involves planning, lifting, diving and re-installation tasks.

Underwater Engineering

The company assists in the planning and engineering of underwater solutions. This can include the design and production of specialized cofferdams (dry habitats), lifting operations, pitting and corrosion repairs, painting and more.

Dry Habitats

Techno Dive has a range of cofferdams to use for structural repairs, thruster replacement, blanking of valves and sea chests or dry anode replacement. The divers install the cofferdam and guard it while work is performed inside.

The company also provides tailor made cofferdams depending on customer requirements for special needs. All cofferdams are strictly quality controlled and design verified by third parties (DNV).

All photos: © Getty Images



SHAREcat*

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SHAREcat is a family of web-based solutions used for supply chain coordination. In order to avoid handling duplicate information for equipment and spares, SHAREcat has solutions for avoiding repeated work. The solutions deliver an innovative collaborative environment which includes manufacturers' equipment catalogues and technical information. The company behind SHAREcat, Tektonisk, was established in 1993 and currently has offices in Bergen, Norway, London, UK, and Aberdeen, UK.

Greater Efficiency

Using SHAREcat solutions, customers can avoid the frustrations involved with doing the same actions on the same vendor data, project after project. Thus, the customer is able to share data and documents across the supply chain and consequently has more time to spend on more important issues. SHAREcat's customers are able to take the weight off their over-stuffed shelves and overloaded databases and share the benefits that result from a more efficient flow of information.

Shared Common Vendor Data

SHAREcat provides the ability to share common vendor data across all energy industry sectors. Project or facility views

cover both standard and project specific supply chain information linked to tags or assets.

SHAREcat's communication interfaces deliver efficiencies to operators, contractors, suppliers and manufacturers. This is done through a shared view of data and documents, using simple workflows which reflect established industry practices.

References

SHAREcat technology has been used on many oilfields, and the system is used on the Sakhalin II field in East Russia. Here SHAREcat is used to handle all vendor documentation, and the vendors are spread over five continents and are all working on-line through the internet.

Project organization has also been done from the United Kingdom, Russia, South Korea and Indonesia. In addition, SHAREcat is currently deployed in major projects like Valhall redevelopment, Skarv, Ormen Lange and Britannia satellites.

Satisfied SHAREcat customers include:

- Aibel
- AMEC
- Aker Kværner
- BP
- ConocoPhillips
- ExxonMobile
- Heerema
- Hydro
- Shell
- StatoilHydro
- Total





TESS^{PSC}

HOSES - SERVICES - MRO

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TESS coordinates almost 100 locations in Norway which manufacture hoses and hose fittings for industrial, on- and offshore applications. TESS is recognized as a reliable supplier of high-quality products for 40 years and the company is now making more than 500,000 deliveries a year and expects a 2007 turnover of NOK 1.9 billion.

Product Lines

The TESS product range includes supply hoses, hydraulic, metal, kill/choke, BOP control and general service hoses, as well as Hammer lug unions and all types of couplings. In addition, TESS provides maintenance, repair and operation products for the onshore and offshore industry.

The company also offers the "Hose Management System" in which microchips are used for identification. InfoChip is a traceable system, uploading all information to a web page for improved control. Other related MRO products include tools, chemicals, PPE, work clothes, lubes, etc.

Products in Supply

From stock at its main office in Drammen or through its network of almost 100 branches across Norway, one in Sweden, one in Denmark and two in Scotland, TESS supplies:

- EDIS metal hoses
- Hammer lug unions

- TESS Cam-Lock (in sizes up to 6 inches, in steel, aluminium, brass or AISI 316) and Snap-tite quick couplings
- Stainless steel fittings
- Rig supply and general service hoses
- Synflex thermoplastic hoses
- TESS loading hoses with built-in buoyancy, swivels and breakaway couplings
- Warmguard fire-resistant BOP control hoses (DNV-approved)
- A variety of hoses from leading manufacturers
- And even more importantly, a variety of related services, in order to offer customers more control and more cost-efficient solutions

Offshore Services

TESS carries out offshore inspection and services and employs a number of engineers and operators who have offshore certificates.

References

TESS currently has the following project orders on fixed installations, semi-submersibles and floaters:

- | | |
|-------------------|---------------------|
| • Draugen | Shell |
| • Sleipner Vest | Statoil |
| • Åsgard A + B | Statoil |
| • West Navion 1 | Smedvig |
| • Snorre B | Norsk Hydro |
| • Ringhorne | Exxon |
| • Kristin | Statoil |
| • Frame Agreement | StatoilHydro |
| • Frame Agreement | Conoco |
| | Phillips |
| • Frame Agreement | A P Møller (Maersk) |
| • Frame Agreement | Norske Shell |





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Thermtech AS is an engineering company that is one of the standard bearers for the treatment of oily drilling cuttings, with its Thermomechanical Cuttings Cleaner (TCC) technology.

Every year several million tonnes of hazardous waste is produced during oil exploration and production drilling around the world. The increasing global focus on pollution and efficient recovery of products from waste streams points in the direction of separating this particular waste into its components and thereby enabling reuse of very expensive base oil used during drilling operations.

Thermomechanical Cuttings Cleaner (TCC) Technology

Thermtech's Thermomechanical Cuttings Cleaner (TCC) heats the oily waste to a temperature just high enough to evaporate the oil and water in it. The TCC is not the only thermal separation technology available; yet, it is fundamentally different from any other technology of this kind. In a TCC heat is created through friction in the waste itself. A drive unit (up to 1 mW) sets a series of shaft-mounted hammer arms into motion inside a barrel-shaped process mill. The solid particles in the waste are then forced towards the inner wall of the stator of the mill where the kinetic energy from the rotating arms is transformed into heat through friction (see illustration).

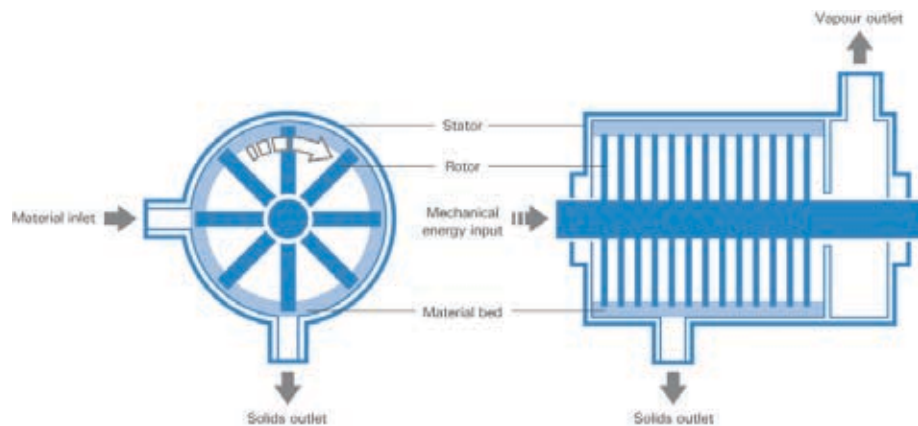
All other technologies heat the waste indirectly through large heated surfaces, increasing the risk of fire and other accidents. Compared to indirect technologies, the TCC is significantly smaller and can easily be moved from location to location. Its small footprint and the fact that the TCC is able to meet relevant safety standards, has led to significant interest in using the technology offshore.

From a financial point of view, the main benefit of using the TCC is the quality of the recovered base oil. Since the hottest spot in the TCC process is actually the waste itself the oil is not degraded and can therefore be

reused. Every litre reused in new drilling mud means money saved.

TCC Capacity

The capacity of a TCC is, as with any other thermal technologies, dependent on the energy input and the content of the waste. In particular, capacity depends on the amount of water in the waste. Thermtech's estimates of the capacity are based on assumptions with regards to the content. A "3 tonne per hour" unit will have that capacity with a ratio of 70/15/15 solids/water/oil content (by weight). If the water content is lower, the capacity of the same unit will be significantly higher than three tonnes per hour.





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A growing number of discoveries are marginalized because the reserves are buried deep in hard, complex sediments. An emerging technology from Norwegian Tomax AS is about to change this. The proof can be found in the northern part of the Norwegian Continental Shelf where the hard, hot reservoirs are now drilled at record speed without compromising the reliability of the advanced downhole logging and directional control systems used.

Anti Stall Technology

The new Anti Stall Technology (AST) is basically a downhole mechanical-hydraulic bit tracking system – not too far removed in function from those systems used to keep cars stable in critical situations. The system is placed in the lower part of the drill string and is typically referred to as the AST tool. Under optimal conditions the tool is a passive part of the bottomhole assembly (BHA) but sharp changes in the drilling torque will activate it. The activated tool optimizes the weight on the bit in a closed-loop process until new, stable and effective drilling parameters are established. In practical terms this means that the AST works actively in the BHA to stabilize the downhole forces to eliminate drillstring overload and at the same time

1. The AST tool cuts in and actively controls the bit tracking during critical loads – much like systems used in cars to handle critical situations. Here it is placed just behind the bit for illustrative purposes.

2. Integration of the Anti Stall Technology with hole enlargement was successfully demonstrated in controlled tests and has produced great results offshore.

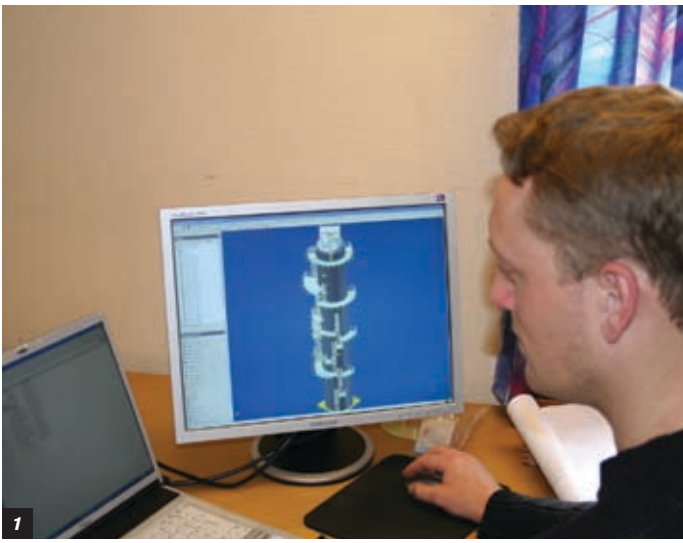
increase penetration through improved efficiency. The AST tool has eliminated over-torqued tool joints in the about 100 wells where it has been used.

The Anti Stall Technology is suitable for both rotary and motor drilling. In rotary drilling the AST decouples the drillstring in order to produce optimal conditions for the bit. The technology has been used successfully with



the main rotary steerable systems (RSS) in the market. In direct comparisons run to run, a leading offshore operator recorded 15 to 100 percent faster penetration with AST while at the same time keeping drillstring dysfunction safely below critical magnitudes. When used with a mud motor Anti Stall Technology offsets problems related to friction and weight transfer and allows for effective drilling in sliding mode with maximized utilization of the motor. The ability to run a higher differential pressure over the motor gives fast a penetration rate along with a reduced or eliminated tendency to stall.

The standard fleet of AST tools features an extended stroke, enabling them to span most applications, and therefore no field specific adjustments are required. The flexibility also allows for adding a hole enlargement device or changing from motor to core barrel. The AST tools are shipped to the rig ready to go in to the hole.



AsTransConstruction

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AS Trans Construction (ATC) is an EPC contractor providing containers, modules and other welded constructions for a wide range of offshore or onshore projects. ATC was established in 1976 and the staff has many years of extensive experience in performing these types of projects. In cooperation with its customers, ATC can deliver turnkey and fully tested systems in a wide range of disciplines.

Standardized & Tailor-Made Solutions

All engineering and some fabrication is carried out at the company's own workshop in Norway. ATC has a daughter company, ATC Module Technology, Szczecin, Poland, as well as a close cooperation with several workshops in Eastern Europe. ATC can deliver custom-built modules designed to fulfill customer specifications, or standard modules. ATC also fabricates constructions based on customer design and its staff can work with steel, stainless steel and aluminium. Most of the company's deliveries involve engineering, fabrication, certification, installation of customer-supplied equipment, and testing.

Product Examples

- Containers and modules equipped with HVAC for cooling of customer-supplied equipment

1. Engineer using Inventor.

2. Module for electrical equipment (PCM), delivered with fire protection A60 and HVAC.

3. Stainless-steel containers/modules for HVAC equipment.

4. Fully-equipped laboratory with furniture and HVAC.

- Fully equipped rest, office or accommodation modules
- Skids and other welded constructions for installation of pumps and other equipment
- Lifting devices
- Fire insulation
- Noise-reduction panels and enclosures

Reference Projects

- Shelf 5, Baku
- Sakhalin II – Piltun and Lunskoye
- Prirazlomnoya
- South Pole – Dronning Mauds Land/ Bouvet Island

- Oseberg
- Valhall
- Volve
- Schiehallion FPSO
- Ormen Lange
- Brage
- Vincent FPSO

Key Clients

- Framo Engineering
- Siemens
- Aker Kvaerner
- Aibel
- Vetco





TRELLEBORG

ENGINEERED SYSTEMS

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Trelleborg Viking AS was established in 1896 and is the largest producer of rubber products in Norway. Trelleborg Viking's rubber products have served the offshore industry for more than 30 years. The company is certified in accordance with ISO 9001 for the "Design, Manufacture and Sale of Technical Rubber and Plastic Products" and environmental standard ISO 14001. Trelleborg Viking AS is a part of the global Trelleborg Group, employing 23,000 people in more than 40 countries.

Prioritizing Safety

Safety for people and the environment has always been in focus in the application of Trelleborg Viking's products – which include corrosion protection, flexible connections, jet fire protection, thermal insulation, and blast and impact protection – all for the lifetime of the customer's installations.

ELASTOPIPE™

is a patented flexible piping system specially designed for use in hazardous and corrosive areas. Statoil, ConocoPhillips, BPAmoco, Norsk Hydro, the Norwegian Navy and Statsbygg sponsored the development of Elastopipe™. This process started in 1996 under the leadership of Trelleborg Viking AS. The main objective was to develop an alternative to the traditional steel and glass fibre-based systems, such as titanium, CuNi, CS and GRE/GRP. The main requirement was the development of a system with high flexibility in both design and installation, with the added features of being corrosion-proof and jet-fire resistant.

Viking Firestop/Jetfirestop

is a rubber-based passive fire protection product, tested to withstand a blast of 2.1 bars and a jet fire for more than two hours. Smoke and toxic fumes from Trelleborg Viking's products are reduced to a minimum. The materials have high chemical and water resistance, and are very robust. The rubber compounds are ozone and UV light tested. Vikotherm Thermal Insulation is designed for use in deep water (tested down to approximately 2,000 metres). The rubber is chemically bonded to the steel substrate and gives therefore excellent corrosion protection and protection against cathodic disbondment. Vikotherm is maintenance-free and highly impact-resistant.

HPT Pipe Penetration Seals

are designed to withstand both blasts and jet fire. The system is constructed of a combination of the well-proven HPT seals

and Viking Jetfirestop material, providing unique protection. Some of the benefits of HPT pipe penetration seals include:

- Allowance of large relative movements
- Quick and easy installation
- Impact and weather resistance
- Availability in both single- and double-sided variants, along with in standard and special shapes
- Long track record

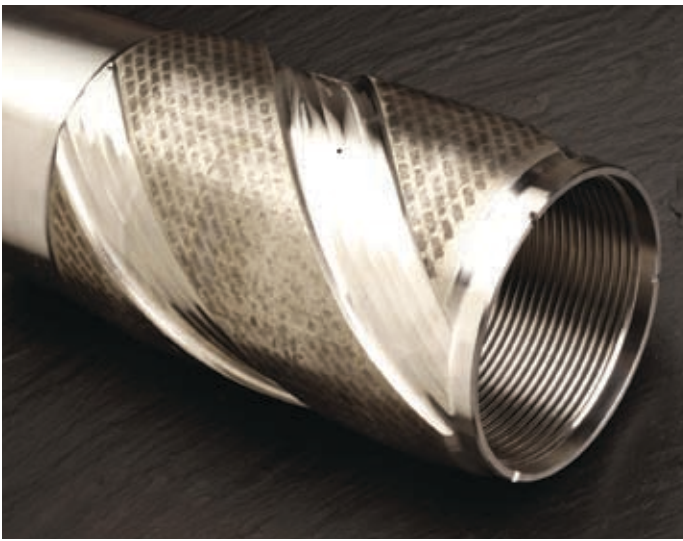
International Sales Network

Trelleborg Viking has representatives in Africa, Australia, Brazil, Canada, Korea, Russia, Singapore, the United Arab Emirates, the United Kingdom and the United States.

References

Trelleborg Viking's products have been used by all major oil companies – including BP, ConocoPhillips, ExxonMobil, Hydro, Maersk, Shell, Statoil and Total.





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Trio AF Teknikk AS was founded in 1999, and through its policy of continual investments in state-of-the-art technology and the highest level of training for the staff, it has established a reputation as a leading contractor. The company's aim is to provide its clients with a non-stop service for all of their wear control and engineering requirements – ensuring continuity, quality and efficiency.

Areas of Operation

- Wear-resistant coatings and products
- Specialized drilling tools
- Hardbanding of drill pipes
- Metal and cermet spraying
- HP/HVOF, arc and flame spraying

General Oil & Gas Applications

Valves and downhole tools in the oil and gas industry are subjected to wear, corrosion and erosion which can destroy tolerances and destroy a surface finish – resulting in premature service failure and higher operating and maintenance costs. Trio AF Teknikk's products and services help reduce problems in these areas.

Thermal Spray Coatings

Trio AF Teknikk is one of the leaders in thermal spraying technology and is recognized as a Castolin Eutectic-accredited contractor. Thermal spraying allows coatings of high-performance materials such as metals, alloys, ceramics, cermets or carbides to be applied to relatively easy-to-use and more economical base materials. The various coating processes can offer tremendous improvements in component performance, such as wear, heat, oxidization and corrosion resistance.

Available Trio AF Teknikk coating systems include:

- Third-generation HVOF systems
- Arc spraying
- Powder flame spray
- Spray fusing (sintering)
- Plasma-transferred arc welding
- Welding technology
- Brazing technology
- SIFCO coatings

Hardbanding of Drill Pipes

Trio AF Teknikk is an accredited hardbanding applicator and offers services in this area. The company's specially developed "closed loop system", PLC-controlled hardbanding machine is capable of performing automated hardfacing sequences – this means reduced turnaround time for its clients' equipment and better quality products. Trio AF Teknikk also offers testing and consultancy within hardbanding coatings.

Hardfacing

Trio AF Teknikk is a leader in hardfacing and can provide its customers with standard hardfacing or newly developed coatings up to 10 times better than the existing materials on the market. Hardfacing services include:

- Drill bits, hole openers and cutters
- Rotary steerable systems and motor applications
- Stabilizers, LWD/MWD sleeves and wearbands
- Drill pipe hardbanding services and consultancy
- General machining and welding





UNIVERSITY OF OSLO
FACULTY OF MATHEMATICS AND NATURAL SCIENCES

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The University of Oslo, the largest and oldest academic institution in Norway, has 70 departments as well as a number of clinics, research centres and museums. Research in oil and gas-related fields is a focus at The Faculty of Mathematics and Natural Sciences. The faculty offers studies in petroleum related disciplines covering a wide range of natural sciences.

Oil & Gas-Related Research

Several departments and centres at The Faculty of Mathematics and Natural Sciences carry out oil and gas-related research in various types of networks:

inGAP/Department of Chemistry

Innovative Natural Gas Processes and Products (inGAP) is a Centre of Research-Based Innovation. The objective of the Centre is value creation in natural gas processes through design of processes and products based on atomistic and mechanistic insight in catalyst and reactor parameters under operative conditions.

Department of Informatics

The Department of Informatics initiates research and education in eOperations in the oil and gas industry. In addition, research is done within signal processing and computational science on sonars, seismic and reservoir modelling and visualization.

Department of Geosciences

The Department of Geosciences has a strong focus on problems related to basin development and sediment compaction. The International Centre of Geohazards,

where the Department is a partner, carries out research and scientific studies on the assessment, prevention and mitigation of geohazards on land and on the geological risks in deep waters.

Department of Mathematics

The Department of Mathematics carries out research within risk and reliability analysis. The Department also does research in computational solid mechanics relevant to the design of offshore structures, as well as experimental and theoretical fluid mechanics.

CEES/Department of Biology

The Centre for Ecological and Evolutionary Synthesis (CEES) is a multidisciplinary group utilizing the latest developments in molecular genetics and statistical/computer-based methods to analyze marine ecosystems. CEES is one of Norway's 21 Centres of Excellence.

Centre for Materials Science and Nanotechnology

A broad spectrum of research related to the material sciences, including micro and sensor technology, is carried out at the Centre for Materials Science and Nanotechnology.

PGP

Physics of Geological Processes, PGP, is one of Norway's Centres of Excellence. PGP works particularly with the coupling between fundamental geological and physical processes across various time and length scales. It also wishes to explain the behaviour of systems with natural complexity and develop ways of predicting and controlling their behaviour to protect the environment, secure natural resources and assess natural hazards.

Petroleum Research-Based Studies

All departments offer petroleum research based studies at all levels (BSc, MSc and PhD). The Department of Geosciences offers a broad and interdisciplinary Master of Science programme in Petroleum Geology and Geophysics covering most aspects from exploration to field development and production, and it is taught in English.



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VIKING Life-Saving Equipment Norway AS is a manufacturer of life-saving appliances. The product range comprises offshore evacuation systems, life rafts and personal protective equipment, such as survival suits, lifejackets and fire-fighter suits.

Chute-Based Evacuation Systems

VIKING LSE's high-quality evacuation systems are manufactured on the basis of the company's wide experience in supplying North Sea installations, where strict regulations focus on work safety. The company is therefore able to add value to the offshore safety industry around the world. Since VIKING's first offshore evacuation system was delivered in 1988, hundreds of chute-based evacuation systems have been delivered to the offshore segment. VIKING Life-Saving Equipment Norway AS has a quality management system certified in accordance with NS-EN ISO 9001:2000.

Concept

Available in various designs for various installations and purposes, VIKING LSE's offshore evacuation systems represent a safe and reliable means of evacuation.

Application

The offshore evacuation systems can be installed on platforms, offshore rigs, such as semi-submersibles, jack-ups, FPSOs, etc.

Benefits

The benefits of VIKING's evacuation systems include:

- No limitations on the height from platform deck to sea level
- The chute will be available for "latecomers"
- No risk of falling
- Evacuees can enter and exit the chute at any level through openings located behind each slide

a closing net around the staircase guarantee safe passage for all. All components are stored in a container when the system is in parked position. A custom-made interface module for transfer between staircase and vessel is integrated in the system. The Selstair is operated by a winch with remote launching features. Safe and efficient deployment will prevent all unauthorized access from the sea.

Service Network

With a network of approximately 300 servicing stations and worldwide representation via local subsidiaries and agents, the company aims to satisfy the individual requirements of all customers.

Offshore Embarkation System – SELSTAIR

VIKING Selstair is a collapsible stair system that serves to facilitate the embarkation and disembarkation of offshore installations. Non-slip aluminium steps, handrails, landings and

Customers

VIKING LSE's main customers include StatoilHydro, BP, Agip, Shell, Total, Chevron, ConocoPhillips, ExxonMobil, SEIC, Sevmash and Lukoil Kaliningrad-Morneft.

1. The evacuation chute.

2. Evacuation through chute onto boarding platform.

3. Deployment of system in a controlled manner.

4. VIKING life raft, 12DK+, and VIKING immersion suits.





WESTCON

WEST CONTRACTORS AS

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West Contractors AS (Westcon) is a modern and effective shipyard providing shipbuilding, rig repair and ship repair services. The company has a wealth of experience, competent personnel and specialized equipment to provide customers with the best possible service. Nature has also been kind in providing a uniquely sheltered location that ensures work is not interrupted by adverse winter conditions.

Straight to the Point

Westcon listens to its customers and produces solutions for them that meets their expectations, be it a new vessel or improvements or repairs on rigs and ships. The company's competent and reliable staff is committed to finding good, no-nonsense solutions.

Shipbuilding

Westcon delivers technically advanced vessels for the fishing, supply and seismic industries. The production of quality vessels is a matter of pride at all levels in the organization. The dedicated project team follows the project from conception to delivery contributing with design services, engineering, procurement, construction, outfitting, installation, documentation and delivery. During 2007, the yard delivered supply and seismic vessels, and an advanced environmentally friendly gas driven vessel.

Rig Repair

Over seventy upgrades and/or SPS rig projects have used the yard, many of these have returned time after time. Westcon is experienced in work on all rig systems including main engines, alternators, mud pumps, thrusters, anchor winches, mooring systems, drillers' cabins, mud pits, riser tensions, Xmas tee handling systems and accommodation – the list is endless. The project team pays special attention to communication with the customer and planning in order to ensure that all requirements are met and that the project period is used as efficiently as possible.

Ship Repair

All types of vessels – tugs, fishing and supply vessels and coastal cruise ships – have used the two floating docks and the yard's well-equipped halls. Maintenance and upgrade work is performed on main engines and valves, propulsion, electrical systems simultaneously with external sandblasting and surface treatment. Westcon's experienced staff is always willing to advise and assist customers in satisfying operational requirements.



1. Viking Queen 2007– built for Eidesvik – 105 metres.



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Maritime Colours is a knowledge-based design and communication company providing the maritime and offshore industry with an integrated range of services and solutions within its field. The company helps its customers to strengthen their position in the market place through improved corporate and commercial identity and quality of communication.

Multidisciplinary Competence

Maritime Colour's customers take great advantage of its multidisciplinary competence where industrial designers, graphic designers, multimedia designers and programmers work in teams to develop unique communication solutions for the company's customers. Some of the leading companies in the world benefit from Maritime Colour's multidisciplinary competence, methods and integrated software solutions.

Design & Communication Services

Maritime Colours delivers design and communication services to a large number of leading national and international companies, helping them to differentiate themselves in an increasingly competitive marketplace. By offering a complete range of services from a "single contact point" its clients increase their market potential and become more competitive.

Maritime Colours offers an integrated suite of visual web-based communication solutions called MaritimeCommunicator™, tailor made for the maritime and offshore industry.

1. Visualization for SIM Kongsberg.

2. Visualization for Framo Engineering.

Serving a Global Market

Maritime Colours is a fast growing design and communications company serving a global market, and the company works hard in order to become the preferred provider of maritime and offshore design and communication solutions worldwide. Some of the leading companies in the world benefit from their complete range of services and products. The company's clients include Rolls Royce Marine, StatoilHydro, Conoco Phillips, Framo Engineering, TTS, Danfoss, DNV, Graig Group, Aker Yards, Aker Kværner and Odfjell.

Maritime Colour's objective is to provide the maritime and offshore industry with the most creative, dedicated and powerful workforce available within the integrated fields of design and communication.

Main Goal

Maritime Colours is situated in Bergen (Norway), a centre for the maritime and offshore industry. The company's blend of industrial

expertise, creative skills and application of technology makes it a powerful, efficient and accelerating tool for its clients.

Maritime Colour's main goal is to contribute to:

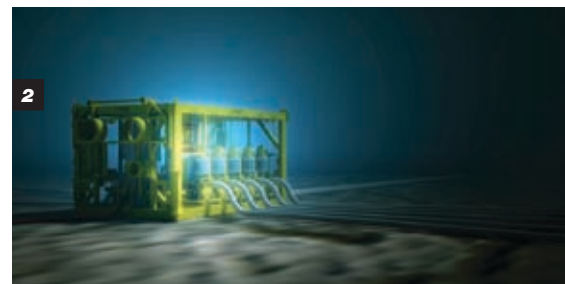
- Increased ability to reach commercial targets
- Increased brand identity and professional market communication
- Release of internal resources
- Increased focus on core activities
- Improved level of innovation

Maritime Colour's key services include:

- Product development and design
- Corporate identity and brand management
- Visual communication
- 3d communication and interaction design
- Software development

Integrated Software Solutions MaritimeCommunicator™

- Project planning
- Document management
- Marketing and presentation
- Training and education
- Content management and publishing
- Customer relation management





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Nordea is the leading financial services group in the Nordic and Baltic Sea area. Nordea is present in 19 countries including Denmark, Finland, Norway and Sweden, where they operate full service banks with nationwide branch networks. In other countries the subsidiaries, branches, representative offices and special advisors offer a broad range of banking services to companies operating internationally.

Consultant & Partner

Globalization, establishment in new markets and increasing e-commerce are creating new business opportunities for forward-looking companies. But the rapid development imposes requirements for more efficient cash management. Nordea offers its services as a consultant and partner. To a large extent cash management is about being able to see the big picture so one can more easily simplify complex processes and isolate the most important elements within large quantities of data. In collaboration with the client, Nordea makes an assessment of capital flow, and on the basis of this creates solutions that are both practical and profitable.

Electronic Services

Electronic services represent fundamental changes in the way businesses function. The advantages are clear: e-services simplify administration, reduce margins of error, are easy to manage and reduce costs. Another aspect of interest is that they can strengthen customer relations. The number of electronic

invoicing transactions is increasing dramatically as more and more companies come to see the benefits of such services. Changeover to such technology provides opportunity for future cost savings.

Risk Management

All companies have a certain element of risk connected to their operations. Interest rates rise and fall, exchange rates and prices on raw materials fluctuate, and accounts receivable have an inherent instability. There can also be risk in connection with acquisitions of other companies or

establishment in new markets. The best means by which to reduce such elements of risk is to implement modern methods of risk management. Nordea has tools and models for analysing different forms of risk, and products designed for hedging risks of a specific nature.

Nordic & Baltic Markets

Companies doing business in the Nordic or Baltic region have added benefits from choosing Nordea as their partner. The entire region is Nordea's domestic market, which allows a large degree of flexibility.





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Petroleum professionals from Odin Petroleum AS provide a comprehensive range of services to the exploration and petroleum industry, and the company specializes in geophysics, geology and reservoir engineering services from prospect evaluation to tail production. Odin can also offer valuable expertise in wellsite and operational geology.

Classified Provider of Services

The company was founded in 1997 by a group of experts within geophysics, geology and reservoir engineering. Odin's recently established offshore department supplies complete operation and well-site geology services, with long-term contracts for two drilling platforms. The company is classified according to Achilles Joint Qualification System as a provider of services to the oil industry in Norway and Denmark. Furthermore, the staff has comprehensive experience from Norwegian and international areas.

Core Areas of Expertise

Apart from offering consultants to the industry based on single-placement, Odin also undertakes in-house projects within its core areas of expertise, such as:

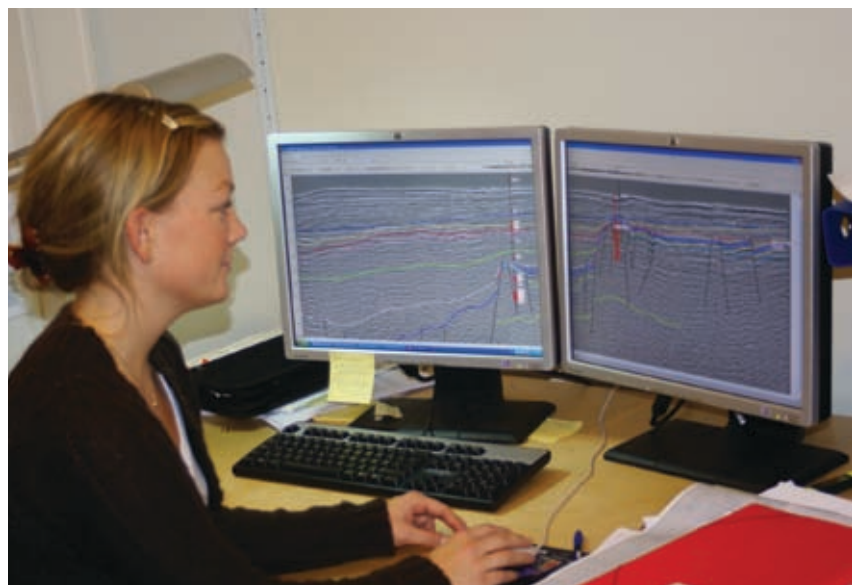
- Seismic interpretation based on industry standard geo- and reservoir modeling tools

- Reservoir evaluation, simulation and IOR studies
- Integrated reservoir evaluation and well planning
- Seismic data analysis, petrophysics and reservoir characterization
- Geo-pressure prediction and borehole stability analysis
- Evaluation of farm-in prospects and development of farm-out prospects
- Complete field evaluation from exploration to tail production

- Research and development within geophysics, geology and reservoir technology
- Training and support for common engineering and petroleum software systems

New Office

The new Odin office in Bergen is equipped with modern computer facilities, in a highly secured environment.





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Wikborg Rein is one of Norway's leading law firms, with 170 lawyers in Oslo, Bergen, London, Singapore, Kobe, and Shanghai. The firm's long-standing presence overseas provides extensive international experience and expertise. A thorough understanding of the client's business, combined with the highest professional standards, ensures that each client receives the best possible legal assistance.

Detailed Local Knowledge

Wikborg Rein's Energy and Natural Resources Group assists both Norwegian and foreign clients engaged in enterprises involving energy and natural resources. The unique problems and challenges in these fields are often complicated further by political concerns and control. The firm's lawyers have experience with all aspects concerned, including a detailed knowledge of the local administration.

Activities in Oil & Gas

Wikborg Rein's activities in the oil and gas field include:

- **Purchase of gas from the Norwegian continental shelf**
 - Contract law
 - Competition law
- **Purchasing from and by the oil service industry**
 - Contract law
 - Labour legislation
 - Dispute resolution

- **Acquisition/sale of shares in licences or companies**

- Licensing procedures
- Considerable amount of permits on the continental shelf and on land (provided that you purchase a land-based plant)
- Tax
- Contract
- Stock exchange and securities legislation
- Due diligence
- Financing

- **Assistance with uncontrolled spills in the air or sea**

- Framework of environmental laws
- Assistance under investigation and following prosecution
- Disputes

- **Moving of mobile rigs across continental shelf borders**

- Contracts pertaining to international law
- Contract
- Dispute resolution
- Labour legislation

- **Assistance in connection with the coordination of regulations on the Norwegian and British continental shelf**

- **Outsourcing**

- Contract
- Special labour legislation questions

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find new business partners in norway



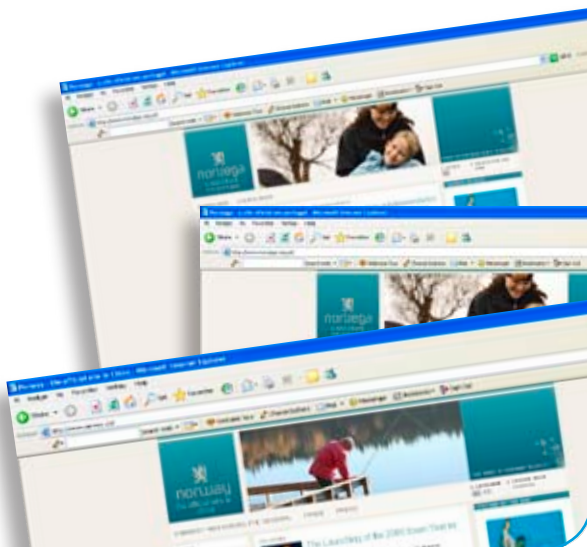
The Official Norwegian Trade Portal

At www.nortrade.com you will find up-to-date information on more than 4,000 Norwegian manufacturers and exporters within 35 different industries. There you will find a search tool which allows you to perform searches for companies, products or services in the Norwegian Export Directory.



www.norway.info

“Norway – the official site” provides extensive background information on Norway, as well as news and details of Norwegian-related events abroad. The large number of articles on politics, travel, culture, business, education, research and history are presented by the Norwegian Ministry of Foreign Affairs and its partners. “Norway – the official site” has been established in 90 countries and in 18 languages.



Innovation Norway promotes nationwide industrial development profitable to both the business economy and Norway's national economy, and helps realize the potential of different districts and regions by contributing to innovation, internationalization and promotion. The company has approximately 700 employees. Headquartered in Oslo, Innovation Norway has offices in over 30 countries worldwide, along with all of the counties across Norway.

English-language information about Innovation Norway is available at www.innovationnorway.no/english.



Produced in cooperation with:

