

Annual Report 2005



The world cries out for rapid solutions

In the course of the past couple of years we have seen several occurrences of extreme conditions all over the world. Extreme storms and natural disasters have made many of us stop and ask ourselves: Have these been caused by humanity or are there “greater forces” out there that are challenging us? Whatever the cause, we can no longer risk continuing to raise our standard of living without doing our best to secure ourselves against a further worsening of such conditions.

At the same time, we are seeing high rates of growth in countries such as China and India, which are increasing the demand for energy and raw materials.

A growing need for transportation, as a consequence of the global division of labour, as production moves to developing countries, has also become a reality. The developing countries themselves are also demanding to the right to participate in our rising standard of living, which in turn is leading to greater per capita energy consumption. As the world population continues to rise, this is facing us with almost insurmountable challenges.

It is one thing to perceive these trends in development, quite another to do something concrete to help to deal with them. To do so will require more



– long-term research is the answer!

knowledge, new technology and, not least, politicians who are willing to take responsibility and implement measures that cut across established social structures and national borders. The world is crying out for solutions, and young people are ready to secure a future for us all.

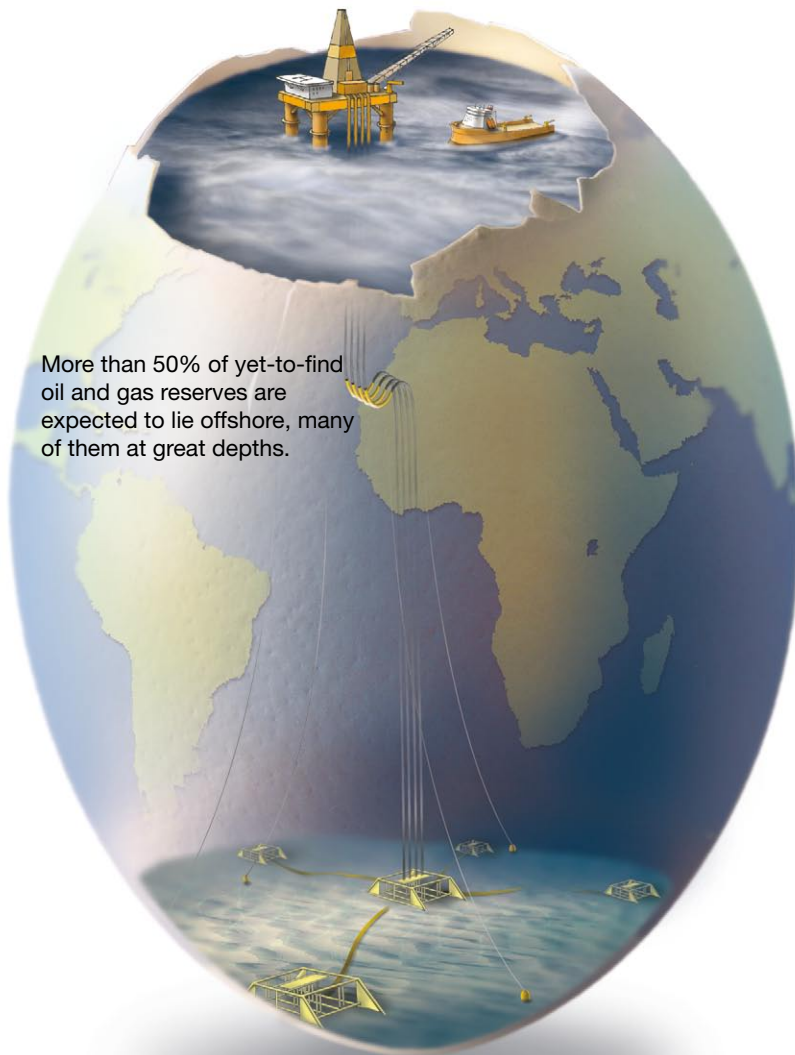
The work of the research community will quite certainly be the most important contribution to the essential task of raising the level of knowledge needed if we are to meet these challenges before it is too late. The sea covers most of our globe. Environmentally responsible utilisation of the resources in

and below the sea will be an important part of such a global picture.

MARINTEK 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.

Oddvar Aam
President

Offshore industry



More than 50% of yet-to-find oil and gas reserves are expected to lie offshore, many of them at great depths.

At the international level, the high price of oil has led to increased production, and more and more fields, in ever deeper waters, are being planned for development. At the same time, last year illustrated the growing significance of extreme weather conditions for the reliability of offshore oil and gas production. More stress will be laid on designing for extreme weather survivability in the development of new solutions and in order to avoid damage to existing installations. The high price of oil has led to a growth in interest in exploiting small fields, whether in the form of floating production systems or as subsea systems connected to existing infrastructure on nearby fields. Interest is still growing in activity in the Arctic, where higher reserve estimates for Goliat and the choice of Shtokman partners are among the driving forces.

In the course of 2005 we carried out verification testing and concept studies for several systems for extreme water depths offshore Brazil, West Africa and in the Gulf of Mexico. One interesting aspect of the international picture is that Pemex, the Mexican oil company, is heading for deeper waters and thus for the use of floating production systems. In 2005, MARINTEK carried out a comprehensive set of model tests of Pemex's first FPSO under extreme weather conditions. This vessel is a conversion of the former Norwegian vessel "Berge Enterprise", which was once

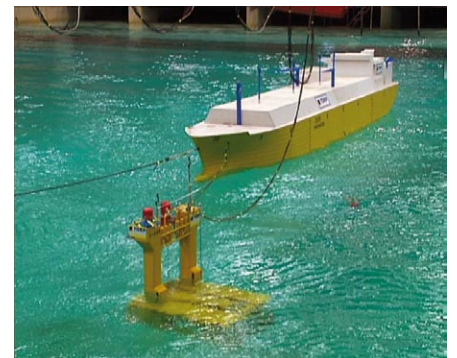


Ku Maloob Zaap - Mexico's first FPSO.

the largest tanker in the world. As well as Bergesen Offshore, which is the prime contractor, other Norwegian companies are heavily involved in this project; among others, Vetco Aibel will supply topside systems, while APL will deliver the turret and mooring system.

Remora terminal in extreme weather

MARINTEK has been heavily involved in the basic design, the supply of hydrodynamic expertise and model trials of a new floating system for discharging LNG on the coast of the USA in the Gulf of Mexico. The technology, which is known as the HiLoad LNG Regas Terminal, is unique and was awarded the prestigious Innovation Prize at the OTC in Houston in 2004. MARINTEK was a member of the engineering group which was responsible for producing the basic design, particularly its hydrodynamic behaviour in stormy seas, the keel design and other main parameters, loads and mooring. A special aspect of this project is that the tropical hurricanes Ivan and Katrina led to a completely new design philosophy as far as survivability under extreme wave conditions was concerned. Model trials based on wave measurements from



Model tests of the Remora Technology's HiLoad LNG Regas terminal in high seas.

these two storms were performed, as was a comprehensive set of numerical simulations. HiLoad LNG Regas and its mooring system were thus tested under the worst wave conditions ever used as a basis for the design of floating structures, and its survivability was therefore regarded

as very satisfactory. Our clients were extremely satisfied, and they intend to use our results as the basis of their submissions to the US Coast Guard and of further work on the loading concept.

Floating production under severe conditions in ultra-deep waters



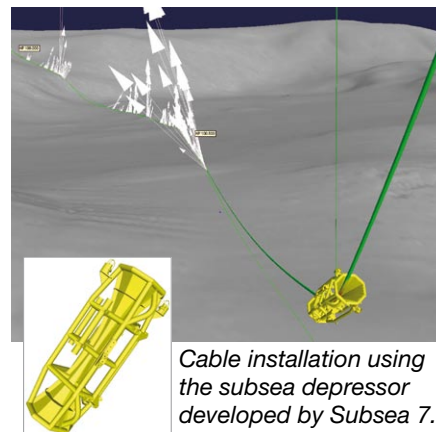
Model tests of DEMO2000 semi with SCR.

A concept that combines a semi-submersible platform with steel catenary risers (SCR) and a 25,000 tonne topside unit has been tested by MARINTEK. The work was done as part of a joint industry project led by Aker Kværner, in which MARINTEK was a project partner, and with funding provided by DEMO2000, Statoil, Norsk Hydro, BP and Shell. The concept is especially aimed at use under severe weather conditions and particularly deep water, for example in the Norwegian Sea. The platform is tautly moored using polyester mooring lines. The depth of water in the study was set at 1500 metres. In order to be able to test such deep-water systems in a laboratory basin we need to model it using shortened lines and risers, even in MARINTEK's basin, which is one of the deepest in the world. Special demands are made of the shortening procedure, which was performed in close combination with advanced modelling techniques, and techniques of this sort, which have been developed by MARINTEK, were demonstrated in this project. Comprehensive numerical analyses were carried out in collaboration with Aker Kværner and compared with the measured values. The project has demonstrated that "Integrated Semi with SCR" is a viable concept.

As depths become greater, the costs and technological challenges associated with risers increase

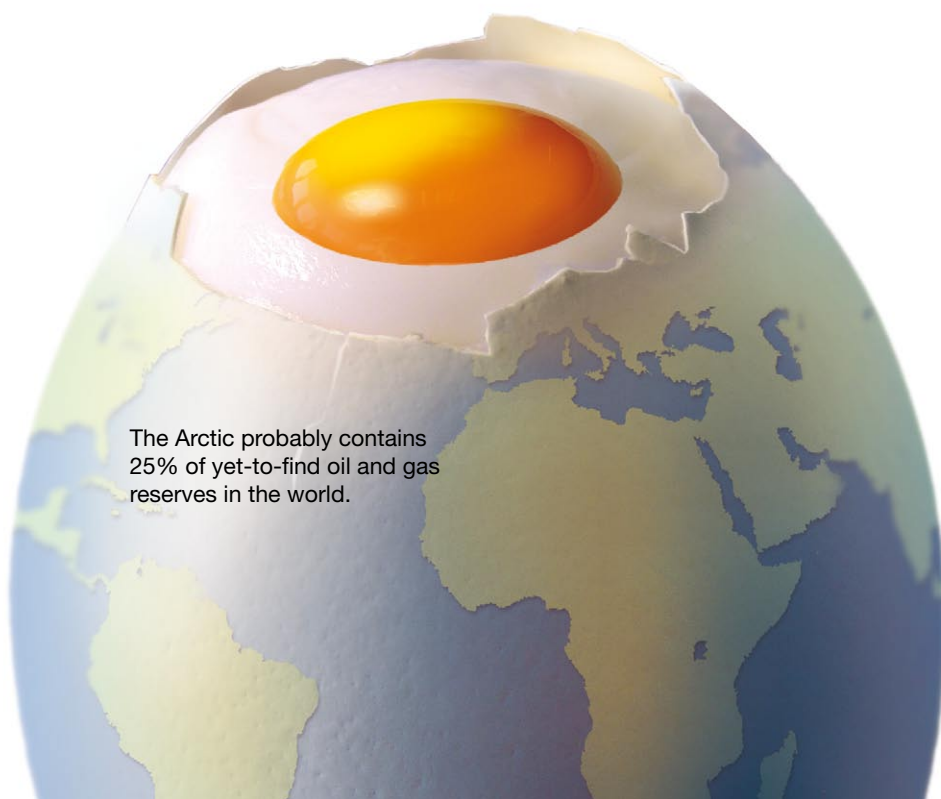
In the course of 2005 MARINTEK carried out a number of research programmes that focused on improving our understanding of the behaviour of long flexible risers, umbilical strings and pipelines affected by currents. New measurement techniques and leading analytical techniques have been developed for these studies. A very special project was a free-span vortex-induced vibration (VIV) test of a 20 metre full-scale prototype section of the umbilical to the Ormen Lange field. The umbilical consists of a bundle of hydraulic pipes, electric and fibre-optic control cables, and it is used to control the subsea production system from an onshore control room. During an interim period, before the cable is buried in the seabed, free spans will be critical with respect to VIV-induced fatigue. Our scientists focused on verifying VIV-induced tension in critical elements of the umbilical. They produced results that could be utilised directly for the prototype situation, and provided good insight into the mechanisms that generate VIV, as well as the behaviour of the umbilical string.

Installation of deepwater cables



Cable installation using the subsea depressor developed by Subsea 7.

Underwater cables from Nyhavna out to the field will be installed to provide power and control signals to the well templates on the Ormen Lange field. The requirement for low laying tensions, combined with powerful currents, presents considerable challenges to the installation process. Subsea 7 has therefore developed new installation techniques for cables of this sort. On behalf of Norsk Hydro, MARINTEK has developed software that makes it possible to perform analyses that include appropriate models of the newly developed installation set-up.



The Arctic probably contains 25% of yet-to-find oil and gas reserves in the world.

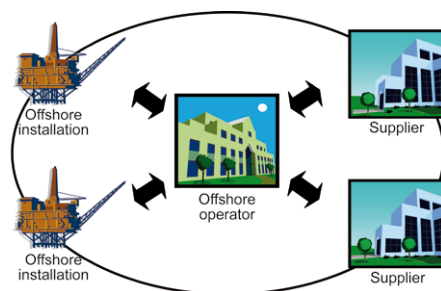
Estimating the strength of deepwater cables

Ever greater depths in connection with the development of offshore oil and gas fields all over the world are forcing us to focus on greater accuracy in calculating the strength of deepwater cables and flexible risers. In collaboration with Nexans, therefore, MARINTEK has started an industry-financed project in which several oil companies are participating. The project, which focuses on the next generation of design tools for deepwater cables, was launched in 2005 and will have a duration of three years.

In the course of the past year, MARINTEK has also carried out a number of studies for various companies, in the course of which existing tools have been used to verify the strength of both deepwater cables and flexible risers. One example of analyses of this sort is life-cycle and extreme-capacity estimates of risers for water injection on the Thunderhorse field in the Gulf of Mexico.

“Integrated Operation” of oil and gas fields

“Integrated operations” mean more than remote control and monitoring of installations; the term also refers to good, efficient cooperation between the shore organisation and the offshore



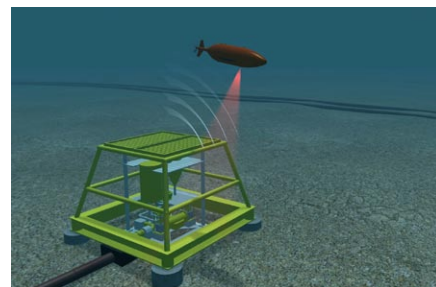
Actors and coordination in Integrated Operations.

installation. Coordinated activity in multidisciplinary groups and cooperation throughout the value chain from reservoir to market can lead to important gains in efficiency. CORD MTO is a method that can be used during the adoption of Integrated Operations to analyse and support the change processes that this involves. The method has been developed by MARINTEK, SINTEF and IFE for Hydro, Statoil, ConocoPhillips and BP. CORD MTO incorporates the human, technological and organisational (MTO) aspects of identifying the optimal allocation of resources among functions that are performed on board offshore installations and in shore organisations. The chances of the adoption of new technology being successful are much greater when the roles of people and the organisation are emphasised besides the technology itself. CORD MTO has been used on several fields and on a number of installations in connection with pilot projects in the development phase. The method has also played

a central role in the development of a learning concept that Statoil UPN will employ in its adoption of Integrated Operations on all its fields.

Technical goal-oriented control of topside and subsea facilities

As we focus more and more on safety and the environment, particularly with regard to operations in sensitive areas, oil companies and equipment suppliers are particularly interested in good condition assessments of equipment and installations. This development is also being pushed forward by growing demands for cost-efficient operation, in order to keep lifting costs down.



Data capture rates are improved by the adoption of new communication technology.

A number of projects are under way at MARINTEK to improve and adapt methods and tools for determining the technical conditions of topside and subsea equipment and systems. The projects are based on methods and tools that MARINTEK has developed and tested in close collaboration with industry and the oil companies in the course of the past ten years.

Development of instrumentation for the future

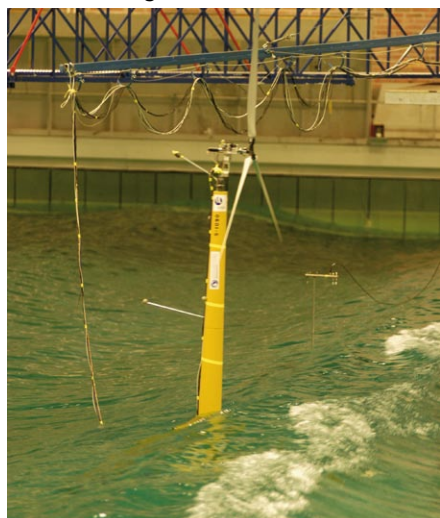
The oil companies are focusing on making operating data available to their shore organisations in order to enable better, more rapid decisions to be made, for example on the basis of condition monitoring of equipment. Traditionally, the costs and dimensions of sensor systems for this purpose have meant that only the most expensive or most critical items of equipment have been instrumented.

Few large fields remain to be discovered. Future oil and gas reserves lie in a large number of small fields which will have to be linked up.

MARINTEK and SINTEF are currently developing and producing sensors that are small, reliable and cheap, and that communicate wirelessly. One example is a system for the condition monitoring of motors. Active motors “talk” by vibrating, and by interpreting their “speech”, i.e. their range of vibrations, we can provide early warning of faults, thus improving safety and efficiency and reducing costs by optimising maintenance routines. A small autonomous sensor unit is mounted on the motor. Such units consist of a vibration sensor, temperature sensor, battery-driven microcontroller and a circuit for wireless communication with a central computer. The computer processes and analyses the data and makes the results available to the user. The vibration sensor is manufactured by SINTEF’s Micro- and Nanotechnology Laboratory using silicon technology similar to that used to produce integrated circuits.

Green energy

High oil prices are producing a growing interest in environmentally friendly electricity generation. A number of studies have been carried out on different types of wave-power stations. Floating wind turbines are another topic that is being paid increasing attention. MARINTEK has carried out model tests for Norsk Hydro of a 5MW floating wind turbine intended



The floating wind turbine behaved well in waves. The structure was tested in four different sea states, with significant wave heights ranging from three to 14 metres.

Siting wind turbines far out at sea will provide more energy as well as protecting our coastline. Out of sight, out of mind!



for installation in deep water. The full-scale structure will measure nearly 202 m from the keel to the top of the tower, and the radius of the rotor is 61.5 m. The model scale was 1:47. Manufacture of the model was a challenging process, due to limitations on the weight on individual components. The turbine rotor blades, for example, had to be made of carbon fibre and epoxy, and they were vacuum-formed to obtain the correct shape. The main objectives of the tests were to study how the structure would behave in waves and wind, examine various control strategies for electricity generation and provide data for verifying the validity of the simulation programme.

Ships and large structures in shallow waters

A sharper focus on offshore LNG terminals that are being planned for relatively shallow waters in various parts of the world has led to a need for more in-depth understanding of the responses of vessels and floating structures that operate under such conditions. Hydrodynamic forces and motions in waves act differently from the way they do in deep water, and this

is particularly true of slowly varying effects on moored vessels. In the course of the past few years, MARINTEK has carried out a number of major projects on this and related topics. In 2005, we started cooperating with ExxonMobil and the Centre for Ships and Ocean Structures (CeSOS) at NTNU and MIT,



Example of model test in shallow water.

with the objective of establishing more reliable methods and procedures for the use of numerical simulations and model trials in such cases. Special challenges involved in the numerical work mean that the physical model aspect plays an important role. This project will last for three years. In this connection, MARINTEK has also collaborated with CeSOS in organising a successful scientific seminar which attracted top-level national and international participants, and at which these hydrodynamic effects were analysed from a number of different perspectives.

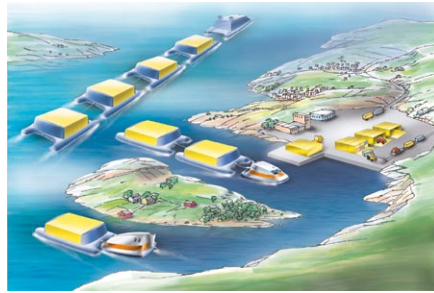
Shipping og maritime industry

Sharper focus on innovation

The Ministry of Industry launched the Maritime Development Initiative (MARUT) in 2004. MARINTEK has been an active participant in the process of describing topics in which Norwegian industry possesses the skills required to implement research-based innovation. Our work on the topics of Coastal gas, Cold climate specialist, Maritime ICT supplier and SMART shipping was continued via pilot projects that formed the basis of the main projects which will start in 2006. The projects, all of which are led by shipping companies and maritime industry companies, support the government's efforts in the development and management of the Arctic/Barents Sea region, the reduction of environmentally harmful emissions by the use of natural gas and increased use of sea transport as an environmentally friendly alternative to goods transport by road.

VISIONS - a European maritime "Think Tank" for greater innovation

The spring of 2005 saw the establishment of European maritime collaboration in the form of a non-commercial network of European ship-building industries, maritime universities



Will VISIONS create new, innovative maritime transportation concepts?

and leading research institutes. The network organises annual creative process meetings at which visionary ideas and concepts for vessels and floating structures are developed and validated. Taking market and social scenarios for the coming five to fifteen years as its point of departure, VISIONS is a "think-tank" for product ideas which could become reality in the medium to long term. In 2005, MARINTEK led efforts to develop scenarios that describe market and social requirements in five market segments; intermodal transport in overseas shipping, short-sea shipping, inland waterways, cruise traffic and large floating structures.

Tomorrow's decision-support systems

MARINTEK, SINTEF ICT and SINTEF Technology and Society have joined forces to develop tomorrow's deci-

sion-support systems for planning and control in maritime transport and logistics. The aim of these efforts is to develop the internationally most attractive commercial decision-support systems and best logistics systems in maritime transportation. SINTEF and its cooperating units have allocated significant resources to these efforts. We have a very large joint software portfolio on which we can build. Examples include the TurboRouter and Spider software systems. There are significant potential gains from more efficient vessel utilisation via better planning, in terms of both cost reduction and environmental protection.

An example of work on logistics systems is the "Fresh Fish" project, which aims to demonstrate that it would be possible to set up a competitive shipping-based logistics system for the export of seafood to the Continent from the west coast of Norway, primarily from Western Norway and the Counties of Møre og Romsdal and Sør-Trøndelag. The results of the project have already shown that there is a significant potential for improvement from the adoption of shipping-based transport in combination with new technology, for example in refrigeration, in an integrated market-oriented logistics solution.

The role of the terminal in the transport chain

Terminals are the nodes in every intermodal transport chain, and they are often regarded as bottlenecks that limit the efficiency of the chain as a whole. Terminal operation and terminal handling present major challenges to efficient operation. These challenges have been at the focus of a number of MARINTEK projects. Both the physical handling of goods and exchange of information in connection with the transport itself need to be assessed as a whole as a basis for improvements in the transportation process. We are currently performing two projects that focus on the role of terminals in the value chain. Field

Efficient global transport chains require a competitive European shipping industry.



studies carried out in 17 Norwegian and international ports and terminals have identified a number of keys to efficient terminal operation in the fields of layout and infrastructure, organisation, coordination and information exchange, competence and equipment, and externally imposed frame conditions.

New offshore vessels

There has been a great deal of activity in the market for offshore vessel testing in 2005. There is currently a trend for such vessels to become more specialised for specific types of operation. New types of platform supply vessel (PSV) that emphasise good operating economics and sea-keeping characteristics have been developed. Many of these utilise azimuth thrusters for propulsion, thus improving their manoeuvrability and permitting better internal layout.

New anchor-handling vessel designs still focus on high bollard pull, good sea-keeping characteristics and manoeuvrability under operating conditions. In these vessels, conventional ducted propellers are the major propulsion system.

We have tested the AX-104, Ulstein Design's controversial innovation in anchor-handling vessels. This vessel was designed with a distinctive bow shape that lacks the traditional bulb, largely in order to improve its sea-keeping characteristics. The model was tested in calm water and in waves. The vessel has been widely discussed in the media and has also won the Norwegian Engineering



Ocean Basin tests of Ulstein's new anchor-handling vessel in heavy seas. (Photo: Tony Hall, the Ulstein Group)

Lifeboats must be fully operational even when everything else fails.



Achievement Award for 2005. Similar vessels have not been tested recently in the same way by MARINTEK under high-sea conditions, which made it difficult to make a good comparison of the sea-keeping characteristics of this design with those of traditional vessels.

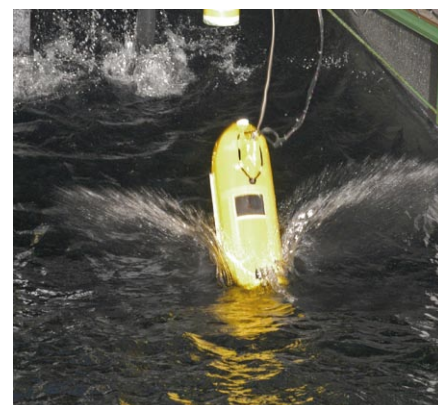
Offshore structure vessels with large midships moon-pools have also been tested. Good design of such constructions can help to reduce loss of speed and pumping in the moon-pools. Common goals for the model tests that we perform on offshore vessels are to develop hull and propulsion systems that offer good operating economics and stable, safe work platforms.

Free-fall lifeboats

Statoil ASA was our client for very comprehensive tests of models in still waters and in waves. Four types of free-fall lifeboat were studied, and we also carried out full-scale trials of instrumented lifeboats; both launches

from platforms and new approval tests of rebuilt lifeboats.

The background for this work was the experience gained during an installa-



Model tests are performed on most types of free-fall lifeboats in use in the Norwegian sector.

tion test on the Veslefrikk field, when a free-fall lifeboat that was launched into calm water suffered an unacceptably high degree of deformation of its superstructure. This led to an immediate need for checking and, if necessary, upgrading of the structural

strength of free-fall lifeboats to a level that would enable them to withstand launching under extreme conditions in both calm water and in waves.

The aim of the model trials and verification by means of full-scale trials in calm water was to document total pressure and pressure development as a basis for the establishment of characteristic design pressures for strength estimates.

The principal end-point documentation for these lifeboat studies was a set of estimates of the strength of existing lifeboat designs and further calculations concerning potential improvements. Highly detailed calculations have been made for two of the lifeboat types that have been tested.

High-speed vessels

MARINTEK has performed model studies and calculations for General Dynamics in connection with the "Littoral Combat Ship" programme for the US Navy. The vessel is a 127 m-long trimaran with a centre hull and two smaller side hulls for stability purposes, and an operational speed of almost 50 knots. The hull design is by Austal Ships. The model trials and calculations form part of a multi-year programme.

We have also carried out several studies of commercial high-speed vessels. In November we tested yet another pentamaran for our client BMT Nigel Gee and Associates Ltd. The trials took place in the Ocean Basin, and fo-



Pentamaran in heavy seas.

cused on motions and forces in heavy seas, and they were more heavily instrumented than ever. During the trials we were visited by the client and his own client. They were very impressed by both the hydrodynamic aspects and technical aspects of the model.

Propeller Forum

MARINTEK and NTNU play central roles in the implementation of the "Propeller Forum" research programme, which has a budget of around NOK 28 million over three years and in which all the Norwegian propeller manufacturers and DNV are participants. The programme receives financial support from the Research Council of Norway and Innovation Norway. MARINTEK is collaborating with St. Petersburg Marine University and Shidong University in Shanghai. The objective of the programme is to develop improved design and analytical tools. Great emphasis is placed on generating knowledge and verified methods that can be applied to all new types of propulsion and steering systems that appear on the market. Requirements regarding the documentation of performance and steering characteristics are becoming

more stringent, particularly in connection with complex marine operations in the open sea. The programme supports dr.ing. and post-doc. studies in cooperation with NTNU.

Environmental requirements and vessel emissions

In May 2005, the International Maritime Organisation, the UN's maritime organisation, introduced restrictions on vessels' emissions to the atmosphere, including NO_x and VOCs. From May 2006 it will be forbidden to burn bunkers fuel with a sulphur content higher than 1.5% in the Baltic, and in autumn 2007 this restriction will be extended to cover the North Sea and the English Channel. These regulations face the whole of the maritime sector with serious challenges. In order to meet these in a responsible and cost-effective way, MARINTEK and the Norwegian



The IMO has introduced restrictions on vessels' discharges to the atmosphere. Will cleaning soot from flue-gas boilers be a problem in the future?

Shipowners Association founded the "Forum for Reducing Sulphur Emissions from Shipping" in autumn 2004. The Forum now has more than 40 Norwegian and foreign company members, representing all sectors of the maritime cluster. One result of the activity of the Forum has been the establishment of a three-year R & D project as part of the Research Council of Norway's MAROFF Programme. Several important areas for development have been identified, ranging from new criteria for bunkers quality and mechanisms of wear resulting from long-term use of high-sulphur fuels, to quality criteria for discharge water produced by seawater flue-gas scrubbing.

LNG shipping - a necessity in the North for access to energy consumers.



Income statement 2005 Balance sheet 2005

Extract of MARINTEK's accounts (KNOK). Current exchange rate: 1 USD = NOK 6.73 - 1 EUR = NOK 7.97

Operating revenues and expenses

Revenues	199 282
- Direct project expenses	34 438
Net operating revenues	164 844
Salaries, social security and other sec. costs	113 802
Other operating expenses	43 691
Net operating expenses	157 492
Operating result	7 352
Financial income and expenses	531
Annual result	7 883

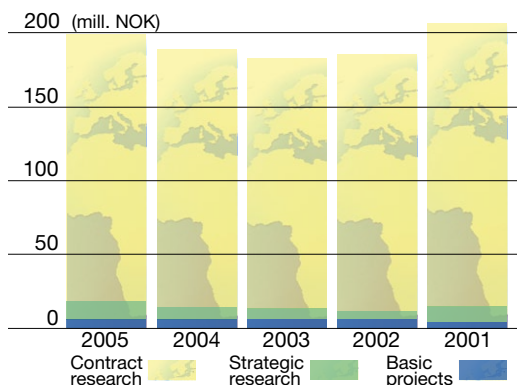
Assets

Fixed assets	27 994
Fixed operating assets	22 738
Financial long-term assets	5 257
Current assets	173 185
Other current assets	109 913
Cash, bank accounts	63 273
Equity and liabilities	201 180
Equity	103 483
Paid-up equity	11 600
Earned equity	91 883
Liabilities	97 697
Long term liabilities	4 427
Current liabilities	93 270

Key figures (MARINTEK concern main financial figures)

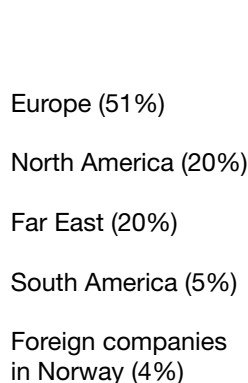
KNOK	2005	2004	2003	2002	2001
Result					
Gross operating revenue	199 282	188 950	184 169	186 809	207 881
Net operating revenue	164 844	152 446	154 021	149 124	162 191
Operating result	7 352	-330	3 070	-9 086	20 187
Annual result	7 795	18	3 247	-7 773	23 779
Balance					
Operating assets	27 994	27 365	32 280	40 222	35 819
Liquid assets	173 186	149 217	140 634	141 609	162 656
Total assets	201 180	176 582	172 914	181 831	198 475
Equity capital	103 483	95 218	95 200	91 954	99 726
Liabilities	97 697	81 364	77 714	89 878	98 749
Total equity and liabilities	201 180	176 582	172 914	181 832	198 475
Profitability					
Operating margin %	4.5	-0.2	2.0	-6.1	12.4
Total profitability %	1.9	-0.1	0.9	-2.4	5.4
Profitability on equity %	3.9	0.0	1.7	-4.1	13.5
Liquidity					
Cash flow from operations (KNOK)	4 185	9 862	-10 203	-4 522	-3 128
Degree of liquidity	1.9	1.9	1.8	1.6	1.6
Solidity					
Equity capital %	51.4	53.9	55.1	50.6	50.2

Project-related specification of turnover



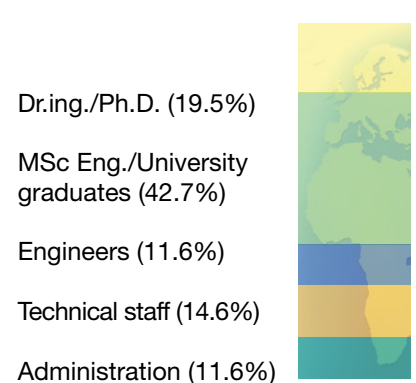
Foreign trade

(26% of total turnover)



Personell

(Total staff: 164)



Auditors: Deloitte

Report of the Board (extract)

Activities

MARINTEK performs research and development for industry and public-sector bodies involved in marine activities. The company operates in an international market, developing new technologies in the fields of floating petroleum production, subsea pipelines for oil and gas transportation, vessel development, the shipbuilding and maritime equipment industries, shipping and logistics.

The headquarters of the company are in Trondheim, and it has a subsidiary in Houston, Texas: MARINTEK (USA), Inc., which was set up as an element of our strategy of focusing on the international market, in collaboration with other Norwegian companies that wish to export Norwegian petroleum technology.

An important aspect of our work is operating the marine technology laboratories at Tyholt in Trondheim, of which the Ocean Basin Laboratory, the Ship Model Tank and the Marine Structures Laboratory are the major units. These laboratories are also utilised by NTNU's Department of Marine Technology, in a fruitful collaboration with our own groups. Most of our research scientists are recruited from this milieu.

The development of mathematical models and the integration of these into simulators for the study of physical phenomena and marine structures are responsible for a growing proportion of our contracts. We use our laboratories to calibrate the mathematical models in order to ensure that these form the optimal point of departure for more detailed studies of the complex structures and constructions that will be built by our clients. During the past few years, in conjunction with NTNU, MARINTEK has developed a unique range of expertise in carrying out integrated laboratory-supported studies of this sort. This has enabled us to increase our international involvement, and today, we are a strategic technology partner for major international companies operating in the shipping and offshore sectors.

Markets and technology

The international market is displaying very positive tendencies in both the shipping and offshore sectors, and in the second half of 2005 we experienced a growing demand for our laboratory capacity. Nevertheless, there is strong competition in certain parts of our product and market areas, with the result that earnings were still weak in some of our segments. There is also a challenge related to the availability of personnel capacity, due to high demand in the market, coupled with the fact that educational capacity in the natural sciences is falling in the western world. For this reason it is no simple matter to increase our capacity in those areas in which demand is great.

Thanks to the positive market situation, in spite of the resources situation 2005 saw a rising level of activity in most of our market segments. Particularly worthy of mention is testing of new types of offshore supply vessel, where our contributions take the form of hull optimisation and propulsion systems. The testing of LNG vessels, in which wave impacts in membrane tanks are a critical factor that need to be estimated, was also important in 2005. The testing of systems for docking to floating LNG terminals was another area in focus. We have also been involved in the development of new high-speed vessels for our international customers, and in testing systems for offshore wind turbines and wave-power devices. Our hydrodynamic laboratories are an important input factor in such activities.

Once again, the testing of risers and cables has been a significant market, with rising demand, given the upswing in activity in the offshore market. This area of activity includes tests and simulations of how deepwater currents affect risers, pipelines and the cables that supply control units installed on the seabed with power and control signals. Our strength laboratory is highly suitable for work of this sort, and we are well known as the only neutral test laboratory in the world within this market segment.

In the field of operation and maintenance, we see a growing market for

servicing Norwegian subsea installations. We have built up a group of professionals who serve this market, and have carried out major projects for the dominant participants on the Norwegian continental shelf. We are also making efforts to bring knowledge of this sort to ship-owners, via a joint knowledge centre for the management and analysis of operating data.

The logistics market was weak in 2005, but market prospects rose to some extent towards the end of the year, and we therefore expect to be able to approach a normal level of operation in the course of 2006.

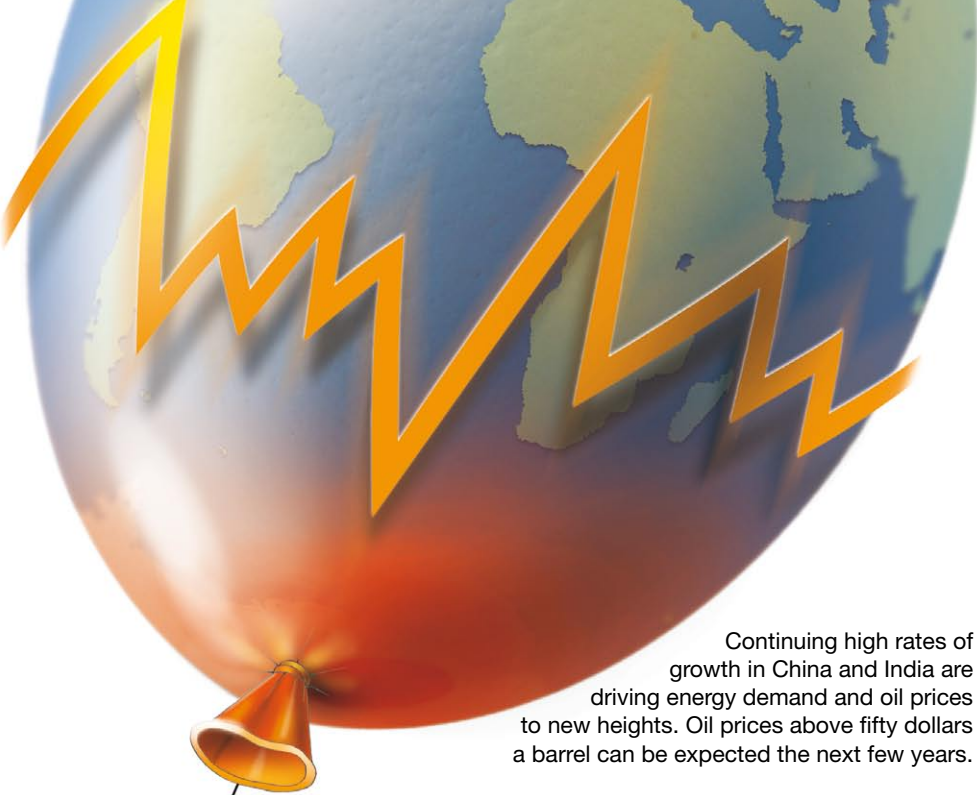
In the field of energy systems and environment, we experienced a positive development in the order situation in 2005, and our scientists are well covered for the coming years, on the basis of national and international demands. Among other activities, we are in contact with the Chinese markets for gas applications.

Increasing financing of research, development and innovation via the Research Council of Norway, Innovation Norway and the EU provided the opportunity for us to sign a number of research contracts towards the end of the year. The results of these contracts will only become available in the course of 2006.

Profit and loss accounts and balance sheet

The company's result is in line with the expectations of the Board. With a gross turnover of MNOK 199.0 and net operating income of MNOK 160.5, we made an operating result of MNOK 7.0. A financial result of MNOK 0.5 left a profit after financial items of MNOK 7.5, which the Board proposes to transfer to the company's other equity capital.

Of a total capital of MNOK 201.0, our equity capital comes to MNOK 102.8, equivalent to an equity capital ratio of 51.0%. Working capital is MNOK 78.7, which represents a rise of MNOK 8.2. The most liquid assets come to MNOK 47.8, a reduction of MNOK 4.8.



Continuing high rates of growth in China and India are driving energy demand and oil prices to new heights. Oil prices above fifty dollars a barrel can be expected the next few years.

The company's order reserve stands at MNOK 76.4, compared with MNOK 74.5 at the same point in time last year.

Prospects for the future

In the course of 2005 we have seen a general improvement in our shipping and offshore markets, thanks to high oil prices and a large demand for freight services. However, prices in some of our market segments are still under pressure.

We can also see a certain improvement in the market for research services through larger allocations to applied research in those industrial segments in which Norway has traditionally been at a competitive advantage, e.g. the maritime and offshore industries. Grants to maritime research via the Research Council of Norway and Innovation Norway have risen by MNOK 40 a year to reach a total of MNOK 70 million a year.

We are registering a more positive willingness on the part of the Norwegian authorities to ensure that the Norwegian maritime cluster maintains its strength. Not least, it has been realised that the efforts that will need to be made in the Arctic are dependent on a viable maritime industry.

The development of Arctic resources is being sharply focused on by all branches of Norwegian industry. The challenge, however, is to develop these resources in such a way as to take demands for sustainable development in these vulnerable areas into account. This will

require significant research efforts and international cooperation on the part of those involved. MARINTEK is making active efforts to position itself as an important player in this area, in order to contribute to meeting these challenges.

In the oil and gas industry, we need to focus on increasing our exports, and MARINTEK is currently positioning itself as a knowledge partner for the major Norwegian actors that are currently entering the international market.

Recruiting young Norwegians to the maritime sector will be a key factor in our ability to maintain and strengthen Norway's maritime advantages. MARINTEK is in the process of drawing up a concept that will be capable of providing a basis for fulfilling the ambitions of the Norwegian Parliament, as expressed in the discussion of the White Paper on Research of June 2005, and cited by the Parliamentary Church and Education Committee:

"The Committee wishes to emphasise the considerable degree of value creation related to the maritime industry, and Norway's unique international position in this area.

In order to strengthen the future innovative capacity of this sector, the Committee stresses the importance of stepping up the level of maritime research.

The Committee notes that NTNU and MARINTEK in Trondheim represent the largest centre of maritime technology research in Europe.

The Committee believes that more countries, including EU member states, should be invited to draw upon the resources of the Norwegian R&D milieu.

The Committee therefore requests the Government to ensure that MARINTEK is enabled to become a European research laboratory."

As far as MARINTEK's specific areas of special effort are concerned, the situation is as follows:

The order situation is good in offshore structure technology, which is involved in technology development of risers, cables and pipelines.

There is a high level of demand for our services in the hydrodynamic laboratories, both within the vessel segment, where there is a sharp focus on offshore vessels, and the offshore segment, on which new floater concepts are being launched.

The area of operation and maintenance is showing good signs of growth since positioning itself vis-à-vis the oil companies and the challenges they offer in the field of offshore field operation. However, we also see a growing market with ship-owners in this area.

Our order reserve in maritime energy systems is good, and we still believe in a positive development in this segment. The logistics segment has also seen an improvement after a somewhat weak period during the first half of 2005.

In view of the above market prospects, the Board expects that 2006 will also be a good year.

Thanks to our employees

The Board extends its thanks to our customers and employees, and to NTNU staff involved in MARINTEK's activities, for their excellent collaboration in 2005.

Trondheim, December 31, 2005
February 21, 2006

Diderik Schnitler (Chairman of the board)

Ownership

MARINTEK's shareholders:

SINTEF	6.5 MNOK	56%
Norwegian Shipowners' Association	3.0 MNOK	26%
Det Norske Veritas	1.0 MNOK	9%
Foundation of Shipbuilders' Fund for Research and Education	0.5 MNOK	4%
Directorate of Shipping	0.5 MNOK	4%
Fed. of Norwegian Coastal Shipping	0.1 MNOK	1%
Total share capital	11.6 MNOK	100%

Board of directors

Director Diderik Schnitler, chairman
President - CEO Unni Steinsmo
Director Rebekka Glasser
Division manager Per Marius Berrefjord
Director Sigbjørn Akselvoll
Professor Odd Faltinsen
Dr.ing. Gro Sagli Baarholm
Dr.ing. Lisbeth Hansson
Principal Research Engineer Halvor Lie

Management

President Oddvar Aam
Finance manager Birger Åldstedt
Quality manager Arne Selnæs
Personnel manager Anne Jørgensen
Vice president - marketing, Kjell Holden
Vice president - business development, Helle Moen
Div. manager Atle Minsaas, Logistics and techn. operations
Div. manager Terje Nedrelid, Ship and ocean laboratory
Div. manager Oddvar Eide, Structural engineering

Our research managers: - Roar Bye, Maintenance technology - Eivind Dale, Strategy and logistics - Per Magne Einang, Energy and environment - Hans Jørgen Rambech, Ship technology - Frode Meling, Marine operations and simulation - Rolf Baarholm, Offshore hydrodynamics

MARINTEK - a certified institute

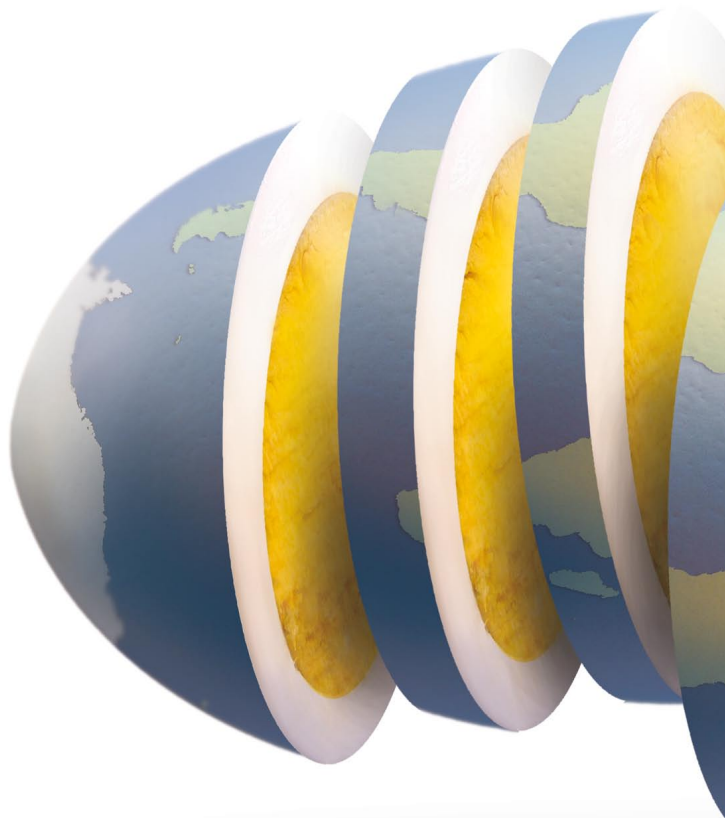
MARINTEK has chosen to certify the whole company to the ISO-9001:2001 standard. We have mapped out all of our work processes, including laboratory activities, theoretical studies and analytical work. This is intended to ensure that our customers enjoy quality in all the work that we do for them.

MARINTEK (USA), Inc.

MARINTEK is dependent on being close to its key customers, some of whom operate in the offshore industry. Every day, Houston and Texas are becoming more and more obviously the global centre of gravity in offshore structure design, and these centres are active vis-à-vis deepwater field developers in Brazil and West Africa as well as field developments in the Mexico Gulf. MARINTEK also operates a subsidiary in Houston and is involved in studies aimed at taking up the challenges of ultra-deep water.

Cooperation with NTNU and other SINTEF units

NTNU's Department of Marine Technology and MARINTEK actively coordinate their strategic programmes so that there is a high degree of interaction between the work of NTNU's Centre of Excellence (CoE) at the Marine Technology Centre at Tyholt and MARINTEK's research programmes. Cooperation takes place in areas such as hydrodynamics and sea loads, marine structures including risers and pipelines, and marine cybernetics. These efforts

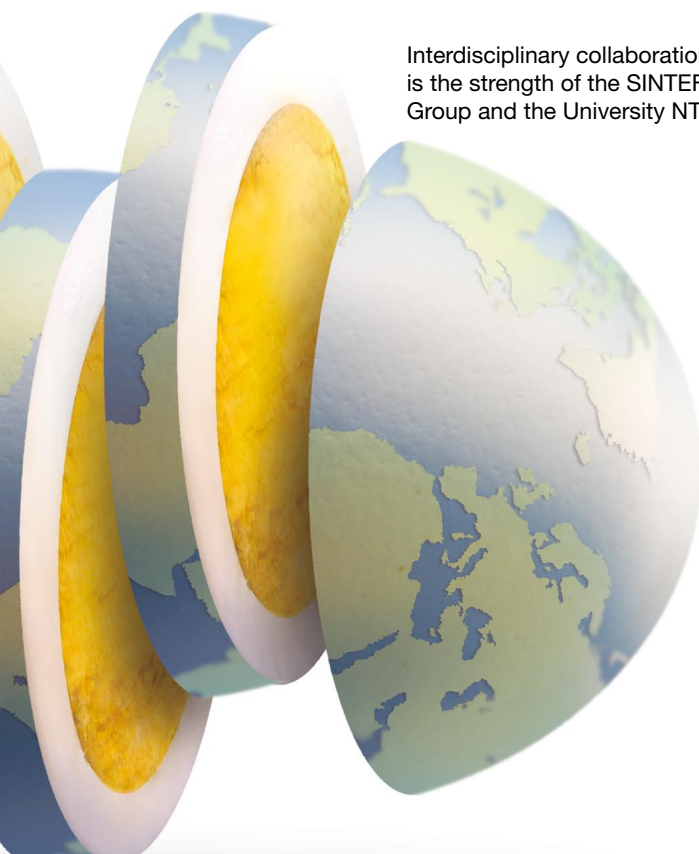


are coordinated vis-à-vis both industry and the Research Council of Norway, with the result that the combination of MARINTEK and NTNU is one of the strongest civil centres of maritime R&D in the western world. MARINTEK participates in the financing of the CoE, and some of our scientists are involved in the Centre's research programmes. We have established a Gemini Centre in the field of construction technology, and this is a model promoted by the SINTEF Group and NTNU when they wish to emphasise their cooperative relationship.

A University Technology Centre has also been set up in the form of a joint effort that involves Rolls Royce, NTNU and MARINTEK. Exchanges of personnel between NTNU and MARINTEK will ensure that we continue to develop our competence in the long term for the benefit of maritime industry.

We also cooperate extensively with other SINTEF units, and we participate in SINTEF Group efforts in offshore applications of pipelines, marine logistics and integrated offshore operations.

The SINTEF Group consists of approx. 2000 employees, and MARINTEK is the group's principal source of expertise in the maritime sector.



Interdisciplinary collaboration is the strength of the SINTEF Group and the University NTNU.

The Norwegian Parliament wishes MARINTEK to be a centre of gravity in European maritime research

In the course of 70 years, the Norwegian authorities have built up an impressive maritime infrastructure in shape of the marine technology laboratories at Tyholt in Trondheim. MARINTEK and the Department of Marine Technology at the University NTNU make up one of the largest centres of maritime R&D in the western world.

In its discussion of the Research White Paper "The Will for Research" in June 2005, a unanimous Parliament set out the following ambitions for the marine technology milieu in Trondheim:

"The Committee wishes to emphasise the considerable degree of value creation related to the maritime industry, and Norway's unique international position in this area.

In order to strengthen the future innovative capacity of this sector, the Committee stresses the importance of stepping up the level of maritime research.

The Committee notes that NTNU and MARINTEK in Trondheim represent the largest centre of maritime technology research in Europe.

The Committee believes that more countries, including EU member states, should be invited to draw upon the resources of the Norwegian R&D milieu.

The Committee therefore requests the Government to ensure that MARINTEK is enabled to become a European research laboratory."

In 2005, MARINTEK's Board and management team have been working actively on a prospectus aimed at realising this ambition, and they now wish to involve the whole of the Norwegian maritime sector in putting its considerable power behind the implementation of this plan.

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