

SUBSEA UK NEWS

THE NEWSLETTER FROM SUBSEA UK

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Spring 2005

SUBSEA UK AWARDS STUDY FOR NATIONAL SUBSEA TEST CENTRE

THE UK could soon have its own, dedicated subsea test centre thanks to Subsea UK. Scottish Enterprise and ONE North East are providing Subsea UK with financial support towards a major study to determine the requirement for a National Subsea Test Centre.

"The need for a wide-ranging subsea test centre has been the subject of debate for many years", says David Pridden. "Thanks to Scottish Enterprise and ONE North East we now have the opportunity to assess the requirement in a structured and open manner. I firmly believe that our sector would benefit from both an onshore and offshore test centre to fully test new technology and enable us to bring that technology to market more quickly and compete more effectively with our counterparts in Norway and Brazil."

"The need for a wide-ranging subsea test centre has been the subject of debate for many years."

The study will provide a strong regional and national picture of the UK's subsea business clusters and their current and future test requirements. If there is a positive recommendation to establish a National Subsea Test Centre, the primary deliverable from the study will be to produce an outline specification of what is required. Further work will be undertaken to select the optimum location for the centre, identify and communicate with key stakeholders and associate organisations, and put together a preliminary budget. All of this information will then be used to prepare a business plan for setting up the centre.

After competitive tender, OTM/Westwood Associates were appointed to undertake the study which is expected to take three months to complete. Results from the study will be made available to members of Subsea UK.

Forthcoming Events

Subsea UK Challenge Cup Golf Day

Inchmarlo – 27th May 2005

Chairman's Membership Address

Aberdeen – 31st May 2005

London Reception

One Birdcage Walk
London – 9th June 2005

Subsea Solutions 05

Paris – 28th June 2005

Offshore Europe 2005

Aberdeen – Subsea Day
9th September 2005

Subtech 05

December 2005

Subsea 06

Aberdeen – 2nd February 2006

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CHAIRMAN SETS OUT BUSINESS IMPERATIVES

AS WE enter a significant phase in the evolution of Subsea UK, there is one key challenge for the organisation's Board – to set, and then meet, expectations. We need to sell our vision of what the sector can go on to achieve and of the role Subsea UK can play in that, not only to the wider industry, but to our membership and our funding bodies.

Our operational priorities are captured in our recently-agreed business plan. We are committed to meeting the financial and timescale targets as set out in the plan, but, critically, it is central to our long-term success that members understand our strategic activity and the aspirations behind it. That is why we aim to make it the centrepiece of a members' event soon.

As we work to roll out our programme of strategic activity, the business imperatives behind Subsea UK remain essentially the same: to help the membership to win work at home and abroad, to ensure the industry is developing the technologies needed to win that work, and to ensure that end users – the international oil companies – know only too well what we have to offer.

The continuing, active support of our membership base for our work is absolutely critical to our fortunes. We have three tremendous decades of experience behind us,

and much of the cutting edge technology prevalent in the industry has been developed here. The achievements, innovation, drive and vision of member companies are our most effective assets when we are seeking to convince the domestic and global markets that we can meet their requirements.

That membership, of course, is not limited solely to companies directly focused upon subsea activity. We already count a number of operators among our membership and we would hope to see more join us in the year ahead. In my view it creates a healthy, dynamic mix and generates effective networking opportunities, especially for SMEs, who are presented with welcome – and all too rare – opportunities to link up with major contractors and operators.

Over the coming period of time we will be aiming to maintain a profile that illustrates to stakeholders the powerful force we can be in helping drive the sector forward globally. I look forward over the coming months to working with Board members and Chief Executive David Pridden to sell our vision, as we continue to set the foundations for long-term success.

“The continuing, active support of our membership base for our work is absolutely critical”

Bill Edgar
 Chairman, Subsea UK

SUBSEA UK APPOINTS NEW CHAIRMAN

> **Bill Edgar**, CBE was appointed chairman of Subsea UK in January this year. A chartered engineer with over 30 years in the oil and gas industry, Mr Edgar is currently President of the Institution of Mechanical Engineers, a fellow of the Royal Academy of Engineering and a Director of Wood Group Holdings International.

Mr Edgar joined the Wood Group in Aberdeen in 1995 and until May this year, he was the Group Director responsible for the engineering and production facilities division, overseeing 35 business units operating in 19 countries with an annual turnover in excess of \$1 billion. In this capacity he was chairman and chief executive of Wood Group Engineering and chairman of JP Kenny Group of Consulting Engineers.



A CHANGE OF VIEW

WHEN I came into this job last summer, I thought that of the four themes set out for Subsea UK, networking/collaboration was the least required by the industry and the easiest for Subsea UK to achieve. After all, there are plenty of forums where people can meet and, after a career spent in some form of business development capacity, meeting people has never been a problem for me. Now, eight months, four drinks receptions, two breakfasts and two major UK conferences later, my view has changed completely: getting people to network, attend meetings, conferences and ultimately collaborate is arguably the biggest issue facing the subsea industry in the UK. Why is this? Because, quite simply, we no longer have time to network or see the value in doing so.

Interestingly, and on the basis of admittedly only a couple of trips recently to Brazil and the US, this networking issue seems to be a particular UK problem. My feeling is that in the US and Brazil, networking appears to be alive and well with events attracting people from all areas of the supply chain who, although they are busy, do appear to have the time to show, say and stay.

So what's gone wrong? I'm sure it's very complex and there's bound to be some detailed analysis by some management consultant but a recent chance conversation on an aeroplane did give me an interesting insight or two into today's value driven industry. My informal chat was with a manager who works for one of the majors in the downstream sector of the oil industry. He told me that they operate virtually i.e. from home with no office base; they communicate by e-mail or mobile and meet once a month in some central UK location. Procurement for his business is based in Eastern Europe and his salary is paid out of India or similar. He claimed that morale was low and "face time" (terrible expression but very graphical) was almost non-existent.

I presume this state of affairs has been driven by efficiencies and cost cutting, much of which was evident in the 90's when the supply chain was honed to such an extent that the ability to have "face time" and networking has been virtually eliminated. It has been successful if judged by the bottom line. The industry is delivering record profits which, although in part are due to the oil price, do come from minimum manning, use where possible of low cost operations and presumably, a general sweating of the "assets" both human and material. However, I would venture to say that they've come at the expense of communication, networking, innovation and general morale.

So, what happens next? Well, it looks as if we are entering the era of the individual when, once again, people matter above all else. The scramble for resources, particularly those under the age of 30, is beginning to become a panic. Will "adding value" be adopted to an individual's career and will it be simply offering more money or will companies across the supply chain have to offer something else like the chance to network, the time to innovate and the ability to have "face time" with colleagues? If so, then we can look forward to a more interactive future where people can justify (and benefit from) taking time out to visit an exhibition. Lets hope so.

David Pridden
CEO, Subsea UK

SUBTECH

Over 120 people attended Subsea UK's first London event - SubTech O4. The subsea innovation and technology seminar took place in the City Conference Centre in the headquarters of the Institute of Marine Engineers and was supported by the Society for Underwater Technology (SUT).

Chaired by David Brookes, director, Deepwater Tieback Technology Programme, BP and vice-president and chairman of the council of the SUT, the seminar focused on technology - the products and services being developed in the UK, potential customers' technology requirements and the issues around the need for improving the UK's commercialisation process to get products to the marketplace more quickly.

One of the key messages was that capital expenditure is projected to accelerate dramatically on subsea wells and infrastructures over the next few years. Mr Brookes noted that "five years from now we will be operating more than 300 subsea wells, compared with the present 150. Over the next few years we are likely to invest \$2 - \$3 billion a year in this area" he said, with a need for subsea systems for water depths of 3000 metres and beyond and for pressures to 25,000 psi.

Fuelled by these prospects, Subsea UK must rise to the challenges and raise its game at an international level.

David Pridden used this opportunity to address an audience, made up of subsea companies from around Britain, about the need for macroscopic changes to be made if the UK's subsea sector is to thrive anew. The challenges facing the sector include the long-running problem of declining graduate intake coupled with an ageing workforce; a supply chain that has been honed to such an extent that networking and innovation are constrained; falling activity and investment levels in the UKCS; and R&D spending that has dropped by 50% in the last decade.

A series of technical presentations demonstrated that the UK does indeed possess the technology to solve subsea challenges around the world. Of particular note were Brinker Technology's platelet technology using the human body's natural method of blood platelets sealing wounds to locate and seal leaks in pipeline infrastructure; DES Operation's subsea processing solutions including the Multiple Application Reinjection System and SLDI's optical technologies.

SUBSEA 05



SUBSEA UK'S second annual showcase event, which took place in February at the AECC, was hailed a success by delegates, exhibitors, sponsors and organisers. With over 750 registrations, 60 exhibitor stands and a speaker programme headed up by former energy minister, Tony Benn, the event out-stripped last year's and firmly established it in the industry calendar as Europe's biggest subsea showcase.

Representatives from the operators, contractors, drilling and supply companies and SMEs toured the exhibition to view the world-class technology and innovative services on display.

Opening the event, Mr Benn claimed UK engineering achievements were not being trumpeted enough in the media. And he warned that Britain's rich heritage of manufacturing and engineering was in danger of being forgotten as the UK "slithers by definition" into becoming a Third World country.

He said it could be left with just an atom bomb, museums and tourist trails to serve as a reminder of its industrial past.

"Global needs for oil mean it is vital to harness UK technology and skills developed offshore for Britain's future prosperity," said Mr Benn.

He also said it was inconceivable that any UK government would not plan to expand the North Sea oil and gas industry. The former energy minister told delegates that it was largely through work in the subsea sector that energy firms operating in the North Sea continued to make huge profits.

Meanwhile, David Pridden warned of the dangers facing the sector if communication issues were not improved.

He said "Small to medium-sized companies have real problems in getting "face to face" with operators, most of whom only deal with major contractors on long term, partnering contracts or frame agreements. How can they rise to the challenge of developing innovative technology and services to meet future requirements of the operators if they are unable to sit down and speak to them?"

During his speech Pridden linked up in real time with an ROV at work on the seabed in the Gulf of Mexico. He contrasted the relative ease of this high technology communication with the difficulties being experienced in personal communication with the supply chain, both internally and externally.

One of Subsea UK's key objectives is communication - raising the profile of the sector and the UK companies involved in it. Pridden added: "It is difficult to do that when the word subsea does not even appear in the English dictionary. In addition a survey of the UK national press revealed that in the course of the last 12 months the word subsea or rather sub-sea appeared less than 30 times."

"With a country increasingly concerned about security of its energy supply and with a significant proportion of UKCS offshore production coming now from subsea wells, it is staggering how little interest is paid by the press and the general public to this increasingly important business sector. This though is not a media problem - it is the industry's problem - we don't communicate!"

He challenged the industry to improve its communications both internally within individual organisations as well as with the outside world, saying that without doing so companies would be unable to fully capitalise on the significant opportunities available to the UK's subsea community over the next 20 years.



"I would urge companies to consider the bigger picture and as well as the promotion of their own products and services look at how they can raise the profile of the industry in general. Equally, the oil majors and main subsea contractors need to pay more attention to the SMEs and how their products can be accessed. But in turn, the SME community has to become better at marketing themselves and more familiar with the industry in which it operates."

SUBSEA TIEBACK FORUM - GALVESTON 2005

THE SUBSEA Tieback (SSTB) Conference in Galveston on the coast of the Gulf of Mexico is fast becoming the subsea event in the US calendar. With nearly a 1000 attendees and over 60 exhibitors this year, the event continues to grow in importance and appears an excellent venue to meet a wide cross-section of the US subsea community as well as showcase a product or service.

Subsea UK took a stand and sponsored lunch on the second day of the SSTB in order to raise our profile as well as obtain a view of the US subsea industry. Both were achieved. A large number of operators were present along with the main subsea hardware manufacturers and contractors. The atmosphere was informal and with a "show and say" format, allowed for a full programme of technical papers as well as time to get round the exhibitors. Two evening receptions gave the opportunity to network in a more informal setting.

The overall message for the industry was positive with most attendees looking forward to a very buoyant marketplace for the foreseeable future. All in all, this is an event worth attending although it does have, unsurprisingly a strong GOM flavour.

DES HOLDS SUCCESSFUL SYSTEM INTEGRATION TESTS OF NEW TECHNOLOGY



ABERDEEN-BASED DES Operations recently launched their patented Multiple Application Reinjections System (MARS) to the global subsea market.

Two years in the development with £2.5 million funding from 3i and the DTI, MARS enables oil and gas operators to optimise production whilst minimising the current risks and costs associated with well intervention.

DES Operations carried out system integration tests at a subsea centre in Aberdeenshire where oil and gas operators were shown how MARS is deployed and operates on a standard subsea Xmas tree.

MARS is a universal interface which enables low cost, low risk processing, such as pumping, on new and existing subsea wells. By using MARS full well-bore intervention or flowline decommissioning and re-commissioning are avoided. This lowers the economic barriers to achieving increased production.

DES managing director, Ian Donald, explains: "In the pumping scenario, MARS can be deployed on the subsea well system at any time during field life and will allow operators to increase production without well intervention or drilling risk.

"With oil and gas operators increasingly seeking low capital expenditure solutions to the development of new and existing fields, the market potential for MARS is significant, particularly in deepwater regions.

"We are currently focused on pumping opportunities; however MARS is a universal work platform which enables other subsea processing elements, such as separation or metering, to be simply deployed throughout the life of field."



SUCCESS IN DEEPWATER PIPELINE PROJECT OPENS UP NEW MARKETS FOR NORSON

NORSON SERVICES, the UK market leader in pipeline, process and umbilical services, has recently completed its first deepwater pipeline operation offshore Egypt using newly developed technology. The success of this project will see the Aberdeen-based company complete work on the remaining 21 pipelines in a contract worth over \$6 million.

In an alliance with Weatherford International Limited, Norson Services was appointed by Technip Offshore UK Limited to provide pre-commissioning services to the Simian, Sienna and Sapphire Development project. This development is in the Egyptian Mediterranean West Delta Deep Marine Fields and will supply the Egyptian LNG export project.

As part of this contract, Norson Services developed a subsea remote flooding module which was able to flood and pig pipelines in water depths of almost 1,000 metres to clean them and allow pressure testing.

Les Graves, Director of Norson's Pipeline, Process and Umbilical division, says: "Newly installed pipelines are laid on the seabed at atmospheric pressure. Our remote flooding module uses the available seawater pressure outside the pipe as a source of power and water to flood and pig the lines whilst still meeting the desired filtration and chemical protection specifications. The benefit of our remote system is that it is ROV friendly and removes the need for connection to a surface vessel, thus saving substantial costs and time.

The success of Norson's remote flooding module opens up new global markets for Norson in areas of deepwater.

Mr Graves adds: "With oilfield developments moving into even greater water depths, there are now opportunities for Norson which would not have been open to us before now we have a tried and tested deepwater product which can save clients' time and money, we are anticipating significant growth in many deepwater areas."

NEW MOTION REFERENCE UNIT AND HEADING SENSOR FROM TRITECH

TRITECH International Ltd have launched an all new intelligent Gyro Compass (iGC) along with a complementary intelligent Fibre-optic Gyro (iFG).

The iGC is a core component within an integrated family of products that provide the ROV user with heading direction, attitude and motion data. It is designed around an advanced set of sensors measuring acceleration, magnetic field, and the rate of turn on all three axes. The iGC has numerous applications in underwater navigation and positioning.

State of the art digital signal processing and adaptive filtering give outputs of heading,

pitch, roll, heave and acceleration. The iGC is an ideal replacement for all magnetically slaved gyro and flux gate compasses used on most ROVs.

The iFG, combined with the iGC, provides additional heading stability in the presence of magnetic fields. It is a solid state, single axis fibre-optic gyro that measures rate of turn to a very high degree of accuracy and with a very low drift rate.

The combination of the two products can be used to replace spinning mass gyrocompasses with the big advantages of much higher accuracy, reliability and dramatically reduced cost of ownership.



2H INSTRUMENTAL IN MONITORING DEEPWATER RISERS REAL TIME



2H Offshore Engineering Ltd, an Acteon company, has been contracted by BP to design and supply a monitoring and response evaluation system for the drilling riser deployed by the drillship Discoverer Enterprise. Owned by Transocean and designed to operate in ultra-deep

water, the vessel is under contract to BP for work on the oil company's Thunder Horse prospect in 1800 metres of water in the Gulf of Mexico. The monitoring system, due to be installed in September 2005, will

provide structural response information along the entire riser length in real time to confirm its structural integrity and support drilling operations.

The project will aid understanding of the behaviour of deepwater risers subject to high marine currents, particularly where vortex-induced vibration (VIV) is a factor. It builds on previous monitoring campaigns conducted by 2H that have used stand-alone instruments recording response data into memory. The monitoring system will provide data at the surface in real time and give the clearest information yet on the complex problem of VIV response and its associated fatigue damage. The data collected will also greatly assist offshore operations, allow inspection requirements to be optimised and hence reduce the risks that are inherent in such operations. It will also provide valuable input to the design of future riser systems.



WORLD'S SMALLEST ROV MAKES WAVES AROUND THE GLOBE

> All Oceans has designed and manufactured the smallest commercial ROV system which is revolutionising the global subsea sector. The AC-ROV is being marketed by AC-CESS Co UK Limited, a division of All Oceans, which promotes the remote operated vision and sense technologies mainly by e-based sales and marketing.

The AC-ROV is rated to 75 metres. It is very capable and portable and the complete system comes in a very smart waterproof case with an all up weight of less than 15kg. The submersible itself weighs only 3kg.

Brian Abel of All Oceans explains: "However, what really sets the AC-ROV apart from its competitors is its manoeuvrability. It is fitted with six thrusters, so it can move as fast sideways as it can forwards and back. It has five degrees of freedom and all this is controlled via an intuitive single handed interface. The other hand can take notes or work the two function micro-manipulator option."

NEW UNDERWATER CAMERAS LAUNCHED

BOWTECH Products have launched two new underwater cameras in their miniature range.

The first is the BP-L3C-HR-2 camera which

has been redesigned with a sapphire glass lens giving a higher resistance to scratching. This camera features increased sensitivity and is available in 2 depth options - 3,000 and 6,000 metres.

The second, the BP-DIVECAM-2, has undergone a complete re-design. Using the

Sony sensor, the Divecam-2 housing is manufactured from opaque blue acrylic with an integrated optically clear window. The rear of the camera is titanium, maintaining its high anti-corrosion properties and it has been upgraded to a depth rating of 100 metres.

E-PRODUCTION SOLUTIONS WINS CONTRACT

PRODUCTION Optimisation company, e-Production Solutions, has won a contract to provide a subsea control system for Apache North Sea Limited. The initial contract is for an e-Production Artemis Subsea Control System to interface with previously purchased Vetco Gray subsea wellheads.

The system will be ROV or diver retrievable and installable and designed to be controlled from Apache's platforms in the Forties field.

Mark Richardson, Apache's Projects and Modifications Manager said: "eProduction's experience, flexibility, willingness to integrate, plus full project management were the

deciding factors in our choice."

Alex Leddy, Subsea Business Development Manager for eProduction Solutions is keen to emphasize the importance of this award; "Getting this contract award comes at a great

"Getting this contract award comes at a great time for us..."

time for us because we are now at the top of our game when it comes to the people and products we offer, and this is reflected in our overall provision to the subsea market. Since Weatherford

acquired Brisco controls and CAC controls, two of the industries leading names in this sector, we have sought to maintain their high standards and reputations. Also, working with a highly respected global name like Apache provides us the ideal platform to strengthen our overseas strategies."

SIMPLE SOLUTION TO JOINING OF PLASTIC LINING TECHNOLOGY

PLASTIC LINING of subsea pipelines provides a cost effective and environmentally friendly solution to internal corrosion. Current technologies enable the use of plastic lining in pipelines, which are installed by the reel-lay method. The plastic lining provides the corrosion barrier, with the steel pipe providing the strength.

However, to make plastic lining technology more widely available, a system to allow the joining of short lengths of plastic lined pipe onboard J-lay and S-lay vessels was required. Boreas has developed a solution with the launch of the Pressure Balanced Joint (PBJ™).

The PBJ™ is a plastic joint, wrapped with a heat shield, which ensures continuity of the plastic lining across a welded joint. Because the joint is pressure balanced, the structural requirements are minimised, resulting in a very simple solution.

Boreas, with support from BP, Statoil, Stolt Offshore and Bredero Shaw, are currently undertaking a qualification programme, to prove the PBJ™ is suitable for use in water injection pipelines. This project has been awarded a SPUR grant from the Scottish Executive, and should be completed by the end of Q3 2005.

TECHNOLOGY DEVELOPED AT THE IEEE EXTENDS LIFE OF SUBMERSIBLE PUMPS

ELECTRICAL submersible pumps used for oil and gas extraction are often located in deep-sea environments with step-out distances of several tens of kilometres. When a pump is located remotely, the length of submarine electric cable between the motor and the drive circuitry makes it difficult to ensure that it is being run optimally. Poor power factor operation, over-voltage and over-current conditions can accelerate the deterioration of the plant.

Accurate measurement of current and voltage at the motor terminals would allow the motor to be operated at its optimum point thus reducing the likelihood of failure.

Technology developed at the Institute for Energy and Environment allows current and voltage waveforms to be accurately measured on plant located at step-out distances of up to 100km. The system is completely passive at the sensor end, while remaining immune to electromagnetic interference. A packaged sensor suitable for the harshest deep-sea environments is currently being developed. Temperature and vibration sensors can be integrated within the system to provide a complete condition monitoring solution.

SUBSEA ENGINEERING CONSULTANCY LEADS NEW JOINT INDUSTRY INITIATIVE

MCS IS TO LEAD and manage a new joint industry project (JIP). The subsea engineering and consultancy firm is currently involved in several joint industry projects worth £1 million.

The Flexible Pipe Technology JIP was launched at a week-long event in Galway, Ireland and already comprises 13 companies, including BP, Statoil, Petrobras, Shell and ChevronTexaco. The Flexible Pipe Week initiative was hosted by MCS and attracted 30 leading experts in this field from around the world.

The aim of the joint industry projects is to get companies across the sector working together to push the boundaries of flexible pipe engineering and create the platform for further technology development.

The Flexible Pipe Technology JIP will undertake a complete review of current flexible pipe technology to improve capability to meet future demands and update industry standards. It will investigate key critical aspects of flexible pipe technology, such as design, integrity management and prototype testing, particularly in the context of pipe use in deepwater applications.

Frank Grealish, Director of MCS, says: "The Flexible Pipe Week Initiative was a tremendously successful event, providing a unique forum for the main stakeholders in flexible pipe manufacturing to discuss current and future technology developments and share their knowledge and experience.

"The highlight of the week was the launch of the Flexible Pipe Technology JIP and MCS is delighted to be involved in work which will drive forward new technology enhancements and standards to help maximize offshore oil and gas production."

SONAVISION EXPANDS WITH NEW PRODUCT AND BRAZILIAN CONTRACT

SONAVISION LTD has launched the long range sonar TITAN, the latest member of the Sonavision Scanning Sonar family. Although, measuring only 226mm by 90mm, the TITAN is capable of ranges up to 300m and is the only sonar of its size with the performance of a high-resolution sonar.

The company has also supplied a complete SubCom 2000 Emergency Through Water Communications system to Stolt Offshore Brasil SA for installation on the Seaway Harrier. The communications system will be installed on the saturation diving bells and will provide a communications link in the event of an emergency or if there is a failure in the wired communications system.

SubCom 2000 systems have a proven twenty year track record and are a familiar sight on saturation diving systems around the world, using a range of frequencies to provide clear voice communication for divers and supervisors.

ON-GOING DEVELOPMENTS AT NAUTRONIX

SPECIALISTS in underwater acoustic technology, Nautronix, have developed two new systems on their technology platform - Acoustic Digital Spread Spectrum.

NASBOP allows for the control and monitoring of seabed systems without the use of cables from the drilling rig. Whilst, the underwater GPS - NASNET enables positioning and navigation across wide areas of the seabed.

In addition to these products, Nautronix has a number of defence related systems either delivered or under evaluation with several of the world's navies.

The potential for their technology is vast as Jim Mann, General Manager, explains: "As technologists and applications engineers gain exposure to our Acoustice Digital Spread Spectrum and realize that underwater acoustic systems can now be considered for a much greater range of control, communication and monitoring opportunities than ever before, the possibilities for our enabling technology are immense."

DEVELOPING OPPORTUNITIES IN BRAZIL

PROGRESS IS BEING MADE on the UK Brazil Centre for Ocean Engineering, which aims to open up real opportunities for UK businesses operating in the subsea sector.

Believed to be the first of its kind in the world, the centre was opened last August when the Society for Underwater Technology (SUT) and Subsea UK joined forces with the Federal University of Rio de Janeiro's ocean engineering department (COPPE). The centre, which focuses on subsea and deepwater technology and will identify opportunities for business and academia from both countries whilst developing technology that protects the environment, promotes safety and the economical use of the ocean.

The centre aims to build relationships between universities, research institutes, industry bodies and businesses from the UK and Brazil in the subsea sector engineering sectors of oil and gas, ship-building, telecommunications and other related areas. It will also promote collaboration between British and Brazilian partners in collaborative research projects of mutual interest, supported by business and government from both countries

It is delivering those objectives through joint expertise groups working in a co-ordinated way to provide new knowledge to the industry and to disseminate technical information and new perspectives on technology advances for the sector, particularly with regards to protecting the environment and promoting safety. Direct links through the internet between Brazilian and British institutions will allow for information sharing. Seminars, workshops and other events, facilitated by the SUT will further enhance the collaboration of expertise and experience between the two countries.

Ian Gallett of SUT says: "The establishment of the centre was a big step forward in increasing co-operation between academia and industry in the subsea area in which both countries have played such a prominent part developing.

"The centre will facilitate greater co-ordination of both British and Brazilian businesses, academia and government and, I am confident, will undoubtedly result in opportunities for our member companies. Networking meetings are being run jointly with the local SUT branch in Rio de Janeiro and various joint projects are under discussion.

WEBSITE TO BECOME SUBSEA PORTAL

AS ANNOUNCED at recent events, Subsea UK's new website has been launched. The new site which aims to become a major portal for the subsea industry has already undergone a major facelift.

www.subseauk.co.uk now provides market leading reports and commentary, news of current Subsea UK activities, a full listing of members and their details with links to their sites and Subsea Pages, a growing directory of subsea companies, products and expertise.

Whilst its development is still on-going, the portal will eventually provide any and every bit of information connected to the subsea sector and give access to opportunities and project developments, new technical advances, a technical "talk shop" as well as live subsea news feeds and government support information.

Pridden explains: "The subsea portal will become a subsea "google". It will be user-friendly and enable users to find information and answers to specific subsea-related questions. In turn, it will actively promote UK subsea expertise, services, technology and jobs. There is a tremendous amount of work still to be done but we are working hard to achieve our overall aim."

Membership is growing rapidly and full details of all our members can be found on the web site: www.subseauk.co.uk