



ISCO NEWSLETTER

The Newsletter of the International Spill Response Community

Issue 261 6th December, 2010

Email info@spillcontrol.org Web <http://www.spillcontrol.org>

BONN AGREEMENT – DUBLIN DECLARATION MAKES COMMITMENT TO IMPROVING PREVENTION, PREPAREDNESS AND RESPONSE

Dublin, Ireland 24 November 2010 – Ministers and Senior Government Officials from Belgium, Denmark, France, Germany, Ireland, the Netherlands, Norway, Sweden, the United Kingdom and the European Union met last week in Dublin under the Bonn Agreement, an international Agreement for regional co-operation in dealing with pollution by oil and other harmful substances.

The meeting also welcomed the accession of Ireland to the Bonn Agreement, and a realignment of national zones of responsibility following which the size of the Bonn Agreement maritime area has more than doubled, now comprising about 1,586,000 km². Mr Noel Dempsey, the Irish Minister for Transport hosting the meeting said: "Ireland joined the Bonn Agreement as a Contracting Party earlier this year. We fully recognise the need to work together to prevent pollution, to be prepared and respond when any accident happens. International technical co-operation in this area is essential."

The meeting adopted an ambitious Bonn Agreement Action Plan to further improve the protection of the coastal and marine environment against pollution by oil and other harmful substances from shipping, offshore oil and gas operations and other maritime activities.

The 2010-2013 Bonn Agreement Action Plan (BAAP) provides a Vision, Strategic Aims and Operational Objectives to guide and focus the work of the Bonn Agreement as well as specific measurable Actions and targets that will be jointly implemented and achieved in the period from 2010-2013. The BAAP acknowledges the need to maintain well established systems and to continue work in hand necessary to continue the operational nature of the Agreement. At the same time opportunities to enhance these efforts and to develop new directions are articulated. A number of key Actions have been identified which will be taken forward as a priority by assigned lead countries.

Mrs Kristalina Georgieva, European Commissioner for International Co-operation Humanitarian Aid and Crisis Response welcomed the Action Plan saying: "The experience gained and results achieved over the last 40 years have to be acknowledged but they also have to pave the way to achieving further goals and vision of the Bonn Agreement. It is therefore very timely that the Bonn Agreement engages to further enhance co-operation through the newly adopted Bonn Agreement Action Plan, strengthening not only response, but also adequate prevention and preparedness actions."

Finally, in the margins of the Dublin meeting the UK and Norway reinforced their bilateral cooperation with the signature of a joint response plan, the so called NORBRIT plan.

You can download and read the following –

Communiqué: http://www.bonnagreement.org/eng/doc/PR_10_BONN_2010_final.pdf

Dublin Declaration: http://www.brymar-consulting.com/wp-content/uploads/2010/11/Dublin_101124.pdf

Action Plan: <http://www.endseurope.com/docs/101125a.pdf>

EMSA STRENGTHENS ITS NETWORK OF OIL SPILL RECOVERY VESSELS IN THE EASTERN MEDITERRANEAN



The European Maritime Safety Agency (EMSA) has signed a contract to provide pollution response capacity using the Limassol, Cyprus-based tanker *Alexandria*. The newly-contracted vessel considerably strengthens EMSA's oil-spill response coverage of the Eastern Mediterranean Sea, a sensitive sea area given its proximity to major oil transport routes transiting the Suez Canal, and those originating in Black Sea and Middle-Eastern ports. EMSA selected Petronav Ship Management Limited, a Cypriot Company, to provide pollution response capacity through its tanker *Alexandria*. The Service Contract signed with Petronav has a duration of four years with a total value of 4.5 million euros, renewable once for an additional four years. More: <http://www.emsa.europa.eu>

USA: MSRC ANNOUNCES USCG COMPLIANT DISPERSANT PROGRAM

Tuesday, November 30th, 2010 - The Marine Spill Response Corporation (MSRC) and the Marine Preservation Association (MPA) announced MSRC's intention to fulfill customer's regulatory planning obligations for dispersant capability as promulgated by the United States Coast Guard (USCG).

MSRC customers may cite MSRC singularly, with one exception as noted below for Hawaii, within MSRC's Operations Area, which includes the coastal environment of the U.S. and the U.S. Caribbean.

In Hawaii, MSRC has been working with Clean Islands Council (CIC) to support CIC's efforts for USCG acceptance of a plan that takes advantage of existing resources in Hawaii and supplements it with MSRC's significant dispersant stockpile and access to MSRC's C-130 aircraft. Pending acceptance by the USCG, vessels that intend to call Hawaiian ports will need to have contractual access to both MSRC and CIC to meet this planning standard. MSRC is supporting the efforts of CIC as it works with the USCG in this process. Read more: <http://www.maritime-executive.com/article/msrc-announces-uscg-compliant-dispersant-program/>

USA: CSB TO HOLD HEARING IN WASHINGTON DC TO HEAR EXPERT TESTIMONY ON REGULATION OF OFFSHORE OIL AND GAS SAFETY PRACTICES

November 23 - The U.S. Chemical Safety Board (CSB) today announced that it will be holding a daylong public hearing entitled "Regulatory Approaches to Offshore Oil and Gas Safety" on Wednesday, December 15, 2010, in Washington DC. The meeting is part of the CSB's ongoing investigation into the April 20, 2010, fire and explosion on the Deepwater Horizon that killed 11 workers. The hearing will bring together international regulators, union representatives and industry groups to discuss approaches to regulating the safety of offshore oil and gas exploration and production. The meeting will be held from 8:30 am – 4:30 pm at the Embassy Suites Ballroom located at 1250 22nd Street Northwest in Washington D.C. The meeting is free and open to the public. The CSB's board members and Deepwater Horizon investigation team will hear testimony from leading safety experts involved in offshore drilling activities from the United Kingdom, Australia and Norway. Read more: <http://www.csb.gov/newsroom/detail.aspx?nid=353> [Thanks to Don Johnston of ISCO Associate Member, DG & Hazmat Group for relaying this news item]

CAN EUROPEAN COMPANIES MEET THE DEADLINE FOR REGISTERING CHEMICALS?

November 30 - The European Union's REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) legislation is the world's most extensive attempt at improving the safe use of chemicals. By today all chemicals produced or sold in quantities of more than 1,000 tonnes a year must be registered, their existing toxicity data must be submitted along with proposals for additional tests to fill in gaps in safety information. *Nature* has investigated whether the European chemicals industry will meet the deadline and what will happen if it does not.

The European Chemicals Agency (ECHA) based in Helsinki, which is responsible for implementing REACH, estimates that more than 4,700 chemicals produced at the 1,000 tonne a year level will need to be registered by today. As of 30 November, 3,662 substances have been logged.

Read more: <http://www.nature.com/news/2010/101130/full/news.2010.636.html>

AUSTRALIA / DENMARK: MISSING EMERGENCY PLAN STOPS TOXIC SHIP SAILING

December 3 - The Danish Environment Minister has said a shipment of toxic waste set to arrive from Port Botany is on hold because the port where it is to dock does not have an emergency plan.

"If there is no emergency plan, then the toxic ship can't come to Kommunekemi in Nyborg," Karen Ellemann told Danish state-owned radio DR yesterday. Mrs Ellemann made the comments after she was told local authorities in the Danish port of Nyborg had not prepared a contingency plan for the arrival of 3000 tonnes of hexachlorobenzene, a byproduct of solvents manufactured in Botany until 1991.

The 252 containers of waste are housed by the chemical firm Orica at its plant in Botany, where it awaits the German ship Beluga Fascination, which has been chartered for the trip. Orica has hired the Danish hazardous waste company Kommunekemi to incinerate the waste. More: <http://www.smh.com.au/nsw/missing-emergency-plan-stops-toxic-ship-sailing-20101202-18iaa.html>

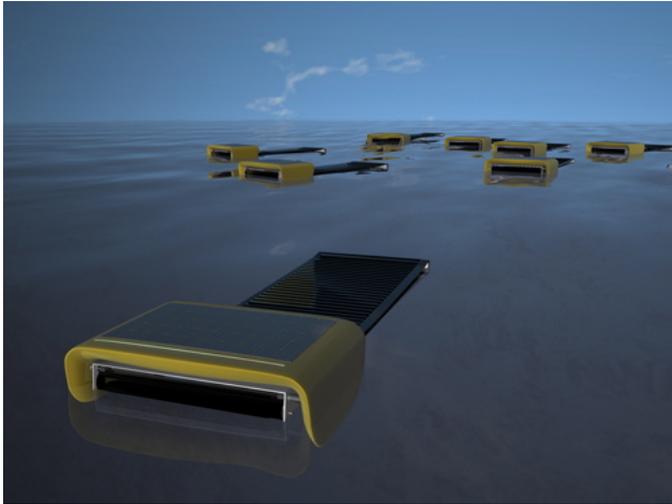
PHILIPPINES : HOW THE PIPELINE LEAK IN MAKATI WAS FOUND

November 28 – This is an interesting first hand account of a spill leaking into a building basement, the source of which was a mystery for some weeks. Several potential sources were identified - Aside from the pipeline which was ultimately found to be responsible, possibilities included car repair shops, several gasoline stations, a generator fuel tank, an old underground oil tank and a pipeline close to the building.

The author writes "The scientific method dictates the ruling out of competing hypotheses by testing, which we followed religiously" and the approach and methodologies used are described in some detail. It's like a detective story and well worth looking at. [Thanks to Don Johnston of ISCO Associate Member, DG & Hazmat Group, for passing this on] You can read the complete account of how the culprit was found and the necessary evidence assembled at: <http://opinion.inquirer.net/inquireropinion/talkofthetown/view/20101127-305704/How-the-pipeline-leak-in-Makati-was-found>

PROGRESS REPORT: UPDATE FROM MIT ON THE SOLAR-POWERED SEASWARM SKIMMING SYSTEM

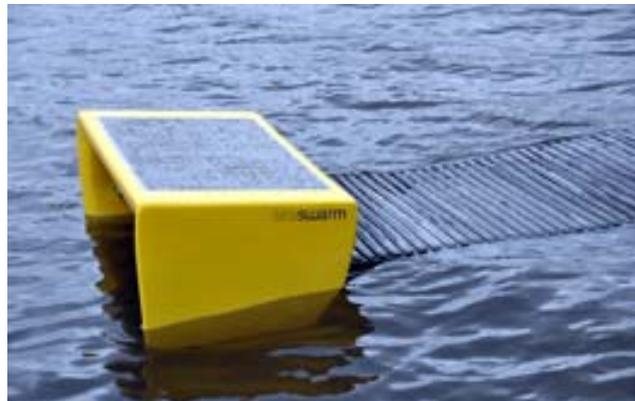
The ISCO Newsletter has just received this exclusive briefing on progress being made in the development of the Seaswarm Skimming System



Editor: This is a follow-up to the article that appeared in the ISCO Newsletter 247 (30 August 2010). To remind you: The Senseable City lab at the Massachusetts Institute of Technology (MIT) said this fleet of robotic vehicles make use of a conveyor belt covered with a thin nanowire mesh to absorb oil. The mesh, developed by associate professor Francesco Stellacci, "can absorb up to twenty times its own weight in oil while repelling water. By heating up the material, the oil can be removed and burnt locally and the nanofabric can be reused." One robot alone is 16 feet in length and seven feet wide, using solar panels for its power source. It is said Seaswarm could potentially just be put out to sea in an oil spill situation and left for weeks to clean up the mess.

Oil Processing - The processing technology for the collection and digestion of oil is being researched and developed at this time. Processing of the oil will occur in the "head" of the vehicle. Several processing options have been considered to work in conjunction with the nanofabric. The oil could be squeezed from the fabric, bagged, tagged and released for pick-up. Or, as it rotates, the oil-soaked fabric could move through a digestion chamber of micro-organisms. The fabric could also move through a heating chamber to burn-off the oil. This last technique seems to be the most promising since the fabric is made of potassium manganese oxide nanowires, which remain stable even at temperatures above the boiling point of oil. As a result, the oil could evaporate very quickly, and the nanofabric membrane could be used again and again, constantly collecting and processing oil while moving forward.

Solar Technology - Photovoltaics are an integral part of the SeaSwarm design and we believe our current design is both efficient and streamlined. A 2m x 2m solar panel placed on the surface of the "head" could supply the vehicle with 300W of energy, the equivalent of three household light bulbs. Supported by our initial calculations, 300W of energy is enough to keep the vehicle constantly processing oil and moving at speeds of up to 10 km/hr. Extra energy can be stored in lithium-ion batteries to keep the vehicles moving through the night. Advances in solar technologies promise more efficient and more powerful solar cells to be developed in the future. These technologies, when developed, could be used in SeaSwarm vehicles to further increase the efficiency of the power supply.



Communication - The Seaswarm communication system is designed to be 100% autonomous, using sensing technologies to perform its required tasks without human labor. Sensors in the vehicle and satellite images of oil "locations" sent wirelessly to the robots over WiFi will help the robots find pollutants in the ocean. These units collectively sense the environment and guide each other's actions, while also communicating images to researchers and the general public via onboard cameras streaming footage to the web. Groups of robots move together in coordinated search patterns using advanced algorithms to maximize the collective efficiency. Distinguishing oil from other substances also requires these robots to share data and sensor readings to accurately identify their targets. Several communication software and hardware options have been considered for the next phase of prototyping: MOOS, Arduino, fit-PC 2, Seiko PS 050, Pontech, and Garmin USB.

Nano Fabric - The Nanofabric material, which inspired the design concept of SeaSwarm was developed in 2008 by Francesco Stellacci, an MIT associate professor in the Department of Materials Science and Engineering. Composed of many nanowires to form a membrane of tiny pores and a water-repelling coating, the material only absorbs hydrophobic liquids, such as oil, up to 20 times its weight in oil. The fabric is created in a similar technique as paper production; the nanowires are suspended to dry on a non-sticking plate. In addition to its potential abilities to clean oil spills, this nanofabric has the potential to clean other types of contaminants and impurities from water.

USA: AQUA-GUARD LAUNCHES 3rd GENERATION OF OFFSHORE OIL SKIMMERS



Aqua-Guard has announced the launch of its 3rd generation offshore oil skimming system called the RBS Triton 600. Important features of the new system are

- Only one skimmer head is required for recovery of virtually all oil types
- DNV witnessed heavy and medium oil recovery rates to ASTM standards
- RBS Triton patented technology
- More efficient than previous RBS technology by 300% with up to 600 m³/h recovery rate
- Integrated crane system allows the skimmer head to be conveniently lifted by the umbilical hose for both deployment and recovery
- Automated and safe remote control system facilitates low-risk operation
- Self-contained in a 20 ft ISO storage base – all components are stored together with minimal pre-assembly, resulting in decreased response time
- Fully and easily repairable floating umbilical hose.

The photo on the left was taken just three weeks ago on completion of final testing. You can watch a video of deployment and recovery at: <http://il.youtube.com/watch?v=w2BWijNS23o&feature=related>

For more information, visit <http://www.aquaguard.com/> or send an email to Ronald Bowden at ronb@aquaguard.com

EVENTS

For more comprehensive information on upcoming events & training courses click [HERE](#) and select "Events"

UK: LSLC MONTHLY EVENT - THE HNS CONVENTION

The International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Convention) was adopted in 1996. The HNS Convention, which is largely based on the 1992 Civil Liability and Fund Conventions, establishes a two tier compensation regime, the first tier being paid by the shipowner and the second tier by an international fund (HNS Fund). During the preparations for its entry into force, it became clear that a number of states considered that there were serious obstacles to their ratification of the Convention and that the Convention would not enter into force in its original version. In order to eliminate these obstacles, a Diplomatic Conference held in April 2010 under the auspices of IMO adopted a protocol to the HNS Convention.

The discussion will focus on the following issues: ■ Contributions to the HNS Fund for packaged goods ■ Increase of liability limits for ships carrying packaged goods ■ Liability for contributions in respect of LNG cargoes ■ Sanctions against States that do not fulfill their obligation to report receipt of HNS cargoes ■ Insurance aspects ■ Prospects for the revised HNS Convention entering into force. ■ Practical aspects of HNS spills and case study (including the MSC CHTIRA, India).

Chairman: Måns Jacobsson – Former Director of the IOPC Funds

Panelists: Dr Rosalie Balkin – International Maritime Organisation; Claudine Albersammer – The UK Chemical Industries Association; Andrew Tucker – Senior Technical Adviser, ITOFF; A representative from the International Group of P & I Clubs

Venue: West of England Insurance Services, Tower Bridge Court, 226 Tower Bridge Road, London, SE1 2UP
Wednesday 8th December 2010 - 5.30pm for 6.00pm

For further details and bookings please contact the Centre's office on 020 7063 9737 or e-mail to: shipping@shippinglbc.com

USA: "WRECKS OF THE WORLD: HIDDEN RISKS OF THE DEEP (WOW) II" CONFERENCE

May 2 – 3, 2011, Conference will address 8,500+ world-wide shipwrecks that may contain up to 20 million tons of oil, other hazardous materials.

The American Salvage Association (ASA) and the North American Marine Environmental Protection Association (NAMEPA) will co-sponsor a conference, "Wrecks of the World: Hidden Risks of the Deep (WOW) II" on Monday, May 2 and Tuesday, May 3, 2011 at the Maritime Institute of Technology and Graduate Studies (MITAGS) in the Washington, DC area (Linthicum Heights, MD) USA. The conference will explore the myriad issues (pollution threat, impact modelling, risk assessment, oil removal and remediation, implications to the environment, legal, insurance and funding issues, next steps) related to the more than 8,500 sunken vessels in the world, many of them World War II-era. More info: <http://www.maritime-executive.com/article/wrecks-world-ii/>

MALAYSIA: DISPERSANTS AND THEIR ROLE IN OIL SPILL RESPONSE WORKSHOPS

The International Maritime Organization (IMO), IPIECA and the Marine Emergency Mutual Aid Centre (MEMAC) have announced a two-day workshop covering dispersants and their role in oil spill response. The event will take place from [14-15 February 2011 in Manama, Bahrain](#). IMO and IPIECA in collaboration with PETRONAS and Petroleum Industry of Malaysia Mutual Aid Group (PIMMAG) will also stage a second workshop from [17-18 February 2011 in Port Dickson, Malaysia](#).

The focus of both workshops will be the use of dispersants; providing delegates with a better understanding of dispersant types, methods of application, environmental considerations and how to factor dispersant use into contingency planning. Both events will feature case studies, including lessons learned from the Deepwater Horizon accident. For more information or to register please contact [Yvette Osikilo](#) at IPIECA. <http://www.ipieca.org/news/20101130/dispersants-and-their-role-oil-spill-response-workshops>

PUBLICATIONS

USA EPA: TECHNOLOGY INNOVATION NEWS SURVEY AND TECHDIRECT

The October 16-31, 2010 *Technology Innovation News Survey* has been posted to the CLU-IN web site. The *Survey* contains market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. The latest survey is available at: <http://www.clu-in.org/products/tins/>

The December 1 issue of TechDirect is available at: <http://www.clu-in.org:80/techdirect/td122010.htm>

CORMACK'S COLUMN



In this issue of the ISCO Newsletter we are printing the concluding part of four articles contributed by Dr Douglas Cormack.

Dr Douglas Cormack is an Honorary Member of ISCO. As the former Chief Scientist at the British Government's Marine Pollution Control Unit and head of the UK's first government agency, the Warren Spring Laboratory, Douglas is a well known and highly respected figure in the spill response community. He is the Chairman and a founder member of the International Spill Accreditation Association.

HARMONISATION OF TECHNOLOGY AND MARINE ENVIRONMENT (PART FOUR)

In any case, the oil industry and its regulators must accept that their belief-based reliance on inherently limited response equipment will result only in continual demands for ever-greater holdings and in ever-greater embarrassment when these fail to achieve what belief expects; and that their best option is reliance on knowledge-based preventative technology. Yet again, the shipping industry must insist that while it has applied knowledge-based technology to reducing the environmental impact of ships, the regulators have relied on belief in their responses to accidental releases from ships, and in their provision of reception facilities for operational wastes. Further to accidental releases, however, the respective industries and regulators must now recognise that reliance on inadequate response has been possible only because belief in species-extinction/ecological disaster has not been realised in any incident thus far; and that compensation must now be paid for commercial loss and not for inadequate response by *ad hoc* contractors and misused equipment; that in-house expertise and knowledge-based contractors must now be employed in prevention and response; and that the growing response costs per tonne released must thus be reduced. Further to contractors, it must be recognised that those involved with inland, river and lake spills have been largely free from belief-based interference in their continual development of cost-effective responses which complement the knowledge-based marine shoreline/inshore responses earlier produced by the UK R&D programme^{2,3}.

However, industrial/regulatory acceptance of knowledge-based assessment, prevention and response in light of the *Deepwater Horizon Incident*, will require public and political recognition that belief and knowledge are now unambiguously defined¹; that environmental NGOs are henceforth invited to reality-validate/-refute their beliefs rather than to debate belief-based opinions; and that acceptance/rejection of this invitation will be explicit/implicit acceptance of the supremacy of knowledge over belief.

Thus the paper, here presented as four articles, will now be presented to governments and industrial/environmental NGOs through the MEPC and OPRC TG at IMO; and to politicians and the public through the media, such dissemination being supported by all who see the *Deepwater Horizon Incident* and current interest in HNS as significant opportunities to harmonise technology and environment by accepting knowledge and rejecting belief.

1 *The Rational Trinity: Imagination, Belief and Knowledge*, D.Cormack, Bright Pen 2010 available at www.authorsonline.co.uk

2 *Response to Oil and Chemical Marine Pollution*, D. Cormack, Applied Science Publishers, 1983.

3 *Response to Marine Oil Pollution - Review and Assessment*, Douglas Cormack, Kluwer Academic Publishers, 1999.

COMPANY NEWS

Editor: This section allows Corporate Members and others to inform readers about changes, new developments and other matters.

CORRESPONDENCE

Forum for letters from readers – Send letters to john.mcmurtrie@spillcontrol.org

PATENTED PNEUMATIC SYSTEM TO CONTROL HIGH PRESSURE OIL AND FLUID LEAKS

Letter from Mario Mimbela in Spain – This system was offered to BP in May, 2010 after the Gulf of Mexico oil leak. In its response BP said “A similar approach has already been considered or planned for possible implementation”. Now Mario hopes that someone else will be interested in the invention ...

“I’m addressing to you to offer you a new patented system for rapid control of fluid or gas kicks in high pressure in case the conducts burst. This simple system allows us an easy anchorage and the “total” sealing thanks to a pneumatic camera located inside the funnel, controlling the pressure of the anchorage with a regulator. Its placing offers a low resistance, because it’s got several exit pipes. These pipes diameters sum is superior to the spill’s one. The pipes might have controllable valves to redirect the fluid or for the total closing of the spill.

I also have two more designs for anchorage and sealing inside the pipes.

I am at your disposal, for if you’re interested in the utilization of any of these patents.

Awaiting your news, yours sincerely”,

Mario Mimbela, 50830- Villanueva de Gállego, Zaragoza, Spain.
Tel. +34 639782907

ISCO NOTICES

DG AND HAZMAT GROUP

This week we welcome new readers – members of the DG & Hazmat Group, who responded to a message to the DG & Hazmat Group forum in which the ISCO Newsletter was given a mention. The DG & Hazmat Group has been an Associate Member of ISCO since 2006.

The free newsletter published by Don Johnston of the DG & Hazmat Group is one of the best sources of world-wide news on oil /chemical spills and related events. It comes out every few days and contains about 20 pages, mainly incident reports, often accompanied by dramatic colour photos and video links. How do interested parties become members? - It’s pretty easy, there are two ways this can be done, and the simplest is to send a blank email to: DangerousGoods-subscribe@yahogroups.com. Alternatively, visit the Group’s Home Page at: <http://tech.groups.yahoo.com/group/DangerousGoods/> and click on the icon “Join this Group”.

Your editor is delighted that members of the DG & Hazmat Group have joined the increasing number of people on the ISCO Newsletter mailing list, helping us to make progress towards our target of 10,000 readers worldwide.

If you find the Newsletter interesting and useful, think of friends and colleagues who would like to join our readers. Just click on <http://www.spillcontrol.org> and then on “Click Here to join our Mailing List”

Better still, you can help to ensure the continued production of the Newsletter by joining ISCO. You can apply to join on line by clicking [HERE](#)

INTERNATIONAL DIRECTORY - SPILL RESPONSE SUPPLIES & SERVICES

FIND WHAT YOU'RE LOOKING FOR !

[CONSULTANTS](#)

[EQUIPMENT & MATERIALS](#)

[RESPONSE CONTRACTORS](#)

[TRAINING PROVIDERS](#)

Click on the links above to find what you are looking for. Clicking on any entry will display the advertiser’s website. Cost of inserting each entry is – For ISCO Corporate Members FREE – For non-members GBP 500 per annum. Entries should be submitted in JPG format, size approx. 500 x 120 pixels.

Legal disclaimer: Whilst ISCO takes every care to ensure that information published in this Newsletter is accurate unintentional mistakes can occur. If an error is brought to our attention, a correction will be printed in the next issue of this Newsletter.