Global energy brief

Well safety

Learning – and improving – all the time

Major incidents in the oil and gas industry are rare, but when they do happen, they trigger major responses. Initially, these responses minimize further risks to people and the environment. In the longer term, responses centre on incident prevention, based on what we have learned.

That is what happened in 2010, following deep-water well incidents in the Gulf of Mexico and offshore Australia.

Such major incidents undermine confidence in an industry that we all need for half of our energy requirements now – and for decades ahead.

IOGP, as the global forum of the companies that produce oil and gas, led the initiative that set out to identify and implement improvements to the safety of offshore operations in general and to deep water drilling in particular. This work, which began in July 2010, was called the Global Industry Response Group (GIRG).

GIRG’s remit was straightforward: to lead the industry’s effort to learn from major incidents and, ultimately, to rebuild trust with regulators and the public.

To that end, GIRG brought together more than 100 technical experts and managers from some 20 companies around the world. For the better part of a year, they pooled their knowledge and experience to create three dedicated teams focused on well incident prevention (stopping an incident from happening); intervention (minimizing and controlling the impact of an incident) and response (cleaning up any oil spilled).

Since then, GIRG recommendations have led to:

- Significant improvements to training in the class room and on the job to reduce the risks of human error in well management by focusing on the role of human factors in major technical incidents
- Establishing an industry-wide well control incident database that enables operators to learn from each other and share challenges and progress
- Measurable improvements in the reliability of equipment to prevent well blow-outs by setting up a dedicated reliability task force
- Developing and implementing key international standards for well design and operations management
- Founding the Oil Spill Response Joint Industry Project – known as the OSR-JIP – to build on and improve established oil spill response capabilities
- Establishing mutual aid agreements and framework to enable operators to access additional resources in the event of a major oil spill

One of the most tangible GIRG legacies has derived from an alliance among nine oil and gas companies to set up the Subsea Well Response Project (SWRP). This collaboration, backed up by significant investment for research, development and construction, has resulted in a global network of well capping devices and ancillary hardware.
In partnership with Oil Spill Response Ltd (OSRL) this equipment is now available to the international industry by subscription for use in the event of a subsea well incident.

New storage, transport and deployment facilities

![Map showing storage, transport, and deployment locations for subsea well intervention equipment.](image-url)

- Regional containment toolkit component sets
- One international air freightable set of containment toolkit components (stored at original manufacturers’ facilities)
- Capping/dispersant locations (dispersant indicated by ‘D’ icon)
- Planned storage location for OIE

* The US has its own system in place.

Effective incident response relies on the timely transportation and deployment of equipment at the incident site. The intervention equipment is designed to be rapidly transportable by sea and/or air from international storage locations. These locations were selected for their international reach, strong sea/air transport links, to reduce logistical challenges and to further enhance international readiness.

The equipment is stored and maintained ready for transportation at locations close to ports and airports. In the event of an incident the equipment will be delivered to its airport/port for onward transportation by the well owner/operator.

As a result of implementing the work that began in July 2010, the upstream oil and gas industry is now better able than ever to work safely and control the wells we drill.

And, if for any reason, a well incident should occur, the expertise, equipment, logistics, people and agreements that are in place world-wide will minimize the impact and limit any associated environmental damage.

**In summary:**

Since 2010, the upstream oil and gas industry has transformed its management of deep water wells.

The work of the Global Industry Response Group (GIRG) has led to improvements in training, management procedures, communications and technical standards – all geared to prevent future incidents.

And if, for any reason, an incident should occur, innovative new equipment is available around the world to put a well back under control and handle any necessary clean-up operations.

For more information, visit:

[www.iogp.org](http://www.iogp.org)
[www.subseawellresponse.com](http://www.subseawellresponse.com)
[www.oilspillresponse.com](http://www.oilspillresponse.com)
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