

Marine Division

IMCA is the international trade association representing offshore, marine and underwater engineering companies.

It seeks to:

- ◆ strive for the highest possible standards with a balance of risk and cost in: health and safety; technology; quality and efficiency; environmental awareness and protection;
- ◆ achieve and sustain self-regulation in the industry;
- ◆ ease the free movement of equipment and personnel globally;
- ◆ achieve equitable contracting regimes;
- ◆ provide the framework for training, certification, competence and recruitment to support and sustain the industry globally;
- ◆ resolve industry issues; and
- ◆ promote co-operation across the industry.

Members include pipelay, heavy lift, diving, remotely operated vehicle, survey and offshore construction contractors, plus various contractors operating specialist marine equipment.

IMCA has two core activities in which all members participate:

- ◆ Safety, Environment & Legislation (SEL) includes monitoring national and international regulatory bodies, circulation of relevant information to members and advancement of industry positions where necessary
- ◆ Training, Certification & Personnel Competence (TCPC) includes a comprehensive framework devoted to promoting safety by defining and encouraging competence in key safety-related positions.

Members join in one or more of IMCA's four technical divisions relevant to their own area(s) of work:

- ◆ Diving
- ◆ Marine
- ◆ Offshore Survey
- ◆ Remote Systems & ROV

IMCA works with a global focus, but also includes regional sections covering the key offshore regions: Americas, Asia-Pacific, Europe & Africa and Middle East & India.

IMCA has published substantial and comprehensive guidance based on its members' experience in a range of related areas. More details on specific activities are contained on this and other information sheets.

IMCA Marine Division covers all aspects of specialist vessel operations and marine equipment. Focusing on dynamic positioning and general marine construction, other key areas of interest are offshore lifting operations, position reference equipment, thrusters and system reliability.

IMCA (and its predecessor DPVOA) has published a range of technical documentation, including guidance, analysis of incidents and various technical reviews which all aim to assist its members in the safe and efficient operation of specialist vessels used in the offshore industry.

Marine Division publications often address cutting edge technology as well as bringing together the collective experience and expertise of IMCA members to set out industry best practice guidance.

[Guidelines for the Design and Operation of Dynamically Positioned Vessels \(IMCA M 103\)](#)

This key document provides the basis for much of IMCA's guidance relating to the use of dynamic positioning (DP) techniques in the offshore sector. Building on the International Maritime Organization (IMO) guidelines on the same subject, the IMCA document includes guidance from an operational perspective.

As well as an initial section covering the basic principles to be applied to all DP vessels, the guidelines include detail on eight vessel types – diving and ROV support, drilling, floating production, accommodation, crane vessels, shuttle tankers and pipelay vessels.

IMCA also led the development of cross-industry *International Guidelines for the Safe Operation of Dynamically Positioned Offshore Supply Vessels* (IMCA M 182), published in early 2006, which sets out similar guidance to assist vessel operators as DP becomes an increasingly used technique on OSVs.

Specialist Vessel Equipment

IMCA has produced technical reviews and specific documents covering a range of specialist equipment used by marine contractors, addressing both safety and performance issues. Topics addressed include:

- ◆ Thruster failure modes
- ◆ DGPS performance and availability
- ◆ Marine laser position references
- ◆ Crane specification
- ◆ Power management systems.

Audit Protocols

IMCA has produced a number of audit protocols and report templates, which aim to set out requirements in a common way that can be adopted generally by vessel operators and their clients. This helps to reduce unnecessary variation and avoid repeat audits by providing a uniform set of criteria, bringing increased efficiency for all concerned.

[Common Marine Inspection Document \(IMCA M 149\)](#)

In the past, clients and prospective clients have requested individual audits of vessels that they wished to contract. These audits can be both time-consuming and expensive; and many operators were struggling with the demands placed upon them. The Common Marine Inspection Document (CMID) aims to reduce the number of audits carried out on individual marine vessels through the adoption of a common auditing standard for the offshore industry.

Intended as a 'living' document, vessel crews can prepare identified material in advance of an audit and keep the CMID up-to-date. A second publication (IMCA M 167) sets out a fully worked example to aid further in this goal.

Annual Seminar

The Marine Division also holds an annual seminar, which has grown into an event attended by hundreds of delegates around the world and combining content relevant to all technical divisions. In recent years, the events have been held in each IMCA region.

The foremost event on the IMCA calendar, the annual seminars bring together members and industry colleagues for a variety of presentations on cutting edge technological developments and current issues as well as the sharing of experience and networking at the associated exhibition and less formal social events.

IMCA Annual Seminar

Recent venues:

- 2006 – Copenhagen
- 2005 – Abu Dhabi
- 2004 – Singapore
- 2003 – Houston
- 2002 – Aberdeen

www.imca-int.com/events

Training and Competence of Marine Personnel

IMCA guidance builds on international requirements under IMO codes and national legislation, as well as other related schemes such as that offered by the Nautical Institute for DP operators, to help ensure the competence of personnel working on vessels in the offshore industry.

The Training and Experience of Key DP Personnel (IMCA M 117)

IMCA has produced the recognised and agreed industry standard for the training, competence and experience required of all key DP personnel on dynamically positioned vessels. As well as formal training, practical experience and certification requirements, the guidance provides a structured familiarisation process for those joining a new vessel or commencing a new project.

The IMCA dynamic positioning logbook enables the recording of offshore experience, including sections covering competence assessments of individuals in accordance with the guidance above.

Competence Assurance & Assessment: Marine Division (IMCA C 002)

IMCA's wider guidance on competence assurance and assessment for the marine sector covers 23 safety-critical positions – including vessel master, watchkeepers, engineers, crane operators, technicians and others – in nine types of vessel operation, setting out entry level qualifications and acceptance criteria plus competence assessment guidance.

Sharing of Safety-Related Information

IMCA Marine Division enables the sharing of information in a variety of ways, helping to improve safety for its contractor members around the world.

There are three major elements in this, including the safety flash system (see right), while IMCA committee meetings regularly include an un-minuted discussion to allow free sharing of lessons learned from incidents and near-misses. An online discussion forum is available to members which can facilitate similar dialogue. Through these methods, members are kept abreast of current safety issues, which the committees can address through their own work programmes, distributing additional information and producing new or updated guidance as required.

IMCA Safety Flashes

A key tool of IMCA is its safety flash system, which enables prompt distribution of safety alerts across the industry.

Through this system, vital information is shared on potentially dangerous items of equipment, methods of use, other aspects of operations and the importance of adhering to well prepared procedures.

By learning from the findings of one contributor, IMCA members can avoid repeat incidents and further improve their safety.

DP Station Keeping Incidents Analysis

IMCA maintains a database on DP incident reports from dynamically positioned vessels over 25+ years. Each year, the reports are collated and an anonymised analysis of the incidents is issued. This helps establish trends in incidents for discussion with vessel operators, equipment suppliers, training establishments and others to address particular issues. The results have helped keep the DP fleet operational, safe and acceptable to authorities by feeding into improvements in designs, procedures and training.

Lifting Incidents Analysis

Aiming to mirror the benefits achieved under the DP incidents analysis above, IMCA has also established a system for reporting and analysis of lifting incidents.

See www.imca-int.com/marine to find out more about the work and publications of IMCA Marine Division