



REPORT

International Association of Drilling Contractors
Offshore Division

International Regulatory and Standardization Activities Affecting the Offshore Oil and Gas Industry 1 December 2016

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Paris Agreement under the UN Framework Convention of Climate Change

The Paris Agreement was adopted on 12 December 2015 at the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change held in Paris from 30 November to 13 December 2015. In accordance with its Article 20, the agreement was open for signature at the United Nations Headquarters in New York from 22 April 2016 until 21 April 2017 to States and regional economic integration organizations that are Parties to the United Nations Framework convention on climate change.

The agreement has garnered the support of 191 signatory countries, 94 of which have ratified the agreement through 3 November 2016 and account for 59.9% of global greenhouse gas (GHG) emissions. Deposits of ratification made by at least 55 UNFCCC party nations that account for 55% of global GHG emissions were required to bring the agreement into force. China and the U.S. account for almost 40% of GHG emissions.

Taking effect on 4 November 2016, the agreement aims to contain the average global temperature to less than 2°C above pre-industrial level with a target of limiting such increase to 1.5°C above pre-industrial levels via pursuit of mitigating efforts. These efforts include ways to encourage finance and investment toward lowering GHG emissions and increasing sustainable development.

Intergovernmental Panel on Climate Change (IPCC)

At its 43rd Session (11 – 13 April 2016), the IPCC Panel accepted the invitation from the UNFCCC to provide a special report in 2018 on the impacts of global warming of 1.5°C above pre-industrial levels and related global GHG emission pathways. The Special Report will also consider ways in which to strengthen a global response to climate change while addressing sustainable development, including options to facilitate eradicating poverty.

United Nations Framework Convention on Climate Change (UNFCCC)

The Bonn Climate Change Conference of the UNFCCC met 16 – 26 May 2016 in Bonn, Germany to include, *inter alia*, the first meeting of the ad hoc working group on the Paris Agreement. A primary intent of this session was to begin formulating technical objectives and making “operational” the elements of the Paris Agreement. Requests were made at this session for submission of technical papers and work plan proposals in preparation for the 22nd session of the Conference of the Parties (CoP 22) 7 – 19 November 2016. Additionally, parties at the Bonn Conference were able to agree to a work plan related to accounting protocols for public finance in contribution to the transparency of financial management under the Paris agreement.

The 22nd session of the Conference of the Parties (CoP22) held 7 - 19 November 2016 resulted in, *inter alia*, the following developments:

- Terms of reference adopted for the Paris Committee on Capacity-Building as a means to facilitate interaction between and among various convention bodies to advance the development of convention objectives.
- Update on work regarding the Executive Committee for the *Warsaw International Mechanism of Loss and Damage associated with Climate Change*. Strategic elements of the 5-yr plan continue to be developed to address components of finance, technology, and capacity-building that will underpin support for addressing loss and damage associated with the adverse effects of climate change.

- Gender and climate change initiatives in support of the Convention framework underscore the importance of “gender-responsive climate policies” when progressing the work of the Parties.
- A complete list of decision documents may found [here](#).

Convention on Biological Diversity (CBD)

At the 20th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (25 – 30 April 2016), a series of 15 recommendations were generated to address a variety of current issues. (See [here](#) for a full list.) The subject matter of note contained in the list includes marine debris and invasive species as issues for further consideration.

Montreal Protocol

The U.S. Department of State has announced that agreement has been reached on an amendment to the Montreal Protocol which will phase out the production and international trade of HFCs, commonly used as refrigerants and fire suppression agents.

United Nations Convention on the Law of the Sea (UNCLOS)

Commission on the Limits of the Continental Shelf—December 2014

On 15 December 2014, the Kingdom of Denmark submitted to the Commission on the Limits of the Continental Shelf, in accordance with Article 76, Paragraph 8, of the Convention, information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of its territorial sea is measured in respect of the Northern Continental Shelf of Greenland. It is noted that the Convention entered into force for Denmark on 16 December 2004. According to the submitting State, this is a “partial submission of the Government of the Kingdom of Denmark together with the Government of Greenland.”

On 17 December 2014, the Kingdom of Spain submitted to the Commission on the Limits of the Continental Shelf, in accordance with Article 76, Paragraph 8, of the Convention, information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of its territorial sea is measured in respect of the area west of the Canary Islands. It is noted that the Convention entered into force for Spain on 14 February 1997.

Commission on the Limits of the Continental Shelf—March 2016

The 40th session the commission was held from 1 February to 18 March 2016. Its statement contains an overview of the progress made in the consideration of the submissions made by the following: The Russian Federation, in respect of the Arctic Ocean (partial revised submission); Brazil, in respect of the Brazilian Southern Region (partial revised submission); Uruguay; the Cook Islands, in respect of the Manihiki Plateau; Argentina; Iceland, in respect of the Ægir Basin area and the western and southern parts of Reykjanes Ridge; Norway, in respect of Bouvetøya and Dronning Maud Land; South Africa, in respect of the mainland of the territory of the Republic of South Africa; the Federated States of Micronesia, Papua New Guinea and Solomon Islands, jointly, concerning the Ontong Java Plateau; France and South Africa, jointly, in the area of the Crozet Archipelago and the Prince Edward Islands; Kenya; Mauritius, in the region of Rodrigues Island; Nigeria; and Seychelles, in respect of the Northern Plateau Region.

International Court of Justice (ICJ)

Delimitation of the Continental Shelf between Nicaragua and Colombia by an Order of 19 September 2014,

the International Court of Justice extended time limits for the filing of written pleadings leading to a decision. As of 28 April 2016, the Republic of Nicaragua has received an extension to 28 September 2016 to file its memorial. The Republic of Columbia has been given until 28 September 2017 to file its Counter-Memorial in this case.

Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC)

In April 2016, the Ministers of Cyprus, Greece, and Israel signed a declaration of cooperation to coordinate preparedness efforts in addressing marine pollution concerns. With the rise in hydrocarbon exploitation activities in the south-eastern Mediterranean region, the three countries have submitted a formal request to REMPEC to assist them with the further development of the framework of this agreement.

On 26 May 2016, the UN Environmental Program (UNEP) launched its new updated Marine Litter Assessment for the Mediterranean. Items addressed in the report include, *inter alia*, the tracking of a variety of sources of litter/debris, effects on the marine environment, resource organizations working to combat marine debris, and research to improve data collection.

International Labour Organization (ILO)

Under Article XIII of the MLC 2006, the second meeting (8 – 10 February 2016) of the Special Tripartite Committee under the Convention established a working group to examine issues related to the protection of seafarers' wages when the seafarer is held captive on or off the ship as a result of acts such as piracy or armed robbery, and to prepare proposals including an amendment to the Code of the MLC, 2006, to address these issues:

- To recommend improvements to the process for preparing proposals for amendments to the Code of the MLC, 2006.
- To deliver a report, with recommendations, to be submitted to the third meeting of the STC in February 2018, not later than 9 months before the meeting.

At its 323rd Session (March 2015), the Governing Body decided to constitute an Ad Hoc Tripartite Maritime Committee and convene a meeting of this Committee in 2016 for the amendment of Convention No. 185. The committee adopted the following:

- Proposals for amendments to Annexes I, II, and III of the Convention No. 185
- Resolution on the implementation of the Convention 185, and entry into force of the proposed amendments to its Annexes, including transitional measures
- Resolution on the facilitation of access to shore leave and transit of seafarers

International Maritime Organization (IMO)

23 November – 2 December 2015: Regular Session of the Assembly and Resolutions Adopted (A 29)

The following resolutions were adopted:

Resolution	Title
A.1097(29)	<i>Strategic Plan for the Organization (for the six-year period 2016 to 2021)</i>
A.1098(29)	<i>High-level Action Plan of the Organization and priorities for the 2016-2017 biennium</i>
A.1099(29)	<i>Application of the Strategic Plan and the High-level Action Plan of the Organization</i>
A.1104(29)	<i>Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), 2015</i>
A.1105(29)	<i>2015 Non-exhaustive list of obligations under instruments relevant to the IMO Instruments Implementation Code</i>
A.1106(29)	<i>Revised guidelines for the onboard operational use of shipborne automatic identification systems (AIS)</i>
A.1107(29)	<i>Entry into force and Implementation of the 2012 Cape Town Agreement</i>
A.1108(29)	<i>Amendments to the Recommendations on Pilot Transfer Arrangements</i>

Election of Members of the IMO Council

The following countries elected members to the IMO Council:

- Under Article 17(a)—“Ten shall be States with the largest interest in providing international shipping services”:
China, Greece, Italy, Japan, Norway, Panama, the Republic of Korea, the Russian Federation, the United Kingdom, and the United States
- Under Article 17(b)—“Ten shall be other States with the largest interest in international seaborne trade”:
Argentina, Bangladesh, Brazil, Canada, France, Germany, India, the Netherlands, Spain, and Sweden
- Under Article 17(c)—“Twenty shall be States not elected under (a) or (b) above which have special interests in maritime transport or navigation, and whose election to the Council will ensure the representation of all major geographic areas of the world”:
Australia, the Bahamas, Belgium, Chile, Cyprus, Denmark, Indonesia, Jamaica, Kenya, Liberia, Malaysia, Malta, Mexico, Morocco, Peru, the Philippines, Singapore, South Africa, Thailand, and Turkey

18 – 22 January 2016: Subcommittee on Ship Design and Construction (SDC 3)

Amendments to SOLAS Regulations II-1/6 and II-1/8-1

Building on the Correspondence Group's work completed since MSC95, the subcommittee accomplished the following:

- The subcommittee noted that, due to time constraints, the group was unable to finalize the draft Explanatory Notes to the SOLAS Chapter II-1 subdivision and damage stability regulations. Therefore, the group decided to continue consideration of the draft Explanatory Notes with a view to reporting to SDC 4 and recommended that a Correspondence Group be instructed to further consider this issue with a view to it being finalized at SDC 4.
- In order to further progress the work on this output intersessionally, the subcommittee reestablished the Correspondence Group on Subdivision and Damage Stability (SDS), under the coordination of the United States with a view to finalizing at SDC 4.

Amendments to Part B of the 2008 IS Code on Towing, Lifting, and Anchor Handling Operations

The working group established at SDC 3 addressed the following:

- Draft amendments to the 2008 IS Code regarding vulnerability criteria and the standards (levels 1 and 2) for pure loss of stability and surf-riding/ broaching.
- Draft amendments to the 2008 IS Code regarding vulnerability criteria and the standards (levels 1 and 2) related to dead ship condition and excessive accelerations.
- Explanatory notes for pure loss of stability, parametric roll, surf-riding / broaching, dead ship condition, and excessive accelerations failures

The subcommittee, taking into account the progress made at this session, agreed to reestablish the Correspondence Group on Intact Stability, under the coordination of Japan to continue intersessional work with a report to be produced and presented at SDC 4.

Amendments to Parts A and B of the 2008 IS Code On Towing, Lifting, and Anchor Handling Operations

The subcommittee endorsed the draft amendments to the introduction and part A of the 2008 IS Code regarding vessels engaged in lifting and towing operations, including escort towing, as set out in Annex 4, for submission to MSC 96 for approval with a view to subsequent adoption.

The subcommittee also endorsed the draft amendments to part B of the 2008 IS Code regarding vessels engaged in in lifting and towing operations, including escort towing, as set out in Annex 5, for submission to the Committee for adoption in conjunction with the adoption of the related amendments to the Introduction of the Code (see also Paragraph 7.10).

Work on this output was completed with content readied for consideration by MSC 96.

Revised SOLAS Regulation II-1/3-8 and Associated Guidelines (MSC.1/Circ.1175) and New Guidelines for Safe Mooring Operations for All Ships

A drafting group was convened to further develop comments received in relevant SDC papers in order to develop draft terms of reference for a correspondence group on safe mooring operations.

The drafting group reported on terms of reference which were adopted by the subcommittee. The five ToR elements included consideration for design, operations, selection, and inspection of mooring gear.

The correspondence group will submit a report to SDC 4 for further consideration.

Mandatory Instrument and/or Provisions Addressing Safety Standards for the Carriage of More than 12 Industrial Personnel on Board Vessels Engaged on International Voyage

The subcommittee established an Expert Group on the Carriage of more than 12 Industrial Personnel on Board Vessels Engaged on International Voyages and instructed it, taking into account the comments made

and decisions taken in plenary and documents SDC 3/16, SDC 3/16/1, SDC 3/16/2, SDC 3/16/3, SDC 3/16/4, SDC 3/16/5, SDC 3/16/6, SDC 3/16/7, SDC 3/16/8, SDC 3/16/9, and SDC 3/16/10 to:

- Examine existing national regimes and procedures for transporting industrial personnel.
- Identify possible options for accounting for carriage of industrial personnel via possible modification of existing IMO provisions and/or creation of new provisions.

Much discussion ensued regarding this matter that was compiled into eight options the expert group proposed for further consideration by the committee. Details of these options can be found in Annex 22 of Document SDC 3/21—Report to the Marine Safety Committee. Generally, these options envisioned by the experts group center on possible modifications to the Special Purpose Ship Code to provide for an industrial personnel definition, modification of SOLAS Chapter I definitions, creation of a new SOLAS chapter addressing industrial personnel, and several other derivations of current voluntary and mandatory IMO provisions.

Prior to SDC convening, SDC document 3/16/7 produced by IADC expressed concern that the subcommittee continue to acknowledge the exceptions of Resolutions A.1023(26); the 2009 MODU Code, and A.1079(28); Recommendations for the Training and Certification of Personnel on Mobile Offshore Units (MOUs) in the context of discussing safety standards for the carriage of more than 12 industrial persons. SDC 3/21 continued to uphold this MODU Code exception.

The subcommittee received the results of the expert group into consideration which resulted in the subsequent recommendation that deliberation of these options should be undertaken at MSC 96 with a view to identifying the most prudent manner in which to implement provisions that would account for the carriage of greater than 12 industrial persons.

1 – 5 February 2016: Subcommittee on Human Element, Training, and Watchkeeping (HTW 3)

Report on Model Course Program

The Subcommittee agreed to the following:

- Prioritize categories assigned to model courses that were older than 5 years, taking into account the expert advice and justification of the Secretariat.
- Modify the list of all model courses, which the subcommittee had assigned prioritization Category I (new model courses developed as a result of new or amended IMO instruments) and Category II (existing courses that required significant changes due to amendments or significant industry or technological changes).
- Urge Member States and international organizations to assist the Organization in developing, reviewing, and updating IMO model courses in categories I & II.

Validation of Model Courses

The subcommittee validated the following model courses on:

- Advanced Training for Chemical Tanker Cargo Operations;
- Training for Radar navigation at operational level; and
- Personal safety and social responsibilities

The subcommittee instructed the Secretariat to finalize and publish them, as soon as possible.

Review Groups for Development, Review, and Updating of Model Courses

Review groups for development, review and updating of model courses The subcommittee agreed to the terms of reference for course developers to establish review groups for the following model courses with a

view to validation at the next session:

- Ratings as able seafarer engine in a manned engine-room or designated to perform duties in a periodically unmanned engine room
- Ratings forming part of a watch in a manned engine-room or designated to perform duties in a periodically unmanned engine room
- Assessment, Examination, and Certification of Seafarers
- Training course for Instructors
- Onboard Assessment
- Basic training for masters, officers, and ratings, and other personnel on ships subject to the IGF Code
- Advanced training for masters, officers, and ratings, and other personnel on ships subject to the IGF Code
- Basic training for masters, officers, and ratings and other personnel on ships operating in polar waters
- Advanced training for masters, officers, and ratings and other personnel on ships operating in polar waters
- Ratings as able seafarer deck

Offshore Training and Certification Guidance

The subcommittee agreed that there was an inconsistency in the provisions relating to familiarization training requirements in the STCW Code and in Resolution A.1079(28)—Recommendations for the Training and Certification of Personnel on MOUs.

They therefore recommended a consequential amendment to the Maritime Safety Committee that proposes the deletion of Paragraphs 5.3.3 and 5.3.4 of Resolution A.1079 (28). This amendment will remove the requirement to have familiarization training renewed every 5 years and also deletes the requirement for mariners to hold a certificate of proficiency or other documentary evidence of having completed the familiarization training.

Revision of the Guidelines on Fatigue

The subcommittee agreed that there was general support for amending MSC/Circ.1014, Guidance on Fatigue Mitigation and Management. The subcommittee further agreed that, in line with the proposal in document MSC 95/9/3, a holistic approach should be followed, including taking into consideration the issue of manning as it relates to fatigue, but that manning provisions should not be amended. The subcommittee noted that, owing to time constraints, the group had not been able to complete the review of the proposed amendments to the guidelines and, recognizing the importance of completing this work as soon as possible, it had recommended the establishment of a correspondence group to progress the work intersessionally and submit their report to HTW4.

Revised Guidelines on the Implementation of the International Safety Management (ISM) Code by Administrations

The subcommittee endorsed the draft amendments to the Revised Guidelines on the Implementation of the International Safety Management (ISM) Code by Administrations and the associated draft Assembly resolution (Annex 4), with a view to approval by the Committees.

Review of the MODU Code, LSA Code, and MSC.1/Circ.1206/Rev1

The subcommittee reviewed and decidedly made no changes to the proposed amendments by the Ship Systems and Equipment (SSE) Subcommittee; they agreed to inform the SSE Subcommittee accordingly.

These changes included the following:

- The master should be designated as the Person in Charge (PIC) at all times when using dynamic positioning systems as the sole means of position-keeping.
- The crew who were required to operate shutdown logic systems should be familiarized with the system and should receive appropriate training, and human element aspects should be considered in the design of these systems.

Electro-Technical Officer (ETO) Certification

The subcommittee reminded Administrations that the Electro-Technical Officer (ETO) requirements will come into force on 1 January 2017 and that seafarers serving as ETOs must be trained and certified by then.

15 – 19 February 2016: Subcommittee on Pollution Prevention and Response (PPR 3)

Safety and Pollution Hazards of Chemicals and Preparation of Consequential Amendments to the IBC Code

The subcommittee considered document PPR 3/3/1 (Secretariat) setting out an analysis of the impacts on carriage requirements based on the application of the draft revised Chapter 21 of the IBC Code, commenting on the analysis and highlighting the implications for industry resulting from the proposed amendments.

The subcommittee noted, in particular, that the application of the current draft of revised Chapter 21 of the IBC Code would result in a 64% increase in products that have both safety and pollution aspects; a 145% increase in products requiring controlled venting; a 183% increase in products identified as toxic or flammable/toxic with regard to vapor detection requirements and a 102% increase in products that would now require personal protective equipment, all representing an escalation to more stringent carriage requirements than currently required.

Concern was expressed by a number of delegations with regard to the significant number of products that would now be considered toxic and the associated carriage requirements that would be triggered by this increase.

The subcommittee noted a number of other considerations that were raised, notably the lack of availability of vapour equipment for the full range of toxic products and the need to review the special requirements related to toxic products in Chapter 15 of the IBC Code to determine whether these were still applicable

Having considered the comments and concerns raised, the subcommittee agreed to refer the documents to the ESPH Working Group for further consideration as part of its ongoing work on the revision of Chapter 21 of the IBC Code, taking into account the views expressed in plenary.

Code for the Transport and Handling of Limited Amounts of Hazardous and Noxious Liquid Substances in Bulk on Offshore Support Vessels

The subcommittee established a Working Group on the OSV Chemical Code and instructed it, on the basis of the report of the correspondence group (PPR 3/5/1 and PPR 3/INF.2) and taking into account the outcome of SDC 2, SSE 2 and CCC 2 (PPR 3/5) as well as the comments made in plenary, to:

- Further develop the text of the draft OSV Chemical Code.
- Consider whether the correspondence group needs to be re-established and, if so, develop draft terms of reference for the group.

Having considered an oral report by the Chairman of the Working Group, the subcommittee expressed its appreciation to the group and its Chairman for the progress achieved and noted that a written report, including the draft text of the OSV Chemical Code, would be submitted to PPR 4.

In this connection, the subcommittee noted that the group had finalized Chapters 3 to 9 and 11 to 14 on ship design, special requirements, cargo containment, cargo transfer, cargo tank venting, electrical installations,

firefighting, mechanical ventilation, instrumentation and automation systems, pollution prevention, and personnel protection, respectively, subject to final review by PPR 4; and had further developed Chapters 1, 2, 15, 16, and 17 on general, ship survival capability and location of cargo tanks, operational requirements, back loading of contaminated bulk liquids and discharging/loading of portable tanks on board, respectively.

The subcommittee reiterated its invitation to Member Governments and international organizations to submit relevant data and technical information on the back loading of contaminated bulk liquids to ESPH 22 and PPR 4, with a view to facilitating the development of carriage requirements for contaminated bulk liquids carried on OSVs (see Paragraph 3.25).

The subcommittee re-established the Correspondence Group on the Development of the OSV Chemical Code, under the coordination of Denmark¹, and instructed it to:

- Finalize the text of the draft OSV Chemical Code, on the basis of the text of the Code prepared by the Working Group on the OSV Chemical Code established at PPR 3.
- Submit a written report to PPR 4.

Revised Guidance on Ballast Water Sampling and Analysis

The subcommittee recalled that PPR 2 had agreed to amendments to the Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2) (BWM.2/Circ.42), which were subsequently approved by MEPC 68 and issued as a revision of the Guidance (BWM.2/Circ.42/Rev.1). The subcommittee also recalled that PPR 2 had invited Member Governments and international organizations to submit further information and proposals related to ballast water sampling, analysis and contingency measures to future sessions, with a view to further developing and improving the relevant guidance documents and guidelines.

The subcommittee noted the information regarding a new method for in-line ballast water sampling submitted in documents PPR 3/6 and Corr.1 (Republic of Korea) and the intention of the Republic of Korea to submit draft amendments to the Guidance (BWM.2/Circ.42/Rev.1) to PPR 4, with a view to possible inclusion of the new sampling method. In this connection, the subcommittee agreed that further consideration, in particular regarding the safety aspect of the said sampling method, was needed.

The subcommittee reiterated its invitation to Member Governments and international organizations to submit further relevant information and proposals to future sessions.

Production of a Manual Entitled "Ballast Water Management – How To Do It"

Delegations and observers expressed their general support for the draft manual, while some specific comments and suggestions were made, including the following:

- A need for improvements to Section 9.5 was identified, with regard to a reference to the ISM Code in the context of the approval of ballast water management plans, which was considered not appropriate.
- A similar need was identified to improve Section 9.6 with regard to the requirement for retention on board of the ballast water record book.
- Concerns were expressed regarding non-compliance and resulting actions, in particular the criminalization of seafarers.
- The final text of the manual should ensure consistency with the requirements of the BWM Convention.
- Having considered an oral report of the drafting group having completed its work at this meeting, the subcommittee expressed its appreciation to the group and its Chairman for the progress achieved and noted that the written report of the group, including the draft text of the manual, would be submitted to PPR 4.

Development of Standards for Shipboard Gasification Waste to Energy Systems and Associated Amendments to Regulation 16 of MARPOL Annex VI

After discussion of the development of the subject standards, the subcommittee established a Correspondence Group under the instruction of the U.S. to take into account:

- Further develop draft standards for shipboard gasification waste to energy systems and associated amendments to regulation 16 of MARPOL Annex VI, using Annex 3 to document MEPC 67/16 as the basis.
- Submit a written report to PPR 4.

Amendments to Bunker Delivery Note to Permit the Supply of Fuel Oil Not in Compliance with Regulation 14 of MARPOL Annex VI

During this session, the subcommittee instructed the Working Group on Prevention of Air Pollution from Ships, to finalize draft amendments to appendix V of MARPOL Annex VI, taking into account the comments made in this session's plenary and documents MEPC 68/12/14 and PPR 3/10.

Having considered the relevant part of the report of the working, the subcommittee agreed to draft amendments to appendix V of MARPOL Annex VI, as set out in Annex 3 of the working group report, for submission to MEPC 70 for approval with a view to subsequent adoption.

Guidelines for Onboard Sampling and Verification of the Sulphur Content of the Fuel Oil Used on Ships

The subcommittee instructed the Working Group on Prevention of Air Pollution from Ships, to finalize the draft Guidelines for onboard sampling and verification of the sulphur content of fuel oil used on board ships, taking into account the comments made in plenary and using information prepared for this session (document PPR 3/11) as the basis.

Upon completion of the Working Group deliberations, the subcommittee agreed to the content of the draft MEPC circular on "Guidelines for onboard sampling for the verification of the sulphur content of fuel oil used on board ships," for submission to MEPC 70 with a view to approval.

Updated IMO Dispersant Guidelines

The subcommittee recalled that PPR 2 had established an intersessional correspondence group under the overall coordination of the United States (see Paragraph 14.1), and instructed it, *inter alia*, to develop a draft of part IV of the Guidelines for the use of dispersant for combatting oil at sea (IMO Dispersant Guidelines), devoted to subsea dispersant application.

The subcommittee, having considered the report of the correspondence group, submitted by the United States, noted the progress made on the development of Part IV of the IMO Dispersant Guidelines and instructed the group to continue its work and submit a report to PPR 4, in accordance with the terms of reference agreed at PPR 2.

Unified Interpretations to Facilitate Implementation of the NOx Technical Code 2008 and Resolution MEPC.198(62)

The subcommittee received the report of the Working Group pertaining to the NOx Technical Code and addressed the following items:

- The subcommittee agreed to a draft MEPC Circular on "Unified interpretations to the NOx Technical Code 2008 related to the approval of SCR systems for submission to MEPC 70 for approval.
- The subcommittee agreed to the draft justification for a new output on the revision of the 2011 Guidelines addressing additional aspects to the NOx Technical Code 2008 with regard to particular provisions related to marine diesel engines fitted with Selective Catalytic Reduction (SCR) Systems for submission to MEPC 70 with a view to approval.

29 February to 4 March 2016: Subcommittee on Navigation, Communications and Search and Rescue (NCSR 3)

Routing Measures and Mandatory Ship Reporting Systems

The subcommittee addressed corrections and proposals for ships' routing in areas as follows:

- Off the Netherlands-Belgian coast between West Hinder, North Hinder, and Maas West TSSs
- Amendments to the existing TSSs "In the Approaches to Hook of Holland and at North Hinder"
- Amendments to the existing TSS "At West Hinder" and adjacent routing measures
- Routing measures other than TSS "Approaches to the Schelde Estuary"
- Windfarm Borssele
- Off Cape Leeuwin, Australia
- Corsica Channel
- Inshore traffic zone for the existing TSS "In Bornholmssgat"

Amendment to the General Provisions on Ships' Routing [Resolution A.572(14)] on Establishing Multiple Structures at Sea

On receipt of the relevant part of the working group's report (NCSR 3/WP.4), the subcommittee took action as summarized below:

The subcommittee approved amendments to the General provisions on ships' routing (resolution A.572[14], as amended) on establishing multiple structures at sea and invited the Committee to adopt them with a view to the Assembly's subsequent confirmation.

Recognition of Galileo as a Component of the World-Wide Radio Navigation System (WWRNS)

The subcommittee considered the information provided by Austria on the status and performance of the Galileo GNSS and on the provision of its initial services in view of its recognition as a component of the World-Wide Radio Navigation System (WWRNS).

Additional Modules to the Revised Performance Standards for Integrated Navigation Systems (INS) [Resolution MSC.252(83)] Relating to the Harmonization of Bridge Design and Display of Information

The subcommittee recalled that MSC 95 had agreed to include, in the 2016-2017 biennial agenda of the NCSR Subcommittee and the provisional agenda for NCSR 3, an output on "Additional modules to the Revised Performance standards for Integrated Navigation Systems (INS) relating to the harmonization of bridge design and display of information," with a target completion year of 2017.

The subcommittee had for its consideration information submitted by China (NCSR 3/6/1) and Norway (NCSR 3/6/2), providing comments on the new modules to the Performance standards for Integrated Navigation Systems (INS) and proposing to add new modules on harmonization of bridge design and display of information.

The subcommittee agreed to establish a Correspondence Group on the development of additional modules to the INS performance standards, under the coordination of China, to develop the new draft modules to the INS performance standards, taking into account documents NCSR 3/6, NCSR 3/6/1, and NCSR 3/6/2, as well as any relevant comments provided during the discussions, and submit a report to NCSR 4 for consideration.

Updates to the LRIT System

Ongoing LRIT issues continuing to be addressed by Member Governments:

- Audits of LRIT Data Centres and of the International LRIT Data Exchange

- Second modification testing phase of the LRIT system
- Proposals and recommendations related to the functioning and operation of the LRIT system
- Changes to the periodic rate of transmission of LRIT information
- Member Governments were invited to continue to report on progress of LRIT for consideration at NCSR

Guidelines for the Harmonized Display of Navigation Information Received via Communications Equipment

The subcommittee recalled that MSC 95 had agreed to include, in the 2016-2017 biennial agenda of the NCSR Subcommittee and the provisional agenda for NCSR 3, an output on "Guidelines for the harmonized display of navigation information received via communications equipment," with a target completion year of 2017.

The subcommittee recognized the importance of harmonizing the display of information on board ships to reduce human errors and to contribute to the safety of navigation. The need for coordination between related activities conducted by IHO and IMO was highlighted, including the opportunity for activating the IMO/IHO Harmonization group on Data Modelling, which had been previously authorized by MSC 90.

Norway was invited to coordinate a joint proposal from interested Member Governments and international organizations to NCSR 4 containing draft Guidelines for the harmonized display of navigation information received via communications equipment.

Revised Guidelines and Criteria for Ship Reporting Systems

The subcommittee recalled that MSC 95 had agreed to include, in the 2016-2017 biennial agenda of the NCSR Subcommittee and the provisional agenda for NCSR 3, an output on "Revised guidelines and criteria for ship reporting systems with a target completion year of 2017.

Revision attributes for consideration were as follows:

- The use of different communication means for the efficient, cost-effective, and secure transfer of information
- The harmonization of data transfer and formats
- The automated or semi-automated collection and integration of information available on board from different systems and equipment for reporting, including the use of existing technologies (e.g., AIS)
- The possible use of a single point of communication for ship reporting to avoid having the ship to communicate through different systems in different formats (e.g., different National Single Window implementations)
- The reduction of administrative burden on board the ship
- Delegations expressed concerns moving toward totally automated reporting, and were of the view that to some extent the possibility of verbal reporting should be retained. Consequently, the subcommittee agreed to forward proposal documents (NCSR 3/10/1 & NCSR 3/10/2) and the above comments to NCSR 4 in order to promote their consideration together with any additional proposals that might be submitted. The subcommittee also invited additional Member Governments to submit proposals for consideration at NCSR 4.

Performance Standards for Shipborne GMDSS Equipment to Accommodate Additional Providers of GMDSS Satellite Services

The subcommittee noted that MSC 95 agreed to include, in the 2016-2017 biennial agenda of the NCSR Subcommittee and the provisional agenda for NCSR 3, an output on "Performance standards for ship-borne GMDSS equipment to accommodate additional providers of GMDSS satellite services", with a target completion year of 2016.

The subcommittee endorsed the deliberation of the subject Working Group:

- Member Governments were invited to submit views on this matter for consideration at NCSR 4.
- The U.S. plans to coordinate an intersessional group to further work on these performance standards and welcomed members interested in participating.

The subcommittee agreed to invite the Committee to extend the target completion year for this output to 2017.

7 – 11 March 2016: London Convention/London Protocol Scientific Group (LC SG 39/LP SG 10)

Reporting on Dumping Activities

Dumping initiatives of particular focus were as follows:

- Collaboration with/among other international bodies providing countries the opportunity to either report directly to the IMO, or to report to IMO via established regional bodies
- Review of historical dumping records and case studies that may provide insight for identifying trends and opportunities for focusing the Scientific Groups efforts in further managing future permitting processes

Monitoring and Assessment of the Marine Environment

The Scientific Groups approved the report of this session's Working Group to forward the draft low cost, low technology compliance monitoring guidance for approval at the next meeting in September 2016.

Coastal Management Issues Associated with Activities to Prevent Marine Pollution

The Riverine and subsea disposal of tailings and associated wastes from mining operations correspondence group was reestablished at this session to continue collecting information on best practices and existing guidance from around the world to support initial terms of reference work by GESSAMP. Such work will seek to identify effects of tailings disposal on the marine environments.

Underwater Noise from Anthropogenic Sources

It was noted that a proposal to evaluate the contribution of merchant ships and other sources of underwater noise was brought forth at MEPC 68. The Committee decided more information was required to fully consider the need to take up acceptance of this output. The Scientific Groups at this session noted the release of the inaugural newsletter from IOGP regarding the Sound & Marine Life Joint Industry Programme (JIP). The JIP has committed \$55 million in funding and has contracted in excess of 70 studies in support of exploring the effects of anthropogenic noise sources.

14 – 18 March 2016: Subcommittee on Ship Systems and Equipment (SSE 3)

Safety Objectives and Functional Requirements of the Guidelines on Alternative Design and Arrangements for SOLAS Chapters II-1 and III

The subcommittee recalled that MSC 95 had agreed that a new work plan be taken up for the development of functional requirements of SOLAS Chapter III only, as set out in Paragraph 12.7 of Document MSC 95/22; Report to the Maritime Safety Committee (MSC 95) and established a working group on Life-Saving Appliances.

The working group deliberations concluded that continued efforts, at this stage, should be focused only on SOLAS Chapter 3 despite the potential for overlap with other SOLAS chapters.

The subcommittee invited MSC 96 to endorse its support for the working group's draft recommended functional requirements for SOLAS Chapter 3 as set out in Annex 1 of SSE/3/16; Report to the Maritime Safety Committee.

A Correspondence Group was established by the subcommittee to continue this work in formulating functional requirements and expected performance of such requirements to result in a report of further progress to be submitted to SSE 4 in March 2017.

Making the Provisions of MSC.1/Circ.1206/Rev.1 Mandatory

The subcommittee recalled that MSC 95, bearing in mind the importance of the issue on periodic servicing and amount of work to be done, had agreed to re-establish the original output on "Making the provisions of MSC.1/Circ.1206/Rev.1 mandatory" and had instructed SSE 3 to review: the draft MSC resolution set out in Annex 1 to document MSC 93/3/4, taking into account circulars MSC.1/Circ.1206/Rev.1 and MSC.1/Circ.1277 and that the annual thorough examination should be carried out by the manufacturer or a service provider authorized by the Administration, including the understanding that a service provider may be an entity other than the manufacturer (e.g. ship operator complying with the relevant criteria); SOLAS regulations III/20 and III/36; and MSC.1/Circ.1205, for the purpose of consistency with the draft MSC resolution.

Upon further discussion at SSE 3 prior to the LSA working group deliberation, the subcommittee agreed that:

- A service provider, other than the original equipment manufacturer (OEM), can be authorized by the Administration;
- The OEM need not be authorized; and
- The extent of authorization of service providers must be specified in the draft MSC resolution.

The subcommittee noted the conclusions of the working group as follows:

- Endorsed the draft amendments to SOLAS regulations III/3 and III/20, as set out in Annex 2, for submission to MSC 96 for adoption.
- Endorsed the draft MSC resolution on Requirements for maintenance, thorough examination, operational testing, overhaul, and repair of lifeboats and rescue boats, launching appliances, and release gear, as set out in Annex 3, for submission MSC 96 for adoption.
- Further review of draft amendments to MSC.1/Circ.1205 is necessary with member governments invited to submit comments to affirm proposed amendments at SSE 4.
- The subcommittee requested the Committee to extend the target completion year for this output to 2017.

Review of the MODU Code, LSA Code, and MSC.1/Circ.1206/Rev.1

The subcommittee noted the following Correspondence Group conclusions leading up to SSE 3 as directed by SSE 2 and MSC 95 to consider:

- The views expressed on the proposal to increase the occupant weight and seating radius for lifeboat installed on MODUs were split.
- By including any MODU-related amendments in IMO instruments falling under the SOLAS Convention, they will become mandatory and any future amendments to these MODU-related provisions will need to comply with SOLAS Article VIII (Amendments), taking into account that the MODU Code is a non-mandatory instrument. This would set a precedent by developing mandatory provisions for MODUs, most of which are regulated by national laws and/or regional agreements.

The subcommittee instructed the LSA working group to consider:

- Draft amendments in Annex 1 to document SSE 3/5, the report of the correspondence group.
- Draft amendments to Chapters 10 and 14 of the 2009 MODU Code set out in Annex 2 to document SSE 3/5.

- Further consider the issue of the occupant weight and seating radius for lifeboat installed on MODUs.
- Advise the subcommittee on how best to proceed.

Working group deliberations yielded the following based on documents SSE 3/5 and 3/5/1:

- No amendments to MSC.1/Circ.1206/Rev.1 are necessary, but the introduction of such draft amendments into chapter 14 of the 2009 MODU Code is more suitable.
- The introduction of the draft amendments to the 2009 MODU Code proposed by the correspondence group (SSE 3/5, Annex 2, Paragraphs 12 to 14, 18, 19, and 22 to 23) has been unanimously agreed by the group.
- The discussion on the issue of the occupant weight and seating radius for lifeboat installed on MODUs has not been concluded by the group and, therefore, further consideration by the subcommittee is necessary.
- A majority of the group welcomed the proposed increase in occupant weight and also the possibility to further adjust the average weight if necessary.

Following discussion, the subcommittee endorsed the draft amendments to the 2009 MODU Code, as set out in Annex 6 to document SSE 3/WP.3.

In view of the above, the subcommittee requested the Committee to extend the target completion year for this output to 2017.

Further Work on Review of the 2009 MODU Code

Taking into account the relevant parts of the reports of the LSA Working Group (SSE 3/WP.3) and the Working Group on Fire Protection (SSE 3/WP.4), the subcommittee decided that further Correspondence Group review of the MODU and LSA Codes and MSC.1/Circ.1206/Rev.1 was not necessary. Instead, the delegation of the Marshall Islands volunteered to submit a consolidated text of the draft amendments to the 2009 MODU Code for consideration at SSE 4.

Development of Life Safety Performance Criteria for Alternative Design and Arrangements for Fire Safety (MSC/Circ.1002)

Taking into account the previous work completed at SSE 2 and the resulting re-establishment of the Correspondence Group, the group submitted a report to SSE 3 that contained the following highlights:

- The coordinator could not conduct the business of the correspondence group due to a heavy workload. However, since the coordinator has been involved in the recent development of the ISO standards on fire safety engineering, he has developed an investigation report for the determination of life safety criteria for alternative design and arrangements for fire safety, based on various ISO standards the life safety performance criteria are intended for Administrations to use uniformly to achieve minimum acceptable levels of safety in conformity with the fire safety objective "to reduce the risk to life caused by fire"; however, since they are minimum performance criteria (i.e. the minimum standardized thresholds to maintain public safety wherever deviations from the prescriptive rules are requested), they will not restrict Administrations that may want to establish more conservative or more comprehensive standards.
- Application of alternative design and arrangements for fire safety should be considered as an objective for the development of life safety performance criteria, and criteria value and determination methods should facilitate application and operation, rather than prolong the process by being complicated and theoretical.

Instructions to the Working Group on Fire Protection were to finalize the draft guidelines based on text proposed in Annex 1 of Document 3/6/1 (U.S. submission).

The Working Group deliberations resulted in draft amendments to the *Guidelines on alternative design and arrangements for fire safety* (MSC/Circ.1002) and the associated draft MSC circular, as set out in Annex 4 of SSE 3/16 for submission to MSC 97 for approval.

Measures for Onboard Lifting Appliances and Winches

Considering recommendations made at SSE 2 and MSC 95, including the decision of the subcommittee to re-establish the Correspondence Group, the CG provided its report highlighting subsequent progress to SSE 3 as follows:

- Further consideration is necessary of the definition of onboard lifting appliances and winches; the issue of the personnel transfer; the use of the expressions "codes or standards acceptable to the Organization" or "the guidelines developed by the Organization" and "in accordance with" or "based on"; the procedure in terms of inspection; whether the operations manual requires approval; and the threshold limit of safe working load (SWL).
- Further modification of the draft Guidelines for safety onboard lifting appliances and winches may be necessary after finalization of the definition of lifting appliances and winches and the scope of the guidelines.

The subcommittee noted the general comments expressed on this matter:

- A number of delegations expressed concern regarding the outcome of the correspondence group's work related to the draft goal- and function-based SOLAS regulations. In their view this could be a very simple issue of referring to the requirements of a classification society recognized by the Administration (i.e. similar to SOLAS regulation II-1/3-1).
- Issues related to anchoring and mooring were outside of this output, but anchor-handling winches need to be included.
- Development of provisions for onboard lifting appliances and for winches should not be separated.

Upon the subcommittee establishing a Working Group, the group conducted its deliberations with the following results:

- The goals and functional requirements need to be further developed by a correspondence group.
- The discussion on the potential content of the guidelines was premature and it should be considered once the draft goals and functional requirements are further developed.
- If the draft functional requirements are properly addressed in the draft goals, there will be no need for additional guidelines to a goal- and function-based SOLAS regulation.
- The WG was unable to generate a comprehensive list of goals and functional requirements due to time limitations.

The subcommittee invited interested Member Governments and international organizations to submit proposals on which chapter of SOLAS should be amended to SSE 4.

The subcommittee reestablished the Correspondence Group with a focus on:

- Preparing draft goal and function based SOLAS regulations
- Developing a list of industry codes/ standards
- Preparing a report for submittal to SSE 4

Amendments to the Guidelines for Vessels with Dynamic Positioning (DP) Systems (MSC/Circ.645)

Upon establishing a Correspondence Group at SSE 2, the subcommittee directed the CG to prepare draft amendments to affect an update to MSC/Circ.645.

The Correspondence Group's subsequent report at SSE 3 highlighted the following which was endorsed by

the subcommittee:

- Refrain from including specific references to exemptions or exclusions as Circ. 645 is a guidance document.
- Draft guidelines should be issued as a new set of guidelines.
- Recommend inclusion of a section on training.
- Recommend guidelines apply to vessels and units constructed on or after an agreed date.

Due to time constraints, the subcommittee did not convene a Working Group for this item.

The subcommittee re-established a Correspondence Group limiting additional work to considering only existing proposed amendments such that a report may be provided to SSE 4 with plans to complete this output to 2017.

4 – 8 April 2016: Facilitation Committee (FAL 40)

Comprehensive Review of the Facilitation Convention

The Committee unanimously adopted the report of the drafting group's recommendations for updates to the following sections of the FAL Convention for entry into force on 1 January 2018, unless, prior to 1 October 2017 at least one-third of the Contracting Governments have notified the Secretary-General in writing that they do not accept the amendments.

- Definitions
- General provisions
- Arrival, stay, and departure of the ship
- Arrival and departure of persons
- Stowaways
- Arrival, stay, and departure of cargo and other articles
- Public health and quarantine, including sanitary measures for animals and plants
- Miscellaneous provisions

See Annex 1 of the report for details [here](#).

Application of the Maritime Single-Window (MSW) Concept

The Single Window Concept envisages the facilitation of international commerce by implementing a common platform arrangement making international trading more efficient. This objective seeks to optimize and make more efficient, the necessary administration of documentation associated with international trade.

The subject Working Group was convened to accomplish the following:

- Consider the issue of harmonization and standardization of data reporting formats between different existing maritime single windows platforms and advise, as appropriate.
- Recommend the way forward for the development of the maritime single window prototype; and define the scope of the project and of the prototype system, the high-level system's functional requirements.
- Advise on the re-formatting of FAL.5/Circ.40, IMO Compendium on Facilitation and Electronic Business as appropriate.

Due to the intricate nature of the subject matter considered to date, the Committee noted that further deliberation of this issue would be necessary in the areas of:

- Harmonization and standardization of data reporting formats
- Maintenance of the IMO Compendium on facilitation and electronic business

The further consideration of this matter will be revisited at FAL 41.

Requirements for Access to, or Electronic Versions of, Certificates and Documents, including Record Books Required to be Carried on Ships

The Committee charged the Working Group at this session to address the following:

- Finalize the Guidelines for use of electronic certificates and advise on the future of the guidelines.
- Finalize the proposed amendments to resolution A.1052(27), Procedures for port State control, 2011 aimed at promoting wider acceptance of electronic certificates.

The Committee endorsed the work of the Working Group and approved FAL.5/Circ.39/Rev.2, on the *Guidelines of the use of electronic certificates*. Member states issuing electronic certificates were invited to share their experiences via submission to FAL 41 for further consideration.

The Committee approved the draft amendments to resolution A.1052(27) on *Procedures for port State control* with a view to Assembly submittal for adoption.

Measures to Protect the Safety of Persons Rescued at Sea

Noted concerns for Industry guidance on large-scale rescue operations at sea were expressed by delegations as follows:

- Unsafe mixed migration by sea remained a matter which should stay high on the Organization's agenda.
- The rescue of migrants at sea, in particular, in the Mediterranean was still a major problem and many organizations, including IMRF and FRONTEX were assisting the local rescue services.
- Ships and crew, called to assist in these rescue operations, should be protected from danger and offered support.
- There was a need for greater effort by coastal States of departure to better manage and ultimately prevent the departure of unsafe craft in undertaking such dangerous voyages from their respective shores.

Guidelines on Minimum Training and Education for Mooring Personnel

The Committee established a working group to prepare, and subsequently approved the final draft of FAL.6/Circ.11/Rev.1 on Guidelines on minimum training and education for mooring personnel.

18 – 22 April 2016: Marine Environmental Protection Committee (MEPC 69)

Consideration and Adoption of Amendments to Mandatory Instruments

The Committee recalled that MEPC 68 had considered and approved draft amendments to appendix I of MARPOL Annex II, related to the revised GESAMP Hazard Evaluation Procedure, with a view to adoption at this session. The resulting entry-into-force date should be 1 September 2017.

The Committee recalled that MEPC 68 had considered and approved draft amendments to MARPOL Annex VI related to record requirements for operational compliance with NOx Tier III emission control areas, with a view to adoption at this session, as set out in the annex to document MEPC 69/3/1. The resulting entry-into-force date should be 1 September 2017.

The Committee recalled that MEPC 68 had considered and approved draft amendments to the NOx Technical Code 2008 related to the testing of gas-fueled and dual fuel engines for the NOx Tier III strategy, with a view to adoption at this session, as set out in the annex to document MEPC 69/3 (Secretariat). The resulting entry-into-force date should be 1 September 2017.

Harmful Aquatic Organisms in Ballast Water

The Committee noted that the number of Contracting Governments to the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (BWM Convention) on 18 April 2016 was 49, representing 34.79% of the world's merchant fleet tonnage. The Committee urged those States which have not yet ratified the Convention to do so at the earliest possible opportunity.

The Guidelines (G8) continue to be evaluated at several levels, most notably as to how the issue of “most probable number” and a definition for recognizing the criteria that defines a “viable organism” may further dictate development of performance requirements.

The Roadmap for implementation of the Ballast Water Management Convention will be entertained further at MEPC 70. The Committee deferred consideration of exceptions and exemptions under the BWM convention to be further examined at MEPC 70. Note: On 8 September 2016, Finland deposited its instrument of ratification bringing the world's tonnage currently signatory to the BWM Convention to over 35%. Thus, the effective implementation date of the convention has been established as 8 September 2017.

11 – 20 May 2016: Maritime Safety Committee Meeting (MSC 96)

Measures to Enhance Maritime Security

Acknowledging general support for finalizing maritime security guidance at this session, the Committee established a working group to take into account the following:

- Increasing use of technologies potentially subject to cyber threats
- Creating a “live” document amenable to continual update to account for latest developments/threats
- Leveraging work of other standards bodies such as ISO and ITU
- Establishing a policy decision to focus on a broader cyber risk scope vice cyber security

The Committee consequently accepted the report upon completion of the working group with the following results:

- Approval of MSC.1/Circ.1525 on Guidance for the development of national maritime security legislation to provide member states guidelines on which national provisions could be based
- Approval of MSC.1/Circ.1526 on Interim guidelines on maritime cyber risk management intended to raise awareness of cyber risk threats and vulnerabilities

The Committee encouraged Member States and interested international organizations to bring relevant issues to the attention of the Committee at MSC 97 to further evaluate the efficacy of the interim guideline content.

Goal-Based New Ship Construction Standards

The Committee recalled MSC 95 progress on the *Interim guidelines for the development and application of IMO goal-based standards safety level approach* and invited Member States and international organizations to submit concrete GBS-Safety Level Approach (SLA) examples of SOLAS Chapter III and comments and proposals on the draft interim guidelines to this session.

Committee expectations for MSC 96 were to continue work on further development of this goal-based standards/safety level approach whereupon a GBS Working Group was established.

Upon completion of the Working Group deliberations, the Committee approved the report which resulted in the following additional progress:

- The Committee endorsed the draft functional requirements for SOLAS Chapter III, as contained in annex 1 of the SSE 3 Report to MSC 96 with a view that the final outcome of the development of the

functional requirements of SOLAS Chapter III would be further considered at MSC 98.

- The Committee endorsed the work of the Correspondence Group established at SSE 3 to continue to refine functional requirements and develop expected performance for each functional requirement identified.

Items anticipated for further consideration by a MSC 97 Working Group include, *inter alia*:

- Continuous process improvement
- Need for proactive approach
- Additional submissions from Member States and International Organizations

The Committee re-established a Correspondence Group to continue intersessional work in preparation for MSC 97.

Mandatory Instrument and/or Provisions Addressing Safety Standards for the Carriage of more than 12 Industrial Personnel on Board Vessels Engaged on International Voyages.

At MSC 95, the Committee agreed to consider a new output for the “mandatory provisions to address the carriage of more than 12 industrial personnel engaged on international voyages.” Consequently, this issue was placed on the agendas of SDC 3 and MSC 96 to facilitate the subject output.

Begun as a means to address the carriage of offshore windfarm installation personnel, the effort has broadened in scope to include all ships engaged on international voyages.

Several options have been posited for amending existing IMO provisions to satisfy this issue. However, consensus has gravitated towards the creation of a new chapter in SOLAS with a corresponding new code to be developed based on elements of the Special Purpose Ship (SPS) Code and the High Speed Craft (HSC) Code.

Current discussion continues to intentionally exclude offshore personnel working on board MODUs as defined in A.1079(28)—*Recommendation for the Training and Certification of Personnel on Mobile Offshore Units (MOUs)*.

The Committee agreed the number of industrial personnel being transported should be the basis for applying the new SOLAS requirements to be developed (vs. tonnage applicability as with cargo ships).

The Committee established a working group and subsequently approved its report in general noting, *inter alia*, the following points:

- The term "industrial activities" was not defined; therefore, it should be further considered.
- Many of the ships that will transport or accommodate industrial personnel will not be engaged on international voyages and thus they are not covered by international instruments.
- The use of exemptions and equivalents, under SOLAS regulations I/4 and I/5, respectively, is highly problematic as these regulations were never intended to allow for the replacement of the entire standard to which a ship is built and, more importantly, are not implemented as such by flag State Administrations.

Noting the complex nature of the legal issue pertaining to some Member States desiring to exercise SOLAS regulations I/4 and I/5 despite expressed concerns, the committee agreed this matter should be added to the agenda for MSC 97 for further consideration.

Outcome of FAL 40

With regard to the draft amendments to the *Procedures for port State control, 2011* [Resolution A.1052(27)], aimed at promoting wider acceptance of electronic certificates as approved by FAL 40, the Committee instructed III-3 to consider draft amendments in the context of its ongoing comprehensive review.

The delegation of Denmark made a statement regarding its decision to discontinue the issuance of flag State paper certificates. Accordingly, all ships flying the Danish flag will be issued with certificates in an electronic format. When existing certificates expire such documentation will be re-issued via electronic means.

Ship Design and Construction – Report of the Third Session of the Subcommittee

The Committee approved MSC.1/Circ.1544 on Unified interpretations for the application of Chapter 2 of the 2009 MODU Code and the Revised technical provisions for means of access for inspections [Resolution MSC.158(78)].

Human Element, Training, and Watchkeeping

The Committee, noting that MEPC 69 had approved the draft Assembly resolution related to the revision of the guidelines on the implementation of the ISM Code, subject to concurrent decision by MSC 96, approved the draft Assembly resolution on *Revised guidelines on the implementation of the ISM Code by Administrations* for submission to the thirtieth session of the Assembly for adoption.

Navigation, Communications, Search, and Rescue

The Committee noted that the World Meteorological Organization (WMO) was conducting its Marine Meteorological Monitoring Survey 2016, and had requested the Secretary-General to encourage Member States and international organizations to invite users to participate in the online survey. Accordingly, the Committee urged Member States and international organizations to invite users to participate in the online survey [here](#).

Piracy and Armed Robbery against Ships

The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia – Information Sharing Centre (ReCAAP-ISC) had released a new regional guide to counter piracy and armed robbery against ships in Asia.

The Committee urged Member States to:

- Provide information to the Organization on national points of contact for communication of information on piracy and armed robbery using the Contact Points module of GISIS.
- Continue to report information on piracy and armed robbery incidents through the Secretariat (marsec@imo.org), using the reporting form set out in appendix 5 of MSC.1/Circ.1333/Rev.1.

Unsafe Mixed Migration by Sea

The Committee, having considered document MSC 96/WP.12, approved MSC.1/Circ.896/Rev.2 on Interim measures for combating unsafe practices associated with the trafficking, smuggling or transport of migrants by sea.

Work Programme

Working and drafting groups intended for MSC 97 provisionally include:

- Goal-based standards
- Maritime security
- Carriage of industrial personnel
- Consideration and adoption of amendments to mandatory instruments

4 – 8 July 2016: Council (C 116)

Consideration of the Report of the Maritime Safety Committee

The Council endorsed:

- The new outputs agreed at the session for inclusion in the High-level Action Plan and priorities for

the 2016-2017 biennium; and

- The intersessional meetings approved for 2016 and 2017.

The Council approved the report of the ninety-sixth session of the Maritime Safety Committee in general and decided to transmit it, together with its comments and recommendations, to the thirtieth session of the Assembly, in accordance with Article 21(b) of the IMO Convention.

Consideration of the Report of the Facilitation Committee

The Council approved the report of the fortieth session of the Facilitation Committee in general and decided to transmit it, together with its comments and recommendations, to the thirtieth session of the Assembly, in accordance with Article 21(b) of the IMO Convention.

Consideration of the Report of the Marine Environment Protection Committee

The Council noted the concerns expressed by several delegations at MEPC 69 on how the Committee's deliberations under the agenda item on "Reduction of GHG emissions from ships" had been reported by NGOs and the media as well as the information provided orally by the Secretary-General on the follow-up action taken by the Secretariat in this regard.

The Council expressed its appreciation for the action already taken and requested the Secretary-General to send a letter to the relevant NGO and media outlet and to issue a circular letter to all Member States, NGOs in consultative status and IGOs reinforcing the need to adhere to the Organization's terms and conditions for media attendance at meetings, and the prohibition to record and broadcast deliberations during meetings.

The Council endorsed the holding of an intersessional meeting of the Working Group on Review of the Guidelines for approval of ballast water management systems (G8), to be held during the week preceding MEPC 70 (24 to 28 October 2016); and of the ESPH Working Group, to be held in 2017.

The Council approved the report of the sixty-ninth session of the Marine Environment Protection Committee in general and decided to transmit it, together with its comments and recommendations, to the thirtieth session of the Assembly, in accordance with Article 21(b) of the IMO Convention.

Relations with Intergovernmental Organizations

The Council noted the information provided orally by the Secretary-General on relations with intergovernmental organizations, in particular that the formal procedures for the signing of the Agreement of Cooperation between IMO and the International Seabed Authority were complete.

8 – 10 June 2016: Legal Committee (LEG 103)

Facilitation of the Entry into Force and Harmonized Interpretation of the 2010 HNS Protocol

The committee acknowledged the as yet ratified 2010 Hazardous and Noxious Substances by Sea (HNS) Convention as the remaining gap in the global framework of liability and compensation conventions.

The need exists to establish an internationally coordinated approach to see implementation of the convention.

The Committee finally considered document LEG 103/3/2 (Canada, Norway, and Turkey) introducing the principles and concept of a potential resolution on the implementation and entry into force of the 2010 HNS Protocol.

The Committee noted that the HNS Correspondence Group had identified three specific items that could be further developed by the group, if its mandate was extended, namely "HNS Incident Scenarios"; a resolution on the implementation and entry into force of the 2010 HNS Protocol; and a program for a workshop in conjunction with the 104th session of the Committee. In this regard, the Committee was invited to extend the mandate of the HNS Correspondence Group until the next session of the Committee and to hold a workshop in conjunction with that session.

LEG 104 should decide on the nature of the resolution, specifically whether it should be adopted by LEG or by the Assembly.

Under the coordination of Canada, the Committee extended the Correspondence Group until LEG 104.

The Committee encouraged Member States to ratify and bring into force the 2010 HNS Protocol as soon as possible.

Fair Treatment of Seafarers in the Event of a Maritime Accident

The Committee recalled that, at its 102nd session, it further analyzed the outcome of a survey concerning the implementation of the 2006 Guidelines on fair treatment of seafarers in the event of a maritime accident (the Guidelines) (LEG 102/4).

ITF was recognized for its additional analysis of the survey related to the guidelines.

The Committee concluded that the different approaches in the implementation of the Guidelines could be streamlined through the development of guidance and therefore decided that the workshop proposed by ITF would be useful to provide assistance to Member States to give effect to the Guidelines in a uniform and consistent way. The Committee further invited Member States to continue to comply with the Guidelines.

Piracy

The Committee noted that no submissions relating to this agenda item had been received at this session.

It was further noted that all counter-piracy initiatives undertaken by the Maritime Safety Division of IMO and any developments related to Output 6.2.1.1 on "Consideration and analysis of reports on piracy and armed robbery against ships" have been and will continue to be reported to MSC under agenda item "Piracy and armed robbery against ships."

The Secretariat pointed out the following:

- There was no consistent practice by flag States regarding the provision of information to the seafarer's State on rescue operations, no medical support to seafarers in captivity, and no assistance from flag States to ensure that ship owners continue to pay the seafarers' wages.
- The short duration of seafarers' contracts, usually 3 to 6 months, often meant that contracts would run out during the captivity of the seafarer and ship owners would not feel contractually obliged to continue paying the wages.

The committee invited the Indian delegation to submit a document addressing these issues to LEG 104 for further consideration.

Technical Cooperation Activities Related to Maritime Legislation

The Secretariat introduced document LEG 103/9 reporting on IMO's technical cooperation activities related to maritime legislation for 2015 which emphasized:

- The outcome of the member States Audit Scheme and assistance Member States may require to bring IMO instruments into force via domestic legislation
- The promotion of a wider acceptance of the limitation of liability and compensation conventions

The International Maritime Law Institute reported on IMLI activities for the year 2015.

The Director of the International Tanker Oil Pollution Liability and Compensation Funds reported on the work that it had carried out in cooperation with IMO and regional organizations to promote the accession to, and implementation of, the 1992 CLC and the 1992 Fund Convention during the biennium 2014-2015.

Review of the Status of Conventions and Other Treaty Instruments Emanating from the Legal Committee

The U.S. provided contact details of the designated authority to receive and respond to requests for assistance, confirmation of nationality, and authorization to take appropriate measures (circular SUA.3/Circ.38) after last year's ratification of the 2005 Protocol for the Suppression of Unlawful Acts (SUA)

against the safety of maritime safety and SUA against the safety of Fixed Platforms located on the Continental Shelf (SUA PROT).

Japan encouraged other member states to ratify and implement the Limits of Liability for Maritime Claims (LLMC) Protocol.

The Committee encouraged delegations to work with their respective Governments towards achieving effective and uniform implementation of IMO conventions and to report any barriers to implementation to LEG for advice and guidance.

18 – 22 July 2016: Implementation of IMO Instruments (III-3) Subcommittee

Consideration and Analysis of Reports on Alleged Inadequacy of Port Reception Facilities

Outcome of MEPC 69:

MEPC 69 had deleted the item on "Inadequacy of reception facilities" from the Committee's agenda since the biennial agenda of the III-3 Subcommittee includes the item "Consideration and analysis of reports on alleged inadequacy of port reception facilities" and the outcome of the subcommittee meetings will be considered by the Committee.

Annual enforcement reports on port reception facilities for 2015:

- It was recognized that compliance of ships with the discharge requirements of MARPOL depends largely on the availability of adequate port reception facilities, especially within Special Areas. Thus, the Governments of each Party where such conditions exist shall notify the Organization, for transmission to the Parties concerned, of all cases where the facilities are alleged to be inadequate.
- Document III-3/3 contains a summary of enforcement reports on port reception facilities for reporting year 2015:
 - 86 cases of alleged inadequacies reported
 - 7 flag States, 1 associated member, two territories of the UK reported
 - The subcommittee reminded member states of their duty to respond to flag administrations bringing forth claims concerning inadequate port reception facilities
- Availability of adequate port reception facilities:
 - Bulk carriers most affected by limited availability of adequate port reception facilities
 - The IMO Member State Audit Scheme (IMSAS) was not the right tool to address specific items like the availability of PRF
 - The IACS Quality System Certification Scheme (QSCS) could be introduced to address similar problems

Lessons Learned and Safety Issues Identified from the Analysis of Marine Safety Investigation Reports

The subcommittee considered the report of the Correspondence Group on Casualty Analysis (III 3/4) and noted the casualty-related outcome of other IMO bodies as referenced in Documents III 3/2 and Add.1, III 3/2/1, and III 3/2/2 and Add.1.

Casualty elements for consideration at this session included the following:

- Dissemination of lessons learned from marine casualties and access to reports of investigation into casualties
- Use of accident data in IMO instruments
- Establishment of the working group on casualty analysis

- Dissemination of the Countries Survey Questionnaire

Taking into account the work completed at this session, the subcommittee established the Correspondence Group on Casualty Analysis, under the coordination of the United Kingdom to continue work intersessionally with the objective of providing a report to III 4.

Measures to Harmonize Port State Control (PSC) Activities and Procedures Worldwide

Activities under this agenda item having been considered at previous sessions and by the working group initiated at this session continued to address:

- Establishing guidelines and procedures for port state control for consideration towards updating A.1052(27) on *Procedures for port State control, 2011*
- Promoting wider acceptance of electronic certificates
- Amending STCW to account for masters and mates polar water qualifications
- Verifying container gross mass
- Consideration of MARPOL Annex VI regarding energy efficiency and port state control verification
- Development of guidelines for port state control officers on the ISM Code
- Development of guidelines for port state control officers regarding certification of seafarers hours of rest and manning
- Performance flag administrations and recognizing organizations
- Providing transparency and harmonization of PSC information

Progress achieved through this session is detailed in *the Report to the Maritime Safety Committee and The Marine Environment Protection Committee* Document III 3/14.

The subcommittee, taking into account the work completed or progressed at this session, as well as the potential need to further consider issues relevant to the review of the Procedures for PSC, e.g. the outcome of SSE 3 (see Paragraph 2.3) and the examination of the method of structural protection on board passengers ships (Paragraph 6.2 of appendix 6 of the Procedures for PSC), established the Correspondence Group on Measures to harmonize port State control (PSC) activities and procedures worldwide, under the coordination of the European Commission to continue its work intersessionally with a report on continued progress to be delivered to III 4.

Consideration of Consolidated Audit Summary Reports

Analysis of audit summary reports was undertaken to address issues encountered by member states in implementing mandatory IMO instruments

The subcommittee established a working group to consider/analyze challenges to areas which lack effectiveness in the implementation and enforcement of relevant IMO instruments.

- Conclusions yielded the identification of five majors areas where further redress is considered necessary:
 - Flag surveyor competence – documented system for qualification
 - Delegation of authority – lack of oversight program for ROs
 - Initial actions/legislation – Member State domestic adoption of mandatory IMO instruments
 - Implementation – absence of national guidance for IMO requirements left to the “satisfaction of the administration”
 - Enforcement – lack of control and/or monitoring programmes

- Four main root causes contribute to these five areas:
 - Absence/lack of national provisions and ability to promulgate internal directives/national legislation
 - Lack of structure for policies and procedures/documented processes
 - Management systems/lines of authority/coordination among national organs
 - Implementation inadequacies associated with absence of technical guidance/records/databases/technical capabilities
- Technical assistance programs and other support functionality provided by IMO was explored by the subcommittee.

The subcommittee suggested that review of consolidated audit summary reports (CASRs) should be continued for further analysis of the outcome of mandatory audits.

Updated Survey Guidelines under the Harmonized System of Survey and Certification (HSSC)

Exemption of unmanned non-self-propelled barges from survey and certification requirements under the MARPOL convention:

- The Subcommittee recalled that III 2 had invited MEPC 69 to approve amendments to MARPOL Annexes I, IV, and VI concerning the exemption of unmanned non-self-propelled barges from survey and certification requirements, taking into account the question of whether it is necessary to amend MARPOL Annex IV; and also to approve the associated draft MEPC circular on Guidelines for exemption of unmanned non-self-propelled barges from the survey and certification requirements under the MARPOL Convention.
- the Subcommittee instructed a drafting group to be established under agenda item 9 to finalize the draft amendments to MARPOL Annexes I, IV, and VI concerning the exemption of UNSP barges from survey and certification requirements, taking into account documents III 3/2/1, MEPC 69/13/2 and MEPC 69/13/3, and to finalize also the associated draft MEPC circular on guidelines for exemption of unmanned non-self-propelled barges from the survey and certification requirements under the MARPOL Convention, as contained in annexes 9 and 10 of the report of III 2 (III 2/16), with a view to submission to MEPC 70 for approval.

Early implementation of amendments to SOLAS 1974:

- The Subcommittee, as instructed by MSC 96, considered document III 3/8/2 (Bahamas) commenting on the early implementation of some amendments to the 1974 SOLAS Convention and proposing measures to address the risk of inconsistent approaches in order to ensure that the intent and spirit of the decisions are respected on a globally consistent basis.
- The Subcommittee instructed the drafting group to be established under agenda item 9, taking into account documents III 3/8/2 and III 3/2/2/Add.1, to identify issues in relation to the early implementation of amendments to the 1974 SOLAS Convention, for reporting to MSC 97, and to propose a course of action for further consideration of the matter, taking into account notification-related aspects.

Survey and certification matters pertaining to the Polar Code:

The Subcommittee referred the proposed Polar Code-related amendments generated by the correspondence group established at III 2 to the drafting group for finalization with a view to submission to MEPC 70 and MSC 97 for approval or adoption as appropriate.

Unified interpretation on the expiry date of statutory certificates:

The Subcommittee considered the relevant part of the report of the correspondence group (III 3/8), and agreed that the proposed draft MSC-MEPC.5 circular, as contained in annex 3 of document III

3/8, be referred to the drafting group to be finalized, with a view to submission to MEPC 70 and MSC 97 for approval.

Amendments to the survey guidelines under the HSSC:

The Subcommittee recalled that III 2 had instructed the correspondence group to continue updating the Survey Guidelines to include the requirements deriving from amendments to relevant IMO instruments entering into force up to and including 31 December 2017, with a view to submission of draft amendments to the Survey Guidelines to A 30 for adoption with the potential approval by the Committees of their direct referral to the Assembly.

Correspondence group on the review of the survey guidelines under HSSC and the non-exhaustive list of obligations:

Taking into account the work completed at this session, the Subcommittee established a Correspondence Group for the Review of the Survey Guidelines under HSSC and the Non-exhaustive List of Obligations, under the coordination of China, to continue development of these session items with a report to be provided to III 4.

Non-Exhaustive List of Obligations under Instruments Relevant to the IMO Instruments Implementation Code (III Code)

The Subcommittee was advised that A 29 adopted resolution A.1105(29) on the 2015 Non-Exhaustive List of Obligations under instruments relevant to the *IMO Instruments Implementation Code (III Code)* (Resolution A.1070[28]) (2015 Non-Exhaustive List of Obligations), which included the requirements deriving from all amendments to relevant mandatory IMO instruments that entered into force up to and including 1 July 2016.

The Subcommittee established a drafting group at this session to consider Updated Survey Guidelines under the HSSC and the Non-Exhaustive List of Obligations with a view to finalizing, along with other related plenary proposals:

- MARPOL Annexes I, IV, and VI concerning exemption of non-self-propelled barges
- Early implementation of SOLAS amendments
- Polar Code related amendments to the Survey Guidelines
- MSC-MEPC.5 circular on *Unified Interpretation of the expiry date of statutory certificates*
- Develop amendments to FAL.2/Circ.127-MEPC.1/Circ.817-MS C.1/Circ.1462 on *List of certificates and documents required to be carried on board ships*

Work initiated by the Drafting Group was continued via the Correspondence Group established with plans to further consider and finalize these undertakings at the next session.

Unified Interpretation of Provisions of IMO Safety, Security, and Environment Related Conventions

The subcommittee noted that no document was submitted under this agenda item at this session.

5 – 9 September 2016: Carriage of Cargoes and Containers Subcommittee

Amendments to the IGF Code and Development of Guidelines for Low-Flashpoint Fuels

Consideration of previous sessional and intersessional work to be addressed by this subcommittee included:

- Draft technical provision for the safety of ship using methyl/ethyl alcohol as fuel
- Requirements for fuel cells
- Research projects relating to LNG as fuel
- LNG as fuel for ships trading in shallow waters

The subcommittee established a working group to address the following considerations based on, *inter alias*, the points listed above:

- Finalize draft amendments to the IGF Code.
- Further develop draft technical provisions for the safety of ships using methyl/ethyl alcohol as fuel.
- Need for a correspondence group to continue work intersessionally.

The subcommittee endorsed the new Part E to the IGF code to address fuel cell criteria as outlined in CCC 3/WP.3 Annex 1.

The issues of methyl/ethyl alcohol as fuel and consideration of other related papers will be considered during intersessional work undertaken by the re-established correspondence group with report to be provided at CCC 4.

Safety Requirements for Carriage of Liquefied Hydrogen in Bulk

Consideration of previous sessional and intersessional work to be addressed by this subcommittee included the following:

- The need to gather additional data on bulk transport of liquefied hydrogen
- Development of interim recommendations for the carriage of hydrogen in bulk
- Additional work undertaken prior to finalizing draft interim recommendations

The subcommittee established a Working Group to address considerations based on, *inter alias*, the points listed above and to finalize the draft interim recommendations for carriage of liquefied hydrogen in bulk.

The subcommittee endorsed the conclusions of the Working Group as set out in CCC 3/WP.4 Annex 1 and invited MSC 97 to adopt these draft interim recommendations.

Amendments to the IMSBC Code and Supplements

The subcommittee noted preparation of the Editorial and Technical Group's (E&T) draft amendments to the IMSBC Code and established a working group to address further consideration of the subject amendments.

The subcommittee endorsed the Working Group's recommendation to amend 4.5.1 and 4.5.2 of the IMSBC Code addressing the need to enhance testing protocol for determining transportable moisture limits of bulk cargoes (See CCC 3/5/20).

A Correspondence Group was established to continue working on consideration of harmonization of IMDG and IMSBC code bulk cargo references with recommendations reported to CCC 4.

Amendments to the IMDG Code and Supplements

The subcommittee had for its consideration document CCC 3/6/5, proposing to amend the existing stowage requirements for jet perforating guns, by amending the stowage of goods of class 1 requirement found in 7.1.4.4 and the addition of a new stowage code. Further action has yet to follow.

Amendments to SOLAS Regulations II-2/20.2 and II-2/20-1 to Clarify the Fire Safety Requirements for Cargo Spaces Containing Vehicles with Fuel in their Tanks for their Own Propulsion

To address confusion between Special provisions 961 and 962 in the IMDG Code with reference to vehicles carrying "non-cargo" fuel in their own tanks, and SOLAS II-2/20.1 and II-2/20.2 requirements; certain delegations proposed amendments (see MSC 96/23/9) for clarification during MSC 96.

The subcommittee endorsed adoption of proposed clarifications at MSC 97.

Suitability of High Manganese Austenitic Steel for Cryogenic Service and Development of Any Necessary Amendments to the IGC Code and IGF Code

At MSC 96, a new output item titled: "Suitability of high manganese austenitic steel for cryogenic service and development of any necessary amendment to the IGC Code and IGF Code" was added to the biennial

agenda of the CCC Subcommittee with a target completion year of 2017.

A correspondence group was established to progress this matter intersessionally with a report to be submitted to CCC 4.

Mandatory Requirements for Classification and Declaration of Solid Bulk Cargoes as Harmful to the Marine Environment

The subcommittee referred to the report on IMSBC Code matters (CCC 3/WP.5) to determine the following action:

Endorsement of IMSBC Code draft amendments related to “Harmful to the Marine Environment (HME) substances as reflected in CCC 3/WP.5; annex 4 with a view to MSC 97 for approval and MSC 98 for adoption to the Code.

The subcommittee endorsed the draft amendments to the 2012 Guidelines for the implementation of MARPOL Annex V for submission to MEPC 71, with a view to adoption.

Unified Interpretation of Provisions of IMO Safety, Security, and Environment-Related Conventions

The following is a list of subject matter addressed under this session item. For details concerning any of this listed subject matter, see CCC 3/15 – *Report to the Maritime Safety Committee and the Marine Environmental protection committee*:

- Clarification of IGF Code requirements
- Tank connection space applied to fuel tanks on open deck
- Passive equipment in tank connection spaces
- Location of premixed engines
- Fuel preparation rooms located on open deck
- Leakage detection for drip trays
- Temperature and pressure of liquefied gas fuel tanks
- Risk assessment of closed or semi-enclosed bunkering stations
- Design features for cryogenic pipe protection
- Requirement for a cofferdam
- Fire detection and alarm system in the ventilation trunk
- Ventilation system of machinery spaces
- Ventilation system for double piping and for gas valve unit spaces in gas safe engine rooms
- Location of the ventilation inlet for the double wall piping or duct
- Instructions to the Working Group on Amendments to the IGF Code and Development of Guidelines for Low-flashpoint fuels
- Requirements for pump vents in machinery spaces
- Closing devices for air intakes
- Cargo tank clearances
- External surface area of prismatic tanks for determining the sizing of the pressure relief valve
- ESD valve type
- Safe means of emergency isolation in the event of a failure of a cargo tank-installed PRV

- Requirements for fire safety and oxygen deficiency monitoring equipment
- Test load for stacking test of tank containers

19 – 23 September 2016: London Convention & Contracting Parties to the London Protocol

Development of the LC-LP Strategic Plan

A working group was established to further develop a strategic plan for the London Convention and Protocol (LC&P) to accomplish, *inter alia*, the following:

- Develop a plan for operationalizing and implementing the strategic plan out to 2030.
Note: The plan includes a purpose, background, four strategic directions, and sub-directions.
- The four strategic directions are as follows:
 - Substantially increase the rate per year of new ratifications or accessions to the LP work of the LP and LC externally.
 - Identify Promote and address emerging issues in the marine environment within the scope of the treaties.

Consideration of the Report of the Scientific Groups

The groups had continued efforts to develop further guidance for the assessment of wastes and update existing guidance.

The LC/LP meetings noted plans for the groups to re-established the intersessional work for further guidance development of action lists for dredged materials for finalization in 2017.

CO₂ Sequestration in Sub-Seabed Geological Formations (LP)

Work continues to encourage ratification of the 2009 amendment to Article 6 of the London Protocol addressing sub-seabed CO₂ sequestration.

Only three ratifications have occurred to date (Norway, UK, and Netherlands).

The International Workshop on Offshore CO₂ Storage was held in Austin, TX 19 – 21 April 2016.

The Workshop recommendations included the following:

- International collaboration/demonstration project considerations
- Funding initiatives
- Information sharing

Interpretation of the London Conventional and Protocol

Dumping guidelines addressed at this session included the following:

- Disposal of fiberglass vessels
- Riverine and subsea disposal of tailings and associated wastes from mining operation, including deep seabed mining
- Marine litter
- Cooperative measure to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea

Matters Related to the Management of Radioactive Wastes

Twenty-five-year scientific review of all radioactive wastes and other radioactive matter concluded that no appreciable change to the ban on low level radioactive dumping should be undertaken.

24 – 28 October 2016: Marine Environment Protection Committee (MEPC 70)

Consideration of Adoption of Amendments to Mandatory Instruments

The Committee adopted amendments to MARPOL Annex I related to Form B of the IOPP (see MEPC.276(70))

The Committee adopted draft amendments to MARPOL Annex V (MEPC.227(70)) related to substances Harmful to the Marine Environment (HME) and the Form of the Garbage Record Book with an effective date of 1 September 2017. While a definition for “E-waste was considered as an element of the adopted changes, it was considered too broad of a definition and will be revisited at MEPC 71.

The Committee adopted the amendments to MARPOL Annex VI related to Fuel oil consumption of ships (MEPC.278(70)) with an effective date of 01 September 2017.

Amendments include the following:

- Acceptance of a new Paragraph 2 in Regulation 22 addressing fuel data collection
- Inclusion of Regulation 22A addressing fuel data collection and reporting
- Changes referring to terminology to include “distance traveled” and “hours underway”
- Harmonization with other Annexes of MARPOL addressing utilization of ROs and associated guidance

As a reminder, Regulation 19.2.2 in Chapter 4 of MARPOL Annex VI exempts the following from SEEMP: “ships not propelled by mechanical means, and platforms including FPSOs and FSUs and drilling rigs, regardless of their propulsion.”

Harmful Aquatic Organisms in Ballast Water

The Committee noted an entry-into-force date of 8 September 2017.

The total number of IMO-type approved BWMS is 69 as of the date of the MEPC 70 report (11 November 2016).

Review of the G8 Guidelines were as follows:

- An Intersessional Working Group met 17 to 21 October 2016 to conduct a review of the G8 guidelines with the Committee subsequently agreeing to the resulting recommended revisions in accordance with (MEPC 70/WP.5).
- The Committee agreed that the review of the G8 guidelines should be completed prior to consideration of a mandatory status; however, options for elevating these guidelines to mandatory status will be entertained again at MEPC 71.
- Further consideration of organism viability and modalities for ballast water treatment will continue via the “Roadmap” for implementation of the convention consisting of:
 - The experience building phase including sampling and data collection efforts
 - Contingency measures (e.g., automatic by-pass conditions, maximum system limits)

The Committee adopted resolution MEPC.279(70) on 2016 *Guidelines for approval of ballast water management systems* superseding the guidelines adopted by resolution MEPC.174(58).

Air Pollution

Impact on the Arctic of black carbon emissions from international shipping were addressed as follows:

- The Committee recognized the need for a protocol to encourage voluntary measurement studies to collect data.
- It was noted that PPR 3 had developed a reporting protocol for voluntary collection on Black Carbon

– interested Member Governments are encouraged to collect data and submit to PPR 4.

As it pertains to fuel oil not in compliance with Regulation 14 of MARPOL Annex VI:

- A concern was raised that adjustments are necessary for certain information to be included in the Bunker Delivery Note (BDN). Such adjustments would avoid erroneous assumptions that the fuel oil supplier would be responsible for delivery of fuel based on its intended shipboard use.
- The committee approved the draft amendments to Appendix V of MARPOL VI based, in part, on suggestions made in MEPC 70/9/4.

The Committee approved MEPC.1/Circ.864 on *Guidelines for onboard sampling for the verification of the Sulphur content of fuel oil used on board ships* based on draft guidelines prepared by PPR 3 together with the inclusion of IACS modifications (MEPC 70/9/3) reflecting provisions for fuel sampling already contained in some class society rules.

The Committee approved MEPC.1/Circ.865 on *Unified interpretations to the NOx Technical Code 2008 related to the approval of SCR systems* based on the draft MEPC circular developed by PPR 3.

Energy Efficiency

- The committee received the Correspondence Group report that explored technology considerations and barriers to improving the energy efficiency of ships.
- The committee endorsed a set of recommendations to guide and assist Member States and industry with implementation of regulations in Chapter 4 of MARPOL Annex VI¹.
- As requested by MEPC 69, the Secretariat established an information portal for access by Member States and international organizations to acquire and provide information concerning technologies associated with efficiencies of ships. (The portal may be accessed [here](#).)

Review of fuel oil availability as required by regulation 14.8 of MARPOL Annex VI noted the following:

- Though differences persisted among delegations as to whether the shipping industry could be adequately supplied in terms of low sulphur fuel availability, the Committee affirmed 1 January 2020 as the effective date for implementation of the .50% sulphur content fuel requirement.
- Resolution MEPC.280(70), *Effective date of implementation of the fuel oil standard in regulation 14.1.3 of MARPOL Annex VI*, was adopted.
 - Acknowledging the potential concerns for low sulphur fuel availability in 2020, the committee referred relevant comment and documentation to PPR 4 for further consideration of a new output on measures to facilitate an orderly implementation of the low Sulphur fuel limit requirements. Consideration of such measures is anticipated at MEPC 71.
 - The secretariat was requested to draft a MEPC resolution on the Committee's decision that Regulation 14.1.3 of MARPOL Annex VI will become effective on 1 January 2020.

Consideration for a proposal to designate additional ECAs for NOx Tier III Control was as follows:

- After discussion considering several proposals for creating an Emissions Control Area (ECA) in the North Sea and the Baltic Sea, the Committee agreed to the subject proposals with an effective date of 1 January 2021.
- The Committee also agreed that vessels with dual-fuel and/or only Tier II engines should be permitted to transit through these ECAs for the purposes that necessitate shipyard or other dockside facilities to affect repairs/modifications.

¹ Regulation 19 in Chapter 4 of MARPOL Annex VI excludes FPSOs, FSUs, and drilling rigs from Energy Efficiency requirements regardless of propulsion

- Amendments to regulation 13 of MARPOL Annex VI to designate the above ECAs will be circulated by the Secretary with a view to adoption at MEPC 71.

Further Technical and Operational Measures for Enhancing the Energy Efficiency of International Shipping

In accordance with MEPC 70/6/1 and MEPC 70/6/2, the Committee considered the introduction of ISO 14064 as a standard provision to address the framework of the fuel efficiency data collection system. However, while the Committee agreed to include this standard, it also acknowledged that only those parts of ISO 14064 that did not exceed the scope of regulation 22A of MARPOL Annex VI could be considered.

While the Committee adopted Resolution MEPC.282(70), *2016 Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP)*, the correspondence group was reestablished to further develop fuel oil consumption database guidelines and provide a report to MEPC 71.

Reduction of GHG Emissions from Ships

The Secretariat informed the Committee of the results of the UN Climate Change Conference held in Bonn, Germany from 16 to 26 May 2016. IMO's continued involvement in UNFCCC was supported by Argentina restating Kyoto Protocol references to ensuring that imbalances in the application of environmental protections is crucial to averting barriers to trade.

The Paris Agreement continues to retain its specific agenda item pertaining to "Emissions from fuel used for international aviation and maritime transport."

GHG reduction measures/efforts were acknowledged by Panama related to the establishment of the Panama Canal Green Route which is considered an early measure to reducing emissions from international shipping.

The committee established a working group to accomplish the following:

- Establish a "Roadmap" for developing an IMO strategy on the reduction of GHG emissions from ships.
- Establish an intersessional working group subject to endorsement of C 117 to consider how to progress this matter and advise the Committee via a report submitted to MEPC 71.

The Committee acknowledged the urgency of this matter and that the "importance and complexity of this topic" will demand significant intersessional work in the coming years.

Identification and Protection of Special Areas and Particularly Sensitive Sea Areas (PSSA)

In an effort to determine the designation of the Jomard Entrance as a Particularly Sensitive Sea Area (PSSA), the Committee reviewed threats posed by merchant shipping to the region's ecological, environmental, economic, and cultural attributes. The proposal was found to meet the provisions of the *Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas* (resolution A.982(24)). The following decisions were made:

- The Committee established a Technical Group on PSSAs to review the designation proposal posited by Papua New Guinea.
- Subsequently, the Committee adopted MEPC.283(70) approving the designation.

Pollution Prevention and Response

The Committee made the following decisions about categorizing liquid substances:

- The Committee endorsed the addition of four new biofuels to the list of recognized biofuels set out in Annex 11 to MEPC.2/Circ.21.
- Section II of the *Manual on Oil Pollution—Contingency Planning* was approved by the Committee with final editing and publishing to follow via the IMO Publishing Service.

The Guide on Oil Spill Response in Ice and Snow Conditions was approved by the Committee with final

editing and publishing to follow via the IMO Publishing Service.

Reports of Other Sub-Committees

The matter of exempting unmanned non-self-propelled barges from survey and certification requirements under MARPOL will be further considered at III 4.

The Committee approved the draft MSC-MEPC.5 circular on *Amendments to the Survey Guidelines under the Harmonized System of Survey and Certification, 2015, for ships operating in polar waters*, concurrent to MSC 97 approval.

As of the date of this session, the Convention for the Sound Recycling of Ships, 2009 had five Contracting Governments deposit instruments of ratification representing 20.34% of the world's merchant fleet.

Use of heavy fuel oil by ships in Arctic waters and other matters related to the Arctic:

Concern was expressed by several delegations concerning effects of heavy fuel oil on indigenous food sources. While the Committee acknowledged concerns expressed, further work would be necessary to more accurately ascertain affects—Member States were invited to contribute as this issue would eventually require a new output.

Future IMO Committee and Subcommittee Sessions

Table 1 provides information about future IMO meetings.

Table 1--Future IMO Committee and Subcommittee Sessions

Dates	Meeting	Agenda Items Note: Numbered items below correspond with the numbering in the respective IMO Agenda documents.
5 – 9 Dec. 2016	Council (117th Session)	3 Strategy, planning and reform 4 Rules and procedures of the Council 5 Resource management: (a) Human resources matters, including amendments to the Staff Regulations and Staff Rules (b) Report on arrears of contributions and of advances to the Working Capital Fund and on the implementation of Article 61 of the IMO Convention (c) Budget considerations for 2016 and 2017 (d) Results-based budget: outline of budgetary implications for 2018-2019 6 IMO Member State Audit Scheme 7 Consideration of the report of the Marine Environment Protection Committee 8 Consideration of the report of the Technical Cooperation Committee
16 – 20 Jan. 2017	Subcommittee on Pollution, Prevention & Response (PPR 4)	3 Safety and pollution hazards of chemicals and preparation of consequential amendments to the IBC Code (7.2.2.1) 4 Review of MARPOL Annex II requirements that have an impact on cargo residues and tank washings of high viscosity and persistent floating products (7.2.2.3) 5 Code for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels (7.1.2.3) 6 Revised guidance on ballast water sampling and analysis (2.0.1.2) 7 Review of the guidelines for approval of ballast water management systems (G8) (7.1.2.1) 8 Production of a manual entitled "Ballast Water Management – How to do it" (7.1.2.5) 9 Consideration of the impact on the Arctic of emissions of Black Carbon from international shipping (7.3.2.2) 10 Development of standards for shipboard gasification waste to energy systems and associated amendments to regulation 16 of MARPOL Annex VI (7.3.1.2) 11 Guidelines for the discharge of exhaust gas recirculation bleed-off water (7.3.1.9) 12 Improved and new technologies approved for ballast water management systems and reduction of atmospheric pollution (13.0.3.1)
30 Jan. – 3 Feb. 2017	Subcommittee on Human Element, Training & Watchkeeping (HTW 4)	TBD – Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
13 – 17 Feb. 2017	Subcommittee on Ship Design & Construction (SDC 4)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
6 – 10 March 2017	Subcommittee on Navigation, Communications and Search & Rescue (NCSR 4)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO

20 – 24 March 2017	Subcommittee on Ship Systems & Equipment (SSE 4)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
27 – 31 March 2017	Scientific Group of the London Convention/Protocol (LC 40/LP 11)	2 Waste Assessment Guidance 3 Marine geoengineering 4 CO2 sequestration in sub-seabed geological formations 5 Reporting on dumping activities 6 Technical cooperation and assistance 7 Monitoring and assessment of the marine environment 8 Coastal management issues associated with activities to prevent marine pollution 9 Habitat modification and enhancement 10 Matters related to radioactive wastes
3 – 7 April 2017	Committee on Facilitation (FAL 41)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
24 – 28 April 2017	Committee on Legal (LEG 104)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
8 – 12 May 2017	Committee on Marine Environmental Protection	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
5 – 16 June 2017	Committee on Maritime Safety (MSC 98)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
26 – 30 June 2017	Committee on Technical Cooperation (TCC 67)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
3 – 7 July 2017	Subcommittee on Implementation of IMO Instruments (III 4)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
17 – 21 July 2017	Council (C 118)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
11 – 15 Sept. 2017	Subcommittee on Carriage of Cargoes & Containers (CCC 4)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
9 – 13 Oct. 2017	London Convention/London Protocol (LC 39/LP 12)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
20 – 24 Nov. 2017	Council/Extraordinary Session (C/ES 29)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
27 Nov. – 8 Dec. 2017	Assembly (A 30)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO
4 – 8 Dec. 2017	Council (C 119)	TBD - Will be posted to the IMO Subcommittee tab on the IADC website when made available by IMO

Private Sector Activities

International Association of Oil and Gas Producers (IOGP)

(as of 1 Dec 2016)

The following publications have been issued since Oct 2014 and are available [here](#):

Table 2--Recently Published IOGP Documents

Document Title	Date
Land transportation safety recommended practice - Emergency Response Vehicles (Report No. 365-16)	Oct 2014
Oiled wildlife preparedness and response (Report No. 516)	Oct 2014
Open letter on the future of Europe's climate and energy policy	Oct 2014
Climate change: IOGP position paper	Nov 2014
Highlights November 2014	Nov 2014
Shale gas in Europe position paper	Nov 2014
Overview of IOGP's Environmental-Social-Health Risk and Impact Management Process (Report No. 529)	Nov 2014
Environmental performance indicators - 2013 data (Report No. 2013e)	Dec 2014
Guidelines for implementing Well Operations Crew Resource Management training (Report No. 502)	Dec 2014
At-sea monitoring of surface dispersant effectiveness (Report No.OSRJIP-F4)	Dec 2014
Oil & natural gas industry positions on potential energy Issues in TTIP	Jan 2015
Annual Highlights 2014 – celebrating 40 years	Jan 2015
IOGP releases coordinate reference system definitions in well-known text format	Jan 2015
IOGP Highlights - January 2015	Jan 2015
High Integrity Protection Systems recommended practice (Report No. 443)	Jan 2015
Tiered preparedness and response (Report No. 526)	Jan 2015

Document Title	Date
A guide to oil shoreline assessment surveys (SCAT) (Report No. 504)	Jan 2015
Aircraft Management Guidelines - Appendix 14. Interim guidance on night operations (Report No. 390-A14ESP)	Feb 2015
Aircraft Management Guidelines (Spanish translation) (Report No. 390ESP)	Feb 2015
Aircraft Management Guidelines (Russian translation) (Report No. 390RUS)	Feb 2015
Safety performance indicators - Process safety events - 2013 data (Report No. 2013p)	Feb 2015
IOGP Position Paper on Energy Union	Feb 2015
Oil & gas exploration and production, strong markets key to Energy Union success	Feb 2015
IOGP Highlights - February 2015	Feb 2015
Shaping safety culture through safety leadership (Spanish translation) (Report No.452ESP)	Feb 2015
Oil spills: inland response (Report No. 514)	Feb 2015
Aerial observation of oil spills at sea (Report No. 518)	Feb 2015
Open letter on the Energy Union package (Report No. 518)	Mar 2015
Safety performance indicators – Process safety events – 2013 data - Fatal incident and high potential events (Report No. 2013pfh)	Mar 2015
IOGP Highlights - March 2015	Mar 2015
Dispersants: surface applications (Report No. 532)	Apr 2015
Contingency planning for oil spills on water (Report No. 519)	Apr 2015
Guidance Note 22. Geodetic referencing in Iraq (Report No. 373-22)	May 2015
IOGP releases version 1.1 of geophysical position data exchange formats	May 2015
IOGP Highlights - May 2015	May 2015
Fatigue in fly-in, fly-out operations - guidance document for the oil and gas industry (Report No. 536)	Jun 2015
Benchmarking on standards and technical specifications (Report No. 500)	Jun 2015

Document Title	Date
Dispersants: subsea applications (Report No. 533)	Jun 2015
IOGP Highlights - June 2015	Jun 2015
Safety performance indicators - 2014 data (IOGP Data Series) (Report No. 2014s)	Jun 2015
Health performance indicators - 2014 data (IOGP Data Series) (Report No. 2014h)	Jul 2015
Effective guard force management - principles and guidelines (Report No. 537)	Jul 2015
IOGP Highlights - July/August 2015	Aug 2015
Guidance for the use of the Geophysical Contractor Management Self-Assessment (GCMSA) (Report No. 538)	Aug 2015
Safety performance indicators - 2014 data - Fatal incidents report (Report No. 2014sf)	Aug 2015
Safety performance indicators - 2014 data - High potential events report (Report No. 2014sh)	Aug 2015
Safety data reporting user guide - 2014 data (IOGP Data Series) (Report No. 2014su)	Sep 2015
Wells Expert Committee Bulletin - Issue 1 (Report No. WEC01)	Sep 2015
IOGP Highlights - September 2015	Sep 2015
IOGP response to the DG Energy "Consultation on an EU strategy for liquefied natural gas and gas storage	Sep 2015
ETS Response	Oct 2015
Conduct of offshore drilling hazard Site Surveys - Technical Notes (Report No. 373-18-2)	Oct 2015
IOGP Response to Consultation on the review of the Intergovernmental Agreements Decision	Oct 2015
Environmental performance indicators - 2014 data (Report No. 2014e)	Nov 2015
Safety performance indicators - Process safety events - 2014 data (Report No. 2014p)	Nov 2015
Safety performance indicators - Process safety events - 2014 data. Fatal incident and high potential event reports (Report No. 2014pfh)	Dec 2015
Oil & gas producers welcome historic Paris agreement	Dec 2015
Supplementary Procedure for Development and Maintenance of ISO Standards as an ISO Liaison Member Rev 20151217	Jan 2016

Document Title	Date
Temporary onshore accommodation - Design, layout, accommodation, facilities and services (Report No.542)	Jan 2016
Temporary onshore accommodation - Selecting the camp type (Report No. 541)	Jan 2016
Safety performance indicators - Motor Vehicle Crash Data - 2008-2014 (Report No. 2014m)	Jan 2016
Hydrocarbon process single & multi-layer level measurement - Recommended Practice (Report No. 547)	Jan 2016
IOGP Highlights - January 2016	Jan 2016
Safety data reporting user guide - 2015 data (Report No. 2015su)	Feb 2016
EU Energy Security Package is a start in recognizing key role of natural gas	Feb 2016
Poster: ISO Standards for use in the oil & gas industry	Feb 2016
Standards Solution presentation	Feb 2016
Standards Solution flyer	Feb 2016
Land transportation safety recommended practice – Glossary (Report No. 365gloss)	Mar 2016
Diving System Assurance recommended practice (Report No. 468)	Mar 2016
Environmental fate and effects of ocean discharge of drill cuttings and associated drilling fluids from offshore oil and gas operation (Report No. 543)	Mar 2016
IOGP Highlights - February 2016	Mar 2016
IOGP response to the EU Energy Security Package	Mar 2016
Health impact assessment - a guide for the oil and gas industry (Report No. 548)	Mar 2016
Standardization of barrier definitions (Report No. 544)	Apr 2016
Components of Organizational Learning from Events (Report No. 552)	Apr 2016
IOGP Highlights - March-April 2016	Apr 2016
The Reports on Payments to Governments Regulations 2014 Industry Guidance (Report No. 535)	Apr 2016
Firearms and the use of force (Report No. 320)	May 2016

Document Title	Date
2015 Annual Highlights	May 2016
New technologies in offshore monitoring – Summary (Report No. 546)	May 2016
CHC Helicopter Crash Norway 29 April 2016 - Position Paper	May 2016
Health leading performance indicators - 2015 data (Report No. 2015h)	May 2016
Shaping safety culture through safety leadership - Japanese translation (Report No. 452J)	May 2016
Operating Management System Framework - Japanese translation (Report No. 510J)	May 2016
Questions and Answers on energy subsidies in Europe (Report No. EUQA1605)	May 2016
Generic exposure scenario for the use of chemicals in the exploration and production of hydrocarbons using high-volume hydraulic fracturing (Report No. 553)	May 2016
IOGP Highlights - May-June 2016	Jun 2016
Safety performance indicators - 2015 data (Report No. 2015s)	Jun 2016
Safety performance indicators - 2015 data - Fatal incident reports (Report No. 2015sf)	Jun 2016
Safety performance indicators - 2015 data - High potential event reports (Report No. 2015sh)	Jun 2016
Drilling waste management technology review (Report No. 557)	Jun 2016
Standards and guidelines for drilling, well constructions and well operations (Report No. 485)	Jun 2016
Conducting security risk assessments (SRA) in dynamic threat environments (Report No. 555)	Jun 2016
IOGP Highlights - June-July 2016	Jun 2016
Biodiversity and ecosystem services fundamentals guidance - guidance document for the oil and gas industry (Report No. 554)	Jun 2016
Supplementary Requirements to IEC 61439-1 and 2 LV Switchgear and Controlgear (Report No. 560)	Jun 2016
Letter to Minister - Energy Council - July 2016	Jul 2016
IOGP publishes the Technical Notes to supplement the Guidelines for the conduct of offshore drilling hazard site surveys	Jul 2016
Process safety - leading key performance indicators. Supplement to IOGP Report 456	Jul 2016

Document Title	Date
(Report No. 556)	
Brexit	Jul 2016
Obsolescence and life cycle management for automation systems - Recommended practice (Report No. 551)	Aug 2016
Guidelines on aspects of materials certification standards EN 10204 and ISO 10474 (Report No. 571)	Aug 2016
Naturally Occurring Radioactive Materials - The Facts (Report 412F)	Aug 2016
Subsea intervention hazard identification – checklist (Report 570)	Aug 2016
Recommendations for enhancements to well control training, examination & certification (Report No. 476)	Aug 2016
OGP Highlights - July August 2016	Aug 2016
Global Energy Brief - How much more oil and gas will the world need?	Sep 2016
Global Energy Brief - Well safety	Sep 2016
Supplementary requirements to API 17D - Subsea trees (Report No. 561)	Sep 2016
Coordinate conversions and transformation including formulas (S and P 07-2) (Report No. 373-07-2)	Sep 2016
EPSG geodetic parameter registry - developers guide (Report No. 373-07-3)	Sep 2016
Geomatics Guidance Note 23 - Web Mercator (Report No. 373-23)	Sep 2016
IOGP Highlights - September October 2016	Sep 2016
DRAFT Supplementary Requirements to API Spec 6D - Ball Valves (Report 562)	Sep 2016
Europe Exploration and Production Trends 2016	Oct 2016
Country evacuation planning guidelines	Nov 2016
Safety performance indicators – Process safety events – 2015 data – Fatal incident & high potential event reports	Nov 2016
Safety performance indicators – Process safety events – 2015 data	Nov 2016
Supplementary Requirements to IEC 61439-1 and 2 LV Switchgear and Controlgear	Nov 2016
Environmental performance indicators – 2015 data	Nov 2016

**International Petroleum Industry Environmental Conservation Association
(IPIECA)**

(as of 1 Dec 2016)

The following publications have been issued since October 2014 and are available [here](#):

Table 3--Recently Published IPIECA Documents

Document title	Date
Exploring low-emissions pathways. Advancing the Paris Puzzle	Nov 2016
IPIECA Climate Change Reporting Framework: A pilot guidance document for the oil and gas industry	Sep 2016
Infectious disease outbreak management. A program manual for the oil and gas industry	Aug 2016
Exploring methane emissions	Jun 2016
Natural gas: into the Future (The Paris Puzzle)	Jun 2016
Oil Spill preparedness and response: an introduction	Jun 2016
Oil and gas industry guidance on voluntary sustainability reporting (3 rd edition)	Jun 2016
Managing Biodiversity & Ecosystem Services (BES) issues along the asset lifecycle in any environment: 10 Tips for	Apr 2016
Biodiversity and ecosystem services fundamentals. Guidance document for the oil and gas industry	Apr 2016
Annual Review 2015 – Engaging as part of the solution	Mar 2016
A guide to shoreline clean-up techniques: Good practice guidelines for Incident management and emergency	Dec 2016
The global distribution and assessment of major oil spill response resources	Aug 2015
Health leading performance indicators – 2014 data	Jul 2015
Dispersants: subsea application Good practice guidelines for incident management and emergency response	Jun 2015
Fatigue in fly-in, fly-out operations: Guidance document for the oil & gas industry	Jun 2015
Common Operating Picture	April 2015
Annual Review 2014 – An extraordinary journey	April 2015
Dispersants: surface application	April 2015
Health Management contract guidelines for clients and contractors	April 2015
IMO/IPIECA Global Initiative	April 2015
Addressing uncertainty in oil and natural gas industry greenhouse gas inventories. Technical considerations and	Feb 2015
Tiered preparedness and response	Jan 2015
At-sea monitoring of surface dispersant effectiveness	Dec 2014
Capabilities and uses of sensor and video-equipped waterborne surveillance-ROVs for subsea detection and tracking	Dec 2014
Regulatory approval of dispersant products and authorization of their use	Dec 2014

International Marine Contractors Association (IMCA)

(as of 1 Dec 2016)

The following publications have been issued since October 2014 and are available for download [here](#):

Table 4--Recently Published IMCA Documents

Document Number	Document Title	Issue Date
IMCA SPP 01	IMCA SPP 01 Manual Handling - PDF version for download for members only	2 Dec 2016
IMCA S 016 Rev. 1	Mobilization requirements for offshore survey operations	29 Nov 2016
IMCA SEL 016 Rev.1	Guidance on the investigation and reporting of incidents	25 Oct 2016
IMCA M 121	DP position loss risks in shallow water	21 Oct 2016
IMCA M 159	Guidance on thruster-assisted station keeping by FPSOs and similar turret-moored vessels	21 Oct 2016
IMCA M 234	Research on personal locator beacons	13 Oct 2016
IMCA SEL 003	Guidance on the initial and refresher familiarization of vessel crews	30 Sep 2016
IMCA SEL 007 Rev. 2	Basic safety training and vessel induction for non-marine personnel working offshore	30 Sep 2016
IMCA M 134	A comparison of moored and dynamically positioned diving support vessels	29 Sep 2016
IMCA M 125	Safety interface document for a DP vessel working near an offshore platform	29 Sep 2016
IMCA M 196 Rev. 1	Guidance on the design, selection, installation and use of uninterruptible power supplies on-board vessels	28 Sep 2016
IMCA SEL 041	Standardized boat landing research report	14 Sep 2016
IMCA M 117 Rev.2	The training and experience of key DP personnel	8 Sep 2016
IMCA M 206 Rev.1	A guide to DP electrical power and control systems	8 Sep 2016
IMCA M 179 Rev. 1	Guidance on the manufacture and safe use of cable-laid slings and grommets	6 Sep 2016
IMCA M 163	Quality assurance and quality control of software	2 Sep 2016
IMCA M 205	Guidance on operational communications	30 Aug 2016

IMCA M 203	Guidance on simultaneous operations (SIMOPS)	23 Aug 2016
IMCA SEL 022. Rev.2	Guidance on wire rope integrity management for vessels in the offshore industry	18 Aug 2016
IMCA M 115	Risk analysis of collision of dynamically positioned support vessels with offshore installations	12 Jul 2016
IMCA M 149 Issue 10	Common marine inspection document, Issue 10 PDF download only.	12 Jul 2016
IMCA M 174	A review of the Artemis Mark V positioning system	1 Jul 2016
IMCA M 189 Rev. 3	Marine inspection for Small Workboats (Common Marine Inspection Document for Small Workboats)	10 Jun 2016
IMCA SEL 040	Guidance on drug & alcohol policies and testing	7 Jun 2016
IMCA SEL 014 Rev.1	Guidance on travel security	1 Jun 2016
IMCA R 007 Rev. 2	IMCA ROV services contracting principles	1 Apr 2016
IMCA M 166 Rev. 1	Guidance on failure modes and effects analysis (FMEA)	1 Apr 2016
IMCA SEL 039	Technip DROPS (video) is available to view online	2 May 2016
IMCA S 001 Rev.2	IMCA survey work contracting principles	1 Dec 2015
IMCA SPC 25	IMCA SPC 25 NORM (naturally occurring radioactive material) - Safety Pocket Card - PDF version for download for members only	7 Oct 2015
IMCA SPC 25 ZIP	IMCA SPC 25 NORM (naturally occurring radioactive material) - Safety Pocket Card	7 Oct 2015
IMCA M 229	Mini RadaScan microwave radar sensor for dynamic positioning operations	1 Oct 2015
IMCA S 022	An introduction to inertial navigation systems	1 Apr 2015
IMCA SEL 038	Mooring incidents (DVD) is available to view online	1 May 2015
IMCA M 226	Security measures and emergency response guidance	1 Feb 2015
IMCA SEL 037	Security measures and emergency response guidance	1 Feb 2015
IMCA SPC 24 ZIP	IMCA SPC 24 Health in the workplace - Safety Pocket Card - Members only download	26 Jan 2015
IMCA SEL 036	Line of fire	1 Jan 2015

IMCA M 225	Example redundancy concept and annual DP trials for a DP class 3 construction vessel	1 Oct 2014
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International Electrotechnical Commission (IEC)

(as of 1 Dec 2016)

The following publications have been issued since October 2014:

Table 5--Recently Published IEC Documents

<i>Standard No.</i>	<i>Document Title</i>	<i>Committee</i>	<i>Date</i>
60092-202: 2016	Electrical installations in ships - Part 202: System design - Protection	TC 18	19 Sep 2016
60092-202:2016 RL Version	Electrical installations in ships - Part 202: System design - Protection	TC 18	19 Sep 2016
60092-504:2016 Ed. 4.0	Electrical installations in ships - Part 504: Automation, control and instrumentation	TC 18	22 Sep 2016
60092-504:2016 RLV	Electrical installations in ships - Part 504: Automation, control and instrumentation	TC 18	22 Sep 2016
60092-507:2014 Ed. 3.0	Electrical installations in ships - Part 507: Small vessels	TC 18	25 Nov 2014
60533:2015 RLV Ed. 3.0	Electrical and electronic installations in ships - Electromagnetic compatibility (EMC) - Ships with a metallic hull	TC 18	25 Aug 2015
60533:2015 Ed. 3.0	Electrical and electronic installations in ships - Electromagnetic compatibility (EMC) - Ships with a metallic hull	TC 18	25 Aug 2015
61892:2015 SER Ed. 3.0	Mobile and fixed offshore units - Electrical installations - ALL PARTS	TC 18	13 Jul 2015
61892-1:2015 Ed. 3.0	Mobile and fixed offshore units - Electrical installations - Part 1: General requirements and conditions	TC 18	13 Jul 2015
61892-1:2015 RLV Ed. 3.0	Mobile and fixed offshore units - Electrical installations - Part 1: General requirements and conditions	TC 18	13 Jul 2015
61892-5:2014 Ed. 3.0	Mobile and fixed offshore units - Electrical installations - Part 5: Mobile units	TC 18	6 Nov 2014
61892-7:2014 Ed. 3.0	Mobile and fixed offshore units - Electrical installations - Part 7: Hazardous areas	TC 18	11 Dec 2014
IEC/IEEE 80005-2:2016 Ed. 1.0	Utility connections in port - Part 2: High and low voltage shore connection systems - Data communication for monitoring and control	TC 18	27 Jun 2016

ISO 16315:2016 Ed. 1.0	Small craft - Electric propulsion system	TC 18	16 Mar 2016
60092-353:2016 RLV Ed. 4.0	Electrical installations in ships - Part 353: Power cables for rated voltages 1 kV and 3 kV	SC 18A	19 Sep 2016
60092-353:2016 Ed. 4.0	Electrical installations in ships - Part 353: Power cables for rated voltages 1 kV and 3 kV	SC 18A	19 Sep 2016

International Organization for Standardization (ISO)

(as of 1 Dec 2016)

The following publications have been issued since October 2014:

Table 6--Technical Committee 67: Materials, Equipment, and Offshore Structures for Petroleum, Petrochemical, and Natural Gas Industries

<i>Standard No.</i>	<i>Document title</i>	<i>Date Published</i>
ISO 12736: 2014	Petroleum and natural gas industries -- Wet thermal insulation coatings for pipelines, flow lines, equipment and subsea structures	12 Dec 2014
ISO 13702: 2015	Petroleum and natural gas industries -- Control and mitigation of fires and explosions on offshore production installations -- Requirements and guidelines	1 Aug 2015
ISO 14224:2016	Petroleum, petrochemical and natural gas industries -- Collection and exchange of reliability and maintenance data for equipment	15 Sep 2016
ISO 15156-1:2015	Petroleum and natural gas industries -- Materials for use in H ₂ S-containing environments in oil and gas production -- Part 1: General principles for selection of cracking-resistant materials	1 Sep 2015
ISO 15156-2:2015	Petroleum and natural gas industries -- Materials for use in H ₂ S-containing environments in oil and gas production -- Part 2: Cracking-resistant carbon and low-alloy steels, and the use of cast irons	1 Sep 2015
ISO 15156-3:2015	Petroleum and natural gas industries -- Materials for use in H ₂ S-containing environments in oil and gas production -- Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys	1 Sep 2015
ISO 15551-1: 2015	Petroleum and natural gas industries -- Drilling and production equipment -- Part 1: Electric submersible pump systems for artificial lift	1 May 2015
ISO 16440: 2016	Petroleum and natural gas industries -- Pipeline transportation systems -- Design, construction and maintenance of steel cased pipelines	15 Oct 2016
ISO 16969:2015	Petroleum, petrochemical and natural gas industries -- Internal coating and lining of steel storage tanks	1 Aug 2015

ISO 16904:2016	Petroleum and natural gas industries -- Design and testing of LNG marine transfer arms for conventional onshore terminals	15 Feb 2016
ISO 16961:2015	Petroleum, petrochemical and natural gas industries -- Internal coating and lining of steel storage tanks	1 Aug 2015
ISO 17348:2016	Petroleum and natural gas industries -- Materials selection for high content CO2 for casing, tubing and downhole equipment	15 Feb 2016
ISO 17349:2016	Petroleum and natural gas industries -- Offshore platforms handling streams with high content of CO2 at high pressures	15 Feb 2016
ISO 17776: 2016	Petroleum and natural gas industries -- Offshore production installations -- Major accident hazard management during the design of new installations	15 Dec 2016
ISO/DIS 17781.2	Petroleum, petrochemical and natural gas industries -- Test methods for quality control of microstructure of ferritic/ austenitic (duplex) stainless steels	17 May 2016
ISO/DIS 17782.2	Petroleum, petrochemical and natural gas industries -- Qualification of manufacturers of special materials	9 Sep 2016
ISO 17945:2015	Petroleum, petrochemical and natural gas industries -- Metallic materials resistant to sulfide stress cracking in corrosive petroleum refining environments	15 Apr 2015
ISO/TS 17969:2015	Petroleum, petrochemical and natural gas industries -- Guidelines on competency for personnel	15 Jun 2015
ISO/DTS 17969	Petroleum, petrochemical and natural gas industries -- Guidelines on competency for personnel	Under Development
ISO/DIS 18796-1	Petroleum, petrochemicals and natural gas industries -- Internal coating and lining of carbon steel process vessels -- Part 1: Technical requirements	14 Oct 2017 Target Date
ISO 18797-1: 2016	Petroleum, petrochemical and natural gas industries -- External corrosion protection of risers by coatings and linings -- Part 1: Elastomeric coating systems- polychloroprene or EPDM	1 Sep 2016
ISO 18797-1:2016	Petroleum, petrochemical and natural gas industries -- External corrosion protection of risers by coatings and linings -- Part 1: Elastomeric coating systems- polychloroprene or EPDM	1 Sep 2016
ISO 19008:2016	Standard cost coding system for oil and gas production and processing facilities	15 Aug 2016
ISO 19901-1:2015	Petroleum and natural gas industries -- Specific requirements for offshore structures -- Part 1: Metocean design and operating considerations	15 Oct 2015
ISO/AWI 19277	Qualification testing for protective coating systems under insulation	Under Development
ISO 19901-4: 2016	Petroleum and natural gas industries -- Specific requirements for offshore structures -- Part 4: Geotechnical and foundation design considerations	15 Jul 2016

ISO 19901-5: 2016	Petroleum and natural gas industries -- Specific requirements for offshore structures -- Part 5: Weight control during engineering and construction	15 Feb 2016
ISO 21809-3: 2016	Petroleum and natural gas industries -- External coatings for buried or submerged pipelines used in pipeline transportation systems -- Part 3: Field joint coatings	1 Mar 2016
ISO/CD 20815	Petroleum, petrochemical and natural gas industries -- Production assurance and reliability management	Under Development

American Petroleum Institute (API)

(as of 1 Dec 2016)

Below are recently published API documents since October 2014. Those standards that may be incorporated by reference into regulation may also be obtained at <https://publications.api.org/Default.aspx>.

Table 7--Recently Published API Documents

.Document No.	Document Title	Date
RP 2A-WSD	Planning, Designing, and Constructing Fixed Offshore Platforms – Working Stress design (22nd edition)	Nov 2014
RP 2D	Operation and Maintenance of Offshore Cranes (7 th edition)	Dec 2014
RP 2EQ/ISO 19901-2:2004	Seismic Design Procedures and Criteria for Offshore Structures	Nov 2014
RP 2 MET/ISO 19901-1:2006	Deprivation of Metocean Design and Operating Conditions	Nov 2014
RP 2N/ISO 19906:2010	Planning, Designing and Constructing Structures and Pipelines for Arctic Conditions (3 rd edition)	Apr 2015
RP 2SIM	Structural Integrity Management of Fixed Offshore Structures	Nov 2014
TR 18TR1	Guidance on Changes to API Q1, (9 th edition)	Jun 2015
API OSRC	Proceedings of the 2014 Offshore Structural Reliability Conference	Dec 2015
Spec 5LC	CRA Line Pipe	Mar 2015
Std 6ACRA	Age-Hardened Nickel-Based Alloys for Oil and Gas Drilling and Production Equipment	Aug 2015
Std 7CW	Casing Wear Tests	Jun 2015
Spec 7K	Drilling and Well servicing Equipment	Dec 2015

RP 9B	Application, Care, and Use of Wire Ropes for Oil Field Service (14 th edition)	Oct 2015
RP 10B-3	Testing of Well Cements Used in Deepwater Well Construction	Jan 2016
RP 10B-4	Preparation and Testing of Foamed Cement Formulations at Atmospheric Pressure	Oct 2015
TR 10TR6	Evaluation and Testing of Mechanical Cement Wiper Plugs	Jul 2015
Spec 11AX	Specification for Subsurface Sucker Rod Pump Assemblies, Components, and Fittings	May 2015
Spec 11D1/ISO 14310:2008	Packers and Bridge Plugs	Apr 2015
Spec 12B	Specification for Bolted Tanks for Storage of Production Liquids	Nov 2014
Spec 14A	Specification for Subsurface Safety Valve Equipment	Jan 2015
RP 14B	Design, Installation, Operation, Test, and Redress of Subsurface Safety Valve Systems	Sep 2015
Spec 16C	Choke and Kill Equipment	Mar 2015
Spec 16RCD	Specification for Rotating Control Devices	Sep 2015
RP 17R	Recommended Practice for Flowline Connectors and Jumpers	Mar 2015
RP 17S	Recommended Practice for the Design, Testing, and Operation of Subsea Multiphase Flow Meters	Jun 2015
TR 17TR8	High-Pressure High-Temperature Design Guidelines	Feb 2015
TR 17TR10	Subsea Umbilical Termination (SUT) Design Recommendations	Dec 2015
TR 17TR11	Pressure Effects on Subsea Hardware During Flowline Pressure Testing in Deep Water	Sep 2015
TR 17TR12	Consideration of External Pressure in the Design and Pressure Rating of Subsea Equipment	Mar 2015
RP 17U	Recommended Practice for Wet and Dry Thermal Insulation of Subsea Flowlines and Equipment	Feb 2015
RP 17V	Recommended Practice for Analysis, Design, Installation, and Testing of Safety Systems for Subsea Applications	Feb 2015
RP 19G9	Design, Operation, and Troubleshooting of Dual Gas-Lift Wells (2 nd edition)	Apr 2015
Spec 20C	Closed Die Forgings for Use in Petroleum and Natural Gas Industry	Oct 2015

Spec 20F	Corrosion Resistant Bolting for Use in the Petroleum and Natural Gas Industries	Jun 2015
Std 20H	Heat Treatment Services – Batch Type for Equipment Used in the Petroleum and Natural Gas Industry	Oct 2015
Bull 92L	Drilling Ahead Safely With Lost Circulation in the Gulf of Mexico	Aug 2015
RP 100-1	Hydraulic Fracturing – Well Integrity and Fracture Containment	Oct 2015
RP 100-2	Managing Environmental Aspects Associated with Exploration and Production Operations Including Hydraulic Fracturing	Aug 2015