

3rd SESSION OF THE IHO ASSEMBLY
SUMMARY RECORD OF THE THIRD PLENARY SESSION

3 May 2023

PRO 1.2 – IMPLEMENTATION AND REVIEW OF THE STRATEGIC PLAN (IHO COUNCIL)
(AGENDA ITEM 4.4) (continued)

(A3/2023/EN/PRO 1.2)

UNITED KINGDOM presented a proposed amendment, comprising a change to the wording of the last sentence to reflect the view that guidance to the Marine Spatial Data Infrastructures Working Group (MSDIWG) should be achieved through supporting regional and national efforts through the Regional Hydrographic Commissions (RHCs) rather than through the creation of a global portal. Noting that a portal created previously by the United Kingdom Hydrographic Office had not proven successful, he said that the purpose and defined customer requirement for a global portal were not clear. United Kingdom supported the use of the United Nations Integrated Geospatial Information Framework (UN-IGIF) pathways as a modern framework to maximize the value of data to societies. Funding and capacity for such a portal would also prove challenging. The role of the MSDIWG should therefore be to support national and regional efforts instead of creating a global portal.

NORWAY said that work of the MSDIWG had helped to create a more mature understanding of MSDI. He supported the changes proposed by United Kingdom; it was unclear who the customer would be for a global portal. Resources should be directed towards support on a national and regional level.

INDIA said that MSDI was still at a nebulous early stage and could not yet be considered to have “matured”. He emphasized the essential nature of global coordination so that layers were developed in a standardized way and ensured interoperability.

GERMANY said that their understanding had been that the proposal was not to develop another worldwide portal, but to make use of the mechanisms that already existed to provide the necessary data infrastructure, which included the UN-IGIF. The original proposal did not hinder regional or national approaches. Either option would be acceptable, but Germany suggested that in either case it be clarified that the aim was to support UN-IGIF rather than to build another portal.

BRAZIL and NEW ZEALAND expressed full support for the United Kingdom’s proposed amendment.

The SECRETARY-GENERAL explained that the idea of a portal had originally emerged in deliberations on the Strategic Plan during the 1st Session of the IHO Assembly. He fully concurred that there was no good purpose for a global portal to be maintained by IHO. He further stated that there was a system already in place under the Secretariat that provided Member States access to global thematic layers. Instead of a global portal, he suggested maintaining the current mechanism to provide global thematic layers, while also integrating the United Kingdom’s proposal to enhance support to national and regional MSDIWG efforts through the RHCs.

GERMANY supported the Secretary-General’s solution and expressed willingness to contribute to the development of the necessary wording.

UNITED STATES OF AMERICA endorsed that approach and said that, conceptually, the United States was a strong supporter of using the UN-IGIF pathways. They noted that it was a major change from the task assigned, and expressed willingness to help develop the necessary wording.

INDIA and FRANCE supported the Secretary-General's solution and expressed willingness to help develop the necessary wording.

UNITED KINGDOM endorsed the approach and said they saw value in articulating the problem the portal was seeking to solve and being specific about the outputs and outcomes it hoped to achieve.

PRO 1.2: The Assembly directed IRCC to provide guidance to the MSDI Working Group on the implementation of Goal 2/Target 2.1 through supporting national and regional MSDIWG efforts via RHCs and the continued provision of global thematic layers by means of the existing IHO GIS infrastructure (trusted source, standardized, interoperable). Any proposed extension of the portfolio of global thematic layers by the MSDIWG has to be brought forward to IRCC for endorsement and Council for approval.

PRO 1.7 – DEPRIVATION OF THE IHO MEMBER STATE STATUS FROM THE RUSSIAN FEDERATION (UKRAINE) (AGENDA ITEM 4.8)

(A3/2023/EN/PRO 1.7)

The CHAIR said that Ukraine had unfortunately been unable to attend the Assembly to present its proposal. She noted that the proposal invited the Assembly “to consider the ability” of the Assembly to make a decision of deprivation of IHO Member State status from the Russian Federation on the basis of its military aggression against Ukraine. She clarified that the Assembly’s ability to make such a decision was determined by the IHO Convention and General Regulations that do not provide for any mechanism for suspending a Member State for reasons other than two consecutive years’ non-payment of contributions. She therefore concluded that the Assembly did not have such an ability.

SWEDEN, speaking on behalf of European Union Member States, who were also IHO Member States, delivered a statement expressing full solidarity with Ukraine and the Ukrainian people. He called on the Russian Federation to cease action and withdraw from Ukraine. He further stated that the Russian Federation must respect international law, including human rights. Sweden requested that their statement is reproduced in these proceedings.

UNITED STATES condemned in the strongest possible terms the Russian Federation’s unprovoked and illegal war against Ukraine, and the fact that the event had created a humanitarian catastrophe. The United States expressed full support for all efforts to ensure the safety of seafarers, commercial vessels, and the marine environment in the Black Sea and Sea of Azov, and further stated that it was important that lawful hydrographic services and activities be facilitated, even in situations involving armed conflict. It was noted that the armed conflict was blocking such activities. The swiftest way to ensure that maritime activities could continue in those areas would be for the Russian Federation to immediately end its illegal war and withdraw all its forces.

NORWAY stated that it was not a member of the European Union, but expressed support for the statement made by Sweden.

JAPAN expressed concern about the impact of Russian Federation’s actions, which were shaking the very foundation of the international order based on the rule of law. Japan took seriously the maritime safety of civilian vessels in the regions that were being attacked and condemned the Russian Federation’s actions. Japan was hopeful that a peaceful environment would return to Ukraine.

UNITED KINGDOM stated that it was not a member of the European Union, but supported the statement by Sweden. The United Kingdom expressed full support for Ukraine in standing against

ongoing illegal aggression from the Russian Federation and condemned that country's unprovoked and premeditated invasion of Ukraine. It was through international bodies such as the IHO that countries should seek to hold the Russian Federation accountable for its illegal and unsafe actions, which were impacting Ukraine's ability to undertake its duties as a national hydrographic office and jeopardizing the safety of the international mariner. Working with other IHO partners, the United Kingdom had responded fully to Ukraine's request for support, detailed in Circular Letter 16/2022, by providing support and assistance to Ukraine to enable it to undertake its responsibilities under the International Convention for the Safety of Life at Sea (SOLAS) as a sovereign coastal State. The United Kingdom would continue to do so, for as long as necessary.

RUSSIAN FEDERATION thanked colleagues who had shown professionalism in abstaining from any comments in what was a political matter. The Russian Federation was making every effort to maintain hydrographic activities and assure navigational safety in the region. The Russian Federation had never stopped conducting bathymetric activities in the Black Sea and Sea of Azov, charting activities and updating maps, and assuring safe navigational activities. The practical results of those efforts were that more than 12,500 ships had passed the Kerch Strait in both directions since navigation had opened. The Russian Federation noted revision efforts by the Russian hydrographic service to support navigational security in the region.

CHINA attached great importance to the sovereignty of Member States, and noted that unilateral sanctions impacted safety of navigation in the region. China called for all countries to strengthen solidarity and work together to avoid adverse effects. They stated that the IHO was an intergovernmental technical advisory body and not a political organization. The Assembly was not a forum suitable for discussion of political issues.

The Assembly took note of the Chair's clarification that neither the IHO Convention nor the General Regulations of the IHO provide a mechanism to suspend a Member State from IHO membership for reasons other than non-payment of contributions for two consecutive years.

CONSIDERATION OF REPORTS AND PROPOSALS: WORK PROGRAMME 2 (AGENDA ITEM 5.1)

HSSC CHAIR presented a summary report of activities under Work Programme 2. The main focus of HSSC's work was to develop and maintain the IHO Standards necessary for safe navigation in a way that also supported the harmonized use of data beyond navigation. HSSC organized its work through nine working groups, whose areas of work he outlined. The S-100 Working Group included five Project Teams. A further Project Team was focused on Maritime Autonomous Surface Ships (MASS) and another on S-130. Lastly the Advisory Board of the Law of the Sea (ABLOS) comprised four representatives of IHO Member States and four from the International Association of Geodesy. HSSC Chair shared an implementation dashboard, which was kept up to date by the HSSC Vice-Chair and was reported annually to the Council.

Explaining the need for the move to S-100, HSSC Chair gave examples to highlight the value of moving to an ECDIS based on multiple interoperable layers. Moving beyond electronic versions of a chart format optimized for the paper media would allow the full potential of available data to be utilized. For example, enabling the creation of a unique safety depth layer that would also take into account dynamic information about water level and currents would contribute to reduced fuel consumption and so fewer emissions. Major benefits included improved safety (high resolution bathymetry in combination with other datasets such as under keel clearance management), optimized loading and route optimization and just-in-time arrival (decreased fuel consumption, avoid squat, usage of tide currents and weather information). The ability for ships to be able to

share their planned route with shoreside entities would be another major innovation that would allow ports to work more effectively. S-100 would also be maintainable and cyber-secure, and constituted a start towards automated navigation as machine-readable nautical information could facilitate the development of MASS.

In replacing S-57 ENC's with multiple interacting layers, the concept was that S-101 ENC would always act as the base layer. Further information could then be layered on top, but users should always be able to revert to the ENC in one click. The system was under development, and HSSC Chair encouraged Member States to engage to ensure that IHO could deliver new systems in a safe but understandable manner. He emphasized the importance of information being issued for use with ECDIS by or on the authority of a government-authorized hydrographic office or other relevant government institution. The navigational base layer of the newly defined Electronic Navigational Data Service (ENDS) was the ENC.

A two-step approach to implementation will focus first on a package of Product Specifications relating to navigational route monitoring mode, then on those relating to navigational route planning mode. In the transition from S-57 to S-101 ENC, backwards conversion was expected to be a more automatic process, which would mean it may be preferable to first produce S-101 data and convert this back to S-57. Various ongoing activities and initiatives were aimed at supporting the transition from S-57 to S-101 so that Member States could achieve substantial coverage before the new IMO ECDIS Performance Standards in-force dates. He encouraged technical experts to study carefully the options for hydrographic offices as there were strategic decisions that needed to be made in relation to parallel production of S-57 and S-101.

IHO had organized a drafting group and a draft redline version of the revised IMO ECDIS Performance Standards had been submitted to the IMO Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) 9th meeting, held in June 2022. With the exception of the withdrawal of functionalities for route exchange all other proposed changes were endorsed by NCSR9. The proposal was subsequently approved by the IMO Maritime Safety Committee (MSC) 106th meeting in November 2022. A transition period had been agreed upon, meaning that S-100 ECDIS would be legal to use after 01 January 2026 and from 01 January 2029 new systems must comply with the new IMO Resolution MSC.530(106) on ECDIS Performance Standards. The inclusion of S-100 in the IMO regulatory framework was a major success for IHO, but meant that IHO had commitments towards IMO and other stakeholders to achieve operational status on the prioritized S-100) Product Specifications. An increase in active contributions in S-100-related Working Groups and Project Teams was therefore needed and Member States must do as much as possible to achieve substantial coverage of S-101 by 2026.

A Project Team was established under the Nautical Cartography Working Group (NCWG) to develop a baseline symbology set to support the automated production of paper charts from S-101 data. Some Member States had suggested a varied approach to achieve better guidance. The HSSC and NCWG perspective was that the IHO Chart Specifications S-4 provided enough flexibility. The general approach agreed upon at A-2 in 2020, regarding paper charts, is reasonable.

Member States were encouraged to engage in the work of HSSC, which would help them to ensure competencies in their own organizations while contributing to the development of new Standards. The involvement of Member States was important to avoid becoming too dependent on industry, and to ensure that the whole S-100 ecosystem was implemented in a safe way. As

IHO's operational resources were limited, a sustainable structure was needed. HSSC Chair thanked all those who participated in the activities of the Working Groups and the HSSC Chair team.

UNITED KINGDOM expressed appreciation for the report. They said that the move away from paper charts towards digital charts was evidenced by a significant reduction in the volume of paper charts sold by Admiralty internationally, from 5 million sheets of paper charts in 2015 to 575 000 charts sold internationally in 2022.

UNITED STATES OF AMERICA expressed appreciation for the report and looked forward to continuing to support such work in future.

The Assembly endorsed the Report of Work Programme 2.

PRO 2.1 – DUAL FUEL CONCEPT FOR S-100 ECDIS (IHO COUNCIL) (AGENDA ITEM 5.2)

(A3/2023/PRO 2.1)

COUNCIL CHAIR, explaining the rationale behind the dual fuel concept, said that S-100-compliant additional data layers would be interoperable only with S-101 Electronic Navigational Charts (ENCs). Introducing PRO 2.1, she noted that there were no substantive objections to the concept and that the Hydrographic Services and Standards Committee (HSSC) and Council had endorsed the document "Dual Fuel Concept for S-100 ECDIS" and the related executive summary.

The Assembly was invited to approve the dual fuel concept for S-100 Electronic Chart Display and Information Systems (ECDIS), including the prefacing executive summary as presented in Annex A, and to note the importance of the fundamental strategic change introduced by the S-100 ECDIS dual fuel concept with regard to multiple interacting navigational data layers.

SURINAME said that it supported the proposal.

CHAIR said she took it that the Assembly approved both proposals.

PRO 2.1: The Assembly took note of and approved the dual fuel concept for S-100 ECDIS including the prefacing Executive Summary as presented in Annex A. The Assembly further took note and approved the fundamental strategic change introduced by the S-100 framework and approved the dual fuel concept for S-100 ECDIS.

PRO 2.2 – ESTABLISHMENT OF AN S-100 INFRASTRUCTURE CENTRE TO SUPPORT THE IMPLEMENTATION OF S-100 (REPUBLIC OF KOREA) (AGENDA ITEM 5.3)

(A3/2023/PRO 2.2)

REPUBLIC OF KOREA, introducing PRO 2.2, said that a permanent and stable support structure would be essential for the IHO to achieve the S-100 Implementation Roadmap and related commitments. The proposed S-100 Infrastructure Centre could assist Member States in implementing the S-100 framework through the sustainable operation of the Geospatial Information Registry, with efficient communication with existing IHO bodies and the Secretariat, and through the update and maintenance of S-100 catalogues and development tools and S-164 test datasets.

Taking into consideration Sweden's comment in the Red Book, Republic of Korea proposed that the Project Team should develop the objectives, scope and operational governance of the proposed Centre and report to HSSC, which should in turn report to Council for approval. Council should then report to the Assembly. It was hoped that the Project Team would find a suitable funding solution to avoid burdening the IHO. As a proponent of the proposal, the Korea Hydrographic and Oceanographic Agency (KHOA) would be actively involved in the Project Team's work.

The Assembly was invited to recognize the need to establish the S-100 Infrastructure Centre and approve the foundation of a new Project Team under HSSC, with a three-year Work Plan including the establishment of the S-100 Infrastructure Centre to prepare for the actual implementation period, with consideration of the possible location of the centre; request the HSSC to propose to the Council how the S-100 Infrastructure Centre could support the S-100 framework; and request the Council to report to the 4th IHO Assembly on the progress of the three-year operation of the Project Team, including the establishment of the S-100 Infrastructure Centre.

NORWAY, acknowledging the need to address the topic, said that it wished to help to develop a solution. It stressed, however, that a decision on the exact form or name of the structure might be premature at the present stage.

UNITED KINGDOM agreed with Norway that the proposed effort might be premature, but expressed a willingness to work with the Republic of Korea to develop the proposal.

SINGAPORE supported the proposal in principle and stressed the need for further discussion at HSSC about the roles and responsibilities of the proposed Centre. It looked forward to exploring possible collaboration between the Centre and the IHO–Singapore Innovation and Technology Laboratory on S-100 related projects.

UNITED STATES OF AMERICA, emphasizing the need for an S-100 technical support centre, said that it endorsed the proposal. There were clear roles for both the IHO Singapore Innovation Laboratory and the proposed Centre, and it would be important to put in place a well-documented, coordinated management structure at the IHO to avoid duplication of efforts. United States stood ready to contribute to the planning process.

SURINAME supported the proposal.

CANADA said that its concerns documented in the Red Book had been addressed. It looked forward to supporting Republic of Korea with the proposed centre.

MALTA, welcoming the initiative, said that, in preparation for the S-100 ECDIS compliance deadline, the proposed centre should consider issues regarding end-user equipment and the implementation of S-100 requirements; for example, whether the ship was new, whether S-100-compliant equipment had been built into a new ship or was retrofitted into an existing ship; whether existing ship equipment would need to be replaced in the medium term; and matters regarding port State control and flag State. Malta stated that these were questions for the International Maritime Organization (IMO), and not the IHO. The proposed S-100 Infrastructure Centre should consider the end-user and how it would benefit end-users without too much hardship.

PORTUGAL, having received answers to a number of questions, expressed support for the proposal.

SECRETARY-GENERAL, stressing the indispensability of making the IHO a cutting-edge technical standardization body, said that a complex digital ecosystem consisting of all the elements contained in the proposal was necessary. The maintenance of that constantly evolving ecosystem would become an operational role requiring substantial human and material

resources. Consideration must therefore be given to where to locate the proposed Centre and to how to maintain and resource it.

REPUBLIC OF KOREA thanked Member States for supporting the proposal and looked forward to fruitful discussions in the project team.

UNITED KINGDOM asked whether “recognize” in paragraph (a) of the proposal should be changed to “approve” or “investigate further”.

REPUBLIC OF KOREA confirmed that agreement was sought on the need for the proposed Centre and on the establishment of a Project Team.

NORWAY suggested rewording paragraph (a) to recognize only the need to address the topic, as it was too early to specify the nature of the solution.

CHAIR said that she understood the proposal was to establish an S-100 Infrastructure Centre and to create a Project Team to explore the matter and report to HSSC, which would in turn report to Council on whether to establish such a Centre and how it would support S-100 implementation.

HSSC CHAIR suggested changing the wording to “the possibility of establishing an Infrastructure Centre Project Team”.

REPUBLIC OF KOREA said that if the proposed Centre could not be established within the three-year Work Plan, Council would report that the work was still in progress. It hoped, however, that that would not be the case, given the urgency of S-100 implementation.

DIRECTOR KAMPFER, noting broad support for recognizing the need for such a structure, suggested including a reference to the operational establishment of the proposed Centre. In view of the approaching S-100 deadlines, it was important to put the Centre into operation as soon as possible.

UNITED STATES OF AMERICA endorsed the proposal as presented by Republic of Korea and concurred with Chair’s interpretation.

CHAIR clarified that HSSC would report to Council on whether to establish the proposed Centre and how it could support the S-100 framework. She therefore proposed amended wording of paragraph (b) of the proposal to that effect.

In the absence of any comments, the CHAIR took it that the Assembly wished to adopt the proposal with her amendment.

PRO 2.2: The Assembly recognized the need to establish the S-100 Infrastructure Centre and approve the foundation of a new Project Team under HSSC with a three-year Work Plan including the establishment of the S-100 Infrastructure Centre and to prepare for the actual implementation period with consideration of the possible location of the Centre; requested HSSC to propose to the Council to establish the S-100 Infrastructure Centre and determine how it can support the S-100 framework; and tasked Council to report to the 4th IHO Assembly on the progress of its three-year operation, including the establishment of the S-100 Infrastructure Centre.

PRO 2.3 THE FUTURE OF DIGITAL CHARTING (UNITED KINGDOM) (AGENDA ITEM 5.4)

(A3_2023_EN_PRO_2.3)

UNITED KINGDOM noted that, with the development of the new S-100 standards and mobile technology, hydrographic offices were in a position to offer accessible official digital solutions that would increase the safety of navigation for those below the ECDIS-mandated sector. However, the regulations, standards and infrastructure required to use hydrographic data in systems below

the ECDIS mandate were currently not in place. It was proposed that a Project Team should be established under IHO to investigate the potential issues in the current S-100 infrastructure to support Electronic Chart System (ECS) users and to elaborate recommendations that would allow for regulated and approved non-ECDIS vessel equipment to utilize hydrographic data from navigational charts. The establishment of a Project Team would enable different maritime administrations to contribute to a single solution, developed in conjunction with IHO, that would propose changes, where necessary, to the regulations at IMO and for those to be mandated.

NEW ZEALAND supported the proposal, believing that all sectors of the global maritime community should benefit from the shared future of digital charting using S-100. The time was right to engage with the regulator and enable a regulatory regime where approved ECSs, when loaded with official Electronic Navigational Charts, could meet the requirements of all commercial vessels.

GERMANY noted that extending the regulations was primarily a task for IMO, assisted by IHO.

SURINAME supported the proposal, since it would further enhance the safety of navigation.

SWEDEN said that IHO should focus its attention and resources, until 2026, on implementation of S-100 in the ECDIS market. The proposal under discussion was mainly a regulatory issue, and hence not a primary question for IHO; nor was it a technical problem that required additional standards or specialized products. Sweden did not support the proposal for the time being; such an initiative should come instead from the regulatory side, possibly through IMO Member States.

INTERNATIONAL CENTRE FOR ELECTRONIC NAVIGATIONAL CHARTS (IC-ENC) said that it had been looking into the possibility of harmonization of the regulatory environment but had paused that work pending the outcome of the discussion at the 3rd Assembly. On that basis, it lent its support, as an observer, to the proposal.

NIGERIA supported the proposal, as it sought to improve navigational safety.

UNITED KINGDOM said that ECDIS had been in place before being regulated retrospectively by IMO. Setting up a Project Team to look at the sub-ECDIS sector would benefit implementation of the whole S-100 Roadmap. IHO should take the lead on work in that sector.

NORWAY said that ECDIS consisted of two components: software and data, or content, for which IHO was responsible; and hardware, the system itself, for which IMO was the regulatory body. They wondered how realistic it would be, from an IMO perspective, to expand on the current ship types using ECDIS. Norway was continuing to provide S-57 and S-101 data for use in ECS. From a regulatory perspective, the country was well prepared for the next step in S-100 implementation.

ITALY strongly supported the proposal, in view of the large numbers of fishing and leisure vessels registered in the country. The process of applying S-100 to the sub-ECDIS sector should be speeded up, under the umbrella of IMO, with proper digital products available to all users.

UNITED STATES OF AMERICA agreed that IHO should consider a short-term Project Team to assess potential differences between the ECDIS and sub-ECDIS markets. It supported the request for IHO to work with IMO and other relevant organizations to ensure that the relevant sub-ECDIS Specifications acknowledged the importance of IHO Standards.

MALTA noted that SOLAS had not yet been amended to accommodate S-100, so the performance appraisal for the equipment had not been established. The S-100 Infrastructure Centre should start work in that area forthwith. The task of amending national codes was made more difficult by the need to specify the equipment that would be required in order to replace paper charts. National maritime administrations would have to conduct extensive discussions on the matter.

TÜRKIYE fully supported the proposal. The needs of non-SOLAS vessels should be addressed without further ado. Even though S-57 data were provided to ECS, they did not meet IMO chart carriage requirements.

DENMARK said that IHO should have a place where the sub-ECDIS market could be discussed. It supported the suggestion to have a short-term Project Team look at the question and elaborate the IHO position.

IRELAND supported the proposal, drawing attention in particular to workboats, fishing boats and other domestically mandated vessels.

SINGAPORE supported the proposal, noting that in Singapore, there were many vessels sharing very limited waters but not all sharing the same navigational data. This is a cause for concern. It was noted that the IHO also issues guidelines that are not enforced by international regulations; if it did so for the sub-ECDIS sector, Singapore would seriously consider adopting them for non-SOLAS ships.

SPAIN said that the non-ECDIS sector needed standards in order to improve safety, and it therefore supported the proposal.

SECRETARY-GENERAL said that IHO was an accredited observer of IMO and its role within the IMO framework was anchored in SOLAS Chapter V, Regulation 9. As such, IHO had been invited by IMO in 1986 to draft ECDIS Performance Standards and Specifications for Chart Content and Display, which were adopted in 1995. The mandated carriage requirement had come many years later, in 2012. IHO did not have a role in proposing to IMO an enhancement with regard to carriage requirements. That was the sovereign right of an IMO Member State.

URUGUAY supported the proposal, believing that the sector needed regulation by IMO.

THE CHAIR suggested that the last phrase of the proposal could be amended so that Member States, rather than IHO, would request IMO to consider an update to the relevant resolutions.

TÜRKIYE said that non-SOLAS vessels were one reason why hydrographic offices continued to produce paper charts, which was a considerable burden on them. It would be beneficial to contact IMO and explore the possibility of changing carriage requirements.

SECRETARY-GENERAL reiterated that a proposal to amend carriage requirements must be presented to IMO by Member States. The IHO could not propose actions to the IMO but could agree to work out guidelines as it had been suggested by Singapore.

UNITED KINGDOM said that most hydrographic offices did not have the resources to continue “triple fuelling”, or issuing paper charts as well as S-57 and S-101 products. The narrative with IMO was not about imposing additional carriage requirements but about moving to digital navigation and retiring paper charting.

DENMARK proposed that the first paragraph in the proposal could be amended to read “development of guidelines”, as had been suggested by Singapore. The third paragraph in the proposal should be reworded to address the request to IHO Member States to approach IMO.

FRANCE was concerned about the mention of “supplementary standards” in the first paragraph of the proposal. S-100 had the flexibility to allow for the development of products for the non-ECDIS sector. France also expressed concern at the reference to international standards in the second paragraph of the proposal, believing that the existing standards could be applied to vessels below the mandated ECDIS requirements.

GERMANY supported the amendments proposed by Denmark and France.

SWEDEN, speaking in its capacity as HSSC Chair, doubted whether there was regulatory expertise within HSSC to set up a sub-ECDIS Project Team. Perhaps such a body should be established under the Council.

DIRECTOR KAMPFER said that getting items on the agenda of IMO was a lengthy process. The Project Team might wish to conduct a study to ascertain what impact the proposal to replace paper charts would have on IMO and its Member States.

PRO 2.3: The Assembly was not able to reach an agreement but anticipates that United Kingdom will keep Council and HSSC informed on the progress achieved with IMO and other interested partners.