The future growth of the global economy depends on a robust air transport sector. Shortly prior to the IAIN Officers’ meeting this year, ICAO was due to be concluding its 37th Triennial General Assembly and review of its major programmes with 190 member state high level delegations and numerous observer organizations. Key issues for ICAO are environmental sustainability, air safety, and security.

**Priority Issues:**

**Environment:** The Assembly is expected to adopt new ambitious globally harmonized goals for reducing CO2 emissions. New policies will form the basis for the aviation sector’s participation in the 16th Conference of Parties of UN Framework Convention on Climate Change (UNFCC) in December. These include a 2% annual fuel efficiency improvement to 2050; development of CO2 certification standards for aircraft engines, and a framework for market based measures. In February, ICAO’s Committee for Aviation Environment Protection (CAEP) committed to a timetable for 2013 for a adopting a global fuel efficiency standard. Nitrous Oxide (NOx) reduction standards will be increased by 15% over current levels applicable to new aircraft certified after 31st Dec 2013 and recommended for all ongoing engine production after that date. A global framework was created for the development and deployment of alternative fuels.

**Safety:** Global accident rates remain remarkably low at four accidents per million departures. The High Level Safety Conference in March identified the challenge for aviation to develop more sophisticated tools and techniques
to proactively improve safety in an increasingly complex operating environment. This will involve a move from reactive to predictive models, in turn requiring greater transparency and information sharing, greater involvement of regional safety organizations, and increased co-operation between regulators and industry stakeholders. ICAO has implemented the Continuous Monitoring Approach (CMA) to safety oversight in all its member states though periodic audits. Its Global Aviation Safety Plan (GASP) calls for improvements on three areas: (i) reducing the number of fatal accidents and related fatalities worldwide regardless of the growth in traffic volume; (ii) reduction in the overall accident rate, and (iii) ensuring that no region has a rate exceeding twice the global average. Two regions still exceed this. Specific areas include loss of control in flight, runway excursions, controlled flight into terrain and system or component failures. A specific focus will be on adoption of Safety Management Systems. Other issues include Halon gas replacement and proficiency in the English language used for radiotelephony communications.

Security: The attempted bombing of a commercial airliner on 25th December 2009 intensified efforts to protect commercial aircraft from terrorist attacks. This includes a comprehensive industry security policy to further tighten the global security net meeting new and emerging threats both in the air and on the ground, while accelerating the flow of passengers at airports. Some 2.5 billion passengers fly each year. Universal security audits are now into a second cycle. Four Ministerial-level meetings this year confirmed commitment to fight terrorism, with measures including improved travel documentation accuracy and security such as through the Public Key Directory (PKD) greater co-operation amongst states and industries, and utilization of modern technologies. In March 2010, the ICAO Aviation Security Panel explored innovative use of passenger data for security purposes, and finding ways to enhance existing international co-operation and threat sharing information.

Other significant areas:
Technical and Operational: ICAO continues to focus effort on the evolution of the Global Air Traffic Management (ATM) System through implementation of a performance framework at the regional level, which includes the establishment of performance objectives, metrics, and timeframes for achieving objectives. The US NextGen and European SESAR are two important air traffic management programmes that will have a significant impact on global aviation. ICAO is working on harmonization of
systems and ensuring that the necessary standards and recommended practices to support these two programmes are available in a timely manner.

Civil/Military co-operation: ICAO convened the Global Air Traffic Management Forum on Civil/Military Co-operation in Montréal from 19th to 21st October 2009.

Liberalization of international air transport services: ICAO is working on strategies to exert a leadership role in the liberalization process.

Prevention of Spread of Communicable Disease through Air Travel (CAPSCA): Through the CAPSCA project, aerodromes are being made to improve preparedness for an outbreak of a communicable disease of serious public health concern. ICAO is working on further extending general state support for such measures.

Next Generation of Aviation Professionals: During the next decade, the aviation workforce will face several challenges, including human resources planning in response to massive retirements; a mismatch between industry growth and training capacity; the lack of implementation of more effective and efficient training methodologies; and the impact of new technologies on safety- and efficiency-critical functions. ICAO convened the Next Generation of Aviation Professionals Symposium in Montréal from 1st to 4th March 2010 to address these challenges.

IMO
Report by Captain Rein van Gooswilligen MSc MBA FRIN, IAIN Co-ordinator, IMO activities

General
IAIN participates as a Non-Governmental Organisation (NGO) in International Maritime Organisation (IMO) committee and sub-committee meetings. IAIN has been associated for more than 30 years (since 1976) with the organisation. Members of IAIN should realise that IMO’s meetings are attended by maritime experts from approximately 170 Member States and
that the specialized committees and subcommittees are at work the year round to update existing legislation and to develop and adopt new measures. In this way IMO renders support in the fields related to transport by sea through among other programmes and studies in the fields of safety, environment, shipbuilding, legal affairs and management. Virtually all the nations of the world with an interest in maritime affairs are present. This offers IAIN and its members a unique possibility to participate in discussions related to many important maritime issues. IAIN members are urged to utilize this possibility to further the cause of maritime navigation as well as attaining IAIN’s goals. This report will disregard meetings mentioned in previous reports and focus on items discussed during the 56th Sub Committee of Navigation (NAV 56) meeting.

**NAV 56**
From 26th July to 30th July 2010 the 56th session of IMO’s Sub Committee for the Safety of Navigation (NAV) was held in London. Approximately 350 representatives of more than 65 countries and 23 Non Governmental and Inter Governmental Organisations met in the IMO building, Albert Embankment, London, under the chairmanship of Mike Sollosi. (USA)

The agenda for NAV 56 included the following items:
- Amendments to or new routeing systems, ship reporting and related matters;
- Amendments to the Performance standards for Voyage Data Recorders;
- Development of an e-navigation strategy implementation plan;
- Review of vague expressions in SOLAS;
- Finalisation of the revision of the principles for establishing the safe manning level of ships including mandatory requirements for determining safe manning.

Working groups were established to deal with routeing of ships, ship reporting and related matters including general provisions on ships (under the chairmanship of Captain Hanken(Germany), e-Navigation (under chairmanship of Mr Hagen (Norway) as well as a technical working group (under chairmanship of Mr Fisher (UK). IAIN participated in the first two working groups.


**Routeing of ships, ship reporting and related matters**

The following new Traffic Separation Schemes (TSS) were approved:

- Off the western coast of Norway
- Off the southern coast of Norway

The following amendments to existing TSS were approved:
- Off Feinstein
- In the Strait of Dover and adjacent waters
- Off the south-west coast of Iceland

The following routeing measures other than TSS were approved:
- Establishment of a new Area to be Avoided in the Atlantic Ocean, off the coast of Ghana.
- Establishment of a new Deep-water route and an associated precautionary area in the approaches to the new port of King Abdullah Port (KAP Port) in the northern Red Sea.
- Amendments to the existing eastern Area to be Avoided, off the south-west coast of Iceland
- Amendments to the existing deep-water route forming part of the “in the Strait of Dover and adjacent waters” Traffic Separation Scheme.

The following new mandatory ship reporting system was approved:
- In the Sound between Denmark and Sweden (SOUNDREP)

The following amendments to mandatory ship reporting system were approved:
- In the Torres Strait region and the Inner Route of the Great Barrier Reef (REEFREP)
- Off the south and south-west coast of Iceland (TRANSREP)

All measures to be forwarded to MSC 88 (to be held from 24th November to 3rd December 2010) for adoption.

**Routeing measures other than TSS:**

Among these were the establishment of areas to be avoided (ATBA) in the Atlantic Ocean off the coast of Ghana and off the South West Coast of Iceland. A proposal for an ATBA in the Campeche Sound (Mexico) was withdrawn and will be submitted at the next session of the sub-committee (NAV 57).
Under this item attention is specifically drawn to the circumstance that a new interim recommendation for ships crossing the Singapore Strait was approved. Following a submission proposing three (vertical) green signal lights for local use for crossing the routeing system in the Singapore Strait this item met with quite some discussion. The proposal met with support from regional member countries, while other members were concerned whether the tests had been completed successfully. One of the questions centred on the circumstance if it would at all be possible to locally introduce a requirement for three green signal lights when navigating in, what is in not a minor part, international waters. It was ultimately decided to adopt the measure as preliminary recommended measure and to give the submitting countries the opportunity to eventually propose an amendment of the International Regulations for Preventing Collisions at Sea (COLREGs). One should therefore realise that this matter might end up in proposals to amend COLREGs. It is clear that proposals and submissions following this discussion will require serious deliberation and will certainly be of interest to IAIN’s community.

Guidelines for consideration of requests for safety zones larger than 500 metres around artificial islands, installations and structures in the exclusive economic zone (EEZ).

Some will recollect that this issue came up related to a submission by Brazil during one of the previous NAV meetings. NAV decided at that time not to decide on the issue during that meeting. The subject was however raised again during a meeting of MSC after which it was referred back to NAV for discussion. After an extensive discussion in the sub committee, within the working group and plenary, it was agreed that there was no demonstrated need, at present, to establish safety zones larger than 500 metres around artificial islands, installations and structures in the EEZ or to develop associated guidelines. Most organisations were of the opinion that such a matter should rather be addressed by an SN circular than in the General Provisions on Ships' Routeing (GPSR). The extension of the safety zone to remain 500 metres maximum. Please note that with relation to floating production, storage and offloading facilities (FPSOs) this definition now also includes “their associated and necessary structures, installations, vessels, shuttle tankers and/or tugs in its operations, and other similarly situated installations and structures, that rotate around a fixed mooring”. Wording that may in some way assist the needs of Brazil. After concerns were raised by the International Sailing Association Federation (ISAF) the SN circular also includes opportunities for consultation with stakeholders.
Amendments to the performance standards for Voyage Data Recorders
This item focussed on the review of the proposal to fit float free VDRs on board vessels. During the meeting a new draft amended recommendation on performance standards for VDRs was produced. According to the work programme, this item will be finalised in 2011. At the next session of the sub committee (NAV 57) the performance standards will be further developed. A cost assessment to establish the (annual) cost of the introduction of float free VDRs on board ships was deemed necessary. One or the other to clarify the cost of retrieving a VDR after a vessel had sunk instead of retrieving a VDR that is automatically released.

Development of an e-navigation strategy implementation plan.
Increasing safety and reducing the burden on navigators is one of the ultimate goals of the development of e-Navigation. Several sub-committees are involved in the work on e-Navigation. Besides NAV these include the sub-committee on Radiocommunications and Search and Rescue (COMSAR) and the sub-committee on Standards of Training and Watchkeeping (STW). NAV is however leading. As mentioned in earlier reports a correspondence group had been set up working between NAV 55 and this sub-committees session. A working group addressed the outcome during the meeting. It was decided again to establish a correspondence group to continue the work in the interim leading to the next meeting of the sub committee on navigation (NAV 57). The debate involved considerable discussion associated with displays, symbols and chart coverage. A proposal to hold a workshop under the Chairmanship of the Correspondence Group Chairman (Norway) was also discussed. Input of IALA on several key items was also addressed.

Architecture of the e-Navigation system has been developed and determination of user needs has been decided. The next step will be to perform a gap analysis in order to establish knowledge of what is required to meet the user needs ashore as well as on board ship.

Review of vague expressions in SOLAS.
This item centred on the clarification of expressions within SOLAS for assessing the blind sector area from (container)ships’ bridges. It appears that the present regulation contains terms that may lead to blind sector areas that are too large. There was quite some debate on this issue which eventually resulted in proposals from member states and organisations being
merged into one single proposal to change SOLAS regulation V/22. It was however ultimately decided not to follow this path but to refer the issue to a new correspondence group review for debate at the next sub commission’s meeting (NAV 57)

**Finalisation of the revision of the principles for establishing the safe manning level of ships including mandatory requirements for determining safe manning.**

NAV 56 endorsed the outcome of the 41st meeting of the sub-committee on Standards of Training and Watchkeeping (STW 41). The proposals for establishing minimum safe manning on board will be sent to MSC 88 for approval before being finally sent to IMO’s Assembly for final adoption.

**Elections and next meeting**

Captain Mike Sollosi (USA) was re-elected as chairman. Mr. Kostiantyn Billiar (Ukraine) was elected vice president replacing Mr Raja Malik (Malaysia) who has retired. The next meeting, NAV 57, is foreseen to be held from 6th to 10th June 2011.

**IMO documents access**

Members are advised that if they wish to have access to IMO documents such can be provided through IAIN’s representative. Please contact: r.vangooswilligen@gmail.com for further information.

**In conclusion**

During the meeting IAIN’s Secretary General Group-Captain David Broughton and RIN’s director Captain Peter Chapman-Andrews also took their place behind IAIN’s flag. I would like to thank them as well as other IAIN members for their support. Please note that members are invited to send any relevant information or other input to me. Those who wish to be more actively involved, either by attending meetings and/or participating in working or correspondence groups, are also invited to establish contact through r.vangooswilligen@gmail.com preferably well in advance of meetings so that the presence can be announced timely to IMO’s Secretariat.
IHO

Report by Yves Desnoës IAIN Representative

The most important topics since our last meeting are as follows:
The S-100 standard has been approved by member states and is active, meaning that the corresponding registry is operational and accessible on the IHO website [also known as www.iho-ohi.net](http://www.iho-ohi.net). There is an interesting and crucial issue for the future of maritime navigation, which is the management of maritime data dictionaries and models (by the means of registries). This problem is being tackled by IALA and IHO with a view of fulfilling the need expressed by IMO of a common data structure. One aspect is how to organize the registers where information will be defined and how to harmonize them.

A long term effort is pursued in IMO and subordinate bodies aiming at convincing signatories of SOLAS which are not members of IHO that they should join IHO in order to best fulfil their obligations under chapter V. This follows from the low state and low progress of hydrographic and maritime information in many of those countries.

Progress in the Marine Electronic Highway domain: a Mediterranean project is being put together, following the Malacca Strait and the West Indian Ocean already under way.

The concept of INT charts for sharing the cartographic burden between member states and ensuring better overall consistency is being extended from paper charts to electronic charts (ENCs). It remains to be seen how it could be applied.

A new NAVAREA zone for the Arctic ocean is envisaged; a regional hydrographic commission should also be created. Hydrographic offices make their best efforts to create geospatial maritime data infrastructures, based on the data they possess, covering more needs than the safety of navigation.

A new publication: *S-66 - Facts about Electronic Charts and Carriage Requirements* is accessible on the IHO web site.