| **ENG Committee – Task Plan 2018-2022** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Strategy Technical Domain** | **Task** | **Expected Output**  **Key: + planned work, x planned but no work carried out, > task extended, \* task completed)** | **WG** | **ENG Session** | | | | | | | **Status** |
| **8** | **9** | **10** | **11** | **12** | **13** | **14** |
| 1. **Standard 1010 – AtoN planning and service requirements** | | | | | | | | | | | |
| * 1. Risk Management | * + 1. Revised guidance on Simulation Technology to revise G1097 in cooperation with ARM task 1.2.4 | Revised guideline | 2 | + | + | + | + |  |  |  | Ongoing |
| * 1. Quality management | * + 1. Develop Guidance on checking that 3rd party AtoN providers are providing what they are obliged to provide– 3rd party AtoN provider quality control. (Joint ARM cooperation) | New guideline | 2 |  | + | + | + | + | + | + | Moved to ENG10 |
| 1. **Standard 1020 – AtoN Design and delivery** | | | | | | | | | | | |
| * 1. Visual signalling(vision, colour, conspicuity, rhythmic characters) | * + 1. Update E-111 Port Traffic Signals | Revised Recommendation | 1 | + | + | + | + | + |  |  | Franck H |
| * + 1. Develop Guideline on Port Traffic Signals | New guideline | 1 |  |  |  | + | + |  |  | Franck H |
| * + 1. Develop E-112 Leading Lights and 1023 Leading Lines into a Guideline | Revised Recommendation and guideline | 1 |  | + | + | + | + | + |  | Franck H |
| * + 1. Complete Guideline 1061 Illumination of structures | Revise Guideline, Last updated in 2008 | 1 |  |  | + | + | + | + | + |  |
| * + 1. Update Guideline 1048    LED technologies and their use in signal lights | Revise Guideline | 1 |  |  | + | + |  |  |  | Jonas L |
| * + 1. Review & update guideline 1043 on Light sources Note: The old task in the 2014-2018 work period was Merge and update Guideline 1043 On Light Sources and Guideline 1048 on LED Technologies and Guideline 1049 on the Use of Modern Light Sources in Traditional Lighthouses (Task 5.1.9). Should this old task replace 2.1.5 and 2.1.6 as Task 2.1.5? | Revise Guideline | 1 |  |  | + | + |  |  |  | Jonas L |
| * + 1. Develop a guideline for E-106 Retroreflective materials | New Guideline | 1 | + | + |  |  |  |  |  | Jorgen RP |
| * 1. Range and performance (visual and audible) | * + 1. Develop E200-3 on light measurement into a Guideline | New Guideline | 1 |  |  |  | + | + | + | + | Alwyn W |
| * + 1. Develop new recommendation on marine light Terms of Measurement | New Recommendation | 1 |  |  |  |  | + | + | + | Alwyn W |
| * + 1. Develop E200-5 on Optical Performance into a Guideline | New Guideline | 1 |  |  |  |  | + | + |  | Malcolm N |
| * + 1. Revise Guideline on effective intensity | Revise Guideline | 1 |  | + | + | + |  |  |  | Malcolm N |
| * + 1. Develop Guidance on monitoring of function and degradation of AtoN light sources | Add to G1077 | 1 |  | + | + | + |  |  |  |  |
| * + 1. Develop Guidance on service factors | New Guideline | 1 |  |  | + | + |  |  |  |  |
| * + 1. Develop Guidance on Colour fading of AtoN (plastic and painted) – methods to measure and assess | New Guideline or add to G1134 | 1 |  |  | + | + | + |  |  | Jorgen R |
| * + 1. Finish guideline G1133 Marine Signal Lights - Calculation of Luminous Intensity and Range | New Guideline | 1 | + | + | + |  |  |  |  | Alwyn W |
| * + 1. Update Guideline 1041 on Sector Lights | Update | 1 |  | + | + | + |  |  |  |  |
| * 1. Design, Implementation & Maintenance | * + 1. Develop guidance to identify appropriate standards for AtoN equipment with extreme environmental conditions. Humidity, temperature, enclosure ratings, UV etc) Also including peak intensity specification for LED AtoN, batteries, optic service factor, thermal cap, etc. | New Guideline | 2/1 |  |  | + | + | + | + | + |  |
| * + 1. Complete guidance on Maintenance of AtoN structures | New Guideline | 2 | + | + | + | + | + |  |  | Draft complete |
| * + 1. Develop Guideline on Tidal flow data capture and display | New Guideline in conjunction with ARM | 2 | + | + | + | + | + |  |  | Liaison Note prepared for ARM |
| * + 1. New Recommendation on the Responsible Design & Maintenance of AtoN (updated to include safety, sustainable design, and relevant building codes and standards) | New Recommendation | 2 | + | + | + |  |  |  |  | Draft complete |
| * + 1. Joint workshop with all 4 technical committees on Cyber Security in AtoN operations | Joint ENG & ARM Workshop | 2 | + | + | + | + | + |  |  | CCG pursuing approval to hold in Canada in October 2020 |
| * 1. Power systems | * + 1. Develop Guidance on what constitutes a good marine AtoN solar panel | New Guideline | 2 |  |  | + | + | + | + |  |  |
| * + 1. Deliver a Workshop - IALABATT/ IALALITE | Workshop | 1 |  |  |  | + | + | + |  | Australia, 2021 |
| * + 1. Monitor Battery development for use in AtoN | Knowledge within ENG | 2 | + | + | + | + | + | + | + | Moved to ENG10 |
| * 1. Floating AtoN (buoys, moorings, stability, etc.) | * + 1. Develop guidance quantifying characteristics to meet nautical and operational requirements and ways to verify them | New Guideline or develop existing Guideline | 2 | + | + | + | + | + | + |  | Moved to ENG10 |
| * + 1. Develop new guideline on radar reflector (reflection) properties | New Guideline | 2 | + | + | + | + | + | + |  | Ongoing work |
| * + 1. Creating an overview guidance on floating AtoN | New Guideline or recommendation | 2 | + | + | + | + | + | + |  | Moved to ENG10 |
| * 1. Environment, Sustainability & Legacy | * + 1. Develop Guidance on modern equipment in traditional lighthouses | New Guideline (see Task 2.1.6 ) | 2 |  |  | + | + | + | + | + | Work started in ENG9 |
| * + 1. Monitor Climate Change to inform IALA of impact and potential adaptation requirements for AtoN providers | Knowledge within ENG  Report to Council if necessary | 2 | + | + | + | + | + | + | + |  |
| * + 1. Establish a World Heritage Lighthouse Cyber Centre, accessible via the IALA website. | World Heritage Lighthouse Cyber Centre, on IALA website. | 2 | + | + | + | + | + | + | + |  |
| * + 1. Establish a database on World Heritage Lighthouses | Database for use in World Heritage Lighthouse Cyber Centre | 2 | + | + | + | + | + | + | + |  |
| * + 1. Establish a concept for nominating one lighthouse as World Heritage Lighthouse of the year for each ‘World AtoN Day’. | Other | 2 | + | + | + | + | + | + | + |  |
| * + 1. Deliver Heritage Workshop | Workshop | 2 | + | + | + | + |  |  |  |  |
| * 1. Sustainability | * + 1. Revise Recommendation R1004 to reference the UN Sustainable Development Goals | Revised Recommendation | 2 | + | + | + |  |  |  |  | Draft complete |
| 1. **Standard 1030 – Radionavigation services** | | | | | | | | | | | |
| * 1. Satellite positioning and timing | * + 1. Resilient PNT (applicable to all techical domains) – (identification, potential impact and mitigations) | New Recommendation and revised Guideline | 3 | + | + | + | + |  |  |  | Alan G |
| * 1. Terrestrial positioning and timing (including eLoran, eChayka, R-mode) | * + 1. Terrestrial radionavigation systems | New Recommendation | 3 |  |  | + | + | + |  |  | Alan G |
| * + 1. R-Mode (MF) | New Guideline | 3 |  |  | + | + | + | + | + | Michael H |
| * + 1. R-Mode (AIS/VDES) | New Guideline | 3 |  |  | + | + | + | + | + | Michael H |
| * + 1. Workshop on R-Mode in 2019 | Technical specification, strategy for deployment | 3 |  | + | + |  |  |  |  | Stefan G |
| * + 1. R-Mode testbed progress coordination | Information sharing on test bed results | 3 |  |  | + | + | + | + | + |  |
| * + 1. Develop and maintain relevant Product Specifications eg. S-245 eLoran ASF data, S-246 eLoran transmitting station alamanc, S-247 Differential Loran reference station etc. | Product Specification | 3 | + | + | + | + | + |  |  | Younghoon H |
| * + 1. Guidance on timing and synchronisation | Guideline | 3 |  |  |  | + | + | + |  | Paul M |
| * 1. Racon & radar positioning | * + 1. eRacon (standard approach) ; Review recommendations ENAV146 & R-101 & Guideline 1010 | Revised Recommendations, reviewed Guideline | 3 |  | + | + | + | + | + |  |  |
| * 1. Augmentation services (SBAS & DGNSS) | * + 1. Consideration of how and when to use SBAS in maritime. | New Guideline (consider questions to be asked, approach available, guidance to service providers on what to consider) | 3 |  | + | + | + | + |  |  | Bjornar K |
| * + 1. Review existing DGNSS infrastructure and provide guideance for current system | Review and maintain DGNSS relevant documents (updates to RTCM etc)  Guideline on simple beacon (if required) | 3 |  |  | + | + | + |  |  | Jesper B |
| * + 1. New Recommendation on augmentation for maritime use | New Recommendation | 3 | + | + | + |  |  |  |  | Etienne L |
| * + 1. Provide guidance, strategy and advice on potential new uses of marine beacon DGNSS infrastructure | Guidance on future and other potential uses, frequency re-use etc | 3 |  | + | + | + |  |  |  | Mike P |
| * + 1. High accuracy systems | Guidance on available systems and how they can be used. | 3 |  |  | + | + | + | + | + | Marek |
| * 1. Document updates | * + 1. Review and update current documentation under the preview of PNT WG | Revised Recommendations and Guidelines | 3 | + | + | + | + | + | + | + |  |
| * + 1. Monitor developments in GNSS, DGNSS, radar, resilient PNT, e-Pelorus, terrestrial systems, R-Mode, inertial and any other relevant areas etc. | Rapporteur reports | 3 | + | + | + | + | + | + | + |  |
| * 1. Liaison with related bodies | * + 1. Update to ITU M.823, potential replacement for A.915, Liaison with IMO, ITU, RTCM, etc on related topics and project areas. | Liaison Notes | 3 | + | + | + | + | + | + | + | `Manolo (IEC) |
| * 1. PNT technology review | * + 1. Input to MSP, Integrity considerations for resilient PNT, cybersecurity impact for PNT data, DATUM considerations | New Guidelines or Liaison as appropriate | 3 |  |  | + | + | + | + | + | Jeffery VG |
| 1. **Standard 1050 Training and Certification** | | | | | | | | | | | |  | Information exchange |
| * 1. Training and assessment | * + 1. Development and review of WWA courses | New Model Courses | 1,2 &3 | + | + | + | + | + | + | + |  |
| * 1. Capacity building | * + 1. Navguide updates and review | Updated Manual | VC  1/2/3 |  | + | + | + | + | + | + |  |
| 1. **Standard 1060 Digital communications technologies** | | | | | | | | | | | |
| * 1. Harmonised maritime connectivity (Maritime Internet of Things, intelligent sensors, AtoN monitoring) | * + 1. Review telemetry Guideline 1008. | Revised Guideline, Last updated 2009 | 2 |  |  | + | + | + | + | + |  |
| * + 1. Review of engineering support for e-navigation services, (including hot/cold climates & radio propagation). TO BE CONFIRMED | Information paper (for ENG use) | 3 | + | + | + | + | + | + | + |  |