| **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** | **Session** | | | | | | | **Status** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| 1. **Standard 1010 – AtoN planning and service requirements** | | | | | | | | | | | |
|  | * + 1. Develop Guidance on protection zones in light and daymark sectors and radar/ VTS systems to avoid obstructions due to structures, mooring ships, etc and competing lights (Joint ARM cooperation) | Draft new guideline and forward to ARM for ARM completion | 2 |  |  |  |  |  |  |  |  |
| * 1. Risk Management | * + 1. Revised guidance on Simulation Technology to revise G1097 in cooperation with ARM task 1.2.4 | Revised guideline | 2 |  |  |  |  |  |  |  |  |
| * 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 |  |  |  |  |  |  |  |  |
| 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 | + | + |  |  |  |  |  |  |
| * + 1. Develop Guideline on Port Traffic Signals | New guideline | 1 |  |  | + | + | + |  |  |  |
| * + 1. Develop E-112 Leading Lights and 1023 Leading Lines into a Guideline | Revised Recommendation and guideline | 1 | + | + | + | + | + |  |  |  |
| * + 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 |  |  |  |  |  |  |  |  |
| * + 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 |  |  |  |  |  |  |  |  |
| * + 1. Develop a guideline for E-106 Retroreflective materials | New Guideline | 1 |  |  |  |  |  |  |  |  |
| * 1. Range and performance (visual and audible) | * + 1. Develop E200-3 on measurement into a Guideline | New Guideline | 1 | + | + | + |  |  |  |  |  |
| * + 1. Develop new recommendation on marine light Terms of Measurement | New Recommendation | 1 |  |  |  |  |  |  |  |  |
| * + 1. Develop E200-5 on Optical Performance into a Guideline | New Guideline | 1 |  |  |  |  |  |  |  |  |
| * + 1. Revise Guideline on effective intensity | Revise Guideline | 1 | + | + |  |  |  |  |  |  |
| * + 1. Develop Guidance on monitoring of function and degradation of AtoN light sources | New Guideline or add to G1077 | 1 |  |  |  |  |  |  |  |  |
| * + 1. Develop Guidance on service factors | New Guideline or add to G1077 | 1 |  |  |  |  |  |  |  |  |
| * + 1. Develop Guidance on Colour fading of AtoN (plastic and painted) – methods to measure and assess | New Guideline or add to G1077 | 1 |  |  |  |  |  |  |  |  |
| * + 1. Finish guideline G1133 Marine Signal Lights - Calculation of Luminous Intensity and Range | New Guideline | 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 |  |  |  |  |  |  |  |  |
| * + 1. Develop Guideline on Tidal flow data capture and display | New Guideline in conjunction with ARM | 2 |  |  |  |  |  |  |  |  |
| * + 1. New Guideline on the Responsible Design & Maintenance of AtoN | Guideline | 2 |  |  |  |  |  |  |  |  |
| * + 1. Joint workshop with all 4 technical committees on Cyber Security in AtoN operations | Joint ENG & ARM Workshop | 2 | + | + | + | + |  |  |  |  |
| * 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 |  |  |  | + | + | + |  |  |
| * + 1. Monitor Battery development for use in AtoN | Knowledge within ENG | 2 |  |  |  |  |  |  |  |  |
| * 1. Floating AtoN (buoys, moorings, stability, etc.) | * + 1. Develop guidance on Buoy Stability testing procedure for use afloat | New Guideline or develop existing Guideline | 2 |  |  |  |  |  |  |  |  |
| * + 1. Develop new or existing guidance on radar reflection properties of plastic buoys | New Guideline | 2 |  |  |  |  |  |  |  |  |
| * + 1. Complete guideline on floating AtoN | New Guideline | 2 |  |  |  |  |  |  |  |  |
| * 1. Environment, Sustainability & Legacy | * + 1. Develop Guidance on modern equipment in traditional lighthouses | New Guideline (see Task 2.1.6 ) | 2 |  |  |  |  |  |  |  |  |
| * + 1. Monitor Climate Change to inform IALA of impact and potential adaptation requirements for AtoN providers | Report to Council | 2 |  |  |  |  |  |  |  |  |
| * + 1. Supervision of the Heritage Forum | Other |  |  |  |  |  |  |  |  |  |
| 1. **Standard 1030 – Radionavigation services** | | | | | | | | | | | |
| * 1. Satellite positioning and timing | * + 1. Resilient PNT (identification, potential impact and mitigations) | New Recommendation and revised Guideline  Recommendation  ENAV task 3.1.3. PNT relevant services & systems that can contribute to Resilient PNT. | 3 |  |  |  |  |  |  |  |  |
| * + 1. New Recommendation on SBAS augmentation for maritime use | New Recommendation | 3 |  |  |  |  |  |  |  |  |
| * 1. Terrestrial positioning and timing (including eLoran, eChayka, R-mode) | * + 1. Terrestrial radionavigation systems | New Recommendation | 3 |  |  |  |  |  |  |  |  |
| * + 1. R-Mode (MF) | New Guideline | 3 |  |  |  |  |  |  |  |  |
| * + 1. R-Mode (AIS/VDES) | New Guideline | 3 |  |  |  |  |  |  |  |  |
| * + 1. Workshop on R-Mode in 2019 | Technical specification, strategy for deployment | 3 | + | + | + |  |  |  |  |  |
| * + 1. R-Mode testbed progress coordination | Information sharing on test bed results | 3 |  |  |  |  |  |  |  |  |
| * + 1. R-Mode: input to sister organisations on R-Mode standards | ITU, IEC. IMO, WRC etc | 3 |  |  |  |  |  |  |  |  |
| * + 1. Product Specification support (eLoran etc). Continue work on ENAV Task 3.1.2 - Develop a Product Specification on eLoran data, beacon corrections, and data exchange – from 2014-18 work period : S-245 ASF data | Product Specification for S-245 eLoran ASF Data | 3 |  |  |  |  |  |  |  |  |
| * + 1. Product Specification support (eLoran etc). Continue work on ENAV Task 3.1.2 - Develop a Product Specification on eLoran data, beacon corrections, and data exchange – from 2014-18 work period : S-246 eLoran Station Almanac | Product Specification for S-246 eLoran Station Almanac | 3 |  |  |  |  |  |  |  |  |
| * + 1. Product Specification support (eLoran etc). Continue work on ENAV Task 3.1.2 - Develop a Product Specification on eLoran data, beacon corrections, and data exchange – from 2014-18 work period : S-247 Differential eLoran Reference Station Almanac | Product Specification for S-247 Differential eLoran Reference Station Almanac | 3 |  |  |  |  |  |  |  |  |
| * + 1. Product Specification support (eLoran etc). Continue work on ENAV Task 3.1.2 - Develop a Product Specification on eLoran data, beacon corrections, and data exchange – from 2014-18 work period | Product Specification | 3 |  |  |  |  |  |  |  |  |
| * 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. SBAS performance for maritime. Continue work on ENAV task 3.1.5 - Develop a Guideline on the use of SBAS - from 2014-18 work period | New Guideline | 3 |  |  |  |  |  |  |  |  |
| * + 1. Guidance for marine beacon service providers (maintenance, knowledge exchange, harmonisation) : Product specification S-240 DGNSS Station Almanac | Product specification S-240 DGNSS Station Almanac | 3 |  |  |  |  |  |  |  |  |
| * + 1. Guidance for marine beacon service providers (maintenance, knowledge exchange, harmonisation) | New Guideline | 3 |  |  |  |  |  |  |  |  |
| * + 1. Review recommendation R-150 - DGNSS Service Provision, Upgrades and Future Uses, after options for such future uses have been identified by the ARM Committee | Revised Recommendation R-150 | 3 |  |  |  |  |  |  |  |  |
| * 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 |  |  |  |  |  |  |  | Recurring |
| * 1. Liaison with related bodies | * + 1. Update to ITU M.823, potential replacement for A.915, Liaison with RTCM, ITU etc. | Liaison Notes | 3 |  |  |  |  |  |  |  |  |
| * 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 |  |  |  |  |  |  |  |  |
| 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 | 3 |  |  |  |  |  |  |  |  |
| * + 1. Develop guidance on how to package monitoring information on AtoN status such that it can be fed into the MCP (Maritime Connectivity Platform) as an MSP | Input to ARM to add to S-201 Product Specification | 2 |  |  |  |  |  |  |  |  |
| * + 1. Review of engineering support for e-navigation services, (including hot/cold climates & radio propagation). | Information paper (for ENG use) | 3 |  |  |  |  |  |  |  |  |
| 1. **Other** | | | | | | | | | | | |
| * 1. Heritage forum | * + 1. Supervision of the Heritage Forum | Other | 2 |  |  |  |  |  |  |  |  |
| * 1. Sustainability | * + 1. Consider how IALA can contribute the UN Sustainable Development Goals | Policy or Guideline on IALA contribution to UN Sustainable Development Goals | 2 |  |  |  |  |  |  |  |  |