Input paper: [[1]](#footnote-1) ENAV18-11.4.1

Input paper for the following Committee(s): check as appropriate Purpose of paper:

**□** ARM **□** ENG **□** PAP X Input

X ENAV **□** VTS **□** Information

Agenda item [[2]](#footnote-2) 11

Technical Domain / Task Number 2 2.1.3

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Annexes of draft input to IMO (ENAV 18-11.4)

# Summary

The attached documents are the annexes of the draft input to IMO – New planned output on development of performance standards for VDES.

# Background

IALA Workshop on Development of VDES developed the draft input that became the input to ENAV 18 (ENAV 18-11.4). Due to the lack of time at the Workshop, the Workshop could not develop the annexes that should be attached to the draft input. The Workshop tasked the Chair of WG1 of the Workshop, Hideki NOGUCHI, the development of the annexes.

# Discussion

The annexes are checklist for human element and for administrative requirement that are both necessary for the proposal of new planned or unplanned output of the IMO work in accordance with the IMO rule.

# References

1. MSC-MEPC.1/Circ.4/Rev.4
2. MSC-MEPC.7/Circ.1

# Action requested of the Committee

The Committee is requested to:

1. Review the attached papers
2. If appropriate, add the attached papers to the draft input to IMO as the annex 1 and 2.

ANNEX 1

**CHECKLIST FOR CONSIDERING HUMAN ELEMENT ISSUES BY IMO BODIES**

|  |  |
| --- | --- |
| **Instructions:**  If the answer to any of the questions below is:   1. **YES**, the preparing body should provide supporting details and/or recommendation for further work. 2. **NO**, the preparing body should make proper justification as to why human element issues were not considered. 3. **NA** (Not Applicable) - the preparing body should make proper justification as to why human element issues were not considered applicable. | |
| **Subject Being Assessed:** (e.g. Resolution, Instrument, Circular being considered)  New IMO Resolution regarding the performance standards for VHF Data Exchange System (VDES) | |
| **Responsible Body**: (e.g. Committee, Sub-committee, Working Group, Correspondence Group, Member State)  Sub-committee on Navigation, Communication and Search and Rescue (NCSR) | |
| 1. Was the human element considered during development or amendment process related to this subject? | X Yes No NA |
| 2. Has input from seafarers or their proxies been solicited? | Yes X No NA |
| 3. Are the solutions proposed for the subject in agreement with existing instruments? (Identify instruments considered in comments section) | Yes No X NA |
| 4. Have human element solutions been made as an alternative and/or in conjunction with technical solutions? | Yes X No NA |
| 5. Has human element guidance on the application and/or implementation of the proposed solution been provided for the following: |  |
| * Administrations? | Yes X No NA |
| * Ship owners/managers? | Yes X No NA |
| * Seafarers? | Yes X No NA |
| * Surveyors? | Yes X No NA |
| 6. At some point, before final adoption, has the solution been reviewed or considered by a relevant IMO body with relevant human element expertise? | X Yes No NA |
| 7. Does the solution address safeguards to avoid single person errors? | Yes No X NA |
| 8. Does the solution address safeguards to avoid organizational errors? | Yes No X NA |
| 9. If the proposal is to be directed at seafarers, is the information in a form that can be presented to and is easily understood by the seafarer? | Yes No X NA |
| 10. Have human element experts been consulted in development of the solution? | Yes No X NA |
| 11. **HUMAN ELEMENT**: **Has the proposal been assessed against each of the factors below?** | |
| CREWING. The number of qualified personnel required and available to safely operate, maintain, support, and provide training for system. | Yes X No NA |
| PERSONNEL. The necessary knowledge, skills, abilities, and experience levels that are needed to properly perform job tasks. | Yes X No NA |
| TRAINING. The process and tools by which personnel acquire or improve the necessary knowledge, skills, and abilities to achieve desired job/task performance. | Yes X No NA |
| OCCUPATIONAL HEALTH AND SAFETY. The management systems, programmes, procedures, policies, training, documentation, equipment, etc. to properly manage risks. | Yes X No NA |
| WORKING ENVIRONMENT. Conditions that are necessary to sustain the safety, health, and comfort of those on working on board, such as noise, vibration, lighting, climate, and other factors that affect crew endurance, fatigue, alertness and morale. | Yes X No NA |
| HUMAN SURVIVABILITY. System features that reduce the risk of illness, injury, or death in a catastrophic event such as fire, explosion, spill, collision, flooding, or intentional attack. The assessment should consider desired human performance in emergency situations for detection, response, evacuation, survival and rescue and the interface with emergency procedures, systems, facilities and equipment. | Yes X No NA |

|  |  |
| --- | --- |
| HUMAN FACTORS ENGINEERING. Human-system interface to be consistent with the physical, cognitive, and sensory abilities of the user population. | Yes X No NA |
| **Comments:**  VHF Data Exchange System (VDES) is a digital data exchange system including AIS and, as same as AIS, the system is operated almost autonomously. Thus human involvement in VDES is minimal and if it is necessary, the engineer of the manufacturer takes over the job. Furthermore, the human-machine interface or application of VDES should be provided by other modules such as workstation, display or keyboard and it is outside of the scope of the proposed output. | |

ANNEX 2

**CHECKLIST FOR IDENTIFYING ADMINISTRATIVE REQUIREMENTS AND BURDENS**

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| --- | --- | --- |
| This checklist should be used when preparing the analysis of implications, required for submissions of proposals for inclusion of unplanned outputs. For the purpose of this analysis, the terms "administrative requirements" and "burdens" are as defined in resolution A.1043(27) on *Periodic review of administrative requirements in mandatory IMO instruments*, i.e. administrative requirements are an obligation arising from future IMO mandatory instruments to provide or retain information or data, and administrative burdens are those administrative requirements that are or have become unnecessary, disproportionate or even obsolete.  **Instructions:**   1. If the answer to any of the questions below is **YES**, the Member State proposing an unplanned output should provide supporting details on whether the burdens are likely to involve start-up and/or ongoing cost. The Member State should also give a brief description of the requirement and, if possible, provide recommendations for further work (e.g. would it be possible to combine the activity with an existing requirement?). 2. If the proposal for the unplanned output does not contain such an activity, answer **NR**   (Not required). | | |
| 1. Notification and reporting?  Reporting certain events before or after the event has taken place, e.g. notification of voyage, statistical reporting for IMO Members, etc. | NR  X | ~~Yes~~   * ~~Start-up~~ * ~~Ongoing~~ |
| Description: (if the answer is yes) | | |
| 2. Record keeping?  Keeping statutory documents up to date, e.g. records of accidents, records of cargo, records of inspections, records of education, etc. | NR  X | ~~Yes~~   * ~~Start-up~~ * ~~Ongoing~~ |
| Description: (if the answer is yes) | | |
| 3. Publication and documentation?  Producing documents for third parties, e.g. warning signs, registration displays, publication of results of testing, etc. | NR  X | ~~Yes~~   * ~~Start-up~~ * ~~Ongoing~~ |
| Description: (if the answer is yes) | | |
| 4. Permits or applications?  Applying for and maintaining permission to operate, e.g. certificates, classification society costs, etc. | NR  X | ~~Yes~~   * ~~Start-up~~ * ~~Ongoing~~ |
| Description: (if the answer is yes) | | |
| 5. Other identified burdens? | NR  X | ~~Yes~~   * ~~Start-up~~ * ~~Ongoing~~ |
| Description: (if the answer is yes) | | |

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Leave open if uncertain [↑](#footnote-ref-2)