



Ministerie van Infrastructuur
en Waterstaat

IMPACT OF MASS ON VTS

IALA Council meeting June 2020



Reason

- Worldwide development of autonomous vessels
- Initiatives of MASS test-beds
- Interactions between MASS and shore / infrastructure required
- Needs for standards and guidelines



Why this document

- Discussion about MASS in 69th Council meeting (June 2019)
- Offer by the Netherlands to prepare a paper
- In cooperation with IALA Secretariat
- Elaboration of request IALA Council



Important themes

- Future of AtoN's
- Shore infrastructure and support
- Organisational issues
- Cyber security



Purpose of the document

- Substantiation for a strategy document on MASS for IALA Council
- Formulate an inter-committee task force
- Under supervision of PAP
- To structure and coordinate discussions and work on MASS
- 6 actionpoints formulated



Awareness of definition MASS

(Actionpoint 1)

- IMO agreed on a definition
- 4 levels of autonomy are established by IMO
- IALA Technical Committes should work with the definitions and levels



Formulate inter-committee task force to coordinate MASS in IALA

(Actionpoint 2)

- MASS involves the workprograms of all Technical Committees
- Coordination and structure of the discussion through the Committees is desired
- An inter-committee task force can achieve this
- Under supervision of PAP



Scoping exercise

(actionpoint 3)

- IMO started a scoping exercise of MASS in relation to the instruments under their remit
- Also a scoping exercise of the IALA Guidelines and Recommendations is necessary
- Big challenge for all Committees



MASS and cyber security

(actionpoint 4)

- Cyber security is important part with the introduction of digitization
- Cyber security risks by transmission data to and from other parties
- MASS is strongly dependent of data transmission
- Reliability, availability and integrity are key factors
- Awareness of cyber security risks is necessary
- Need for guidelines



Develop a guideline for MASS test-beds in VTS areas

(actionpoint 5)

- Revised VTS Guideline A.857(20) make data communication possible between ship and shore
- VTS authorities have to prepare on the introduction of MASS
- Increasingly development of MASS test-beds worldwide
- Need for standards
- Need for guidelines for MASS test-beds in VTS areas



Create information-sharing platform

(actionpoint 6)

- Develop knowledge about MASS and MASS infrastructure
- Learn from MASS test-beds
- Share information about MASS test-bed results
- Seek cooperation with other bodies to create a joint platform



Thank you for your attention

