ABSTRACT SUBMISSION –– SOUMISSION DE RESUME

**Topic No.: / Sujet n° : ------5--- or / ou**

**proposed topic / sujet proposé: ------Future Trends-----------**

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ABSTRACT / RESUME:

**Aids to Navigation in the e-navigation era**

This paper discusses what a lighthouse might look like in 50 years time and subsequently gives a wider view on the future of Aids to navigation (AtoN).

The need for physical AtoN in the future is considered with the possible changing purpose - increasing importance as an integrity check on other systems and an expanded role as data gathering centres and communications nodes. One of the communications functions could be providing e-navigation services, possibly via VDES.

The simplified structure ‘light on a pole’, although not inherent to these changes, could be a parallel development. Changes in communications technologies could also have a significant effect on the utilisation of remote structures, as could the potential applications of their unique locations. Gathering environmental data could become a major function.

The current high level of interest in autonomous shipping increases the relevance of this review, broadening it to cover machine vision: recognition of shapes, lights and non-visible wavelength signals by onboard sensors and processing the resulting inputs.

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