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| From: ANM Committee | EEP16/8/12 |
| To: EEP Committee | 25 March 2011 |

Liaison Note

Input to user needs analysis

# Introduction

Guideline No. 1058 on the use of simulation as a tool for waterway design and AtoN planning was issued in 2008. The guideline was intended to be a high level, strategic document to assist AtoN authorities in understanding how simulation tools can assist them in planning and implementing AtoN.

AtoN designers, developers and researchers are expressing a need to go deeper into how simulation can be more specifically used for

* Comparison of individual light sources
* R&D work related to the development, validation and tests of lights and marks to be used during day and night

ANM is developing a supplementary Guideline to 1058 providing technical detail for simulator providers and procurers of simulators to ensure appropriate components and quality for AtoN features.

# Discussion

The work will be based on a user need analysis providing an overview of current status of simulation technology with focus on capability of simulation software, visual systems and visualization media and identifying a list of features that are important to able to meet the objectives of use of simulators for planning, research and test of AtoN.

# Action requested

The EEP Committee is requested to:

1. Review the list, outlined in ANNEX A, of features relevant to be addressed in a supplementary technical guideline on simulation.
2. Provide feedback and comments on the relevancy of the listed features (Annex A) and whether additional features, relevant to simulation, should be considered in the guideline.
3. Preliminary list of features relevant to be addressed in a supplementary technical guideline on simulation
4. Colours of lights and day marks
5. Background light intensity
6. The influence of on shore back ground lights
7. Use of fluorescent paint on day marks
8. Flickering lights
9. Contrast
10. Flashing light due to rotating wind mill blades
11. The nature of light distribution in the atmosphere
12. Glare above cities
13. Light affected by:
    1. Humidity
    2. Pollution
    3. Air temperature
    4. Latitude
14. Reflection of light from structures
15. Effect of darkness
16. Sky glow covering both ambient light and rivalling light
17. Cultural lights dispersal in the atmosphere
18. Influence of moving objects onshore like e.g. cars