



Explanatory Note to NSHC: ACCSEAS Paper for Meeting on 18 June 2012

NSHC 30th Conference

Information Paper

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ACCSEAS Project and Engagement of Hydrographic Offices in the North Sea Region

Introduction

The ACCSEAS (Accessibility for Shipping, Efficiency Advantages and Sustainability) Project aims to implement and demonstrate an e-Navigation test-bed for the North Sea within the 3 year timescale to February 2015. The project is funded by the INTERREG IVb North Sea Region programme with partners in Denmark, Germany, Netherlands, Norway, Sweden and the UK, led by the General Lighthouse Authorities of the UK and Ireland. The project's objective is to improve maritime accessibility of congested and remote North Sea ports, enhancing the safety of maritime navigation, environmental protection and the efficiency of sustainable berth-to-berth operations. The test-bed will explore e-Navigation services within the existing IMO framework of requirements and architecture, such as dynamic exchange of vessels' routes and manoeuvre intentions, ship-to-ship and ship-to-shore interaction with VTS, underpinned by the provision of resilient positioning, navigation and timing (PNT). The mariner will be considered at the centre of the test-bed, with prototype harmonisation of information portrayal on the ECDIS and the evaluation of decision support applications.

Approach

The North Sea region presents diverse challenges for safe and efficient access of ports, with the proliferation of Offshore Renewable Energy Installations and increasingly congested pinch-points at entrances to major ports such as Rotterdam and approaches to traffic separation schemes such as in the Dover Straits and Skagerrak. Test-bed solutions and their locations will be prioritised by analysis of trends in traffic density, impact of human error and the risk of collision and grounding. Analysis of risks and identification of their mitigation requires the engagement of the expert stakeholder community, including Hydrographic Offices in the North Sea Region, to explore solutions within the e-Navigation framework. This may include the safety consideration of ECDIS information, using ENCs, within the e-Navigation Maritime Service Portfolio. Prototype e-Navigation solutions will be implemented at priority North Sea locations, integrating ships' systems with shore-based infrastructure, to evaluate and demonstrate their effectiveness. Key stakeholders will be engaged in the requirements analysis and share in the test-bed results through a series of workshops and the project's annual conference, enabling the project to inform the wider maritime community, including mariners, hydrographers, ECDIS and other equipment providers and ship operators.

Interaction with NSHC Members

The ACCSEAS workshops will invite interaction with NSHC members at each stage of the project. North Sea traffic and port information will be collected in the project's Geographic Information System (GIS) for analysis, planning, design, implementation and the classification of results. It is expected that ACCSEAS will reuse and extend the GIS system from the North Sea BLAST project – the Coastal Indicator System (COINS) – to which several NSHC members have already contributed data. Any use of existing and future NSHC members' data would be subject to strict agreements and commercial safeguards. Plenary workshops with wider project stakeholders and closed discussions between national hydrographers and ACCSEAS partners



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in each country could be utilised to maximise the mutual benefits of NSHC member engagement and the positive impact on the project, promoting high quality data feedback from the test-bed for aspects of e-Navigation most relevant to hydrographers. ACCSEAS engagement with NSHC members is essential if the test-bed is to succeed through careful consideration of hydrographic needs, issues and test-bed consequences.