ACCSEAS and PROTECT

(edited by Raymond Seignette for the participants of the PROTECT meeting # 20 of Oct 17, 2012)

Traditionally, information and communication technology in shipping have progressed along two routes: through administrative systems to support shipping business and through technical systems to support shipping operations. Gradually, these two routes appear to converge, due to further standardization and harmonization in the use and exchange of information and underlying data models. However, this development is not a rational process, as each route represents stakeholders, having their own interests and speaking their own language.

In seaports, business meets operations and much information is (re)used and exchanged. The bulk of pre-information that need to be reported to the several public authorities and business partners, prior to the arrival – and in many cases prior to departure – is routed through administrative systems ashore. Examples of these for public authorities are port, dangerous goods and waste notifications for the Harbourmaster, cargo notifications for Customs and Extended inspection notifications for Port State Control. Examples of these for business partners are electronic transport orders, requests for track and trace services and planning requests for ongoing transport after transshipment.

When the vessel enters the port's domain and establishes communication with the Port Authority or VTS, more tactical – voyage related – information is exchanged. In certain cases information on draft or security status or expected time of arrival is exchanged and checked with the data from the pre-information in the administrative database. This duplication in reporting has increased by the mandatory requirement for vessels to carry an automatic identification system (AIS), which has the potential to automatically transmit ship, cargo and voyage related information to the VTS technical systems. Next, traffic images used in vessel traffic management, withdraw data from the administrative systems (incl. reference data) as well as from the technical systems. Again, standardization and harmonization of data in these different systems is required in order to provide the user with an unique and accurate traffic image. Unique in a sense that the image and the data disclosed in the image should reflect the information upon which the vessel was admitted in the first place and the voyage (port passage) was agreed in advance; Accurate in a sense that safe and efficient handling of vessel traffic from ashore is based on the actual situation in the port and port approach areas.

PROTECT is engaged in the standardization and harmonization of pre-information through administrative systems to support shipping business. The ACCSEAS project[1] is engaged in the standardization and harmonization of information (and data modeling) through technical systems to support shipping operations. Basically, ACCSEAS focuses on the implementation of a eNavigation[2] testbed in the North Sea Region.

The vision of **e-Navigation**, as defined by the e-Navigation Committee of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), is to have a harmonized creation, collection, integration, exchange and presentation of maritime information on board and ashore by electronic means to enhance berth-to-berth navigation and related services, for safety and security at sea and protection of the marine environment.

The **ACCSEAS project** addresses improved maritime access to the North Sea Region (NSR) by developing & implementing e-Navigation within a transnational framework. A North Sea e-Navigation test-bed will be established to demonstrate proof-of-concept solutions. ACCSEAS enables service providers, researchers & suppliers to develop e-Navigation regional services and to prototype novel marine navigation & communication concepts. ACCSEAS provides the basis for alleviation of congestion, bottlenecks and accident risk, improving NSR access, with sustained cooperation & actions after the project.

Where the two meet is in the domain of vessel traffic management.

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[1] See http://www.northsearegion.eu/ivb/projects/

[2] See http://www.e-navigation.com/