The Request

Operational staffs have been using MCCIS for years to develop a Recognized Maritime Picture (RMP). The changing world order has created a requirement to more closely track merchant shipping activities. Staffs have recently experimented with the deployment of a sensor network (e.g. AIS) to improve their capability to monitor merchant shipping traffic in a defined area of interest. In Jan 2006, a request was initiated to improve the capability to maintain an operationally relevant picture of commercial shipping and determine contacts of significant interest in order to improve the quality of decisions to act in the interest of security and safety. An experiment was proposed to explore the extension of an existing experimental network for reporting commercial shipping information and consider data fusion, and interface to existing C2IS to facilitate an enhanced operational maritime picture.



This request aligns with a comprehensive, emerging interest in NATO and among at least some of the Nations as expressed in the CNAD decisions to improve NATO's Maritime Situational Awareness (MSA) capability in view of the potential security challenges identified in the Comprehensive Political Guidance and other strategic documents.



MSA projects are sponsored and coordinated by:

Allied Command Transformation

C4I Division
Technology Coordination Branch





The Response

A suite of BRITE applications has been designed in response to the Maritime Situational Awareness request. This suite includes updated versions of a number of the exisiting MCCIS WISE based objects, plus some newly developed objects. Existing objects which are reused include Ports, Map Application, Vessels and Janes.

The new objects are Places, Routes, Areas Lloyds, Mership, AIS (Automatic Identification System), Smart Agents, and the ONI database.



The Routes and Places objects are used by users to create and store reference information, predefined routes and the location of otherwise unknown places.

The Lloyds object provides access to a readonly local copy of information purchased from Lloyds.

The Mership application is a dynamic tool that uses many of the BRITE services to access, assess and present available information on a specific track. Using "Smart Agents" to assess inputs, anomalies in the available data can be detected and operators notified.

The AIS application displays data from AIS broadcasts, checks the validity of specific fields of the broadcast data (i.e. Name, Type, Call Sign, IMO) against the Lloyds MIU database fields, provides the user with tools to resolve discrepancies (anomalies) generated during the validity check, displays the vessel location on a map and leads the user to additional sources of information about the vessel(s) through the Discovery capability.

