The IALA Vision

1. Drawing on the work currently being undertaken to develop the IALA Strategic Plan, the E-NAV Committee agrees that the following trends in overall maritime operations and management are likely to occur:

   - Ship design and technology will continue to evolve.
   - Commercial pressures will demand ever-rapid transportation and cargo handling schedules.
   - Heightened international security concerns will have an impact on maritime trade processes.
   - Environmental standards will continue to acquire ever-higher stringency and priority.
   - Professional competency of marine personnel will vary, notwithstanding the adoption of international standards.
   - The pursuit of standardisation will continue, particularly on a regional basis
   - The volume of information being exchanged among ships and shore organisations will continue to increase.
   - The use of formalised and more effective systems to manage quality and safety at sea and in ports will increase.
   - Advances in technology will necessitate an expanding requirement for trained work forces
   - Coastal and inland waterways will be increasingly used for recreational and other purposes. In addition, inland waterways will increase their environmental attractiveness as methods of transportation of goods and passengers.

   - Co-ordination of port services will become increasingly important in the interests of safety where such services may be obtained from alternative sources.

   - Efforts to increase navigational accuracy, reduce crewing levels, and become more efficient have resulted in increasing dependence on GNSS PNT services.

   - Many have recognized the clear risk posed by the vulnerability of GNSS to jamming and unintentional interference.

   - There is an almost exclusive reliance upon GNSS to electronically navigate, position navigational aids, provide Differential GNSS services, operate the Automatic Identification System (AIS), and synchronize data for electronic charting systems.

2. These overall maritime trends are likely to lead to the following consequences for E-NAV:

   a) Automated systems for the effective management of the high-density data transfer between and among ships, shore facilities (e.g., VTS Centres and VTS Regions, Customs agencies, Security agencies, etc.) will become an increasing requirement