



Association Internationale de Signalisation Maritime
*International Association of Marine Aids to
Navigation and Lighthouse Authorities (AISM/IALA)*

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the matter of)	
)	
Amendment of the Commission's Rules Regarding Maritime Automatic Identification Systems)	WT Docket No. 04-344
)	
Amendment of The Commission's Rules Concerning Maritime Communications)	FCC 06-108
)	
)	November 10, 2006

COMMENTS OF THE
INTERNATIONAL ASSOCIATION OF MARINE AIDS TO NAVIGATION AND
LIGHTHOUSE AUTHORITIES (IALA)

The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) respectfully submits these comments in response to the Notice of Proposed Rulemaking published in the Federal Register on October 12, 2006 (71 FR 60102).

Established in 1957, the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) is a not-for-profit, international technical association. IALA aims to foster the safe, economic and efficient movement of vessels. It does so by encouraging its members to work together, so as to improve and harmonize marine aids to navigation globally.

IALA has been at the forefront of the evolution of AIS, being the organization that has sponsored and coordinated its development.

Taking into account the needs of mariners, developments in technology and the requirements and constraints of aids to navigation authorities, IALA began its dedicated AIS efforts. In the 1990s, it was IALA that prepared a draft recommendation, which later became the basis for the IMO performance standard on



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AIS. Subsequently, at the request of several emerging AIS equipment manufacturers, IALA created a special working group in October 1997, bringing together AIS experts from around the world, to prepare a single standard for AIS stations, both on board ships and ashore.

Since then, IALA has led the development of both technical and operational documentation, working closely with ITU, IEC and IMO, and offering guidance on the use of AIS, both as a data broadcast system and as an aid to navigation.

IALA's Position

IALA fully supports the exclusive use of AIS1 and AIS2 frequencies worldwide. IALA foresees an increase in the number of AIS shore stations and networks. It is envisaged that AIS will also be used for inland navigation, as an aid to navigation and on recreational craft.

The availability of AIS1 and AIS2 globally will enable the system to operate on a single set of frequencies. In fact, the International Telecommunications Union Radiocommunications Bureau (ITU-R) has renamed the two AIS frequencies in the Radio Regulations, Appendix 18, from 87B and 88B to AIS1 and AIS2, implying that administrations ought to reserve these two frequencies for the exclusive use of AIS.

One of the problems of using AIS1 and/or AIS2 for other applications is that under certain propagation conditions, VHF transmissions can travel distances of several hundred miles. Therefore, land based applications transmitting on AIS1 and AIS2 can interfere with the operation of AIS, leading to garbled time slots in AIS. Further, garbled time slots can also be caused by the antenna height of AIS base stations, which can create coverage areas of 100 miles and more. Experiments with antenna arrays indicate that coverage can be extended even further. Therefore, it is impossible say that transmissions from land based applications on AIS1 and AIS 2 will never interfere with the operation of AIS.

Clearly, such interference can jeopardize the integrity of AIS and have a detrimental effect on the safety of navigation. As AIS contributes to the safety of navigation, IALA strongly recommends that the use of AIS1 and AIS2 frequencies be reserved for AIS use only.

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