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## **INTERNATIONAL NAVTEX SERVICE**

- 1 The Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its fifth session (11 to 15 December 2000), agreed to a number of recommendations (reproduced at annex) aimed at reducing interference and volume of information in the International NAVTEX Service.
- 2 In addition, COMSAR 5 agreed that it was important to encourage Administrations to migrate non-English language broadcasts and broadcasts of information provided specifically for non-SOLAS vessels from 518 kHz to 490 kHz or 4209.5 kHz, as appropriate.
- 3 The Maritime Safety Committee, at its seventy-fourth session (30 May to 8 June 2001), approved the recommendations made by COMSAR 5 and urged Administrations to complete this migration by 1 January 2005.
- 4 Member Governments are invited to bring this circular to the attention of all Maritime Safety Information (MSI) providers and National Telecommunication Administrations for consideration and action as appropriate.

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**ANNEX****INTERNATIONAL NAVTEX SERVICE****Interference between stations and the use of 490 kHz**

1 Although NAVTEX continues to be generally reliable and an effective medium for the promulgation of Maritime Safety Information, the world-wide infrastructure continues to expand and the volume of information that each Administration disseminates through a NAVTEX service on 518 kHz continues to increase. There is now a real danger that in some geographical areas, without firm management, both the system and system users may become overloaded with information on this frequency.

2 Many stations are filling their allotted 10 minute time slots and an increasing number are over-running. Instances of interference with neighbouring stations, as a result of over-running the time allocation, are also increasing. Where adjacent stations have B<sub>1</sub> characters which follow alphabetically (i.e. time slots abut), if the first station over runs, it may mask the phasing signal of the second station such that, to the user, it seems as if the second station is off the air. Safety-critical information from the second station, although broadcast, may not be received by the system users. Over-run is usually caused by one or more of the following:

- .1 a significant increase in safety-critical activity such as cable laying. Navigational warnings promulgating such activity often include numerous waypoints which are listed by Latitude and Longitude;
- .2 meteorological information provided in a manner which is not concise and easily assimilated by the system user or for a much wider area than is covered by the NAVTEX station;
- .3 additional information provided for non-SOLAS system users e.g. longer-range weather forecasts for fishing and recreational vessels (see paragraph 3 below); and
- .4 information to meet specific national requirements. This includes national language broadcasts and other information which is sometimes required to be broadcast by national statute rather than IMO resolutions.

3 As the GMDSS spreads to non-SOLAS mariners, their requirements for information are often different from the SOLAS ships and may be determined at a national level. SOLAS ships trading internationally usually pass through the area of coverage of a NAVTEX transmitter in a day; for them a 24-hour weather forecast usually suffices. However, fishing vessels and recreational vessels often remain in the same vicinity for several days and may require much longer range forecasts which take up more transmission time.

4 In order to keep the quantity of information that is broadcast on 518 kHz to manageable levels and to reduce avoidable interference on this frequency, it is recommended that:

- .1 Administrations monitor the volume of data broadcast and, together with adjacent Administrations, actively manage the system to ensure that interference caused by over-running allocated time slots, is minimised; and

- .2 Administrations migrate non-English language broadcasts, and broadcasts of information provided specifically for non-SOLAS vessels from 518 kHz to a national broadcast on 490 kHz or 4209.5 kHz as required. B<sub>1</sub> characters for these frequencies will be allocated by the International NAVTEX Co-ordinating Panel, on request.

5 Interference between stations with the same B<sub>1</sub> character/time slot, but located in different regions is also increasing, particularly at night, as the number of operational NAVTEX stations increases. This is occasionally caused by atmospheric conditions, but is generally caused by excessive power output from one of the stations. It is recommended that Administrations restrict the power output from their transmitters to that required to cover the designated area, particularly at night, in order to avoid interference. As a general rule, transmitter power should never exceed 1kW by day and 300 watts by night; use of as much as 7 kW has been noted in extreme cases of reported interference.

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