Action Item CPRNW7-4.2 Contingency Planning

Submitted by IMSO

Introduction

1 The integrity of the World-Wide Navigational Warning Service broadcasts depends on the continuing availability of the broadcast technology used to provide the International SafetyNET Service. IMSO and Inmarsat therefore conduct regular exercises to ensure that the broadcast capability can be restored, within the established timescale of 1 hour, in the event that a prime satellite should fail.

2 However, experience has shown that it is equally possible for a Land Earth Station (LES) to suffer from temporary non-availability or failure of its systems, or of the communication links between the LES and its customers. It is therefore considered imperative that Maritime Safety Information providers, including NAVAREA Co-ordinators and any National Co-ordinators using the SafetyNET broadcast for promulgating Coastal Warnings, should have established contingency arrangements to ensure that their broadcast service is not compromised in the event of a temporary communication or LES failure.

NAVAREA Responsibilities

3 Under the terms of the WWNWS Guidance Document (S-53) NAVAREA Co-ordinators have the responsibility to:

"6.2.1.5 direct and control the broadcast of NAVAREA warning messages, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended". (IHO S-53 and IMO Assembly Resolution A.706(17))

4 This responsibility is normally discharged through a contract or other agreement between the NAVAREA Co-ordinator and the chosen Inmarsat Land Earth Station Operator (LESO) which provides for the NAVAREA Co-ordinator to access the SafetyNET broadcast via the Land Earth Station concerned. In many cases this agreement is a national one that covers other information providers in the country as well, e.g. the Meteorological Service.

Practical Considerations

5 Temporary non-availability of LES

5.1 It is possible for any LES to suffer an equipment breakdown or other technical difficulty that means it will not be able to broadcast through the satellite(s) at the scheduled time for a particular Information Provider, or make an unscheduled broadcast when required to do so. Information

Providers, including NAVAREA Co-ordinators, should pre-plan for such an eventuality. Possible solutions should be discussed with the primary LESO and their assistance sought to ensure that contingency arrangements are put in place and tested before they are needed.

5.2 Possible contingency arrangements could include:

.1 Primary LESO forwards any messages received to another pre-selected LES (the contingency LES) for broadcast; or

.2 Primary LESO informs the Information Provider of the non-availability of the Primary LES and the Information Provider routes any messages to the contingency LES for broadcast.

5.3 Note that in both these cases the contingency LES must be able to "see" the same satellite that is used for the regular broadcast to the NAVAREA concerned.

5.4 These contingency arrangements should form part of the contract or other agreement between the Information Provider and its chosen LESO. In some instances the fall-back LES may be owned or operated by the same company which operates the prime LES, in others, the fall-back LES will be owned by another company. In either case, the Information Provider should ensure that the agreed contingency arrangement is covered in full in the contract(s) for the provision of broadcast services.

6 Failure of the communication link

6.1 It is likely that the LESO will not be the same entity that provides the communication link between the Information Provider and the LES. The potential for failure of this link should also be recognised and planned for. Two independent routes should be available for sending messages to the Primary LES, and also the Contingency LES. This does not mean that two entirely different and separate routes must always be available. For example, the technical structure of Internet provides for multiple routes between two points. In this case, if e-mail is used for sending messages from the Information Provider to the LES, it will only be necessary to ensure that there are two sets of terminal equipment (computers and modems) at each end, with separate lines to access the public switched network. It is for this reason that the use of e-mail will generally provide a more robust solution than more expensive dedicated lines, and is recommended for communication between the Information Provider and the LES.

6.2 Where the use of the internet is not suitable, other local solutions should be found which offer the same level of robustness and reliability.

7 Proving the capability

7.1 It is recommended that Information Providers exercise their contingency arrangements from time to time, in order to prove that they remain effective.

7.2 It is further recommended that the existence of contingency arrangements, and any exercises proving the effectiveness of these arrangements, should be included in the national reports submitted to each session of the Commission on Promulgation of Radio Navigational Warnings (CPRNW).