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SAFETY MARGIN TO PROTECT RADAR SYSTEMS

1 The Maritime Safety Committee (MSC), at its eighty-third session (3 to 12 October 2007), recognizing the importance of safety margins to be taken into account when developing protection criteria for maritime radar systems, approved the guidance prepared by the Sub-Committee on Safety of Navigation (NAV), at its fifty-third session, as set out in the annex.

2 Member Governments are invited to bring the annexed guidance to the attention of the radio regulatory authorities in their Administrations.

ANNEX**SAFETY MARGIN TO PROTECT RADAR SYSTEMS**

1 The Sub-Committee on Safety of Navigation, at its fifty-third session (23 to 27 July 2007), expressed concerns about sharing between the maritime radar frequency bands and non-radar services, and noted that some Administrations are actively developing protection criteria for radar systems to use as the basis for sharing trials with non-radar systems. These protection criteria include various parameters that feature in ITU-R recommendations. However, they are not likely to include allowances to take account of the “human element” aspects of maritime radar operation.

2 The aeronautical world has been well aware of this shortcoming for many years. During any sharing discussions, a “safety margin” is included which takes account of the additional protection required to allow for variations in performance from different radar operators, and various environmental and other conditions.

3 Recent sea trials had been reported which used radars required to be carried under SOLAS regulation V/19 on an operational ship, together with (non-radar) interference sources located on shore, using realistic small maritime targets and experienced maritime radar operators. These trials indicated that there were significant variations in the detection of the targets which can be attributed to the human element.

4 The Sub-Committee concluded that there was a need to ensure that a “safety margin” was taken into account to give additional protection, should sharing with other services become an active possibility, to ensure that the maritime radar as a safety service was adequately protected.

5 Member Governments are urged to bring the above information to the attention of the radio regulatory authorities in their Administrations.
