

WMO GMDSS MARINE BROADCAST SYSTEM

United Kingdom National Report

1. Overview

The United Kingdom has responsibility as a Preparation and Issuing Service for METAREA-I; this is provided through the Navtex system for coastal waters, and SafetyNET™ for all other areas. Forecast content and format is designed to follow the practices laid down in the WMO Manual of Meteorological Services (WMO-No. 558).

Navtex is broadcast via stations at Niton, Cullercoats and Portpatrick in the UK; the more westerly areas are also broadcast by the Irish Coastguard from stations at Valentia and Malin Head.

Until November 2006, SafetyNET™ services were issued to LES Goonhilly in the UK, for transmission via Inmarsat-C broadcast; the operators have Goonhilly (Stratos) have now moved traffic to the LES at Burum in the Netherlands. These services are monitored directly by the Met Office through appropriate transceivers.

2. International (518) Navtex Service

Forecasts to meet this service requirement are prepared every 12 hours, and passed to the UK Maritime & Coastguard Agency (MCA), who are responsible for the Navtex broadcast in NAV/METAREA I.

Issued via Niton (0840 and 2040), Cullercoats (0900 and 2100) and Portpatrick (0620 and 1820), forecasts for Offshore areas (the "Shipping Forecast") are issued every 12 hours; forecasts cover the area from 15 Deg W to the European mainland, and north to Southeast Iceland. The forecast period is a basic 24 hours ahead, with a brief outlook for a further 24 hours; additionally, an "Extended Outlook" (for a further 3 days) is issued at 0040 (Niton), 0100 (Cullercoats) and 0220 (Portpatrick).

In order to meet the change of areas to 20 Deg W, introduced in 2000, these forecasts are passed to Ireland for transmission via their Valentia and Malin Head broadcasts (at 0740 and 1940 for Valentia, and 1040 and 2240 for Malin Head).

Gale Warnings for any of these areas are broadcast by the appropriate Navtex broadcast station as soon as received from the Met Office: in addition, they are also repeated once during the next routine broadcast from that station.

In line with recommendations from ETMSS-I, in order to try to reduce the length of Navtex broadcast times, a set of "standard" abbreviations was introduced in October 2006. To date no exact data is available on the amount of time saved by this.

3. National (490) Navtex Service

A more detailed forecast for the inshore waters of the United Kingdom is now provided via the National Navtex service. Forecasts are currently issued every 12 hours and passed to the UK MCA for broadcast; it is intended that, from early in 2007, the forecast frequency will be increased to an issue every 6 hours.

Issued via Niton (0520 and 1720), Cullercoats (0720 and 1920) and Portpatrick (0820 and 2020), an "Inshore Waters" forecast is issued every 12 hours; forecasts cover the coastal area around the UK in seventeen specific areas out to 12 nautical miles offshore – forecasts for the Isle of Man, prepared by the Isle of Man Met Office, are now passed to the Met Office and incorporated into the "Inshore Waters" forecast. The forecast period is a basic 24 hours ahead, with an outlook for a

further 24 hours; additionally, a brief outlook (for a further 3 days) is also included within the forecast. With the introduction of additional forecasts in 2007, the format is planned to change to one where the additional forecasts will cover only the initial 24 hour period, and the 3-day outlook will be replaced by a more informative “General Synoptic Situation”, at the request of the UK MCA; the format of the text will also change to a style similar to the “Shipping Forecast”, to assist consistency across the range of UK Maritime Safety Information.

“Strong Wind Warnings” (which are issued by the UK for areas up to 12 nautical miles offshore when winds of Force 6 or stronger are expected), are also broadcast on this service - on receipt and at the next scheduled broadcast.

	International (518)			National (490)				
	Forecasts Issued			Forecasts Issued				
Niton	0840	↑ ↑	G	0520	I n W o s a r h t e o e c r r a e s s t	F	S W a t i s r n o d R n e g W q n d g	
	2040		a a					1720
	0040		l s					
Cullercoats	0100	S F h o i r	e	0720	h t e o e c r r a e s s t	F	S W a t i s r n o d R n e g W q n d g	
	0900		R					1920
	2100		W e					
Portpatrick	0220	p e p c i a	a q	0820	e s s t	F	S W a t i s r n o d R n e g W q n d g	
	0620		r u					2020
	1820		n i					
Valentia	0740	n s g t	l r					
	1940		n e					
Malin Head	1040	↓ ↓	g d					
	2240		s					

Fig 1. Summary of Navtex Broadcast Times

4. SafetyNET™ Services

Forecasts for Metarea I are produced twice a day, for broadcast via Inmarsat at 0930 and 2130 each day. These are passed directly to LES Goonhilly for uplink to Inmarsat and broadcast. This broadcast is also monitored directly by the Met Office, under the terms of WMO – No. 471, section 2.2.6.5.

The forecast issued for this area, covering the region from 71Deg to 48Deg 27' N, to 35Deg W, is subdivided into 7 areas, together with relevant areas from the Navtex “Shipping Forecast” (areas immediately to the west of Ireland and southeast of Iceland). Forecasts are in the format of; Storm Warnings (when appropriate), General Synopsis, and area forecasts for 24 hours. Storm Warnings are also broadcast at other times when necessary.

Since November 2006, SafetyNET™ services have been redirected from LES Goonhilly in the UK to the LES at Burum in the Netherlands, for transmission via Inmarsat-C broadcast; this change has is now the subject of discussions between the UK MCA and Stratos (the LES operators) to ensure that remaining aspects of the transfer of services goes smoothly. To date services appear to be unaffected, although we have encountered more “failures” when sending the messages than previously. These services are monitored directly by the Met Office through appropriate transceivers.

5. Feedback from Users

In general, there has been little direct feedback on the range of GMDSS services provided for Metarea I, but the feedback there has been has generally been positive. This is particularly true of the National service, where the introduction of changes is generally the result of discussion between the UK MCA, Met Office and representatives of the coastal user community.

6. Progress with Implementation

Progress has been relatively smooth in this respect; the Met Office works closely with the UK MCA to ensure that services are delivered to Navtex & SafetyNET™, and with the Irish Coastguard service, to deliver services to the west of the UK.

7. Difficulties in Implementation

A number of difficulties have been encountered in implementing the GMDSS services.

Difficulties have generally centred on the length of broadcast; whilst on the International Navtex service the introduction of abbreviations has reduced the probability of overrun, on the National service changes to enhance the service, such as integrating the forecast for the Isle of Man, has led to significant problems. Discussions and trials between the Met Office and the MCA are now underway to try to alleviate these problems; whilst it may be possible to introduce the same style of abbreviations as on the International service, there is concern that there is a high risk that, given the potential for interference and poor reception in the coastal area, "misinformation" could be delivered to recipients.

On the technical side, there is concern over the change of LES from Goonhilly to Burum, as outlined in 1. and 4. above. Although there appear to be few issues over transmission/receipt of the information, there are concerns over the way in which the change of LES was communicated, and also over a suitable backup to Burum (Borum had been the backup LES to Goonhilly); these issues are being taken forward by the UK MCA, as the national maritime authority.

Linked to issues with the change of LES, are issues concerning the methods of transmitting information to the LES. Historically this has been via telex, and a move to a more modern method of transmission is one of the issues under discussion with the LES operator.