

# Proposed AIRMET Revision – GAMET area forecast

This Annex provides details of the proposed amendments to the current UK AIRMET Service.

## 1. Realignment of forecast boundary areas

Figure 1 Current AIRMET areas

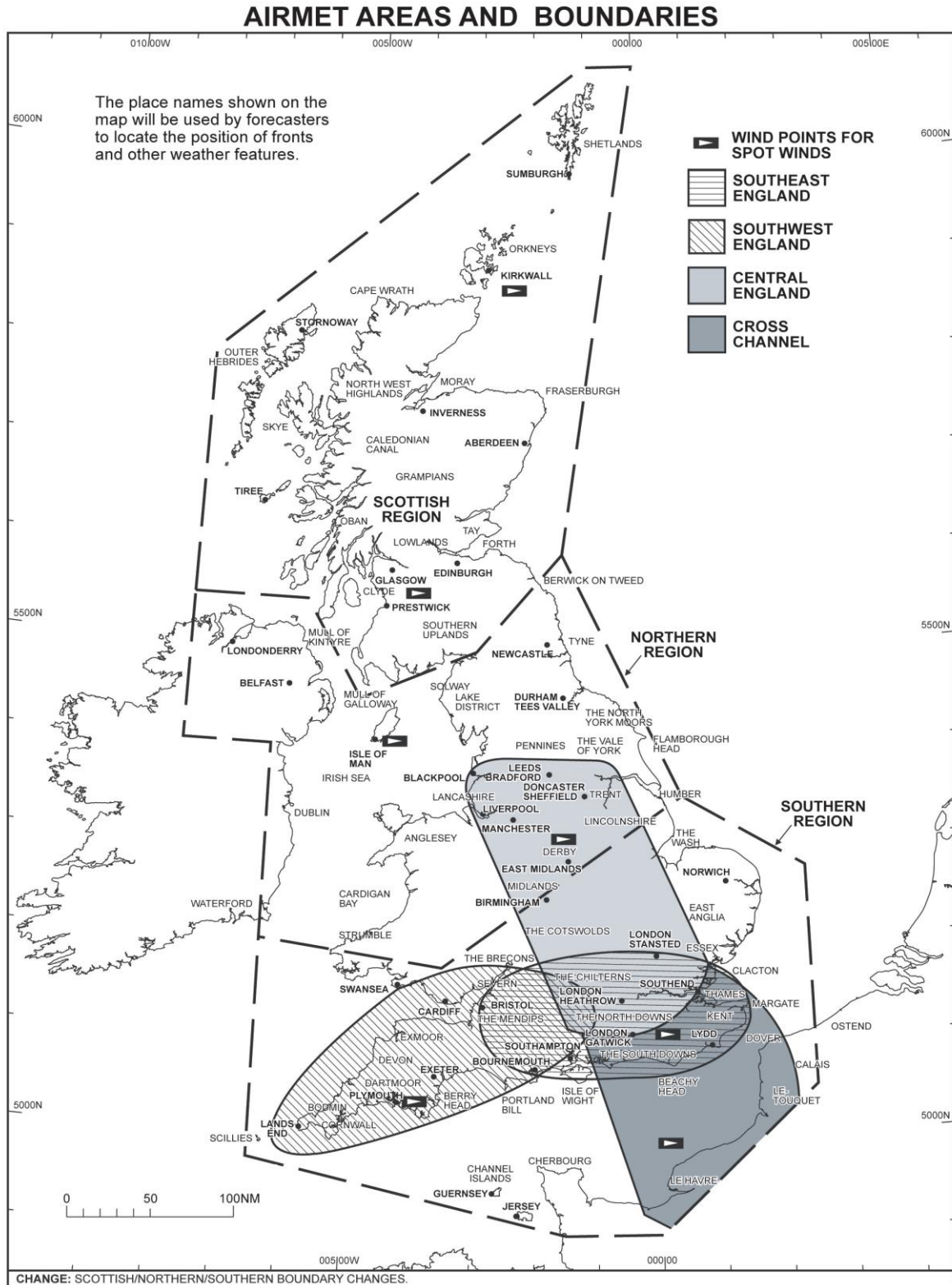
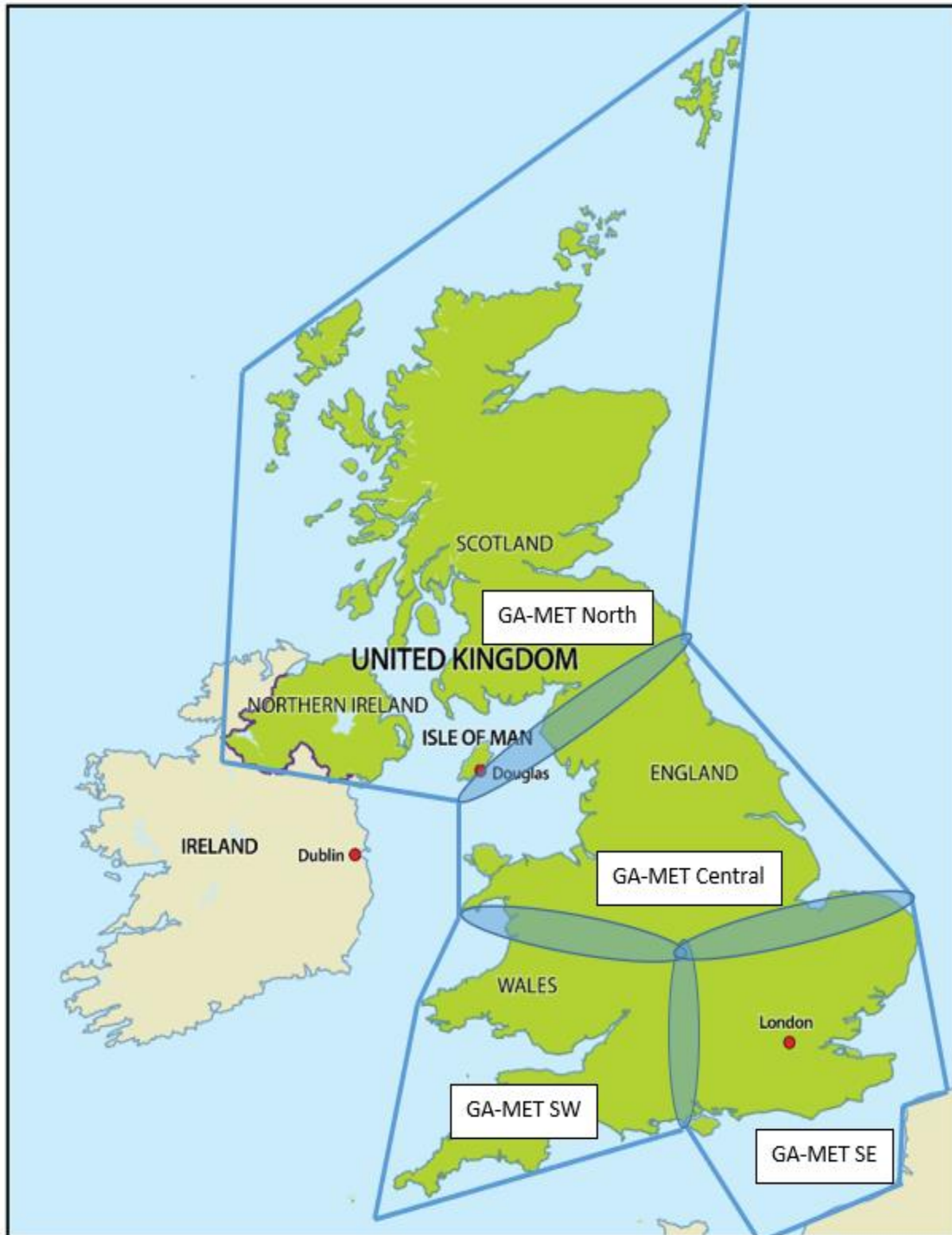


Figure 2 Proposed new GAMET areas (shaded areas indicated overlapping forecast zones)



The diagrams at Figures 1 and 2 show the current and proposed forecast areas. The new areas are described as follows:

- Southeast forecast: Area to the East of Southampton-Oxford-Northampton-The Wash
- Southwest forecast: Area to the West of Southampton-Oxford-Leamington Spa-Llanbedr
- Central forecast: North of area covered by Southeast and Southwest areas up to a line from Carlisle to Berwick
- North forecast: North of area covered by Central area including Northern Ireland

Note that the:

- New South East forecast incorporates the existing Cross Channel and SE sub area AIRMETs
- New South West forecast incorporates the existing Southern England & South Wales AIRMET (excluding the South East)
- New Central forecast incorporates the existing Northern England & Wales and Central AIRMETs
- New North forecast incorporates existing Scottish AIRMET but including N. Ireland

## 2. GAMET Production Times and Validity Periods

It is proposed that the new GAMET area forecast will be issued 4 times per day as detailed in Table 1 below (GAMET forecast times are aligned with Metform 215 for consistency). All times are in UTC.

Regional Area / Forecast	Update time	Validity period	Met Situation validity time	Regional Outlook period	Spot wind validity	UK Outlook period
<b>Standard for all GAMETs</b> (North, Central, SW and SE)	0400	08-17	1200	18-00	09, 12, 15	00-24
	1000	14-23	1800	00-06	15, 18, 21	06-06
	1600	20-05	0000	06-12	21, 24, 03	12-12
	2200	02-11	0600	12-18	03, 06, 09	18-18

*Table 1: Proposed GAMET production and validity periods*

## 3. GAMET Amendment Criteria

Forecasts will be monitored by Met Office operational meteorologists and will be amended subject to the criteria specified in Table 2 below:

Element	Original Forecast	Revised Opinion
a) Surface Wind	All forecasts of surface wind	A change in direction of 30° or more, the speed before and/or after the change being at least 30 kt. A change of speed of 20 kt or more
b) AIRMET Wind Forecasts for 1000 feet, 3000 feet and 6000 feet	All AIRMET forecasts of wind at 1000, 3000 and 6000 feet	A change in direction of 30° or more, the speed before and/or after the change being at least 30 kt. A change of speed of 20 kt or more
c) Surface visibility (general visibility)	8 km or more 5000 m to 8 km 3700 m to 5000 m 2500 m to 3700 m 1600m to 2500 m 800m to 1600 m 0 m to 800 m	Less than 8 km Less than 5000 m or more than 8 km Less than 3700 m or more than 5 km Less than 2500 m or more than 3700 m Less than 1600 m or more than 2500 m Less than 800 m or more than 1600 m More than 800 m
d) Weather phenomena TS, SQ, GR, SA, RASN, SN, FZFG, FZRA, FZDZ	Not included  Included	Now expected  Not now expected
e) Cloud Amount	All forecasts of cloud amount	Changes in the general forecast lowest cloud base below 1500 feet from 4 oktas or less to more than 4 oktas, or more than 4 oktas to 4 oktas or less
f) Cloud Height (general forecast lowest cloud base AMSL (amounts of SCT or more))	2500 ft or more 1500 ft to 2500 ft 700 ft to 1500 ft 500 ft to 700 ft 300 ft to 500 ft 200 ft to 300 ft Surface to 200 ft	Less than 2500 ft Less than 1500 ft or more than 2500 ft Less than 700 ft or more than 1500 ft Less than 500 ft or more than 700 ft Less than 300 ft or more than 500 ft Less than 200 ft or more than 300 ft More than 200 ft

g) Temperature	All forecasts of temperature	5°C or more
h) Turbulence	Nil Light Moderate Severe	Moderate or severe Severe Nil Nil or light
i) Zero degree Celsius isotherm	Below 5000 ft  Above 5000 ft	Changes of 1000 ft or more  Changes or $\pm 25\%$ or 2000 ft, whichever is smaller.
j) Airframe Icing	Nil Light Moderate Severe	Moderate or severe Severe Nil Nil or light
k) Areas boundaries, significant fronts and tropical disturbances	Not included  Included	Now expected  Not now expected or $\pm 60$ nm different from forecast

*Table 2: GAMET amendment criteria*

#### **4. Rationalisation of forecast information**

It is proposed that the GAMET will continue to provide all the details contained in the existing UK AIRMET Service and UK Update and Outlook Product, plus additional information as detailed in Table 3 below:

Forecast Element	Existing Service		UK Update & Outlook	Proposed GAMET Forecast
	AIRMET	SIGWX AIRMET		
Met Situation	Yes	Yes	Yes	Yes – Issued in alignment with, and covering the same period as, the UK Low Level Weather Chart (Metform F215).
Strong Wind Warning	Yes	Yes	No	Yes
Freezing Level	Yes	Yes	No	Yes
Weather Conditions	Yes	Yes	No	Yes - Maximum of 3 Zones Zones = Visibility, Cloud and Weather information. Warnings = Hill Fog, In Cloud Icing and Turbulence, Low level Turbulence, Mountain Waves, Snow on Mountains, Squall, Line Squall.
Winds and temperature	Yes	Yes	No	Yes - Winds and temperature or 1000, 3000, and 6000 feet above ground level provided for selected representative locations <sup>1</sup> , valid at 3 hourly intervals.
Regional Outlook	Yes	No	No	Yes – Issued in alignment with, and covering the same period as, the UK Low Level Weather Chart (Metform F215).
UK Extended Outlook	No	No	Yes	Yes - Covering the 24-hour period beyond the Regional Outlook.

*Table 3: Proposed content of GAMET Forecasts*

<sup>1</sup> Selected wind and temperature profile locations as follows:

GAMET South East: Norwich, Southampton, Oxford, Gatwick

GAMET South West: Plymouth, Exeter, Bristol, Cardiff

GAMET Central: Birmingham, Manchester, Humberside, Newcastle

GAMET North: Glasgow, Aberdeen, Inverness, Kirkwall