Background

One of the Public Weather Service (PWS) milestones for 2008/09 was to review the current Mountain Weather Service provided free-of-charge to the general public.

The PWS mountain weather service has evolved over a number of years. The current service has been influenced by past and present Met Office commercial services and services provided by competitors. The review is to ensure it is meeting the needs of the public.

The Mountain Area Forecast Service (MAFS) originated as a Met Office commercial service provided on premium-rate telephone (and facsimile). A drop in the demand for these telephone services combined with increased Met Office focus on profitability led to the potential cessation of mountain weather forecasts in 2006 and the decision to transfer these to PWS. In Scotland the PWS mountain forecasts are considered insufficient for requirements by the Scottish Mountain Safety Forum; since 2007 funding for mountain forecasts from MWIS\(^1\) for 5 areas of Scotland has been provided by the Scottish Government through SportsScotland. The Welsh Assembly Government funds the Met Office to provide an enhanced mountain weather service for Welsh mountain areas.

A request from the Chairman of Snow and Avalanche Foundation of Scotland for consideration to be given to the provision of PWS funding for the weather forecasts which are used as input to the Scottish avalanche forecasts will also be incorporated in this review.

Desk research conducted at the initial stage of this review confirmed the continued requirement for PWS forecasts for mountain areas of the UK where walkers and climbers are vulnerable to poor weather conditions. Highlights from this research are attached at Annex A. The next stage, the consultation, focuses on ascertaining the detailed requirements for this service.

The recommendations draw on the findings of the desk research and consultation.

Methodology

The consultation comprised meetings (by telephone where necessary) with key stakeholders and surveys of the requirements of individuals through the stakeholder organisations.

Priorities for consultation were identified as below, with the aim to have representation from Northern Ireland, Scotland, Wales and England:

- National Park covered by current MAFS
- National Park not covered by current MAFS
- Mountain Rescue
- Mountaineering Councils
- Other organisations with members involved in mountain activities
- Public using MAFS via Met Office website

Despite best efforts it was not possible to consult with all the organisations and individuals targeted. Noticeable exceptions included Scottish Mountain Rescue and

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\(^1\) MWIS Mountain Weather Information Service
the Mountaineering Council of Ireland where there was no response to repeated calls.

Open discussion was encouraged in the stakeholder meetings. For individual responses a questionnaire was developed based on points raised in previous consultation via the Met Office website, the desktop research and input from stakeholders.

**Results**

**Public Questionnaires**

135 completed questionnaires were analysed. The highest number of responses was from people involved in climbing but there was also a reasonable response from the three other categories – those doing long, moderate and short walks. There is a bias towards mountaineers in Scotland who always use weather forecasts – this group comprises 15% of the total.

Responses to many of the questions are fairly spread; the strongest signals are for mountain forecasts to have:

- both factual and ‘effect of the weather’ forecast information;
- text and pictorial information; and
- be updated twice daily.

**Mountain Rescue Questionnaires**

28 questionnaires were returned from Mountain Rescue Teams (MRT) in England and Wales. (There are around 120 Mountain Rescue Teams in the UK.)

Rather surprisingly only 3 of the 28 respondents ‘Always’ use a weather forecast when they are called to a rescue and only 8 use one ‘Often’. However, when they do use one, most use a Met Office internet forecast and the majority are satisfied or very satisfied with the service.

Consistent with the mountain user, the Mountain Rescue teams would prefer forecasts to contain both text and pictures and for there to be 2 updates a day. The majority would also prefer smaller areas, with some suggesting fairly small as well as non-mountainous areas.

The large majority feel it would be beneficial to have direct contact with a regional weather advisor.

**Stakeholder Input**

The requirement for the forecasts to be more visually appealing and include synoptic charts and possibly other graphics was confirmed during discussions with stakeholders. Use of language which better describes the impact of the weather and which mountain uses can better relate to (in terms of weather experienced in the mountains) was also highlighted as a desirable improvement.

The need to be able to view mountain forecasts alongside forecasts for other areas and activities was raised in meetings at both the Cairngorms and Lake District.

In Scotland, although the MWIS forecast are funded by Sportscotland and promoted to the Scottish mountain community, the requirement for the continued availability of Met Office PWS mountain area forecasts, especially when the weather is bad, was confirmed by key stakeholders. The requirement for the weather input to avalanche forecasts to be funded by PWS was also confirmed and discussed.
Chair of SMSF\textsuperscript{2} and Vice President MCofS\textsuperscript{3}, asked for PWSCG support in changing the time of broadcast of the weekend mountain forecasts on BBC Radio Scotland.

**Recommendations**

The following recommendations are made based on the findings of the Met Office online mountain forecast questionnaire (March 2008), Mountain Weather Service Review desktop research (May 2008) and consultation (July and August 2008). The recommendations have been split into 3 groups, one each where additional running or development costs are likely and another where it may be possible to make improvements with only small additional costs. At this stage only a partial attempt has been made to prioritise the recommendations.

<table>
<thead>
<tr>
<th>Improvements expected to significantly increase ongoing production costs:</th>
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<tbody>
<tr>
<td>1. Introduce a Peak District forecast</td>
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<tr>
<td>2. Provide 2 issues a day; note slight preference for am if only one issue</td>
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<tr>
<td>3. Provide forecasts for Scottish Avalanche Information Service</td>
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<tr>
<th>Improvements expected to incur significant development costs</th>
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<tr>
<td>4. Update the format so it is very clear and visually appealing – focus on internet delivery with an option to print for notice boards etc</td>
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<tr>
<td>5. Allow mountain forecast to be viewed (and printed) with other products e.g. warnings, site specific forecasts, coastal forecasts</td>
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<th>Improvements which may not incur significant costs</th>
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<tr>
<td>6. Approach BBC about BBC Radio Scotland mountain forecasts</td>
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<tr>
<td>7. Include a synoptic chart for today, and possibly further ahead, with a simple text description</td>
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<tr>
<td>8. Include phrases which describe the effect of the weather on the walker (as well as values) and ensure the language of the forecast describes conditions for him in the hills/mountains e.g. fog not cloud</td>
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<tr>
<td>9. Include risk information – definitely rain, possibly other hazards such as fog</td>
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<tr>
<td>10. Review Main Hazards section – ensure these are clear and easy to understand</td>
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<tr>
<td>11. Ensure forecasts accurately describe the character of weather in the mountains (by improving forecaster knowledge of mountain conditions)</td>
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<td>12. Ensure needs of others are catered for by other PWS Outputs e.g. accurate Dartmoor forecasts in or to complement PWS scripts</td>
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<tr>
<td>13. Make regional weather advisors available to MRT (and consider NSWWS subscription noting this does not cover peaks)</td>
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<td>14. Promote forecasts ‘personally’</td>
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It is recognised that a combination of the improvements will be required to make the biggest impact to the forecast (e.g. 4 with 7-11).

\textsuperscript{2} SMSF - Scottish Mountain Safety Forum  
\textsuperscript{3} MCofS – Mountaineering Council of Scotland
Next Steps

The next stage of the review, which with the exception of recommendation 6 will be led by the Met Office, is to carefully consider the feasibility, cost and timescale associated with introducing the improvements to the PWS Mountain Area Forecasts which have been highlighted during this review.

The PWSCG and Met Office share a desire to improve the service such that it better meets the needs of users but also recognise that there may be budget constraints.

There is a requirement to provide costed options, with timescales on any improvements e.g. format and coverage, and recommendations to the PWSCG by the end of November 2008 (Milestone 4).