

**PWSCG (36) Meeting**  
**10:00 – 16:00** Wednesday 27<sup>th</sup> January 2016  
 BIS Conference Centre, 1 Victoria Street

**Minutes**

Wyn Williams (WW)	PWSCG Chair
Denise Harker (DH)	PWSCG Independent Member
Mike Gray (MG)	PWSCG Secretariat
Paul Riches (PR)	PWSCG Secretariat
Keith Hodgkinson (KH)	BIS
Alessia Morris (AM)	Scottish Government
Tracy Goode (TG)	Welsh Government
Paul Furlong (PF)	Highways England
David Gibbs (DG)	Civil Aviation Authority
Craig Woolhouse (CW)	Environment Agency
Trish Abbott (TA)	DCLG
George Tabcart (GT)	MOD
Ian Hoult (IH)	Local Government Association
Richard Jackson (RJ)	Maritime and Coastguard Agency
Derrick Ryall (DR)	Met Office
Richard Orrell (RO)	Met Office
Mel Harrowsmith (MH)	Met Office
Lynne Armstrong (LA)	Met Office
Alex Bailey (AB)	Met Office
Rob Varley (RV)	Met Office

1	<p><b>Welcome &amp; Introductions</b> – Wyn Williams, Chair PWSCG</p> <p>WW opened the meeting and welcomed everyone. Apologies had been received from John Irvine (N. Ireland), Colin Hord (CAA), Ben Fletcher (Cabinet Office), Nathan Travis (CFOA), and Charlie Hall (ACPO).</p> <p>Members for whom this was their first meeting introduced themselves: Tracy Goode from Welsh Government and Lynne Armstrong from Met Office.</p> <p>WW informed the group that Steve Barnes, who had represented the Cabinet Office on the PWSCG, had retired since the last meeting. The PWSCG minuted their appreciation to Steve for his excellent contribution to the Group and wished him well in his retirement.</p> <p>WW also informed the group that MG’s secondment to BIS comes to an end in May this year and that he will be returning to the Met Office. The process to find a replacement is underway and that the April PWSCG will be MG’s last. WW expressed his thanks and gratitude to MG for all his hard work and achievements whilst in the role.</p>
2	<p><b>Minutes &amp; Actions</b></p> <p>The minutes of the October meeting were approved and will be published online.</p>

	PR updated the group on progress against the actions from the last meeting. One action is outstanding: the MCA will follow up with the Met Office regarding the inclusion of the marine forecast within the Public Weather Media Service (PWMS).
<b>3</b>	<b>Reports</b>
3.1	<p>PWSCG Chair's Update – WW</p> <p>WW began his update with a summary of the recent outcome of the spending review process. The PWS is facing a ~10% reduction by the end of this Parliament. A significant amount of preparatory work into how this can be delivered has already been undertaken and an initial proposal was presented to the PWS Assurance Group (PAG) meeting in December. The proposals will be discussed in more detail at this meeting under item 5.1. They will be discussed at the next Interdepartmental Met Office Strategy Group (IMOSG) in February.</p> <p>WW informed the group that he and MG had met with the Office of Government Commerce (OGC) about analysis of the benefits from the new High Performance Computer (HPC). The Met Office is commissioning a review into the socio-economic benefits of the new HPC. This Group hasn't been involved to date in this work but will be involved going forward.</p> <p>WW invited DH to provide an update to the Group about a recent engagement with a member of the public who had raised concerns around the hazard which ice presents to cyclists. The main concerns are whether the information currently being provided through the PWS around ice is sufficient for other road users aside motorists and how to better communicate the hazard that ice presents to that community. Following a telephone call with DH, RO, PR and the individual in December actions were agreed to prepare new content (in conjunction with other organisations which represent the interests of cyclists) for cyclists to help them make better use of existing PWS outputs. The Group welcomed this engagement, and there was some discussion about the value of sharing gritting service information with the public as a proxy for ice forecasts. DH agreed to report back on progress to the next PWSCG.</p>
4.0	<b>Performance 2015/16</b>
4.1	<p>Met Office quarterly summary</p> <p>DR noted that at the last meeting, there were a number of serious concerns for the PWS including the Spending Review and the BBC contract. There has been considerable progress on these issues and the position is much more comfortable for the PWS.</p> <p>Weather wise, December had been warm and wet, 4°C above the long-term average and the wettest single month since records began in 1910. Also, 2015 had been the warmest year globally.</p> <p>On public reach, DR revealed that the results of the Ad hoc surveys</p>

	<p>showed an increase in respondents saying that they had taken action as a direct result of the warnings issued. The new storm naming initiative will be assessed, including consideration on whether it is having an impact on improving reach and its quality in terms of messages to the general public. It appears to be an effective aid for broadcasters and media in general, including social media allowing them to create a narrative around the weather and thereby increasing awareness of the potential for a significant weather event. The present storm naming convention is based on wind impacts but there may be benefits in exploring whether other triggers could be included as part of the criteria for when a storm can be named. This is particularly relevant given the intense and heavy rainfall events that occurred in various parts of the UK in December and January.</p> <p>DR updated the group on the performance against the metrics used for measuring performance of the PWS. Only one metric is likely to be missed resulting from a temporary decline in the verification for cloudless skies. This is due to an artefact of the methodology used within the post-processing scheme rather than any underpinning forecast model performance, and plans are in place to make improvements to how the post processing activity generates the corresponding weather symbol.</p> <p>Milestones achieved included the delivery of 7 day forecasts across all channels; the successful launch of the new Met Office mobile app as part of a phased rollout, with additional updates to current version scheduled; and the migration of most services onto Hazard Manager 2. The outstanding services will be migrated by 31 March 16. Two new advisors have been appointed covering Northern Ireland and South West England.</p>
4.2	<p>Secretariat report on Met Office performance – MG</p> <p>MG reported back on the subjective verification for weather warnings issued since the last meeting. There were a number of significant events witnessed in the stormy December period with 91% of the warnings being assessed as providing good or excellent guidance.</p>
4.3	<p>NSWWS – update on recent weather activity and warnings issued – MH</p> <p>MH updated the group on the recent severe weather, especially flooding, associated with storms Desmond, Eva and Frank during December. The current El Nino event was one of the global drivers suggesting a stormy late autumn and early winter, and this informed the seasonal outlook of a mild, wet and potentially stormy winter with an elevated risk of a cold end to the winter. Individual events were forecast well, with warnings issued in good time, and model rainfall totals in line with those observed. There had been positive feedback from responders on the warnings, and the warnings were well heeded by the public too, with action being taken.</p> <p>There was considerable discussion amongst the PWSCG of these events. Issues raised included the high level of political interest in these events, the importance in communicating uncertainty to responders so</p>

	<p>they can be prepared for a shift in the expected location of the severest weather, and the close working relationship between the Met Office and Environment Agency and Scottish Environment Protection Agency in determining the impacts of these events and hence the warning level.</p>
4.4	<p>Update on Milestones</p> <p>MS9 (Forecast Accuracy) – RO</p> <p>RO provided the group with an overview of accuracy for the newly introduced 7 day forecasts. For temperature and wind the 7 day forecast was verifying well at high levels, and long term performance is increasing.</p> <p>Work looking at the verification of high and low temperatures is ongoing, but initial results suggest that annual differences in the number of hot and cold days obscure the longer term trend, suggesting that careful consideration needs to be given to the period of analysis. CW was keen to see verification of extreme rainfall events introduced. MG reminded the Group that this piece of work was looking at measuring the PWS public forecast outputs, which doesn't include rain totals, but verifying extreme rainfall totals could be considered for measuring the outputs of the computer models.</p> <p>RO presented a new proposal for verifying the accuracy of the weather symbol which differentiates between different types of events. For example, a forecast for sunshine when heavy rain was observed would score worse than a forecast for sunshine when broken cloud was observed. IH felt that a "miss" was a "miss" and it didn't matter how close or not it was.</p> <p>RO set out the recommendations under MS9 for measuring forecast accuracy from 2016/17 onwards. These were:</p> <ul style="list-style-type: none"> <li>- maintaining long term records where there is public interest.</li> <li>- include the measure of day 7 from the forecast in assessments.</li> <li>- PPM7 (forecast accuracy) to focus on public forecasts with National Capability indicators for measuring the performance of underpinning science.</li> <li>- assess the weather symbol more comprehensively; and</li> <li>- develop a better understanding of the requirements of the threshold based schemes.</li> </ul> <p>Action: RO to prepare a paper setting out the proposals for a way forward on the forecast accuracy milestone for the Group to consider ex-committee.</p> <p>MS7b (Hazard Manager Strategy) – MH</p> <p>MH briefed the Group on an initial proposal for the strategy for Hazard Manager. The original objective of Hazard Manager was that it would</p>

	<p>provide a one stop shop for weather related decision making material for all category 1 and 2 responders. As resilience has evolved to include some voluntary sectors, it seemed to make sense to grant some voluntary organisations access to Hazard Manager. Expanding access to Hazard Manager is possible as access rights can be granted on a section by section basis on the site. This may offer the potential to include information on extreme heat or cold or CHEMET for example. In addition, more products outside the PWS would be brought onto Hazard Manager, including other natural hazards such as air quality (which is already in the public domain) and the 3 Month Outlook.</p> <p>A question was raised about the links between Hazard Manager and other services such as Resilience Direct which are widely used within the responder community. Resilience Direct doesn't have the ability to animate the wide ranging meteorological data with minimal latency, but the strategy would aim to bridge the gap between Hazard Manager and Resilience Direct. One idea was whether there could be better signposting or a link established between the two portals. There are also other considerations to bear in mind such as the use of resilience direct is much more widespread within England but less so in Scotland.</p> <p>WW invited the group to feed in any comments they have on the Hazard Manager Strategy to MH by the end of February.</p> <p>MS3a (Launch of new App) – RO</p> <p>RO briefed the PWSCG on the release of the new App. The PWSCG agreed that Milestone 3a had been met, and looked forward to the next release of the App with additional functionality, including maps.</p>
4.5	<p>Seasonal Forecast Consultation – MG</p> <p>MG reported back on his consultation exercise undertaken to test the usefulness and uptake of the seasonal forecast output. Although use of the 3 Month Outlook was poor, there was now real skill possible for winter forecasts, and responders have stated that a winter forecast would be of some use. Hence the consultation recommended:</p> <ul style="list-style-type: none"> <li>- the PWSCG should continue sponsoring the Met Office research into the production of seasonal forecasts in the next customer supplier agreement.</li> <li>- PWSCG to ask the Met Office to develop a PWS sponsored winter seasonal forecast aimed at responders.</li> <li>- PWSCG to regularly review progress in Met Office seasonal forecasting.</li> </ul> <p>The Group was content with the three recommendations and it was suggested that the seasonal forecast could feature as part of the Cabinet Office Gateway Bulletin. The Met Office will take on board the feedback and consider how to promote this forecast amongst the responder community.</p>

	Action: Met Office to take a view of the practicalities of disseminating the seasonal forecast to responders via the CO Gateway Bulletin.
4.6	<p><b>Public Perception Survey</b></p> <p>LA presented to the group a summary of the findings from the latest public perception survey. The key measures of perception of usefulness and accuracy of forecasts remained at the high levels of 87% and 77% respectively. Although people were using weather forecasts less often, more people were taking action as a result of them. TV remained the dominant channel, but digital was continuing the increase seen in recent years. The report highlighted that accuracy was still an area that the public felt could be improved. This was a crucial consideration as the public's perception of accuracy can differ from the objective measures of forecast accuracy.</p>
-	<p><b>Q&amp;A Session with Met Office Chief Executive</b></p> <p>WW welcomed RV to the meeting, and invited him to take part in a short discussion with the PWSCG members. Issues raised included the importance of the proposed Met Office Transformation and Efficiency programme in enabling the PWS to meet the savings required of it from the Spending Review, and how the Met Office was planning to maintain its reach. The PWSCG thanked RV for making the time available to address the meeting.</p>
5.0	<b>Forward look 2016/17</b>
5.1	<p><b>Outcome of Spending Review &amp; Report of PAG – MG</b></p> <p>MG provided the group with a summary of the SR outcome and what this means for the PWS over the course of this Parliament. The overall saving that must be delivered is 9.8% off the inflated baseline by 2019/20. Proposals about how this reduction could be achieved with the minimum impact to the PWS were presented at the PAG meeting in December. The PAG debated the merits of where savings could be realised and worked through priorities to come to a practical and realistic solution. The conclusions of the PAG were shared with the meeting and the report of the PAG is included in the Annex to these minutes. The PWSCG concurred with the conclusions of the PAG and requested the PAG to monitor the implementation of the Met Office Transformation and Efficiency programme to ensure that it would help deliver the required savings avoiding overt harm to the PWS outputs.</p>
5.2	<p><b>Draft plans for 2016-17 and beyond</b></p> <p>DR provided a summary of the priorities for the PWS for the period 2016/17-19/20 and how these will shape the development of the next CSA. Improving forecast accuracy and extending reach would be the two main priorities for the next four years. The six themes of Warnings, Public, Civil Contingencies, Data, International and National Capability</p>

	<p>would continue, although Transformation may be added as a theme to give appropriate emphasis to the importance of delivering the Spending Review settlement and improved IT to manage increasing data volumes.</p> <p>DR outlined the proposed areas of work under the themes, which would include improving the NSWWS in line with the recommendations of the responder workshops, a focus on the development of ‘nowcasting’ to make sure that the short range detail is as good as it can be and communicated effectively. There will be work to look at maximising reach and engagement with an increased focus on digital and of associated content.</p>
5.3	<p><b>National Capability and Transformation</b></p> <p>AB outlined the plans around the transformation and efficiency programme that Met Office will be taking forward in the coming years. This will be an organisation wide initiative with a focus on tackling a legacy of a complex IT infrastructure to reduce costs and make sure the organisation is on a solid footing to exploit its science, technology, data, information and expertise. This cross organisational programme of work will be overseen by the Interdepartmental Met Office Steering Group (IMOSG).</p> <p>WW spoke of the importance about ensuring that the plans stay on track and meet the obligations required to meet the CSR outcome. DH suggested that an outline plan should be seen at the next PAG meeting around the observation changes.</p> <p><b>Action:</b> Met Office to present fuller details of the Transformation and Efficiency programme to the March meeting of the PAG.</p> <p>BBC and Reach update</p> <p>DR provided an update on the dialogue that continues between the Met Office and BBC around the NSWWS. Conversations have been taking place fortnightly and the issue of resilience remains a key theme.</p> <p>In general, the focus on ‘reach’ remains an important element to keep under review as it underpins the accessibility of PWS outputs to the user community. The importance of reach can be viewed in terms of quantity, quality, influence, intervention and value. The Met Office is aware of the fact that PWS outputs are reaching individuals through more diverse channels with the emphasis shifting to digital platforms. The launch of the new App is one example of how this shift is being catered for.</p>
6.0	<p><b>Terms of Reference for the PWSCG</b></p> <p>The group were content with the final version of the Terms of Reference and these come into effect from this point forward.</p>
7.0	<p><b>Dates for future meetings</b></p>

	<p>A proposal was put forward to move to holding three PWSCG meetings per year from 2016/17 which was supported by WW and the group.</p> <p>Provisional dates suggested were:</p> <ul style="list-style-type: none"> <li>• 28<sup>th</sup> September 2016</li> <li>• 25<sup>th</sup> January 2017</li> <li>• 26<sup>th</sup> April 2017</li> </ul> <p>Action: Secretariat to check whether these dates clash with any major planned events and then circulate the calendar appointment to attendees.</p>
8.0	<p><b>AOB</b></p> <p>RJ informed the PWSCG that this would be his last meeting as the MCA representative. WW thanked RJ for his contributions to the work of the PWSCG over the years.</p>
	<p><b>CLOSE</b></p>

**Future PWSCG Meeting dates and locations:**

**PWSCG Northern Ireland, Belfast, Spring 2016**  
**PWSCG 37<sup>th</sup> Meeting, BIS, 27<sup>th</sup> April 2016**

**Proposed PWSCG meetings for 2016/17 (to be confirmed)**

- 28<sup>th</sup> September 2016
- 25<sup>th</sup> January 2017
- 26<sup>th</sup> April 2017

## **Annex: Report to the PWSCG of the 4<sup>th</sup> Meeting of the PWS Assurance Group**

The meeting took place at the Met Office, Exeter, on 14<sup>th</sup> December 2015. PAG members present were Wyn Williams, Denise Harker, Ian Hoult, George Tabcart, Colin Hord and Paul Riches.

The meeting opened with an update on the recent flooding in Cumbria on 5-6 December 2015 and the NSWWS response. It was agreed that this should be included on the agenda for the next PWSCG.

The PAG then concentrated on the outcome of the Spending Review and the implications for the PWS. The PAG received a briefing on how the Spending Review progressed and how the ultimate outcome for the PWS unfolded. Then they discussed the options presented by the Met Office and PWSCG Chairman on how the required savings could be delivered. The PAG noted the importance of the proposed Met Office Transformation and Efficiency Programme in delivering the required savings.

Overall, the PAG endorsed the approach proposed by the Met Office and PWSCG Chairman, and agreed that this should be presented to the next PWSCG meeting in January.