

## MINUTES

### PWSCG (44) Meeting

10:00 – 15:00 Wednesday 17<sup>th</sup> October 2018

Design Council, Angel Building, 407 St John St, Clerkenwell, London EC1V 4AB

#### Attendees

Wyn Williams (WW)	PWSCG Chair
Sarah Jackson (SJ)	PWSCG Secretariat (BEIS)
Paul Riches (PR)	PWSCG Secretariat (BEIS)
Steph Hurst (SH)	DD BEIS
Charlie Coull (CC)	Scottish Government
Lester McDonald	Scottish Government
Tracy Goode (TG)	Welsh Government (Part by phone)
Paul Furlong (PF)	Highways England
William Hall (WH)	CCS Cabinet Office
Colin Hord (CH)	CAA
Carol Holt (CHT)	Environment Agency
Ian Hoults (IH)	LGA
Emer O'Connell (EC)	PHE
Derrick Ryall (DR)	Met Office
Richard Orrell (RO)	Met Office
Mel Harrowsmith (MH)	Met Office
Lynne Armstrong (LA)	Met Office
Paul Davies (PD)	Met Office

#### Actions

	Owner	Action	Date
1.	Secretariat & Lynne Armstrong	Arrange for the following documents to be published on the Met Office PWS webpages: <ul style="list-style-type: none"> <li>• Minutes of the April PWSCG</li> <li>• Summary of PAG Meeting</li> </ul>	As soon as possible
2.	Derrick Ryall	Hold a follow up discussion with Paul Furlong at Highways England on the accuracy and source of data used in the 3 month forecast and differences observed between the Met Office and a competitors offering.	By end Nov
3.	Secretariat	Share the feedback received from Welsh Government with Mel Harrowsmith on the impacts of Storm Callum in Wales.	By 9 <sup>th</sup> Nov
4.	Will Hall	To have a follow up conversation with Network Rail about the resilience of signal box infrastructure following the lightning strike outside York during the 27 <sup>th</sup> July thunderstorm event.	Share any learning at next PWSCG
5.	Secretariat and Tracy Goode	Include a discussion at the next PWSCG on the assessment of impacts witnessed during the weekend of 12/13 <sup>th</sup> October (Storm Callum)	For Jan 2019 PWSCG
6.	Emer O'Connell	Hold a follow up conversation with the Met Office and Yolande Clewlow about the temperature gradients across London during the summer heat.	By 30 Nov
7.	Secretariat and Carol Holt	Discuss the approach to Spending Review to ensure there is no double counting in respect of how Flood Damage Avoidance treated in any analysis.	By 30 Nov

	<b>Owner</b>	<b>Action</b>	<b>Date</b>
<b>8.</b>	Secretariat and Will Hall	Secretariat to contact the National Risk Assessment team (CCS) to understand how their internal assessment tool may help build the case ahead of the Spending Review. Will Hall to provide contact details.	By 16 <sup>th</sup> Nov
<b>9.</b>	Met Office	Check who the current Met Office Rep is on the Business in the Community forum and the level of engagement they currently have with the group	By 26 <sup>th</sup> Oct
<b>10.</b>	All	Review the 'beta' version of responsive web pages and let Met Office have any observations or feedback.	Ongoing
<b>11.</b>	Sarah Jackson & Mel Harrowsmith	Investigate and come back to the PWSCG with findings on what would be sensible and realistic in terms of agreeing a stretch target for weather warnings providing good and excellent guidance	Complete

## **1. Welcome & Introductions**

WW welcomed attendees. Apologies were received from Nick Davis (MoD), Charlie Hall/Lindy Woodage (Police Representatives) Andre Cocuccio (Maritime & Coastguard Agency) Jonathan McKee (Northern Ireland Government), Fiona Wilson, Scottish Government and Nathan Travis (Chief Fire Officer).

WW welcomed new attendees, firstly, Steph Hurst the new Deputy Director at BEIS who has taken over from Paul Hadley and has responsibility for the PWS contract. Emer O'Connell who replaces Thom Waite as the new PHE member.

## **2. Minutes & actions from last meeting**

PR updated the group on progress since the last meeting. Good progress made on all actions.

The minutes for the April meeting were circulated after the last meeting and copies were made available in the meeting. No comments or amendments were received, and these were approved by the group. A copy of the minutes will be uploaded to the Met Office website.

## **3. Reports**

### **3.1 BEIS Update**

SH introduced herself to the group having recently taken over the role as Head of the Public Sector Research Establishments (PSRE) Team at BEIS which includes responsibility for the Public Weather Service Contract and sponsorship of the Met Office as a BEIS partner organisation. SH noted that preparatory work was well underway between her team and counterparts at the Met Office to prepare for the spending review. At present, there is not a significant amount of information available as no formal commission for a spending review has been issued by HM Treasury. However, it is prudent for the Met Office and BEIS to continue to work together in gathering vital evidence to help justify the expenditure on the PWS.

### **3.2 PWSCG Chair's Update**

WW provided a summary of his PWSCG related activity over the summer which was provided to members in a short update paper. Highlights included engaging with the BBC over communication of warnings, contributing on behalf of the PWSCG at the wider inter departmental Met Office stakeholder group meeting, and meeting the new Met Office chair.

### **3.3 Independent Member's Update**

DH summarised her work for PWSCG since the last meeting highlighting key achievements as noted in her update paper and the readout of the meeting she chaired with broadcasters in July. The Media and Reach sub-Group (MARG) tackled issues relating to the severe weather over the winter including the 'Beast from the East' and red warnings to feedback on the latest round of the storm naming initiative and Met Office performance on forecasting maximum temperatures during the hot dry spell over the summer.

## **4 Met Office Updates**

### **4.1 FY17/18 Deliverables and Performance**

DR provided the group with an overview of Met Office performance since the last meeting. The group were provided with a summary of the weather experienced over the summer period which saw an extended hot and dry period particularly in June and July. It was narrowly the warmest summer for mean temperatures in the UK beating 2003/2006 and 1976 by two or three hundredths of a degree. The group were reminded of the impacts the weather had over this period with heat related impacts on the transport network, increased numbers of wildfires, increase in the number of swimming related deaths, hosepipe restrictions and the impact on health linked to heat. DH asked PHE when figures on the impact of the excessive heat on summer mortality rate figures would be available. EC confirmed that the evaluation of the health impacts over the summer was being carried out. EC expected that some of the figures would be ready to be released towards the end of the year. There was discussion amongst the group about how the figures for summer mortality may have been impacted by the winter events such as the 'Beast from the East' and the fact that it was a bad flu season which could mean that these events lead to higher numbers of deaths in vulnerable groups over the winter. EC confirmed that PHE are working with the London School of Hygiene and Tropical Medicine on research into health impacts and mortality.

DR spoke about the priority areas that MO will focus on after analysing performance. They remain committed to improving forecast accuracy for convective and short notice events and they will also pay closer attention to maximum temperatures. Performance on forecasting maximum temperatures was an issue raised by a broadcaster in the MARG meeting in July. DR explained that all models, not only MO models struggle with predicting the extreme temperatures, especially in summer. However, the broad messaging on temperature during the extended hot period was conveyed clearly and the feedback on messaging was positive during that time. The group spoke about the balance that is needed between chasing the media story which was focussing on the maximum temperature compared to the overall accuracy of the forecast.

The group were informed about the completion of the latest major model upgrade (PS41) which has introduced new observations, better use and information on humidity and improved physics such as a more detailed land surface representation. This model

upgrade is expected to deliver a range of benefits including reduced errors in max and min temperatures, better representation of fog and enhanced sea breezes. PF enquired about the improvements that could be expected for winter forecasting and whether the upgrade would improve accuracy on minimum temperatures. DR said that better prediction of min temps in the winter would be one area where they expect to see improvement. Another key area likely to benefit from the model upgrade was in coastal wave forecasting with the introduction of grid resolution down to 1.5km.

The next update on reach and engagement informed the group about the improvements to the Chemet service and GIS interoperability. DR spoke about the enhancements to international products which includes a new daily global weather impact assessment which provides increased information into Government including increased engagement between senior advisors and the FCO. WH reported that this new daily information service had proved very helpful when briefing senior colleagues and was exactly the succinct and targeted tool they required.

DR spoke about the latest information on weather symbol performance. In terms of relative forecast accuracy PF spoke about the seasonal 3 month outlook that had been produced by the Met Office and another by a competitor which were differing in their predictions quite markedly. A query was raised about how data from ECMWF is used to produce a seasonal forecast and whether that would be a reason for the two differing 3 month outlook. DR and PF agreed to follow up this issue outside of the meeting.

#### **4.2 Transformation and Efficiency**

DR updated the group on the latest position regarding the delivery of the T&E programme. For the PWS, the project is on track to meet the required £10m+ cost reduction as required by the last comprehensive spending review. Prioritisation of PWS activity is continuing to make sure that there is minimal impact on PWS services to customers.

#### **4.3 Severe weather subjective assessment**

MH explained the subjective verification process that is followed where routine assessments are carried out by the Met Office and BEIS for amber and red warnings. Particular attention was paid to the thunderstorms which occurred in parts of Yorkshire, Lincolnshire and East Anglia on the 26<sup>th</sup> and 27<sup>th</sup> July to highlight the process that is followed. WH commented that he would be following up with Network Rail about the lightning strike on a signal box which was the main cause for the transport disruption on the east coast mainline during this event.

MH spoke about Storm Ali and provided an initial MO assessment of how this event was handled but acknowledged that this event had not yet been assessed by the Secretariat at BEIS. MO view was that the event was forecast well, with the anticipated level of impacts materialising in the areas covered by the warning. CC from Scottish Government agreed that this was an area of solid performance from the Met Office. The improvements in terms of the clarity of language used as part of the warning service has also been beneficial. SJ provided some feedback on behalf of TG on Storm Callum, although a full debrief has yet to be completed it was felt that the notice and timing received was useful in particular for Carmarthen. There was a question about the level of impacts experienced around the medium to high boundary.

The group also discussed the paper on the performance target for warnings.

SJ explained the background to the proposal set out in the paper for an increasing warnings target over future years. The group discussed the options including whether a tolerance level should be introduced alongside the specific targets. The group concluded that a tolerance should not be included but agreed to the following targets of 74% in FY18/19, 75% in FY 19/20, 75% in FY 20/21 and 77% in FY21/22. A stretch target of 80% would be maintained for each year. The target would be measured on the basis of a 3 year rolling average with the option to review whether the targets are driving the right behaviour on an annual basis. There will be no change to the FY18/19 target.

#### **4.4 Secretariat reports on performance**

The group were consulted on the reports that were prepared and circulated to members of PWSCG in advance of the meeting. Papers included a summary of the PWSCG Assurance meeting that took place in September, Performance Indicators, a summary of the July Media and Reach sub-Group (MARG) and the PAG-Reach. The group acknowledged and approved the reports.

#### **4.5 Update on Nowcasting**

PD provided the group with an update on Met Office work on nowcasting. This work is to deliver two milestones within the CSA:

**Milestone 1.1: May 2018** Establish a nowcast capability within the Operations Centre for trial use during Summer 2018 and identify initial internal user requirements for the full capability

**Milestone 1.2: March 2020** Establish and implement the full operational nowcasting capability within the Operations Centre

The group agreed that milestone 1.1 had been met.

PD reminded the group that nowcasting focuses on the immediate weather situation to typically 3-6 hours ahead. Examples of such events that could benefit from improvements in nowcasting include Coverack and Boscastle. Early indications are that the trial over the summer has filtered through into an improvement in the amber warning performance. PD explained to the group how observations from the WOW network provided a higher density source of information and showed the developing convergence lines during the Birmingham storm.

DH enquired about the density of the WOW (weather observations website) network recording the observations of the general public across the country. DR stated that the observations from WOW are now being used, however greater publicity of the network could be beneficial. LA agreed that it's use could be boosted now that the observations are being used.

#### **4.6 Digital update**

LA provided an update on the digital workstream. Much progress has been made under milestone 2.2 to deliver an initial beta area on the website targeted at expert users (March 2019). The group were informed that a test link to the beta website would be available the following week. Members of PWSCG were encouraged to have a look at the newly designed beta pages and provide any feedback.

## **5 SR 2019 preparations**

### **5.1 Value of the PWS**

SJ provided the group with an update on the preparatory work that has been undertaken so far ahead of any formal spending review commission by HMT. A review of the analysis conducted for the spending review in 2015 being finalised with early indications that the evaluation still holds and that the economic value of the PWS to the UK economy was at least £1.5bn per annum. SJ highlighted that the cost of satellites will be rising substantially over the coming years and this needs to be managed appropriately as currently PWS pays the depreciation. Additional evidence will be gathered through the latest public perception survey which is underway. The group discussed the approach which was felt appropriate and beneficial to get this work underway ahead of any formal commission. CHt suggested that it could be helpful to consider figures and evidence from the insurance sector around damage avoided from taking preparatory action ahead of severe weather.

SJ highlighted an area of the work that looked at the value to the aviation sector when comparing the impact on Heathrow Airport during the 'Beast from the East' event to the heavy snowfall experienced in December 2010. The comparator shows that losses to the airport were reduced for the 2018 event compared to 2010. CH said that from the aviation perspective, companies now have greater trust in the forecast and feel more confident taking decisions ahead of severe weather arriving whereas in the past they have often been too reactionary. Flood damage avoidance was referred to as another area that could be quantified to further strengthen the case for the PWS. SJ and CHt agreed to speak offline to ensure that they avoid any double counting in respect of flood related evidence for spending review calculations. A comment was made about the telecommunications sector and whether that featured on the list of sectors in the ONS blue book figures. SJ took an action away to check about telecommunications.

### **5.2 SME use of weather information**

LA provided a summary to the group on the work to assess the impact of weather information on UK SMEs. The research aimed to provide evidence of the benefits to the UK economy of weather forecasts and data used by SMEs in the UK. The impact of weather on SMEs was clear, both in terms of financial impact and on time lost/saved. The research and subsequent analysis indicates that there is a large educational gap with SMEs in that many know how to access relevant weather information but not how to utilise it and there could be better utilisation of the information already available to them. Improvements to how weather information is distributed around SMEs so it can be acted upon is one area Met Office could be well placed to tackle. CHt suggested that Business in the Community could be a useful channel to reach SMEs. The Met Office have attended meetings in the past and agreed to check their current level of engagement with that group.

## **7. AOB**

WW offered his personal thanks and that on behalf of the PWSCG to George Tabcart. George represented MoD and contributed a huge amount to the work of the group over the last few years, we wish him well in his next assignment.

### **Future PWSCG Meeting dates and locations:**

- Wednesday 30th January 2019 (London)
- Wednesday 24th April 2019 (London)