

**PWSCG (36) Meeting**  
**10:30 – 16:00** Wednesday 27<sup>th</sup> April 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
Sarah Jackson (SJ)	Met Office/Secretariat
Alessia Morris (AM)	Scottish Government
John Irvine (JI)	N. Ireland Government
Colin Hord (CH)	CAA
Nathan Travis (NT)	CFOA
Ben Fletcher (BF)	Cabinet Office
Andy Wilkinson (AW)	Environment Agency
Trish Abbott (TA)	DCLG
George Tabcart (GT)	MOD
André Cocuccio (AC)	MCA
Derrick Ryall (DR)	Met Office
Richard Orrell (RO)	Met Office
Mel Harrowsmith (MH)	Met Office
Phil Evans (PE)	Met Office
Steve Noyes (SN)	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 Paul Furlong (Highways England), Charlie Hall (ACPO) Tracy Goode (Welsh Govt) Craig Woolhouse (EA) and Ian Hoult (LGA)</p> <p>The group welcomed Andy Wilkinson from the EA standing in for Craig Woolhouse. Sarah Jackson joins the group and will be replacing Mike Gray as Head of the PWSCG Secretariat from June.</p>
2	<p><b>Minutes &amp; Actions</b></p> <p>The minutes of the January meeting were approved and will be published online.</p> <p>PR updated the group on progress against the actions from the last meeting. Progress had been made across all areas. AC confirmed that following a procurement exercise the MCA are now in discussions with the Met Office regarding the detail and inclusion of the marine forecast within the Public Weather Media Service (PWMS).</p> <p>The other notable action related to the activity around ice warnings and guidance to cyclists.</p> <p>The Met Office provided an update on progress made in responding to the request from a member of the public regarding ice warnings for cyclists. Current guidance has been updated in consultation with cycling bodies, and the individual has been involved as a peer reviewer, as well as in a focus session on the NSWWS. Input from the individual has been</p>

	<p>helpful, although feedback through social media has shown that there are a wide range of views on this topic from the cycling community.</p> <p>The PWSCG considered a paper that had been sent by the individual to the Met Office on improving ice predictions. The recommendations of the paper were considered by the PWSCG and noted to be quite onerous. Although they could be considered in developing future services, it was felt that the amount of effort to develop such services would be prohibitive in light of financial constraints. The PWSCG welcomed the initiative of the individual in raising the visibility of cyclists' needs as users of the PWS, and agreed it would take forward work to better understand the needs of cyclists through consultation with their official and representative bodies.</p> <p><b>Action:</b> MG to write to the member of the public concerned to update them on the relevant discussion at this meeting.</p> <p><b>Action:</b> JI and AM to canvas a wider view of the ice warnings related to cyclists in N Ireland and Scotland.</p> <p><b>Action:</b> Secretariat to publish online the minutes of the January meeting.</p>
3	<b>Reports</b>
3.1	<p>PWSCG Chair's Update – WW</p> <p>WW reported back on his attendance at the Inter-departmental Met Office Strategy Group (IMOSG) in March where there was a focus on a number of issues related to the activities of this group. Interest focussed on the Met Office's plans to deliver their Transformation and Efficiency (T&amp;E) programme which aims to deliver the Spending Review savings in a way that doesn't significantly impact on the services provided to customers. Through T&amp;E, the Met Office will transform the way it engages and delivers to its customers, ensure the business is future proofed, deliver its strategy and corporate plan. The Met Office has a clear focus on this programme and will be finalising the implementation plans to deliver this over the next couple of months. WW will be representing the interests of the PWSCG at the next IMOSG meeting on 29 June.</p> <p>WW informed the group about his input into the development of the new Customer Supplier Agreement (CSA) for this financial year. WW and DH met the Secretariat to review the milestones and provided further challenge to bring forward some of the milestones for earlier delivery.</p> <p>WW informed the group of the other activity he has undertaken including discussions with the Civil Contingency Team at Cabinet Office and the recruitment of MG's replacement for the post of Head of the PWSCG Secretariat.</p>
3.2	<p>Report of the PWSCG Assurance Group (PAG) – WW</p> <p>The group were updated on the outcome of the PAG meeting held in March. The PAG undertook their annual review of international</p>

	<p>commitments, observations, technology and science and received an update on the plans to deliver the T&amp;E programme. The group adopted the report in the Annex to these minutes.</p>
3.3	<p><b>Report of Media and Reach sub-Group (MARG)</b></p> <p>DH summarised the activity that she and PR have undertaken with a wide group of broadcasters over the last few months. One to one introductory meetings were held with all the main broadcasters with one more to take place shortly. A very successful first meeting of MARG was held on 19 April where the group will focus on the development and rollout of the new Public Weather Media Service (PWMS), improvements to the National Severe Weather Warning Service (NSWWS), Storm naming and communications and ‘reach’ in respect of the general public.</p> <p>DH enquired with the MO colleagues present about the timescale for any revisions to the storm naming system as this was a point that had been raised by broadcasters in the recent MARG meeting. SN informed the group that plans were in place for the Met Office and Met Eireann to review this first season of storm naming by the end of June.</p> <p>The views expressed by this group in relation to warnings were similar to others in that crucial elements to being successfully able to prepare and mobilise resources depend on the lead time into an event. This issue of timing was a prominent issue noted by the broadcasters in being able to get the message out to the public ahead of a weekend storm event.</p> <p>SN noted that there is a balancing act to be maintained in that the NSWWS, as a standard consistent package, has to cater for a wide variety of user needs.</p>
3.4	<p><b>Met Office Update</b></p> <p>The group were informed of the permanent appointment of Rob Varley as the Chief Executive following open competition.</p> <p>The Met Office is also involved in the national flood reviews.</p>
4.0	<p><b>2015/16 Deliverables and Performance</b></p>
4.1	<p><b>Revised Impact Tables – MH</b></p> <p>MH informed the group about the changes and improvements that have been made to the impact tables for NSWWS as a result of the responder workshops last summer and following consultation with other parties. This includes amending some of the language contained in the tables to make the understanding of impacts clearer, with removal of certain elements of probabilistic language. There is now a clearer narrative about the intended use of the tables and what they are not for. There was some discussion around the impact table for ice. MH explained to the group that there was also wording around gritting and treating surfaces which would</p>

	<p>help inform the overall picture for the impacts around ice.</p> <p>CH raised a question over the text around fog and the bullet on dense fog relating to visibility of less than 50m. It was felt that this wasn't always the case and that fog can cause impacts with visibility greater than 50m as well so it was agreed to remove this bullet.</p> <p>Overall the group were very pleased to note the progress that has been made and endorsed the revised impact tables.</p>
4.2	<p>End of Year Reporting – DR and MG</p> <p>Met Office Annual Report</p> <p>DR provided the group with a summary of the activity that had taken place over the last year. In terms of the weather, the spring presented average conditions with summer witnessing record temperatures reached in July before a thundery breakdown which led to a wetter cooler end. Early autumn was settled before a record breaking stormy and mild period from November to February, followed by some cold snaps at the end of winter.</p> <p>DR provided the group with a summary of the activity that went well and highlighted the areas where more work was required. There have been positive developments in exploiting the best of the models, science and forecasters as well as the benefits from embedding Advisors in the Ops centre. High levels of 'reach' were obtained regarding severe weather events with the storm naming seeming to be the factor behind this. More work will be done as part of reviewing the storm naming system to try and understand how much of an effect it has had. Areas to focus on for improvements include the challenge of forecasting detail of showers, and increasing warning lead times to give more notice for responders and the general public. Other areas to focus on include reviewing the number of yellow warnings issued and the lower levels of reach obtained during the summer months.</p> <p>The group were informed about progress made with digital channels, in particular the launch of the new App in the New Year. User numbers continue to grow and there is a process in place to migrate users signed up to the old App onto the new one. Important milestones were reached with the continued rollout of the new High Performance Computer (HPC) with phase 1 and 2 now complete. The last month has witnessed a major model upgrade which has delivered the single biggest model improvement in a decade.</p> <p><b>Action:</b> Secretariat to publish the Met Office Annual report online</p>
4.2b	<p>PWSCG Annual Report</p> <p>MG provided the group with an overview of the main achievements and activity of the PWSCG and secretariat over the last year. These included</p>

	<p>the evidence gathering ahead of the Spending Review to provide robust arguments to support the continued funding of the PWS, establishing the Media and Reach sub-Group (MARG) to engage with broadcasters on the key issue of 'reach' of PWS outputs and delivery of well organised and productive PWSCG and PAG meetings throughout the period.</p> <p><b>Action:</b> Secretariat to publish the PWSCG Annual Report online</p>
4.2c	<p>PWS sign off 2015/16</p> <p>The PWSCG agreed that the Met Office had met the performance standard for 15/16 set down in the CSA and that WW could issue his draft letter to the CEO of the Met Office providing formal sign-off of the CSA.</p> <p><b>Action:</b> Secretariat to issue the letter</p>
	<p><b>Future Plans</b></p>
5.1	<p>New Customer Supplier Agreement (CSA) including Public Performance Measures (PPMs) and Milestones</p> <p>MG provided an introduction to the new CSA and the development of PPMs and milestones. The new CSA would cover the Spending Review period up to 2019/20, and the required Spending Review savings would be accounted for in the PWS price.</p> <p>To support the delivery of savings, a new PWS theme of Efficiency has been introduced in the CSA. The inclusion of this important theme is to ensure progress with the delivery of the Met Office T&amp;E programme.</p> <p>DR described to the group the detailed plans in the CSA for the PWS over the next few years. The key drivers influencing the direction of the PWS include the demand for more accurate forecasts, changing public trends in areas such as how people access weather content, the decline in TV with strong growth in digital and social media. The final installation of the HPC will see huge increases in forecast data available posing a challenge in how users will access the increased data outputs going forward.</p> <p>DR outlined the high level priorities as improving accuracy both actual and perceived, increasing reach and engagement and delivering the savings required as a result of the Spending Review. Work continues on the next generation National Severe Weather Warning Service (NSWWS) with the new design requirements to be delivered by October 16 with the full implementation of the new warning system during 17/18.</p> <p>The Public Weather Media Service (PWMS) is on track for launch this July. The new mobile App will have regular updates to functionality on a three monthly basis with plans in place to migrate users from the old version over to the new version.</p> <p>On civil contingencies, there will be an improved CHEMET service following an assessment of user requirements. There is planned work on</p>

	<p>the Heat and Cold Advisory Service with workshops planned for the autumn to establish responder and public requirements. There is an interim plan to improve communication of heat events from May 2016. The phased implementation of the Hazard Manager strategy to take place from now until March 2018.</p> <p>On data services, there is an obligation to make data available for re-use to allow others to add value to the data outputs from the Met Office. The plan is to provide data through managed APIs by October 2017.</p> <p>On National Capability, full implementation of the HPC is scheduled for March 2017 including upgrades to the global and UK models.</p> <p>The PWSCG approved the CSA with the proposed PWS Performance Measures and Milestones.</p>
5.2	<p>Milestone sponsors</p> <p>To ensure that the PWSCG keep a close eye on progress against the milestones, members of the PWSCG were sought to act as sponsors against specific milestones. The group agreed the following sponsors for the coming year:</p> <p>Milestone 1 - NSWWS Next Generation: Ben Fletcher  Milestone 2 – Increasing Reach: Denise Harker  Milestone 3 – Digital Delivery: Ian Hoult  Milestone 4 – Increasing Reach (Digital Strategy): Denise Harker  Milestone 5 – Wow Schools: Ian Hoult  Milestone 6 – Re-use of NSWWS and CHEMET: Nathan Travis  Milestone 7 – Heat &amp; Cold Advisory Service: Alessia Morris  Milestone 8 – Implementation of Hazard Manager: Craig Woolhouse  Milestone 9 – Data Services: Sarah Jackson  Milestone 10 – Forecast Accuracy: Trish Abbot  Milestone 11 – PWS Service Review: Colin Hord</p> <p><b>Action:</b> Secretariat to circulate list of milestones and the agreed sponsors</p>
5.3	<p>Consultation Plan and Secretariat Operating Plan</p> <p>MG presented the Secretariat Operating Plan, noting the importance of a smooth handover to the new Head of the Secretariat, Sarah Jackson, from June. Other key milestones included development of a long term consultation plan to be presented at the PWSCG in September and securing the continuity of appointment of the PWSCG Chairman and Independent Member.</p>
6.1	<p>Review of winter 2015/16</p> <p>MH took the group through the main activity witnessed over the winter period which proved to be full of activity with a very wet and stormy first half.</p>

	<p>The group reported back on how their organisations and stakeholders fared during the winter. The overall messages included positive experience of the storm naming system, although it was a challenge with so many coming along in quick succession it was felt that the system added value in terms of raising the awareness of such events and that the communications worked well. The group were encouraged with the spikes in reach which appear to be attributable to the storm naming. There was general consensus that having some additional lead in time to events helps to ensure the effective deployment of kit, assets and people but recognition that any significant increase in notice would impact on the confidence around a warning.</p>
6.2	<p><b>Met Office Transformation and Efficiency programme</b></p> <p>SN the Met Office Chief Operating Officer provided an update on the plans to deliver the savings required from the PWS as a result of the Spending Review settlement.</p> <p>The key drivers behind the programme are to put in place measures that will deliver the necessary savings required by 2020. The aim is to transform the way the Met Office delivers and engages with customers, future proofing the organisation to ensure it is capable of delivering its strategy and corporate plan. The benefits of the programme include improving leadership and the management of change, repositioning the organisation so it will be more agile in meeting customer requirements and being better positioned to deal with any future significant environmental events. The overall message is that the desired outcome is about delivering a more agile organisation to deal with future challenges, and changing the culture to embed efficiency as standard practice.</p>
7	<p><b>AOB</b></p> <p>WW thanked MG on behalf of the group for his hard work and high achievements in his time as Head of the Secretariat over the last two years.</p> <p>AC offered to host the next PWSCG meeting at the MCA control centre near Portsmouth.</p> <p><b>Action:</b> Secretariat to follow up with AC about the necessary arrangements</p>
	<b>CLOSE</b>

**Future PWSCG Meeting dates and locations:**

**PWSCG Northern Ireland, Belfast, 26 May 2016**  
**PWSCG Scotland, Edinburgh, tbc**

**Proposed PWSCG meetings for 2016/17**

- 28<sup>th</sup> September 2016  
(Proposal to hold at MCA, Fareham, Portsmouth)

- 25<sup>th</sup> January 2017
- 26<sup>th</sup> April 2017

### **Annex: Report to the PWSCG of the 5<sup>th</sup> Meeting of the PWS Assurance Group**

The meeting took place at the Met Office, Exeter, on 15<sup>th</sup> March 2016. PAG members present were Wyn Williams, Denise Harker, George Tabcart, Colin Hord and Mike Gray.

The PAG undertook an annual review the following areas:

- International Commitments
- Observations
- Technology
- Science

The PAG was also briefed on the Met Office Transformation and Efficiency (T&E) Programme.

The review of International Commitments highlighted that all milestones and indicators had been met for EUMETSAT with the key achievement being that the next generation polar orbiter satellite programme (EPS-SG) entered into force. The main issues with ECMWF at present are its future accommodation and ensuring that the ECMWF Strategy emphasises that the ECMWF's core activity must remain in medium-range weather forecasting. The highlight of the year for WMO was its Congress in June 2015 at which the UK achieved all its main objectives. The cost of international subscriptions for 2015/16 was below budget with savings on EUMETSAT due to reducing the costs of depreciation being offset by a small increase to ECMWF costs compared to budget.

The PAG received a comprehensive review of Observations performance and activity over the past year. The only area of concern on the performance of the networks for 1516 was with the wind profilers, which were now at end of life and so more prone to significant failures. Observations had delivered a number of other achievements in the year. This included progress with the Radar renewal project, which is nearly complete, and the new radars are providing greater accuracy and sensitivity of rainfall accumulations. There are a number of challenges facing Observations, including recruitment and obsolescence in the networks. Plans are in place to address these.

Technology performance indicators showed good and solid performance: systems had 98% or above availability for all months. There were a couple

of issues which were dealt with promptly. Other achievements in the technology area included the implementation of HPC Phases 1a and 1b five weeks ahead of schedule. The PAG welcomed the development of the new app which had been done with a lot of external collaboration, and the progress in delivering Hazard Manager 2. The PAG was informed that T&E will be an important part of Technology going forward with the aim of reducing operating costs.

Under the review of the Science area, the PAG was informed that the Met Office remains ranked number one for global NWP against all other National Met Services (NMSs) and that the overall improvement in NWP scores was still in line with the long-term one day per decade benchmark. The new HPC would be exploited over the next couple of years to deliver improvements to NWP forecast accuracy and model changes were being implemented that very day which were expected to significantly increase forecast accuracy scores.

The PAG were provided with the same presentation on T&E as the Met Office Board. Through T&E the Met Office will transform the way it engages and delivers to its customers, ensure the business is future proof, deliver its strategy and Corporate Plan, and optimise the organisations and its processes etc. The PAG emphasised the importance of successful implementation of T&E to deliver the PWS cost savings required under the Spending Review.

The PAG made the following recommendations and observations for the PWSCG:

- The PAG was satisfied with the progress on the International Theme and agreed that PPM5 had been achieved.
- The PAG was satisfied with the in-year progress demonstrated by Observations, Technology and Science, and the solid performance against the National Capability indicators and agreed that PPM6 National Capability had been achieved.
- The PAG noted the need to closely monitor the development of T&E and agreed that an item on T&E should be on its agenda for future meetings for the foreseeable future.