

MINUTES
PWSCG (46) Meeting
10:00 – 14:30 Wednesday 24th April 2019
 Conference Centre, 1 Victoria Street, London, SW1H 0ET

Attendees

Wyn Williams (WW)	PWSCG Chair
Denise Harker (DH)	Independent Member
James Cross (JC)	Highways England
Colin Hord (CH)	CAA
Nick Davies (ND)	MoD
Nathan Travis (NT)	Chief Fire Officer
Emer O'Connell (EO)	Public Health England
Ian Hault (IH)	LGA
Paula English (PE)	Maritime and Coastguard Agency
Charlie Coull (CC)	Scottish Government
Jonathan McKee (JM)	Northern Ireland Government
William Hall (WH)	CCS (by telecom for part of the meeting)
Jenny Shellens (JS)	MHCLG (by telecon for part of the meeting)
Sarah Jackson (SJ)	PWSCG Secretariat (BEIS)
Paul Riches (PR)	PWSCG Secretariat (BEIS)
Derrick Ryall (DR)	Met Office
Richard Orrell (RO)	Met Office
Will Lang (WL)	Met Office
Mike Gray (MG)	Met Office
Lisa Martin (LM)	Met Office
Bryony May (BM)	Met Office

Actions

	Owner	Action	Date
1.	Secretariat	Confirm date for PWSCG meeting in Wales.	By 31 st May
2.	PWSCG	All members to bring the new advertisement for the position of PWSCG Chair to the attention of potential candidates.	When published
3.	Lisa Martin	To check whether it is possible to share public perception survey statistics showing a breakdown of who is accessing weather information in which ways with the rest of the group.	By 31 May
4.	Secretariat	To check the wording of the paragraph on PPM5 within the 'Commentary on PPMs and Milestones' document which accompanies the letter to the Met Office CE.	By 30 April
5.	Secretariat	To circulate to the group the reply to their letter from the Met Office CE, if one is received.	When issued
6.	Derrick Ryall	To confirm to the group that the Public Weather Digital Service has now been launched.	At launch
7.	Derrick Ryall	To put Colin Hord in touch with the Met Office Aviation team to discuss data access and usage.	By 30 April
8.	Secretariat	Organise extended PAG meeting for early September, inviting relevant others to review progress with prioritisation work.	By 17 May

a. Welcome & Introductions

WW welcomed attendees. There were several apologies received, these included Carol Holt (Environment Agency), Clair Tindall (Police), Tracy Goode (Welsh Government), Steph Hurst (BEIS).

DR provided an update on recent Met Office Public Weather Service team personnel changes

Derrick Ryall – Associate Director PWS & National Capability – Accountable for PWS, other resilience services and underpinning National Capability (including HPC); Broad role as AD in governance of Met Office in-year delivery.

Mike Gray – Head Public Weather Service – Responsible for overall development and delivery of PWS CSA, and primary focal point with PWSCG and Secretariat.

Will Lang – Head Civil Contingency Services – Responsible for PWS Warnings and Civil Contingency themes; leads CCA team; focal point with responders.

Richard Orrell – Manager National Capability – Responsible for managing the PWS National Capability theme, including Met Office inputs to PWS Assurance Group.

Lisa Martin – Senior Marketing Manager – Responsible for PWS Public Reach activities within Marketing & Communications.

WW explained that this may be his last meeting as he is due to step down in the next few months. DH offered her sincere thanks to WW for his leadership and ability to push boundaries. He had established an effective assurance process, introducing two new assurance groups, for both customers and the Met Office. In addition, he had championed the service through the challenges of both T & E and the Spending Review. His leadership had been invaluable and he would be a hard act to follow. SJ echoed DH's words on behalf of BEIS and the Met Office.

b. Minutes & actions from last meeting

The minutes of the January meeting were circulated with the papers. 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.

WW reminded the group that all minutes of the group's meetings are available on the Met Office website and that there was evidence that people did access and read these. SJ reported that details of the Storm Naming initiative had been picked up by a national newspaper and TV programme in relation to the perceived difference in response to storms with female and male names. SJ said that some research had been done on this and that there was no strong evidence to support these differences.

PR updated the group on progress since the last meeting. Solid progress had been made on the actions. Preparations towards the comprehensive spending review are covered later in the meeting. PWSCG meetings in the Devolved Administrations have now been set up by the Secretariat in Scotland (14th June 2019) and Northern Ireland (13th November 2019). A date for a meeting in Wales is still to be confirmed and will be carried over for the Secretariat to take forward.

c. Reports

3.1 BEIS Update

SJ provided an update on behalf of BEIS. There had been a lot of changes at BEIS with Steph Hurst moving to lead a team on EU Exit work.. In February, Harriet Wallace joined BEIS as the Director responsible for the Met Office., Director General Gareth Davis is moving on with Sam Lister appointed as the interim Director General for the new Industrial Strategy Science & Innovation portfolio where Met Office responsibilities sit. The focus of work for the PWS BEIS team has been pulling together the evidence for the spending review..

ND raised the point that if there is a delay to the EU Exit process then there would be uncertainty in the timescales for the CSR. SJ responded that the preparatory work that is currently ongoing will stand the team in good stead and strengthen their case.

SJ reported that the post of PWSCG Chair had been advertised but that although there had been some applicants, it was felt that there was an insufficient number to chose a new candidate. It has been agreed to re-advertise the post and boost interest. Members of the group were asked to draw this new advertisement to the attention of any potential candidates that they are aware of.

3.2 PWSCG Chair's Update

WW summarised his activity since the last meeting which included a meeting of the PAG on 12th March to scrutinise the National Capability and International Commitments themes of the PWS programme. WW, DH and SJ had also met with DR and MG on 15th April to discuss the proposed Customer Supplier Agreement. He had also held two introductory meetings with Penny Endersby, with further meetings planned. These had provided an opportunity to follow up on the issues discussed when Penny joined the January Customer Group meeting. They had continued to explore how they might create more choice for the Customer Group in how the National Capability theme money is spent with a view to creating greater flexibility and ensuring that the science is pulled through for the benefit of responders and the public.

3.3 Independent Member's Update

DH summarised her activity since the last meeting which included chairing a meeting of the MARG with broadcasters on 27th February. One highlight from this was a dialogue around the pronounceability of Storm names, given that some may be unfamiliar to the different parties, especially if the Netherlands join the arrangement. There was also a discussion on forecast accuracy, particularly with regards to recent concerns around temperature forecasts. Consideration was also given to the Met Office proposed heatwave definition. Overall, broadcasters felt that it was useful for the Met Office to have a definition, but were less clear whether this should be widely used in the public domain.

4 FY18/19 Deliverables and Performance

4.1 Met Office Annual Report

DR provided the group with an end of year review, summarising that there had been some excellent progress and delivery, but also some challenges and delays during a time of change. It had been a relatively quiet year in terms of weather and generally drier and warmer than average. February 2019 saw some record high temperatures,

and whilst broad forecasts were good, maximum temperatures were poorly captured by the models and post processing.

DR updated the group on the performance of the National Severe Weather Warning Service, with 76% of Amber and Red warnings providing Good or Excellent Guidance. Summer convective events had been handled well, and there was some evidence that new nowcasting techniques had provided useful additional guidance to meteorologists. There had also been some positive feedback on the new-style warnings and production system, with nearly 80% saying that faster issue times have made it easier for them to make decisions. SJ said that she had carried out some analysis on whether people take appropriate action on the basis of issued warnings and that there was clear evidence from the public surveys following undertaken following amber or red warnings that action was increasing over time

National Capability

DR went on to talk about model accuracy, saying that there had been a notable improvement in skill over the last year. DR explained that the model upgrade which was implemented in September 2018 (PS41) had introduced new observations, better use of observations and improved physics. The latest model upgrade (PS42) became operational in March and allows the UK model to be run out to five days with three ensemble members every hour, and makes use of new wind observations from aircraft resulting in improved representation of high level winds.

The group were also updated on the IMPROVER project which will provide post processed forecasts for products and services.

DR explained that prediction of Day 1 maximum temperatures had shown particularly poor performance, both during summer 2018 and during the unseasonably warm temperatures seen in February 2019. This was reflected in both raw model and post-processed data and since the same issue occurred in the ECMWF model is in part due to the weather. Work is now underway to assess how to improve the accuracy of these forecasts. ,

DR reported that weather symbol accuracy is generally improving, although a slight drop-off in performance had been seen in the last month or so, which will need monitoring.

Reach and Engagement

DR updated on the Met Office work to increase reach and engagement. Digital reach continues to grow with the Met Office App doing very well and good use of the website being seen. The daily morning editorial meetings have now become fully embedded and there has also been encouraging growth in third party syndication with twice daily syndication taking place to over 45 organisations, views up by 25% over the year and some very positive feedback.

EO asked whether there are any statistics on who is accessing weather information in which ways, i.e. for vulnerable groupings. LM responded that this kind of breakdown is available and she will check whether this can be shared with the group.

Civil Contingency

DR reported that recent surveys suggest that satisfaction with the Public Weather Service is high across all services. 92% are very or fairly satisfied with the National Severe Weather Warning Service, with 49% being very satisfied. 85% are also

satisfied with Hazard Manager, which is the highest since 2012, although usage has declined.

SJ asked if we know what it is that has driven these improvements. LM replied that there was a particular improvement in the responses on the National Severe Weather Warning Service, with “providing the right level of detail” seeing the biggest rise. IH also talked about the value of the Civil Contingencies Advisors and the relationships that they build with responders. JM supported this, saying that the integration of the Advisors with the Departments in Northern Ireland was seen as a positive step. DR agreed that the level of trust had increased with the greater embedding of Advisors within the resilience community.

WW queried what might be behind the decline in the use of Hazard Manager. IH suggested that it might be due to the diminishing margin between what is available through Hazard Manager and the information that can be accessed via other channels. Perhaps this led to a perception that Hazard Manager no longer provides added value and may need to be developed further. DR replied that there are some elements of Hazard Manager that cannot be accessed elsewhere, but if the website offering is developed further, this may take over some of the functionality of Hazard Manager. It suggests that we need to think about the future strategy for Hazard Manager

Data

DR summarised work within the Met Office to make more data available through DataHub as part of the T&E programme. The work required has been more challenging than estimated and will be delivered later than planned. The group agreed it was better for MO to complete this work to the correct standard rather than rush the delivery to meet the timeline

WW asked about public access to this data. SJ said that the data available should be fully exploited.

DR explained that the plan is to make a layer of data, “public task data” free in order to drive innovation.

ND asked about the drivers for change over the next few years, in particular is the Met Office likely to become involved with the Geospatial Commission. SJ said the Met Office had met with representatives from the Geospatial Commission SJ spoke about the potential impact from an amendment to the re-use of public sector information Directive and the introduction of “High Value Datasets”, which may include meteorological data..

PPMs and Milestones

DR summarised the PWS performance status with good progress generally having been made against the operational performance measures. The Forecast Accuracy measure (PPM 6) had only just been met and two of the development milestones, the expert area of the website (2.2) and DataPoint and Wholesale (4.2) had not been delivered and had been moved to deliver in 2020. WW asked whether the delayed development milestones would directly impact customers. DR responded that the delays wouldn't directly affect customers but rather that they would impact on the development of future services.

DR concluded his update section by summarising the key points: operational delivery had been good, particularly through the Advisor Team; model accuracy was improving following two upgrades, but there were some forecasting challenges, particularly

around warnings and automated forecasts; there has been some good progress in transformation projects, however there had been delays to new data services; Public Reach has held up, both through Met Office channels and through Third Parties; Public Perception, responder and ad-hoc warning surveys all point to increasing usefulness and £10 million savings have been delivered.

4.2 Severe Weather Subjective Assessment

WL introduced himself as the new head of civil contingencies and provided an overview of the warnings issued. The period January to March 2019 had been varied, but mostly low impact. Most notably, there had been snow in late January / early February followed by a short period of exceptional warmth in late February with a number of observing stations breaking records nationwide. There had been a total of 108 warnings issued during the three months, three of which were Amber warnings and the rest were mostly low impact Yellow warnings.

WL provided details of the snow event, 31st January to 1st February. It had been well signalled, and followed a period of sudden stratospheric warming which had been widely reported. The potential for significant snow had been flagged up a day or two in advance and broad Yellow medium impact warnings had been issued. The Amber warning correctly highlighted where significant snow eventually occurred and was considered useful as it drove a correct set of behaviours from responders and public.

ND queried the shape of the initial Amber warning as it appeared very angular and unlikely to reflect reality. WL agreed that it was important that warnings look sensible and there could have been more finesse in this warning shape.

WL continued his summary of the snow event in late January/early February. The following night (1st February) the snow didn't die out as expected, especially around the Basingstoke area. On the basis of the information available a medium impact Yellow warning was issued. In hindsight an Amber warning for a larger area would have been more appropriate. This led to the assessment of a missed Amber warning so although performance had initially been good during this period of snow, it tailed off.

SJ asked the group for their experiences during the snow event. JC felt that the Amber warnings had been pretty accurate, although there were problems the following day, with stranded lorries on the M3 around Basingstoke and on the A21 in heavy snow. JC agreed with the subjective assessment results. IH had the opinion that the situation verged on the point of a Red warning being needed. There had been a fall of 21cm of snow in some areas that had been unpredicted and was very disruptive. On the basis of the warnings issued, Hampshire had closed their operations room, but the snow didn't stop as expected. They ended up having to stand operations up again late in the evening by which stage it was really too late.

JS felt that the warning area didn't extend far enough west. There had been heavy snowfall on the A30 around Jamaica Inn in Cornwall and passengers had not been evacuated until it was too late, although local communications may also have been a factor in this. WL agreed and added that although a Yellow warning was also in force across Southwest England at the time, this may have been misinterpreted as meaning that significant disruption was unlikely here, whereas the implication was that some of the more vulnerable locations might be.

A discussion followed around how messages can be communicated that lead to appropriate action being taken by individuals. EO mentioned that ongoing behavioural insight research focusing on heat and cold alerts may provide some useful input to this.

WL went on to talk about Storm Freya, a period of strong winds which occurred on 3rd - 4th March 2019. Questions were asked whether this storm should have been named. The decision to name two days in advance had been based on the potential for medium impacts to occur. WL said that this is always going to be a challenging messaging exercise. Although the low likelihood medium impact Yellow warning proved to be an adequate impact assessment, with hindsight, a high likelihood low impact risk assessment might have been more appropriate.

WL then talked about a period of forecast windy weather that occurred on 16th March. Partner agencies had suggested that the forecast strong winds had been named Storm Hannah even though no formal naming had taken place. This led to the Met Office needing to issue proactive communications to clarify a storm had not been named. WL said that this demonstrated the 'double-edged sword' of the storm naming process. CC asked whether it would perhaps be better not to release details of the chosen storm names in advance at the start of each season. WL responded that there is an argument for that approach, in fact other countries do work in this way, with the Danish Met Service in particular not releasing any details to anyone until the point at which the storm is named. CH said it would be interesting to know whether there is a similar issue in the United States. WL replied that triggers for storm naming in the US tend to be more clear cut and further in advance, so this issue doesn't arise in the same way there.

WL updated the group that there is a plan to include the Netherlands Met Service KNMI as a member of the UK/Ireland storm naming group. There has also been a proposal to merge this western grouping with the southern grouping of Spain and Portugal, but this isn't supported at this stage.

WL concluded by informing the group that performance of the National Severe Weather Warning Service was running at 76.3% good or excellent at the end of the financial year 2018/2019.

4.3 Secretariat report on performance

a. Media and Reach Group

The latest MARG meeting was held on 27 February 2019, with broadcasters attending from ITV, Sky, C4 and BBC. The key topics for discussion included a follow up on the forecasting of high temperatures, an update on severe weather and the heatwave definition. The group also covered storm naming and there was the usual item to update on the Public Weather Media Service (PWMS).

PR reported that following the discussions on communicating high temperatures at the meeting, the group were keen that Met Office look at this issue further. An objective will be included in this year's CSA.

PR said that he will set a date for the next MARG meeting shortly.

b. PWS Assurance Group Report

SJ highlighted a number of points from the PAG Report: the PAG had agreed that the International Commitments Theme had been delivered; work to improve BestData temperature forecasts would go ahead this year. PAG endorsed the new proposed approach to public weather service planning and budgeting; the proposed new approach to achieve more value from ensemble forecasts was welcomed but the challenge would be how the benefits of this could be fed through to the public users.

DH commented that she felt it was important to make every effort possible to overcome the issue around temperature forecasting, particularly in terms of the science; the current situation should not be accepted.

IH asked about the new post-processing system, IMPROVER and whether it's smoothing out process had led to it not picking up the nuances of the evolving snow situation in late January / early February. DR responded that the system is still in development. .

c. PWSCG Annual Report

SJ introduced the PWSCG Annual Report for 2018/2019 which summarised the work carried out by the group in the last year. The group approved the Annual Report and confirmed that they were happy for it to be published on the website.

4.4 Sign off of FY17/18 Programme

4.4a Letter to Met Office CE

The group were asked to approve the draft letter formally confirming that the Met Office have met the performance standard required by the PWS CSA for the year 18/19. The group approved the issuing of the letter.

DH raised the point that the wording of the 'Commentary on PPMs and Milestones' document refers to attendance at Customer Group meetings in Wales in relation to PPM5. A Customer Group meeting has not yet taken place in Wales so this wording should be amended to reflect this. SJ confirmed that engagement with Wales had been challenging due to resources being diverted towards EU Exit work. SJ agreed to double-check the wording of this section within the Commentary document.

The group confirmed they were content to sign off the following milestones:

4.4b Milestone 2.1 - Website

4.4c Milestone 2.3 - PWDS

4.4d Milestone 4.3 - Data Plan

4.4e Milestone 6.2 - PS42

SJ informed the group that although this milestone was delivered later than planned, the Secretariat recognises the importance of ensuring that planned changes are on balance beneficial and this can sometimes necessitate delaying the implementation of model upgrades.

4.4f Milestone 7.1 - PWS Scope

4.4g Milestone 7.4 - Improver

The group discussed the fact that although the project is still ongoing, delivery of the alpha version was a key milestone and this was now running. The project is now expected to complete in 2020 with the benefits ultimately being a more efficient platform for post-processing that will enable future improvements in the consistency and accuracy of forecasts for the public.

4.4h Milestone 7.5 - Next Gen Guidance

4.4i Quarterly Report

The PWS Quarter 4 Report, January to March 2019 had been circulated with the agenda for information. No questions or comments were raised by the group in relation to this.

5. Future Plans

5.1 Update to Customer Supplier Agreement

MG explained that this is the last year of a four-year plan (post-SR15) which covered 2016-2020. Transformation and Efficiency has dominated this period with cost savings required for 2019/2020 now delivered.

MG went on to say that this year will see some consolidation, and will focus on: completing the key developments planned over the four years; continuing to implement transformation and exploit the benefits; continuing exploitation of HPC, focusing on pull-through of improved forecast accuracy to users (warnings, public channels); consolidating direct reach and growing indirect reach. Outside of the current Customer Supplier Agreement, the new Met Office PWS team would be gathering requirements and planning the next four years of the PWS (2020-2024).

There are six themes: Warnings, Public, Civil Contingencies, Data Services, International Commitments and National Capability, with Delivering Efficiency moved to business as usual. MG then went on to detail the seven new PWS Performance Measures, one each for the six themes plus one for the milestones. MG highlighted a change to the Warnings Accuracy PPM (PPM 1) in that it will now be calculated over a 3 year period, as opposed to a 2 year period as in previous years. The success criteria for the Milestones PPM (PPM 7) will be that at least 11 out of 14 Development Milestones will be delivered and that the overall success measure will be that at least 5 of the 7 PPMs are delivered.

MG then provided some highlights from the CSA for each theme, which were then discussed by the group.

5.2 FY 19/20 Consultation Plan and Secretariat Operating Plan

SJ introduced the Secretariat Operating Plan for the coming year, key tasks include appointing a new PWSCG Chair and preparing for the comprehensive spending review. The Secretariat will offer introductory meetings to all members of the group to meet the new Chair.

SJ then went on to introduce the Secretariat Consultation Plan for the coming year which sets out the proposals for consultation and evidence gathering for the financial year 2019/20 and completion of the current Customer Supplier Agreement (CSA) timeframe. A range of regular surveys would continue, along with a number of specific surveys: a review of CHEMETPro to gather user requirements for improvements, and expanding the adoption of CHEMET-GIS, a programme of work to understand how storm naming is driving trust, belief and action in response to severe weather warnings.

ND and EO asked about digital diversification. SJ said that surveys are gathering information on this but we need to consider how best to use this to develop new services. The group then discussed the challenge of delivering effective services to 'hard to reach' communities, such as those for which English isn't their first language. DH commented that we may be able to gather some useful information with the help of some of the media providers. EO added that we may need to think of vulnerability in different ways in different contexts. WL cited an example from China where the standard was set that every citizen would have at least one effective way of accessing critical information. ND added that work in this area is also going on within the defence sector.

5.3 Proposed changes to PWS planning & budgeting

DR outlined some proposed changes to the PWS planning and budgeting process and explained that this ties in with the perspective of the new Met Office CE.

DR provided details of the proposed new approach. There would be three strands to this: stronger governance, a thorough zero-based budget review and improved prioritisation to balance the effort across the various work streams. The zero-based budget review would also be essential in preparation for the upcoming comprehensive spending review.

WW commented that whilst developing this new process, it would be vital to ensure pull-through of developments into delivering improvements for customers. CH supported this view saying that it was essential to fully exploit the developments in Science. DR agreed that there needs to be an end-to-end process in place.

The group then discussed the proposed changes in some detail. WW reminded the group that they are a group representing the interests of customers and it is not a commissioning group. DR added that MOSAC have the role to keep a check on the quality of the science rather than the suitability of the outputs. He emphasised that there always needs to be space for innovation. DH and SJ welcomed the initiative to undertake zero-base budgeting and were interested in the proposed timescales. DR replied that the process was expected to be fairly fast with the first cut delivering around July. EO asked how the outputs will be defined within the new process. DR responded that the existing customer supplier agreement includes a list of products and that the PWSCG will have a role to play in defining the required quality of these. It was recognised that this process is likely to involve a large amount of work, particularly with preparations for the anticipated comprehensive spending review going on too. WW confirmed the group are happy that they will have a role to play in setting priorities within this new process.

WW thanked DR for all of his contributions. He added that a further meeting may be needed to monitor progress with this prioritisation work. CH suggested that an extended PAG meeting be arranged in London in early September, inviting any additional relevant players from the wider group to this meeting.

7. AOB

DR mentioned ongoing planning work for the next supercomputer for which a careful consultation will continue with customers, in particular MoD. It was suggested that WH in the Civil Contingency Secretariat should be involved if not already.

Next PWSCG Meeting date: Thursday 10th October 2019