

**Public Weather Service Customer Group (PWSCG) &
Programme Assurance Group (PAG) 1**

10:00-16:30, 28th April 2025

Room 7.05- UKRI, Caxton House, Tothill Street, London, SW1H 9NA

Attendees

Met Office

Penny Endersby (PE)
Steve Calder (SC)
Simon Brown (SB)
Alison Wood (AW)
Margo Melotte (MM)

Tom Wigley (TW)
David Walters (DW)
Will Lang (WL)
Richard Orrell (RO)
Holly Clements (HC)

**Department for Science, Innovation and Technology
(DSIT)**

Ian Belcher (IB) PWSCG Secretariat
Paul Riches (PR) PWSCG Secretariat
Celeste Crabbe (CC) PWSCG Secretariat
Lindsay Jamieson (LJ) DSIT

Public Weather Service Customer Group (PWSCG)

Duncan Potts (DP) PWSCG Chair
Kim Shillinglaw (KS) Independent Member
John Thomson (JT) Scottish Government
Seamus McCann (SM) Northern Ireland Government
Joanna Aston (JA) Civil Aviation Authority
Andy Taylor (AT) Ministry of Defence
Stefan Laeger (SL) Environment Agency
Tristram Newey (TN) Maritime and Coastguard Agency
Katie Wahl (KW) Cabinet Office
Laura Betsworth (LB) Southampton Government
Paul Coleman (PC) UK Health Security Agency
Ben Brook (BB) National Fire Chiefs Council
Katherine Marsden (KM) Foreign, Commonwealth and Development Office

Apologies

Public Weather Service Customer Group (PWSCG)

James Kelly (JK) Northern Ireland Government
Agostinho Sousa (AS) UK Health Security Agency
Lindy Woodage (LW) National Police Chief's Council
Gemma Cox (GC) National Highways
David OConnor (DOC) National Highways
Warren Cheese (WC) Integrated Corporate Services
Lori Frater (LF) Welsh Government
Steve Mulrooney (SM) Ministry of Housing, Communities and Local Government

Actions

Action Number	Owner	Action	Due Date
Action 01	Met Office	Common Warning Framework - Met Office to follow up with Cabinet Office whether the current legal framework provides enough protection to ensure Met Office is the authoritative voice on weather warnings in the UK.	October 2025
Action 02	Met Office	In relation to the Supercomputer, provide a roadmap of when benefits will be realised, including the percentage increase and the impacts to areas of the public / users.	July 2025

Decisions

Decision Number	Owner	Decision	Decision Date
Decision 01	PWSCG	D1.3a Provide advice within the NSWWS API and include within direct and indirect channels (May 25) – Sign off agreed.	28-Apr-2025
Decision 02	PWSCG	D1.3b Improve the simplicity of the visualisation of multiple or complex warnings at a national scale to support use and	28-Apr-2025

		understanding by the public, broadcasters and national responders, enabling enhanced decision making and action of warnings (May 25) – Sign off agreed.	
Decision 03	PWSCG	D1.3d Undertake a review of all warning types, including a review of the optimum timing and focus of the warnings, to drive maximum impact (Mar 25) – Sign off agreed.	28-Apr-2025
Decision 04	PWSCG	D1.3e Based on an improved understanding of user need and known best practice, develop options for short notice and high impact events (Mar 25) – Sign off agreed.	28-Apr-2025
Decision 05	PWSCG	PMD 1.5c Ensure agreed continuity plans and Recovery Time Objectives (RTO) are in place for NSWWS, Hazard Manager, mobile apps and website, PWMS and Weather Data Hub (May 24) – Sign off agreed.	28-Apr-2025
Decision 06	PWSCG	D1.6 – Develop communication initiatives, alongside partners, to complement our warnings to drive greatest action and largest reach, for example ahead of winter 24/25 (Mar 25) - Sign off agreed.	28-Apr-2025
Decision 07	PWSCG	D1.8a Agree product life cycling for UK & international civil contingency products, including CHEMET, international services and the current backlog for Hazard Manager (Nov 24) - Sign off agreed.	28-Apr-2025
Decision 08	PWSCG	D1.8b Agree service life cycling for UK and international civil contingency advisor and expert weather services (Nov 24) - Sign off agreed.	28-Apr-2025
Decision 09	PWSCG	D1.8c Review Met Office provision as a Cat 2 responder into UK resilience community particularly during periods of severe weather, focusing on provision for Cat 2 responders, and organisations who provide ongoing services to the public (e.g. charities) (Dec 24) - Sign off agreed.	28-Apr-2025
Decision 10	PWSCG	D1.8d Improve and increase delivery of civil contingency services, including NSWWS, through 3rd parties (Nov 24) - Sign off agreed.	28-Apr-2025
Decision 11	PWSCG	The PWSCG agreed that they were happy to sign off Theme 1 as being delivered.	28-Apr-2025
Decision 12	PWSCG	PMD 3.7a – Monitor the new form of measurement for demonstrating engagement via indirect Met Office channels (Apr 2025) - Sign off agreed.	28-Apr-2025
Decision 13	PWSCG	PMD 3.8d – Monitor the new form of measurement for demonstrating engagement via direct Met Office channels (Apr 2025) - Sign off agreed.	28-Apr-2025
Decision 14	PWSCG	The PWSCG considered the 2024/25 CSA to be met. PWSCG Chair to confirm end of year assessment in annual letter to PE.	28-Apr-2025
Decision 15	PWSCG	The PWSCG were asked if they were happy to sign off the 2025-30 CSA – sign off agreed.	28-Apr-2025

Item 1: In camera session – PWSCG members only

See full version.

Item 2: Welcome Met Office colleagues & introductions

All introduced themselves and the following was noted.

Item 3: Updates and Reports

a) DSIT update

Negotiations are ongoing for Phase 2 of the Spending Review and an announcement in June 2025 will clarify what departments will get.

The Met Office is delivering in line with the Ministerial Priorities of driving economic growth, performance and productivity and empowering citizens.

A review of Arm's Length Bodies (ALBs) is taking place to establish if they are fit for purpose and have the appropriate level of oversight. All departments have been asked to review their ALBs in line with the criteria. Confirmation was provided that the Met Office has a clear and distinct purpose and that decisions are made at the right level.

b) Met Office Update

PE the CEO provided an update to the group. Feedback in relation to the new Met Office strategy has been complimentary and a launch event will take place on the 04 June 2025, to which PWSCG members will be invited. The key priorities of our new strategy are Customer Driven, Purposeful Data and Intelligence and Agility and Innovation. PE confirmed the successful switchover to the new supercomputer on 8th April. This will now enable key science upgrades to take place in the coming months. PE touched upon recent comparative accuracy results and is keen that the PWSCG provide a steer on where to focus with regards to accuracy overall.

c) PWSCG Chairs Update

The Met Office will be going through a period of change, in relation to the Spending Review, strategic context and technological changes. AI is being used by other weather forecast providers and reputation is linked to perceptions and comparative accuracy. It is therefore important that trust is maintained, and that actual accuracy is right, because trust can be quickly lost. Trust is a measure that can be tracked. Accuracy still remains as the number one priority.

d) Independent Members Update

Broadcasters are largely happy with Met Office services and support, but there are still concerns about the confusion weather warnings cause when multiple warnings are in place.

There is an increased focus on defending and strengthening the Met Office brand and one theme of particular importance is 'innovation'. Stories need to be told and amplified.

Item 4: Review of this year's weather and warnings

There have been a number of events and challenges this year but, in relation to PM1.1a, the end of year score is 80% which is the joint best in-year performance since the current scheme started in 2011. Meeting that target required Met Office to perform highly during the season.

Winter was relatively dry for most, but it was wet in parts of Northern and Central England, and Northeast Scotland. March was dry and sunnier than normal with the trend for dry weather continuing.

Storm Bert which occurred in Nov 2024 was challenging from the outset, as it was a multi-hazard storm affecting the whole of the UK. Initial yellow warnings were issued four to five days ahead of the storm, including a medium-impact rain warning with 150mm of rain predicted in places. An amber warning wasn't issued because there was a lack of confidence in relation to small-scale details, such as precise timing and location of intense rainfall from line convection. 171mm of rain fell in some areas. Questions were asked if the Met Office warnings were good enough and subsequently there have been lots of learning points on how the Met Office could improve its partnership working.

Storm Darragh which occurred in Dec 2024 was more clear-cut. A yellow warning was initially issued, then amber, then red. A UK Emergency Alert was issued by Cabinet Office in direct relation to weather and the NSWWS for the first time.

Storm Éowyn occurred in Jan 2025, and a red warning was issued in Northern Ireland. A post-event survey indicated that, of those who responded to the survey, 99% were aware of the warnings and 95% acted.

Partners are crucial for getting the message across and the group noted the influence that the new metropolitan Mayors have in their jurisdiction. The Met Office has developed a Ministerial briefing pack and will share that with City Mayors in the UK.

PAG 1

Item 5: Review of Theme 1 Performance Measures (PMs)

A snapshot of Red, Amber, Green (RAG) ratings were provided to confirm that the following four out seven Performance Measures have been met.

PM1.1 – Deliver timely, useful and accurate warnings

- **PM1.1a:** Accuracy of warnings should be baseline 80% improving to a baseline of 82% by April, verified by the Met Office and PWSCG (rolling 3-year average. ‘Very Poor’ guidance should constitute less than 20% of warnings.

PM1.2 – Ensure warnings reach as much of the UK population as possible

- **PM1.2a:** Awareness of amber and red warnings should be at least 80% based on ad hoc surveys.

PM1.3 – Increase the usefulness of warnings to increase action and drive behaviour change

- **PM1.3a:** ‘Useful’ at least 85%
- **PM1.3c:** ‘Action taken’ is at least 80%

The following Performance Measure targets were missed for the following reasons.

- **PM1.1b:** Accuracy of warnings should be stretch targets of 82% through 2024/25
- **PM1.2c:** Snow warnings should be at least 85% - Storm Bert was 70%

The following Performance Measure was noted as missed in the meeting pack, however, at the time of the meeting further analysis was being completed with updated information to confirm this position. Post meeting this measure was rectified and changed to Green with the average score meeting the target set in the CSA.

- **PM1.5b:** The Hazard Manager IT system should be available to responders for 99.5% of the time when the system is being used – there were 3 separate outages throughout the year.

The group noted the credit due to the Met Office for meeting the 80% target for PM1.1a. There was discussion about the usefulness of a stretch target at 82% when performance hadn’t reached that in recent years. The group decided it was still beneficial to retain it as it set the level of ambition to achieve in the coming years.

Item 6: Review of Theme 1 Deliverables and Performance Measure Developments (PMDs)

The PWSCG were asked to note the progress against each Deliverable, review the recommendations, and confirm the completion of the four deliverables. The related paper provides details about the work completed this year against four separate deliverables, all of which were signed off as work being completed.

D1.3a Provide advice within the NSWWS API and include within direct and indirect channels (May 25) – Sign off agreed. **Decision 01**

D1.3b Improve the simplicity of the visualisation of multiple or complex warnings at a national scale to support use and understanding by the public, broadcasters and national responders, enabling enhanced decision making and action of warnings (May 25) – Sign off agreed. **Decision 02**

D1.3d Undertake a review of all warning types, including a review of the optimum timing and focus of the warnings, to drive maximum impact (Mar 25) – Sign off agreed. **Decision 03**

D1.3e Based on an improved understanding of user need and known best practice, develop options for short notice and high impact events (Mar 25) – Sign off agreed. **Decision 04**

Whilst the deliverables and PMDs were marked as met, the group felt there was a need to revisit the proposed visualisation of warnings by unitary authority area instead of warning polygons on maps as there were some concerns that this could be confusing or misleading in terms of exact locations covered by a warning.

Item 7: Website and app continuity plans and Recovery Time Objectives (RTO)

It was noted that, in October 2024 questions were asked about the rationale behind having the Met Office website as a Gold service level agreement (SLA) and the app as a Silver SLA. The Met Office were asked to explore the possibility of reviewing the recommended SLA level of the App from Silver to Gold and to come back to the PWSCG with further information on usage stats and indicative costs. A paper has been provided which provides an update on this ask and proposes an aspirational Gold level SLA for the App from FY26/26. Primarily the rationale is that the app contains a subset of information from the website and that there is more information on the website.

The Met Office were also asked to provide demographic information for website and app usage. The average and maximum number of unique users within a 24hr period to the public website and App gives a sense of the number of people who would potentially be affected by an issue: Average daily unique users: Website 707k and App 1.262M. Daily unique users: Website 1.41M and App 1.828M.

The cost implications of Website and App operating to aspirational Gold SLA are detailed in the paper.

A view from the PWCG was that the App needs to have a Gold SLA and that trust could be lost if the App went down and wasn't fixed as an immediate priority. It was also noted that prioritisation exercises could take place if needed, to enable the App to have a Gold SLA.

The PWSCG were asked to accept the papers and support commercial discussions with suppliers to include costs in FY26/27 budget submissions.

PMD 1.5c Ensure agreed continuity plans and Recovery Time Objectives (RTO) are in place for NSWWS, Hazard Manager, mobile apps and website, PWMS and Weather Data Hub (May 24) – Sign off agreed.

Decision 05**Item 8: Request sign-off of deliverables not being formally presented today.**

Papers for the following deliverable were circulated ahead of the meeting.

D1.6 – Develop communication initiatives, alongside partners, to complement our warnings to drive greatest action and largest reach, for example ahead of winter 24/25 (Mar 25) - Sign off agreed. **Decision 06**

D1.8a Agree product life cycling for UK & international civil contingency products, including CHEMET, international services and the current backlog for Hazard Manager (Nov 24) - Sign off agreed. **Decision 07**

D1.8b Agree service life cycling for UK and international civil contingency advisor and expert weather services (Nov 24) - Sign off agreed. **Decision 08**

D1.8c Review Met Office provision as a Cat 2 responder into UK resilience community particularly during periods of severe weather, focusing on provision for Cat 2 responders, and organisations who provide ongoing services to the public (e.g. charities) (Dec 24) - Sign off agreed. **Decision 09**

D1.8d Improve and increase delivery of civil contingency services, including NSWWS, through 3rd parties (Nov 24) - Sign off agreed. **Decision 10**

Item 9: Review sign-off for Theme 1

The PWSCG agreed that they were happy to sign off Theme 1 as being delivered. **Decision 11**

PWS Customer Group Main Meeting

Item 10: PWS Customer Group Main Meeting Priorities

The purpose of PAGs 2, 3 and 4 was explained for the benefit of new PWSCG members.

Item 11: PAG reports – comments and questions from PWSCG

Papers relating to PAGs 2, 3 and 4 were shared ahead of the meeting. The following headlines were noted.

a) PAG 2

PAG 2 met on 25th March 2024, and a key focus of the meeting was for the Met office to update the PAG on its performance across the three lenses accuracy. Actual accuracy verification remains broadly flat whilst we wait for science improvements to be pulled through onto the new supercomputer, with 50% of the measures showing no real change or deterioration over the course of the year.

Within the Theme 2 Performance Measures it was noted that the Met Office had delivered three out of five measures with the following two being missed at the end of the year:

- **PM2.2** - The Met Office ranks in the Top 3 reported weather providers for accuracy (ForecastWatch)
 - Met Office are ranked 4th and outside of the top 3 target
- **PM2.7a** Public Perceptions of forecast accuracy (direct channels) measured by the Consumer Accuracy index. Improve composite score (target of 72%)
 - Met Office average score was 70%

b) PAG 3

PAG 3 met on the 20th March 2024 and a key focus of this meeting was to ask for progress on improving Met Office products, with a particular focus on the Web and App, where the future web and App strategy was presented and signed off at the meeting.

Sign off was requested for the following Performance Measure Developments, carried over from PAG3.

- **PMD 3.7a** – Monitor the new form of measurement for demonstrating engagement via indirect Met Office channels (Apr 2025) - Sign off agreed. **Decision 12**
- **PMD 3.8d** – Monitor the new form of measurement for demonstrating engagement via direct Met Office channels (Apr 2025) - Sign off agreed. **Decision 13**

Within the Theme 3 Performance Measures it was noted that the Met Office had achieved two out of three Performance Measures, with the following one measure being narrowly missed at the end of the year:

- **PM3.6a** – Increase awareness of the Met Office as the UK's national weather service to 59%.
 - Met Office score was 57%

c) PAG 4

PAG 4 met on the 25th March 2024 and full reports were presented to provide assurance reporting in relation to National Capability and International Commitments.

Item 12: PWSCG secretariat review of 2024/25 deliverables and metrics plus questions from PWSCG

The PWSCG Annual Report 2024/25 summarised the work and activity undertaken by the PWSCG during the year and the performance of the Met Office in delivering the 2024-2029 CSA. The following was noted.

The annual opportunity to meet with the Northern Ireland and Scotland Devolved Governments in Belfast and Edinburgh was greatly welcomed, but unfortunately, we were unable to secure a meeting with the Welsh Devolved Government this year. These meetings will hopefully be reinstated in 2025/26, especially in light of the significant flooding impacts seen in Southern Wales during Storm Bert this Winter.

We end the year with measures for both Comparative Accuracy and Perceptions of Accuracy missing targets set at the start of the year, although noting the stretching target set for the Perceptions of Accuracy. Further delays in the implementation of the new Supercomputer and subsequent lack of science upgrades have been the predominant factor in the lack of progress in this area this year.

To help mitigate against the potential for negative impacts on Met Office brand and trust, earlier in the year the PWSCG asked the Met Office to increase communication and engagement activities by way for a brand preference campaign. This, alongside the now well-established Citizen Engagement Strategy, will need to be a key focus until which time the Supercomputer is delivering tangible improvements in accuracy to its users and the public.

There have, however, been some real positives to take from the year. The Met Office have achieved 20 out of 21 deliverables set for this year, with perhaps the most notable being work completed to pull IMPROVER data into the web and app, which was delivered in October.

The PWSCG considered the 2024/25 CSA to be met. **Decision 14**

Item 13: CSA refresh 2025- 2030

The following was noted.

a) CSA refresh overview – comments and agreement

The rolling 5-year CSA has been refreshed and the PWSCG remains focused on the ‘what’ and not ‘how’ it is delivered. The SR Phase 2 outcomes will influence the FY2026/27 refresh.

Some top-level changes are:

- There are fewer deliverables – 18% less – but this doesn’t mean 18% less work.
- There is now a two-tier assurance process where the PWSCG will sign off new, innovative and notable activity (80%) and DSIT will sign off Business as Usual activity (20%).
- There will be 35% fewer items being bought to the PWSCG, creating space to focus on the most strategically important priorities.

b) Sign off on CSA for 2025-2030

The 2025-30 CSA had been circulated a few weeks ago and the PWSCG were asked if they were happy to sign off the 2025-30 CSA – sign off agreed. **Decision 15**

The group discussed the pace of change required for some areas to advance most notably on AI and Machine Learning. The consensus of the group conveyed by the Chair was that the PWSCG was open to a conversation on reprioritisation of effort if needed if that was the only way for MO to keep up with advances in AI for example.

Item 14: Common Warnings Framework

An update from the Met Office on the development of the Common Warnings Framework (CWF) was provided. A discussion took place about confusion between warning services and the remits of different organisations, such as the Met Office, Environment Agency, Natural Resources Wales and Scottish Environment Protection Agency. An update was provided in relation to the progress being made to create a CWF and future steps to deliver the CWF. The group agreed the end goal was a good place to be and in this work the role of the Cabinet Office will be key. There was an action for Met Office to go away and follow up offline with Cabinet Office about whether the current legal framework provides enough protection to ensure Met Office is the authoritative voice on weather warnings in the UK. **Action 01**. There was also some discussion on the ways to ensure the public took enough notice of warnings and associated action and perhaps some expert input would be required on the nudge behaviour aspects to achieve this.

Item 15: Supercomputer Update

An update in relation to the supercomputer was provided and a roadmap focusing on expected outcomes was presented.

A question from the PWSCG was asked in relation to when tangible improvements would be made as it wasn’t clear what improvements would be made and by when.

Confirmation was provided that Parallel Suite 47 will be delivered in November 2025 which will improve the forecast of convective rainfall. An upgrade to the 10-day forecast was also noted, which would mean that early lead-up information could be provided to further inform NSWWS.

The Met Office were asked to provide a roadmap of when benefits will be realised, including estimated accuracy percentage increases and the impacts to areas of the public / users. **Action 02**

The Met Office was also tasked with providing a non-scientific explanation and specific examples of translating what the new capability will deliver for customers under the PWS. Specific tangible examples are required to bring the investment to life for the PWSCG members and the sectors they work in.

Item 16: In camera session – PWSCG members

See full version.

