



Department for
Science, Innovation
& Technology

Public Weather Service Customer Group Annual Report 2024/25

Foreword

Welcome to this year's Public Weather Service Customer Group (PWSCG) Annual Report which summarises the work and activity undertaken by the PWSCG during the year and the performance of the Met Office in delivering the 2024-2029 Customer Supplier Agreement (CSA).



This year has seen the regular drum beat of meetings and high levels of engagement and constructive challenge across the PWSCG, and Theme focused Assurance Groups (PAG's). In person attendance at the October meeting held in London was the highest since pre-covid and resulted in a really engaging meeting, this is something that I am keen to continue as we enter the new year. I also welcomed the annual opportunity to meet with the Northern Ireland and Scotland Devolved Governments in Belfast and Edinburgh. As always, these meetings are hugely valuable for the PWSCG Chair and the Department for Science, Innovation and Technology to hear feedback from a range of key users across government and responder communities across all areas of the UK. Unfortunately, we were unable to secure a meeting with the Welsh Devolved Government this year but I remain hopeful that we can reinstate these meetings in 2025/26, especially in light of the significant flooding impacts seen in Southern Wales during Storm Bert this Winter.

We are now in a well-established process of delivering a rolling 5-year CSA period, with this year being the third iteration, covering the period 2025-30. The rolling agreement ensures that the PWS has the ability to plan for upcoming developments, future capabilities and provide innovation to the market. This flexibility is especially important in the context of uncertainty surrounding PWS spending review settlements beyond year one of this agreement. Equally, it allows for the impact of external market factors such as the development of AI/ML on not only the potential to improve forecasts but also the other aspects of Met Office business.

During my annual report last year (FY2023/24) I noted a number of areas of concern where performance was starting to stagnate or decline. This was focused primarily on Accuracy (Actual, Comparative and Perceptions). During the course of the year accuracy measures have again slipped against the targets set within the CSA and therefore have been a priority area of focus for the PWSCG in seeking improvements. 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. Although the new Supercomputer was successfully transitioned in April 25, we do not expect to see betterment in terms of accuracy improvements until later in the year and into 2026. 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.

Aside from the challenges outlined above, there have been some real positives to take from the year. The accuracy of the NSWWS has performed well and met its target for the year, with 80% of warnings providing 'good' or 'excellent' guidance. This was a challenging target this year with multiple good warnings dropping off the rolling 36-month period in which the average score is

assessed against. To meet this target the Met Office achieved its joint best in-year performance since the current scheme started in 2011. The stretch target for this measure was missed, although not as a consequence of the in-year performance. I am encouraged to see that public trust in the Met Office remains high with an average of 84% of the public surveyed this year stating that they trust the Met Office. This is an exceptionally high result, of which any service or organisation would be extremely pleased to attain. However, trust is hard won and easily lost, so the Met Office needs to avoid any complacency. This is one of the drivers behind the brand preference campaign mentioned above. The Met Office are also on track to achieve 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.

On the weather front, this year was headlined by notable events during the winter including significant Red warnings associated with both Storm Darrah and Storm Éowyn. Storm Éowyn brought the most powerful windstorm to the UK in over a decade, with significant impacts for many. Thousands were left without power, ferries and trains were cancelled and sadly lives were lost. No doubt these impacts would have been significantly worse had it not been for the National Severe Weather Warning Service (NSWWS) allowing responders and the public time to prepare and to make decisions in order to stay safe. Surveys post Storm Éowyn showed record levels of awareness of the storm (99%) and action being taken (97%) something that the Met Office should be proud of.

The composition of the PWSCG continues to provide a valuable mix of skills, experience and views, however, most interest across the Group is focused in the 'Stay Safe' theme of the CSA. This year I will be looking to evolve the membership of the PWSCG to provide more prominent views and challenge from members who can represent the 'Thrive' theme of the CSA. This will include members to represent areas of the outdoor economy such as farming and leisure alongside additional expertise in Digital and Communications. The PWSCG Secretariat are working hard on securing appropriate additional members and we will soon be announcing new representatives from DEFRA to represent farming and Government Digital Service (GDS) to provide expertise in the digital space.



Duncan Potts

Introduction

What is the Public Weather Service Customer Group?

The PWSCG acts as the customer on behalf of the Government, responders, and UK citizens for the free-at-the-point-of-use weather services and advice provided by the PWS delivered by the Met Office. It ensures that these services meet the operational needs of public sector users of PWS outputs, and acts as the guardian for the Met Office's underpinning operational capability upon which all UK weather services depend. It is responsible for setting the outputs and monitoring the performance of the Met Office in delivering the PWS.

The responsibilities of the PWSCG are as follows:

- Setting the current and future outputs required from the PWS and specifying its performance indicators and targets;
- Monitoring the performance and delivery of the PWS outputs against the agreed performance indicators and targets, and considering in-period modifications to the PWS as appropriate;
- Reviewing whether Met Office plans for the underpinning capability and international commitments are appropriately prioritised and have a demonstrable, value for money link to support the delivery of PWS outputs and other direct services to Government, the public sector and civil aviation;
- Reviewing the socio-economic benefits delivered by the PWS, engaging with London Economics to portray the PWS view;
- Supporting cross-Government cooperation to increase the use of PWS outputs and raise issues relevant to wider Government, including through the Chair's representation on Met Office Governance groups;
- Providing independent advice to Government ministers on the PWS as required;
- Consulting widely with the public and the public sector users of the PWS, as appropriate, in order to effectively undertake its responsibilities above.

PWSCG activity during 2024/25

The PWSCG continued their role of scrutinising delivery of the PWS on behalf of the Government this year. The full PWSCG met in October 2024 with PWS Assurance Group (PAG) meetings also taking place in October 2024 and March 2025. The PWS Secretariat attended our annual meetings with Devolved Government in Scotland and Northern Ireland, thank you to the PWSCG representatives from each Devolved Governments for hosting and chairing these meetings. The PWSCG engaged in a number of topics during the year, with the below subjects being of particular focus:

- Continued assessment of Actual, Comparative and Perceptions of Accuracy of Met Office forecasts and the importance of this measure.
- Latest with the Met Office supercomputer delays and implementation plans, focusing on when users and the public can expect to see tangible betterment.
- The rapid development and impact of AI/ML on not only the potential to improve Met Office forecasts but also the other aspects of its business.
- The development of the new Digital Strategy and the planned launch of a new App.
- Communication and Engagement plans, including the development of a brand preference campaign to mitigate against the potential for negative impacts on Met Office brand and trust due to the current lack of science upgrades, linked to Supercomputer delays.

Delivery of the PWS CSA

The CSA aligns the outputs of the PWS into four themes:

1. Theme 1 which provides services to help the UK public to stay safe
2. Theme 2 which provides services to help the UK public to thrive
3. Theme 3 asks the PWS to have an authoritative voice when communicating the weather
4. Theme 4 defines the international commitments and national capability of the PWS.

Themes 1, 2 and 3 have performance measures (PMs), which are monitored via Red-Amber-Green (RAG) status and are required to meet yearly targets, and deliverables (Ds) which are larger pieces of time bound work to drive improvements across PWS products and services and, in turn, the PMs. End of year RAG ratings for 2024/25 CSA are shown below.

PWS Performance Measures Summary

*Note, 'No data' is scored where no relevant surveys or data collection is present for that period, 'No Survey' notes that no external surveys were conducted.

Reference	Performance Measure Description	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	EOY
PM1.1a	Accuracy of warnings should be baseline 80%, improving to a baseline of 82% by April 2026, verified by the Met Office and PWSCG (rolling 3-year average). 'Very Poor' guidance should constitute less than 20% warnings.													
PM1.1b	Accuracy of warnings should be stretch targets of 82% through 24/25.													
PM1.2a	Awareness of amber and red warnings should be at least 80%, based on ad hoc surveys.	No Survey	No Survey	No Survey	No Survey	No Survey	No Survey	No Survey				No Survey	No Survey	
PM1.2c	Snow warnings should be at least 85%.	No Survey	No Survey	No Survey	No Survey	No Survey	No Survey	No Survey			No Survey	No Survey	No Survey	
PM1.3a	Through ad hoc public surveys, Amber / Red Warnings verified at the following levels: 'Useful' at least 85%.	No Survey	No Survey	No Survey	No Survey	No Survey	No Survey	No Survey				No Survey	No Survey	
PM1.3c	Through ad hoc public surveys, Amber / Red Warnings verified at the following levels: 'Action taken' is at least 80%.	No Survey	No Survey	No Survey	No Survey	No Survey	No Survey	No Survey				No Survey	No Survey	
PM1.4a	In biennial responder surveys, achieve 85% satisfaction with Civil Contingency Advisor. (CCA) team.	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
PM1.5b	The Hazard Manager IT system should be available to responders for 99.5% of the time when the system is being used.													

Reference	Performance Measure Description	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	EOY
PM2.1a	Availability of digital channels - 99.5%.													
PM2.1b	Availability of products by the specified publication time.98.5%.													
PM2.2	The Met Office ranks in the Top 3 reported weather providers for accuracy. [ForecastWatch]	No Data	No Data		No Data	No Data		No Data	No Data		No Data	No Data		
PM2.7a	Public perceptions of forecast accuracy (direct channels) measured by the Consumer Accuracy Index. Improve composite scores from 72% (March 2025) to 75% by April 2026.		No Data	No Data		No Data	No Data		No Data	No Data		No Data	No Data	
PM2.8a	Public perceptions of forecast accuracy (Met Office), measured via the Public Perception Survey. Weather forecasts should be viewed as: 'Fairly accurate' or 'very accurate' by at least 92% of the UK public, based on Met Office specific score.	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data		No Data	No Data	

Reference	Performance Measure Description	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	EOY
PM3.6a	Increase awareness of the Met Office as the UK's national weather service to 59% by March 25.	No Data		No Data	No Data		No Data	No Data		No Data	No Data		No Data	
PM3.6b	Increase awareness of the breath of services provided by the Met Office to 69% by March 25.	No Data		No Data	No Data		No Data	No Data		No Data	No Data		No Data	
PM3.6c	Maintain trust held by the public in the Met Office. Achieve or exceed 80% 'trust a little' or 'trust a lot' score.	No Data		No Data	No Data		No Data	No Data		No Data	No Data		No Data	

Performance Measure Development Summary

Reference	Performance Measure Description	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	EOY
PMD1.1a	Review how timeliness is assessed as part of the subjective verification process, report and implement any changes as part of PM1.1.								PWSCG Approved					
PMD1.5c	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.													

Reference	Performance Measure Description	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	EOY
PMD2.0a	Implement new verification scheme for forecasts that are available through web and app.													
PMD2.1c	Review metrics to ensure the most suitable channels are still being monitored.	No Data						PWSCG Approved						
PMD2.2a	Continue to review, develop and implement comparative accuracy, including measures for wet, dry and very wet weather symbols.													

Reference	Performance Measure Description	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	EOY
PMD3.7a	Monitor the new form of measurement for demonstrating engagement via indirect Met Office channels. Implement new targets following sign-off by PWSCG in April 2025.													
PMD3.8d	Monitor the new form of measurement for demonstrating engagement via direct Met Office channels. Implement new targets following sign-off by PWSCG in April 2025.													

Deliverables Summary

Theme 1

Reference	Deliverable Description - detailed	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	EOY
D1.3a	Provide advice within the NSWWS API and include within direct and indirect channels (May 25).													
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).													
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).													
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).													
D1.6	Develop communications initiatives, alongside partners, to complement our warnings to drive greatest action and largest reach, for example, cold ahead of winter 24/25. (Mar 25).													
D1.7	Identify opportunities with partners to align language, hazard matrices & communications (Oct 25).													
D1.8a	Agree product life cycling for UK and international civil contingency products, including CHEMET, international services and the current backlog for Hazard Manager. (Nov 24).													
D1.8b	Agree service life cycling for UK and international civil contingency advisor and expert weather services. (Nov 24)													
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).													
D1.8d	Improve and increase delivery of civil contingency services, including NSWWS, through 3rd parties such as ESRI, Meteoalarm, Warnings API users and Resilience Direct, including implementing the attribution policy. (Nov 24).													

Theme 2

Reference	Deliverable Description - detailed	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	EOY
D2.3b	Deliver 14-day forecast data to web & app, demonstrating new ways of visualising the data and expose the same data via appropriate data platform for reuse. (Mar 26).													
D2.5a	Pull-through of 7 day blended probabilistic site-specific forecasts in tables on web and apps. (Oct 24).								PWSCG Approved					
D2.6a	Deterministic blended probabilistic forecast dataset used on web & app (D2.5a) is made available for reuse. (Dec 24).													
D2.7	Further research into visualisation of ensembles for the public and develop roadmap (Mar 26).	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data

Theme 3

Reference	Deliverable Description - detailed	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	EOY
D3.4	"Telling the weather story" Iterate web & app to improve our story telling ability (Mar 26).	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
D3.5	Develop future Web and App strategy, and develop a business case for implementation following agreement with the PWSCG. (Mar 25 - regular updates to PWSCG).													
D3.6a	Make first tranche of Met Office data available via an open data platform and create plan for future open data provision, in alignment with making data available for use internally. (Sep 24).								PWSCG Approved					
D3.6b	Develop future Weather Data Hub product plan to deliver viable product in line with use and revenue. (Mar 25).													
D3.6d	Raise public awareness of the unique role that the Met Office plays in the UK weather industry, and the range of places that they can access Met Office information. (Nov 24).													
D3.6e	Deliver a new campaign to promote WDH, PWDS, Mountain Weather Forecasts and other appropriate PWS services across industry, government and media leading to growth in the user base and therefore public engagement. (Mar 25).													
D3.7a	Produce a road map for content that will be delivered on direct and indirect channels. Commence delivery of new content roadmap from Oct 2024. literacy to improve the publics understanding of weather extremes. (Sep 24).								PWSCG Approved					
D3.7b	Expand indirect distribution channels, creating new RSS content feeds for Apple & Google. (Mar 25).													
D3.8	Undertake discovery work to understand options to increase scalability of production and distribution of automated and expert content. (Mar 26).	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
D3.9	Deliver communications activities to position the Met Office as thought leaders - focusing on ensembles and severe weather and climate change. (Mar 25).													

Summary of Theme 1 delivery:

- 6 out of 7 Performance Measures were met with the Met Office dropping below target on the following:
 - *PM1.1b NSWWS accuracy of warnings vs target of 82%* ended the year at 80%. This is a stretch target and was expected to be challenging from the offset of the year and when set was predicated on the new supercomputer being available and performing by this time
 - *PM1.2c Awareness of snow warnings should be at least 85%* was also below target. Results were based off a single event with evidence shows that the amber warning was confused with yellow warnings also out at the same time, with 51% identifying the event as yellow and only 39% correctly identifying it as amber. The timing of the warning, issued late the night before the event, may have contributed to low awareness.
- There are 2 PMD's in Theme 1 with 1 being completed in November to include a new timeliness measure in the subjective verification process. This will be implemented from April 2025. *PMD1.5c Ensure agreed continuity plans and Recovery Time Objectives (RTO) in place* for key PWS services will end the year as Amber. This work has been completed, but 10 months later than stated within the CSA. This reflected further work to establish the feasibility and costs of a higher RTO for the App.
- 9 out of 10 deliverables have been completed with notable activities including increasing the delivery of civil contingency services through third parties and including advice statements within the NSWWS API allowing other organisations to display this information. 1 deliverable is scored Amber '*Improve the simplicity of the visualisation of multiple or complex warnings at a national scale*'. This work is completed but will not be available in the timescale requested within the CSA, this is to align activity with the development of the new Met Office App, which the Met Office have been asked to prioritise.

Summary of Theme 2 delivery:

- 3 out of 5 Performance measures have been met with 2 out of 5 missed across Theme 2. Missed measures relate to:
 - *PM2.2 The Met Office ranks in the Top 3 reported weather providers for accuracy*, this measure ranks the Met Office in 4th position as verified by ForecastWatch, this is the same position as FY22/23. The PWSCG have discussed the emergence of big technology providers utilising AI/ML and the impacts this has had on other organisations rankings
 - *PM2.7a Public Perceptions of forecast accuracy* missed the 72% target with an average score of 70%. Although this measure has been missed, the Met Office continues to lead among its competitors and remains the top forecast provider across most accuracy statements, leading on 7 out of 10 accuracy statements.
- 3 out of 3 PMD's have been met this year. 3 out of 3 deliverables have also been met this year or are on track for delivery in future years, this includes work completed to pull through IMPROVER data into forecast tables on the Met Office Web & App.

Summary of Theme 3 delivery:

- 2 out of 3 performance measure have been met with scores for *awareness of the breadth of services provided by the Met Office* and *Trust in the Met Office* exceeding targets set with the CSA. Trust scores have been notable with an average for the year at 84%. *PM3.6a*

Awareness of the Met Office as the UK's National weather service narrowly missed its 59% target with an average score of 57%.

- Both PMD's within Theme 3, which set new engagement measures for both direct and indirect channels, are expected to be signed off at the April PWSCG meeting and therefore will be met at the end of the year.
- All 8 deliverables have been delivered or are on track to deliver against targets set for future years. This has included work to expand indirect distribution channels and creating RSS content for big technology providers and also work to create a new content roadmap.

Summary of Theme 4 delivery:

- Theme 4 requires the Met Office to report on the work completed in the areas of Technical Services (Observations), Science, Technology, International commitments, and Finance that underpins the PWS. The Met Office have provided good evidence that the requirements of this theme have been met during 2024/25. However, a number of trends were noted across this theme including cost and resource pressures, especially in the areas of Technology and the need to invest in aging Observations infrastructure, the PWSCG and PAG-4 will continue to closely monitor these areas into 2025/26.

Overall summary of CSA delivery:

The RAG ratings across the CSA this year have shown that the Met Office has made good progress against a number of measures and deliverables and has delivered a large majority of what it was asked with the CSA.

There are however areas of concern highlighted, which have prevailed for the last two years and which the PWSCG will continue to make our priority for improvement. Accuracy continues to be an area of risk, with measures for both Comparative Accuracy and Perceptions of Accuracy falling below expectations this year. The impacts due to the delays in the Supercomputer have been well documented and discussed at the PWSCG but have been exacerbated by the development of AI/ML and what appears to be significant improvements from other weather providers. Improvements in this key metric are expected to be seen once the eagerly anticipated science upgrades are released on the new supercomputer and a number of measures will be re-evaluated at this point next year.

It is worth highlighting that some of the Red Performance measures are linked to stretch targets and are purposely aimed to challenge the Met Office to push itself to achieve its vision of being global leaders in weather and climate science.

During the meeting the PWSCG will be asked to assess if the CSA for 2024/25 has/has not been met.

Priorities for 2025/26

The enduring priorities for 2025/26 will remain as they have for the previous 2 years, namely ensuring PWS output is Discoverable, Consistent, Useful and Timely. Importantly, as our number one priority, the PWSCG continues to seek improvements from the Met Office in the accuracy of its forecasts across the three lenses of, Actual, Comparative and Perceptions of accuracy. This will continue to be the key focus for the Group as the new supercomputer becomes operational and aims to deliver on the improvements in forecasting promised within its business case.

In addition to the enduring priorities, we look forward to improvements in the direct reach of Met Office services via the launch of the new Met Office App in FY25/26. This builds on the foundations developed within the Citizen Engagement strategy, which to date has primarily focused on increasing attributed indirect reach and has shown some encouraging results.