

Annual Report and Accounts

2020/21

Met Office Annual Report and Accounts 2020/21

Presented to Parliament pursuant to section 4(6) of the Government Trading
Funds Act 1973 as amended by the Government Trading Act 1990

Ordered by the House of Commons to be printed 8 July 2021

HC 455



© Crown Copyright 2021

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated.

To view this licence, visit

www.nationalarchives.gov.uk/doc/open-government-licence/version/3

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at: www.gov.uk/official-documents

Any enquiries regarding this publication should be sent to us

at enquiries@metoffice.gov.uk

or **+44 (0)370 900 0100**

ISBN: 978-1-5286-2756-6

CCS0621841242

Performance report

- 04 Introduction from the Chair
- 06 Chief Executive's summary
- 08 Chief Science and Technology Officer's statement
- 10 A year like no other
- 16 Performance review
- 20 Financial review
- 22 Sustainability summary

Accountability report

- 25 Corporate governance report
- 26 Governance statement
- 36 Remuneration and staff report
- 43 Parliamentary accountability and audit report

Accounts

- 46 Statement of comprehensive income for the year ended 31 March 2021
- 47 Statement of financial position as at 31 March 2021
- 48 Statement of cash flows for the year ended 31 March 2021
- 49 Statement of changes in taxpayers' equity for the year ended 31 March 2021
- 50 Notes to the accounts

Introduction from the Chair

ROB WOODWARD



It is an over used word, but this year has truly been 'unprecedented'. Yet, throughout the COVID-19 pandemic the Met Office has continued to deliver vital 24/7 public services that protect people, businesses and critical national infrastructure and, from a user perspective, with only the barest hints of the significant behind-the-scenes changes in our working practices. It is a testament to the hard work and resilience of Met Office staff that, despite all the challenges of COVID-19, we have achieved all our key targets this year. It is certainly a memorable achievement in this, the most unusual of years.

There have been other highlights throughout the year that illustrate the hard work and resilience of all those involved.

We launched our latest book 'Very British Weather' and collaborated with the BBC's Panorama programme, Britain's Wild Weather. Met Office scientists, Elizabeth Kendon and Mark McCarthy were interviewed about Met Office UK Climate Projections and their implications. In parallel to this, Met Office Hadley Centre scientists worked with BBC journalists to develop a new interactive visualisation tool to show how climate change may impact the weather you see in your area in the coming decades. Bringing historical observations together with the latest climate projections helps to set future extremes in a

context we can all understand. It also demonstrates the Met Office's desire to showcase its science in an accessible way to enable better decision making and greater benefit to UK society as a whole.

There have been other good opportunities to extend the reach of our climate science and our experts by reaching out to different audiences and strengthening our social media presence. For example, Facebook has selected the Met Office to be one of its global partners in its Climate Science Information Centre. This is intended to bring together the latest content around climate science and action to make it easier for Facebook users to find.

The Met Office continually strives for improvement, whether that's in relation to the way it communicates, the accuracy of its forecasts or the efficiency with which it runs. This year has been no exception, with the implementation of an internal reorganisation aimed at simplifying the ways in which our customers interact with and receive services from the Met Office. This has involved setting up a new Markets Directorate to provide one, consistent interface with all our customers. We have also created a Programmes Directorate to take responsibility for management and delivery of all programmes working to develop new customer products and services. The scale of the Met Office's

scientific, technology and operational developments has grown organically over time. The Programmes Directorate will be key to ensuring the fruits of our scientific research are translated into new services with real customer impact and benefit.

As I look to the coming year, I am excited about the future. Just after year end we signed the contract and announced the proposals for our next generation of supercomputing provision. This is a core element of our corporate strategy and will lay the foundations for major developments in weather forecasting and climate prediction in the decade ahead.

At a personal level I am therefore delighted to have been reappointed for a second term as the Chair of the Met Office Board and to have welcomed three new non-executive directors; Professor Jordan Giddings, Christine Ourmières-Widener and Anusha Shah. Inevitably, this means we have also said goodbye to Robert Drummond and Sir John Beddington as they end their terms. I want to thank Sir John for his wise council and dedication during his time as Acting Chair and while handing over to me. I also look forward to working with our new appointees. They bring a wealth of diverse and relevant experience that will enhance our discussions and oversight of the Met Office's strategic development.



The Met Office continually strives for improvement, whether that's in relation to the way it communicates, the accuracy of its forecasts or the efficiency with which it runs.



Whilst we have all become more adept at providing Board oversight through virtual meetings over the last year, it will be a refreshing change to return to the Met Office locations and customer sites in person. The experience of the last year has made me evaluate the importance and benefits of the interactions I have across the Met Office and our external stakeholders. I have been impressed by the caring and understanding attitude the organisation has taken towards staff. The work on how the

organisation will return will build on the key learnings following this period of virtual working.

However, COVID-19 has naturally curtailed the opportunities to collaborate at a more international level. I therefore look forward with keen anticipation to the UK hosting the UN's 26th Conference of the Parties (COP 26); a key international opportunity to discuss climate change science and policy. We are planning for the Board to meet in Glasgow during COP 26. This event will be a unique

opportunity to showcase the UK's leadership in this area and for the Met Office to support and contribute to this. COVID-19 may still present many challenges to come, but I am confident that Met Office staff will rise to those challenges and continue to drive forward our ambitious strategy.

Finally, I would like to thank all Met Office staff and the Executive team for the exemplary leadership and dedication demonstrated throughout the past year.

Chief Executive's summary

PROFESSOR PENELOPE ENDERSBY



Last year, in the early stages of the COVID-19 pandemic, I reflected that this report was coming at a challenging time for the world. A year later, this is still true. The past year has been remarkable in so many ways and although the UK's COVID-19 vaccination programme brings hope, we have not yet returned to the life we once lived.

The spread of the COVID-19 pandemic meant that overnight we transitioned from an organisation based around office hubs with our largest hub in Exeter, to become a dispersed, remote workforce. Where once we were embedded with our customers, we were now working from home offices, kitchens and bedrooms around the UK and worldwide. However, like many others, we invoked our contingency plans and have rapidly become familiar with the tools and technology to make this work. We have innovated to enable our continued delivery and have succeeded. We have also become more keenly aware of the need to connect with our friends and colleagues.

Well-being has been a key focus over the last year. Like so many, we have been balancing life at work with wider challenges. Home schooling, caring responsibilities and, for some, personal losses. Throughout this we have looked out for each other, and by sharing our stories we've seen a new openness and appreciation

for the challenges we face and the differences that make each of us unique. We have remained supportive and understanding; proving we really are 'better together'.

While we have focussed on well-being, I am extremely proud of the way staff have continued to deliver our core services to help people stay safe and go about their business during these challenging times. During lockdown, for many the chance to get outdoors and to connect with nature has provided real pleasure; we saw increased usage and reliance on our regular forecasts as people sought to make the most of these escapes. Our severe weather warnings have remained equally important over the year. January and February 2021 saw a succession of storms and a relatively high number of amber warnings. Feedback on our advice from the emergency response community was really positive, as we helped them prepare for and reduce the impact of these events. The achievement of our stretch targets in relation to warning accuracy demonstrates that the reliability of our forecasts, warnings and advice have remained high despite our dispersed working arrangements. This is a particularly commendable outcome and I congratulate all those who have enabled this to happen.

Alongside this, we have supported the national COVID-19 effort in as many ways as we can. We have provided secondees to Government as well

as sharing our powerful computing facilities with those modelling the spread of COVID-19. We have made our weather data more easily available to researchers looking at links between the virus and weather conditions. So much of what we do supports wide-ranging public benefits and I have been proud that our national resilience expertise has enabled us to contribute to the cross-Government effort in such critical times.

We have continued to deliver on our strategic priorities, with several of our first tranche of strategic actions transitioning to business as usual over the coming weeks. Picking one highlight is hard given the range and importance of them all, but I am proud of the progress we have made in our Equality, Diversity and Inclusion strategic action. We have reinvigorated our staff networks, launched an ally community to enable all staff to play an active role in supporting their colleagues and taken our first steps to achieving a new diversity and inclusion standard.

Beyond COVID-19, the most significant advance of the year by far is the investment by government of £1.2 billion in our new supercomputing capability, and the signature of our contract with Microsoft UK. Investment of this scale by the UK government is a real vote of confidence in the quality of the



Well-being has been a key focus over the last year. Like so many, we have been balancing life at work with wider challenges.



Met Office's science, technology and services. It is also a recognition of the role we can play in supporting the government's commitment to setting an international lead on combating climate change and being a science superpower. The next ten years and two generations of high powered computing are central to the delivery of our long term strategy. Knowing the solution brings clarity for other elements. We plan to test our Next Generation Modelling System on the

first generation and to operate it on the second. I'm pleased to say that we now have an early stage working version of this code: for context our current unified model reached the same stage in June 1991; the month I took my degree!

Similarly, with Microsoft sharing many of our values around planetary responsibility I am also delighted that the Met Office now has a clear plan to become a net zero organisation

by 2030. It's obviously essential that we set an example here and with computing consuming the lion's share of our energy we needed a green solution to make this possible.

It has been an extraordinary year of extraordinary challenges, but we can be proud of our continued achievements in so many areas and look forward with confidence to a brighter future.

Chief Science and Technology Officer's statement

PROFESSOR STEPHEN BELCHER



Over the last year the COVID-19 pandemic has led to our way of living and working change almost overnight, with uncertainty and disruption affecting us in ways we could never have predicted. Two examples of COVID-19's impact on Met Office operations spring to mind. Firstly, due to reduced aircraft flying, there were fewer observations to feed into the Numerical Weather Prediction systems. To counteract this, new satellite observations were incorporated into the data assimilation system, keeping the forecast skill up to the high standards we have come to expect. Secondly, pollutant emissions reduced substantially over lockdown, particularly due to reduced emissions from road traffic. The Air Quality team pulled together at short notice to adjust the emission rates, and ensure the air quality forecast was still fit for purpose. It is a real testament to the dedication and hard work of staff across the Met Office that operations have continued uninterrupted, in spite of many of us having to work completely remotely for the first time in our careers.

Working remotely has highlighted the importance of strong partnerships and collaborations for delivering Met Office products and services. Over the last year we have harnessed additional expertise to help us deliver our strategic goals around data sciences. Firstly, the Met Office

Academic Partnership was expanded to include two new universities: University College London (UCL) and University of Bristol. UCL brings expertise in applying data science to environmental problems, while University of Bristol has much to offer in taking information on weather hazards through to impacts, such as effects of poor air quality on health. Secondly, we have built further on our capabilities in data science and machine learning by signing a memorandum of understanding with the Turing Institute and by launching, with the University of Exeter, a new Joint Centre for Excellence in Environmental Intelligence. These are exciting new partnerships that focus on solving challenging societal problems around the impacts of extreme weather, air quality and climate change.

The numerous extreme weather events over the last year have demonstrated that we are already living with the effects of climate change. Thanks to rapid attribution work by climate scientists at the Met Office, we can say with confidence that many of these extreme weather events, such as the unprecedented Siberian heatwave of 2020, would not have been possible in a pre-industrial world. The pandemic and ensuing global lockdowns resulted in a temporary reduction in global emissions of greenhouse gases and atmospheric aerosols.

In spite of this, our scientists forecast a peak of monthly atmospheric carbon dioxide concentrations in May of more than 50% above the pre-industrial concentrations. It is clear that now, more than ever, we need a concerted global effort to bring us to a resilient net zero future.

The United Nations Climate Change Conference (COP26) is an excellent example of how the world is pulling together with the common aim of addressing the climate crisis. The Met Office Hadley Centre is playing a leading role in defining the science needed to provide the best possible information into the negotiations at COP26, and a series of events to advance the scientific debate. As part of this series, we held the first Sir John Houghton Memorial Lecture on climate science to honour Sir John's inspirational leadership in weather and climate science, and as founder of the Met Office Hadley Centre work. Sir John sadly passed away in April 2020. We were very honoured that the esteemed atmospheric chemist Professor Susan Solomon gave the inaugural lecture. Susan's talk emphasised the need for science to inform government decisions around emissions reductions and building resilience to climate change.

At a national level, the Met Office has supported the government response to the pandemic in several ways. Firstly, several staff have been



Throughout this difficult and most unusual of years I have been immensely proud of the work done by the Met Office.



seconded into the Government Office for Science – the central unit for government advice. Staff have also been seconded into the Joint Biosecurity Centre - the operational government unit that has been tracking the pandemic. Additionally, Met Office staff have participated in Government's Scientific Advisory Group for Emergencies (SAGE) meetings, ensuring that advice about weather and climate science was fed in appropriately to government. Met Office advice has also fed into reports, such as the Academy of Medical Sciences report that published last summer which gave a forward look at what could be expected over the winter to help decision makers plan appropriately.

Throughout this difficult and most unusual of years I have been immensely proud of the work done by Met Office staff, both in responding to the pandemic and in leading new

developments in weather and climate science and services. For example, Professor Jason Lowe was awarded an OBE for his career-long contribution to climate science, taking science into advice for government.

Early in 2020 the government announced fantastic news of its commitment to invest up to £1.2 billion for the Met Office to develop the world's most advanced supercomputer dedicated to weather and climate. This will fundamentally change what is possible in weather and climate science and services. The Next Generation Modelling Systems (NGMS) Programme is key to making the most of the new supercomputer. This ambitious and challenging work involves completely reformulating and redesigning our weather and climate modelling systems, ensuring that they will be fit for purpose for the new supercomputer. Over the last year, NGMS has seen notable success,

with delivery of a prototype system. There is still lots to do, but this is a big landmark to have reached and I am excited to see this work come to fruition over the coming years.

In response to the new supercomputer plans, the Met Office has undergone a period of reorganisation, which will make us more efficient. Part of this work has involved bringing the Science and Technology directorates closer together. This will help dismantle the boundaries between science and technology to deliver the benefits of the new supercomputer and data platforms - it is for this reason that my role has evolved from Chief Scientist into Chief of Science and Technology. I'm really looking forward to steering the evolution of these directorates to ensure we're best placed to make the most of this substantial government investment over the coming years.





We're a force for good.

Before the pandemic, our education outreach team was focussed on our Science Camps, a two-day in person experience for young people at our HQ, and building awareness of our new online education resources. Suddenly, everything changed. Camps were cancelled, and all the other in person events we support were off. We took the opportunity to do something different. Home schooling meant our online resources were in high demand, so we rapidly developed new resources to meet increased interest. Tailoring our communications and reaching out to parents, carers and teachers across different platforms helped them to discover our cross-curriculum activities so young people could learn at home.

It's who we are.



Working together to propagate global solidarity and build a kindness contagion.

We're experts by nature.

While the COVID-19 crisis put huge strain on everyone, Met Office teams stepped up to provide crucial support for modelling and analysis being used to help the nation's efforts to combat the virus. Medical research groups around the country, not used to providing operational support, struggled to provide resilient data to government. Our expertise in the operational running of 24/7 numerical models enabled us to provide support to these groups. This ensured timely delivery of crucial real-time data and advice to high-level decision makers in UK government.

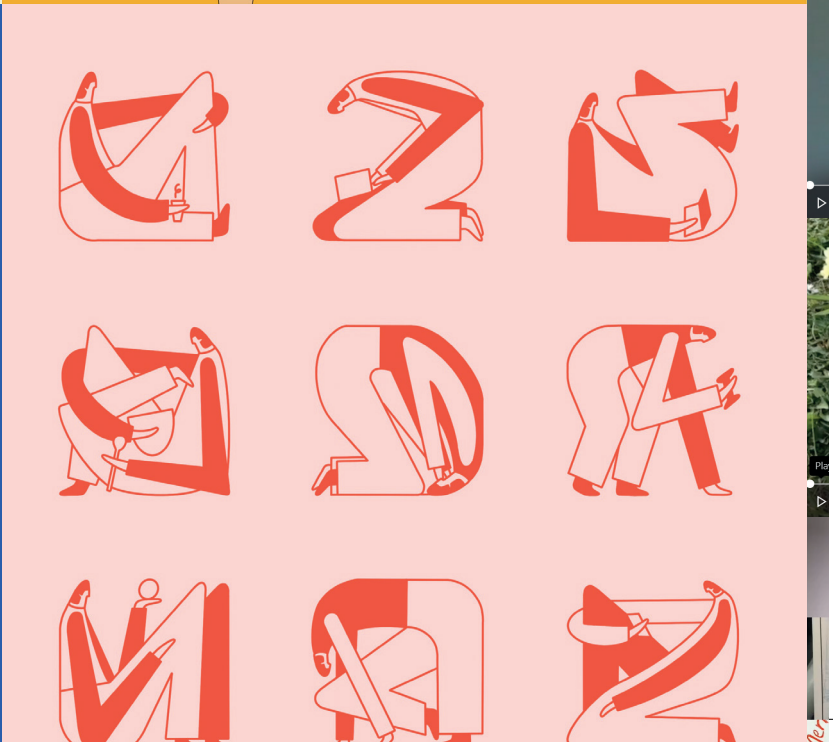
It's who we are.

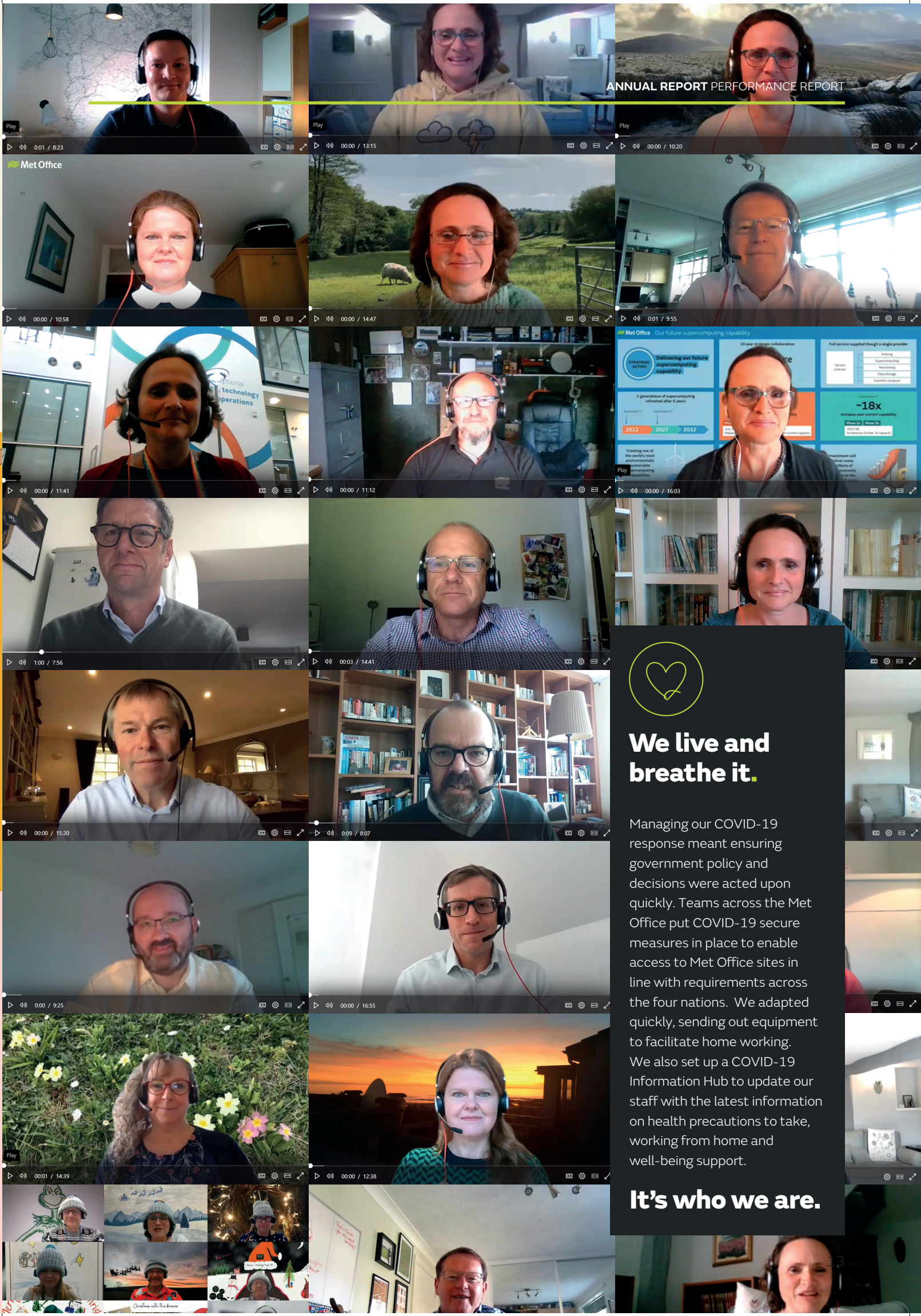
YOUNG
CONTAGIOUS.



NOT ALONE!

Share kindness.





ANNUAL REPORT PERFORMANCE REPORT



We live and breathe it.

Managing our COVID-19 response meant ensuring government policy and decisions were acted upon quickly. Teams across the Met Office put COVID-19 secure measures in place to enable access to Met Office sites in line with requirements across the four nations. We adapted quickly, sending out equipment to facilitate home working. We also set up a COVID-19 Information Hub to update our staff with the latest information on health precautions to take, working from home and well-being support.

It's who we are.



We're better together.

Misha Khan, Met Office Science Partnerships Analyst, set up the Black, Asian and minority ethnic (BAME) network. Misha's aim was to provide a safe haven and a voice for BAME colleagues, educating non-BAME colleagues, and improving BAME recruitment, representation, and retention. Given that the network was conceived just before lockdown, Misha went about driving uptake entirely remotely; setting up meetings, drumming up interest, canvassing participants, constructing a set of terms of reference, gaining the support of Met Office Chief Executive, Penny Endersby, as network sponsor, representing the cause at the Met Office Equality, Diversity and Inclusion Steering Board, and creating social connections. Misha's immediate target for the fledgling network was one of reach, and lots of it. Thanks to Misha's efforts, the network has quickly achieved office-wide as well as public domain visibility, is growing rapidly with exciting events such as Black History Month.

It's who we are.





We keep evolving.

The Customer Data Access project marks a significant milestone for us as it is the first time that we have exposed gridded data directly to our customers with a self service, self configurable, e-commerce capability. The service was constructed against a demanding timeline to meet the needs of data customers with its ability to serve data in a consumable format. The team focused on cost efficiency (for us and the customer) to enable the customer to take the data that they need (and only the data that they need) when they need it and in the format that they need it for their own solutions. The user-focused developmental approach also significantly contributed to the early engagement of the user community and ensured that the service was designed to lower the barrier to entry for complex geospatial data and consequently extend our reach into this market.

It's who we are.

Performance review

Summary

The Met Office has an annual set of performance measures which are agreed by the Met Office Board as a representative set of measures of how well the organisation is performing. The Key Performance Indicators (KPIs) are framed around the delivery and impact of the three strategic anchors, and related strategic actions, with a further KPI for financial performance and regulatory compliance.

Strategic actions are key short- to medium-term priority activities that are critical to the future success of the Met Office. They do not capture everything the Met Office will do but show where we must prioritise our efforts to achieve the Met Office vision.

Delivery measures assess our delivery of products and services to our customers, together with our internal operating systems and process effectiveness.

Performance against agreed milestones for each action or measure is monitored and reported on throughout the year. Performance against these measures is then linked to Met Office-wide corporate performance pay. This encourages employee engagement in driving the performance of the Met Office, as all employees can benefit.

Despite the significant challenges posed during the period, the Met Office has delivered every key target we set ourselves on our strategic actions. Having a clear vision of the future has been instrumental in the selection and focus of our strategic actions and will continue to do so. Our corporate vision to be 'Recognised as global leaders in weather and climate science and services in our changing world' provides us with a clear picture of where we are heading.

Finance and compliance

More detail on performance against financial KPIs is given in the Financial Review section. Both revenue and profit targets for 2020/21 were met.

The Met Office retained its certifications for both ISO9001 and ISO14001, demonstrating our Quality and Environmental Management Systems continue to comply with established good practice.

To ensure a stronger response to growing cyber security threats, we introduced new training for all staff. Our people are our strongest asset and increasing their knowledge and awareness will have the greatest impact on our cyber security. We set a target of 85% completion of this training and exceeded this with 93% of staff completing the training during the year.

Excellent people and culture

The success of every organisation depends upon the quality and commitment of the people it employs. That is even more true in a high-skill, scientifically-driven organisation like the Met Office. It is for this reason that this People Strategy forms one of three anchors in our Corporate Strategy. In it we set out how we plan to recruit, retain, develop, engage and deploy staff from all disciplines to ensure that we can succeed in a context of rapid change, both technological and political. We want to ensure that the Met Office has access to people with the right talent and skills to deliver our future business and that every staff member can develop their skills to enable them to have a fulfilling and adventurous career with us.

As part of our strategic action to transform our leadership for the future we successfully transitioned to a new organisational structure in January 2021. This structure will ensure that the Met Office is best designed to achieve our purpose and vision, making sure that we are recognised as global

leaders in weather and climate science and services in a changing world, not only today but well into the future.

The new structures will benefit the Met Office through the whole lifecycle of our science and services by ensuring that we know what new products and services we have agreed to produce; we have in place the science and technology to support them; and we manage the lifecycle of our products and services.

To succeed in delivering our vision the Met Office will need to draw on talented people from the most diverse range of backgrounds and thinking styles. In January 2021 we launched our new Equality, Diversity and Inclusion (ED&I) Strategy. We have always been committed to ED&I but now, for the first time, we have a clear line of sight from our Corporate Plan, through the People Strategy, to embedding a coordinated approach to enhancing ED&I at the Met Office via the new ED&I Strategy and Action Plan.

Linked to this work we have also transformed how we manage our people data. In May 2020 we launched People Hub, our new single source of people data for the Met Office. This new system will enable improved people processes and support all of our people information requirements.

Exceptional science, technology and operations

Our reputation is built on continually pushing the boundaries of scientific, technological and operational expertise to meet current and future grand challenges. We must remain pioneering in these areas to achieve our vision as global leaders.

At the forefront of this is ensuring that our supercomputing capacity meets future demands and that our next generation of weather and climate models are ready for the supercomputers of the future. Following on from the approval of up to £1.2 billion of investment in this capacity last year, we have successfully completed the procurement exercise that will deliver our supercomputing capacity for the next ten years. We also reached key milestones on our preparations for the next generation of modelling capability and our understanding of the changes we need to make to how we use and manage data to fully exploit this new capacity.

We won't be able to fully exploit the opportunities presented by the new supercomputer without continuing to develop and seek out opportunities to partner with other weather and climate experts across the world.

We also continue to deliver high quality science and research as well as improving our forecast accuracy.

Extraordinary impact and benefits

To make a difference we know we must focus everything we do on delivering greater benefit and impact to our customers, keeping our eye firmly on the ends rather than the means. This means getting our essential weather and climate data in the hands of those that need it. We recognise that we need both technology and processes to enable others, as well as our own experts, to discover, interact and access our data easily, maximising its value and benefit.

As part of this work, the target operating model for our Common Data Platform programme was approved in September 2020. The programme aims to make all the world-leading environmental data that is collected and created by the Met Office available for exploitation by our people, our services, our customers, and our partners. During August 2020 the global model Application Programming Interface (API) also moved to public beta stage, which means that we now have an externally facing global model API service that can be accessed through the Met Office Weather DataHub.

Our Future of Operational Meteorology Programme (FoOM) reached a key milestone with agreement of its model design and implementation plan in September 2020. This programme aims to build the new capabilities we will need to help us thrive and compete, and to meet the needs of our customers in terms of accuracy, timeliness and consistency.

During the year we also set ourselves an ambitious new target, with the Met Office Board approving our plan to achieve net zero carbon dioxide emissions by 2030. This forms part of our contribution to the UK Government's wider target for 2050. The second phase of net zero will involve putting in place a detailed delivery framework to manage the activities and behavioural changes needed to ensure we reach our target on time.

Financial review

Summary

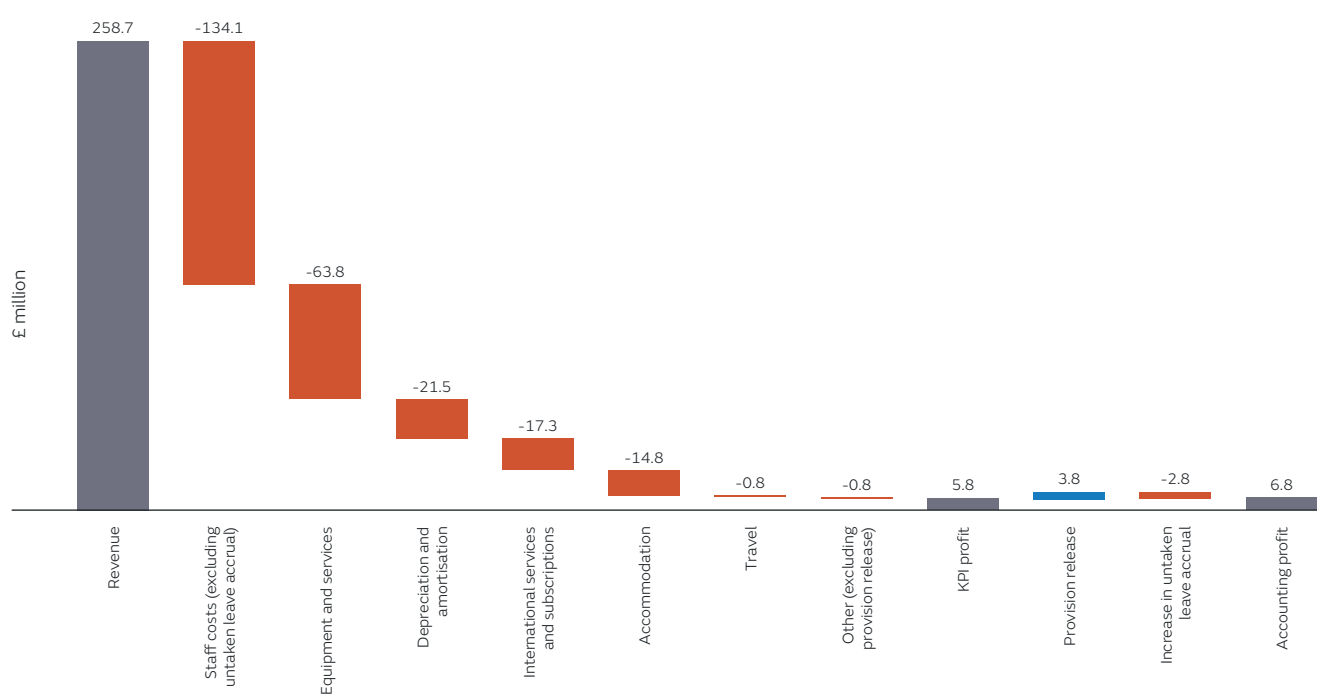
The Met Office met both of its financial targets for the year:

Key performance indicators (KPI)	Target (£m)	Achieved (£m)
Total revenue	256.7	258.7
KPI profit	4.6	5.8

KPI profit is adjusted for items judged as not being related to underlying performance:

	£m
Reported operating profit	6.8
Adjustments	
Add back increase in untaken leave accrual	2.8
Less release of provision	(3.8)
KPI profit	5.8

Operating profit



Revenue

Most Met Office revenue is derived from government contracts, for which services continued to operate as normal during the pandemic. We recognised additional funding of £6.9m for the Met Office's next generation of supercomputer as well as increasing our delivery for the Newton Fund (£2.7m) and the Strategic Priorities Fund (SPF, £3.7m). However, international activity was reduced by £3.5m and commercial revenue streams were impacted to the extent that income derived from aviation fell by £1.8m due to the impact of COVID-19 restrictions on these sectors. Total revenue was £9.4m higher than in 2019/20.

Operating costs

Operating costs increased by £17.9m. Staff costs have increased by £12m, partly due to an increase in staff numbers required to deliver services and partly due to an increase in the cost of untaken annual leave (£2.8m). The demand for resource needed to deliver strategic actions has also increased leading to higher contractor (£4.7m) and services (£4.0m) costs. There has also been a net increase (£2.0m) in external defrayment costs linked to the changes in Newton and SPF revenues. Cost increases have been offset by both a reduction in travel costs (£3.0m) due to COVID-19 restrictions, and the release of a provision for a reclaim of funding received from the European Commission (£3.7m). This release comes as a final assessment of amounts reclaimed is likely to be substantially lower than originally claimed.

Dividends

Total dividend payable to our owner, BEIS, is £6.5m (2019/20 £8.5m).

Cash flows and liquidity

The Met Office holds cash balances primarily to meet short term commitments as they fall due. In the medium to long term the Met Office also meets commitments to EUMETSAT for the funding of meteorological satellite programmes.

Cash balances held reduced from £49.4m to £29.8m. Operating activities generated a cash surplus of £15.9m. Loan funding of £49.0m was also received to support investment in EUMETSAT satellite programmes. Payments to acquire assets, including payments to EUMETSAT, were £59.1m. Loan repayments (£16.8m) and dividend payments (£8.5m) were also made.

Borrowings

Under the Met Office Trading Fund Order and Framework Document, the sole provider of loan funding is the Met Office's sponsor department, BEIS. Therefore, exposure to liquidity risk is limited to these arrangements. As at 31 March 2021, £152.2m in loans were outstanding (31 March 2020, £117.7m). Loan funding requirements are anticipated to continue in future years to finance the UK contribution to the EUMETSAT satellite programmes.

Sustainability summary

Overall strategy for sustainability

At the Met Office, we are committed to meeting our objectives in a sustainable way. This means minimising our environmental impact, acting in a positive way in our dealings with our staff, customers and suppliers

and maximising our contribution to the wider community. We are also committed to encouraging continued improvement in our environmental performance while meeting the increasing demands for weather and climate information. During the year we have reviewed the full extent of the carbon footprint from our operations and the action we can take

to reduce this in future. As a result we have set out a pathway to achieve Net Zero greenhouse gas emissions by 2030, supporting the Government's wider commitment to Net Zero for the UK. During the year we have taken a number of actions to reach this goal, in particular switching our electricity supply to a fully renewable tariff.

Greenhouse gas emissions (GHG) – Exeter and frontline sites		2017/18	2018/19	2019/20	2020/21
Non-financial indicators (tCO ₂ e)	Total gross emissions for scopes 1 & 2 (including white fleet)	21,377	17,709	16,483	14,635
	Fugitive emissions (refrigerant gas leaks from cooling units/systems)	19	31	294	301
	Gross emissions scope 3 - business travel (less white fleet)	2,478	2,654	2,207	96
Related energy consumption (MWh)	Electricity: non-renewable	56,838	57,716	59,836	56,595
	Electricity: renewable – see Performance Commentary	-	-	-	-
	Electricity: good quality combined heat and power	-	-	-	-
	Self-generated renewable (solar panel installation at Exeter)	224	236	253	229
	Natural gas	5,221	5,468	5,413	5,061
	Gas oil (diesel)	26	26	11	1,827
Financial indicators (£)	Expenditure on energy	5,875,046	6,704,577	7,731,729	7,633,897
	Expenditure on business (administrative) travel	2,217,499	2,013,875	1,894,015	260,488
	Expenditure on Carbon Reduction Commitment Energy Efficiency Scheme allowances (to 2018/19 after which scheme ceased)	347,896	286,772	N/A	N/A

Energy

The energy consumed by our headquarters-based High-Performance Computer (HPC) accounts for most of our energy consumption and associated emissions. Electricity consumption for our Exeter offices and IT halls is at steady state. We seek to reduce our energy consumption where we can but cannot avoid the significant electricity requirements of the HPC which underpins our work.

However, we have made the move to the 'greenest' supply available to us by using the EDF Renewable for Business (R4B) tariff. The Government's Crown Commercial Services (CCS) Energy Team has agreed with the Energy Supplier EDF Energy on the CCS Electricity contract to provide a R4B tariff at a cost premium of 0.6% on the energy bill. This electricity is generated through a mix of non-natural renewable sources (e.g. biomass) at circa 60% and natural sources

(e.g. wind/solar) for the balance. This tariff is classified as "100% renewable" and therefore is rated as "zero carbon" by the Department for Environment, Food & Rural Affairs (DEFRA); we use this definition for monitoring our progress toward our Net Zero target. However, as a Central Government funded body, for the purposes of this annual report we report our energy usage in accordance with the standard emissions factors for the UK electricity grid.

Our fugitive gas emissions relate to losses from our air conditioning units and chillers which we use to cool our IT. The losses are from instances when, despite regular maintenance taking place, the equipment, which is now near end of life, has suffered unexpected failures.

The gas consumption for FY19/20 has been amended from 3,529 MWh to 5,413 MWh following receipt of more accurate data.

Gas is used to heat our building and despite low occupancy due to COVID-19 we have not seen a significant reduction. This is due to the need to maintain a constant temperature in the building whilst increasing the fresh air input to meet COVID-19 requirements.

The increase in usage of gas oil (diesel) in this FY was due to a power

interruption/failure at our Exeter HQ leading to the standby generators coming online to provide power for the super computers.

Our Solar PV installation at our Exeter site continues to meet its projected outputs.

Travel

Travel has been restricted during this FY due to the COVID-19 lockdown and in many cases we have been able to use technology to facilitate virtual meetings. It is our intention to continue this where possible. If travel is required, our travel policy encourages staff to question whether their planned travel is essential. If the trip is necessary then staff are encouraged to use the most sustainable form of transport. We calculate the emissions from all of our

business journeys and have revised the emissions data for our business flights to use the 'with Radiative Forcing' conversion factor to more accurately reflect the impacts of flying. Future targets have been set for the business to reduce business travel emissions as part of our overall pathway to Net Zero emissions.

Recycling

In 2020/21, we achieved a recycling rate of 75.2% and a recovery rate of 24.4% which means that less than 1% of our waste went to landfill. We currently recycle cardboard, metal, batteries, ICT/electrical items, glass, green waste and all types of plastic. We have a wide range of recycling facilities on site which staff are encouraged to use facilities on site which staff are encouraged to use.

Waste		FY17/18	FY18/19	FY19/20	FY20/21
Non-financial indicators (t)	Total waste arising	187.1	170.8	171.2	53.3
	Recycled and re-used	124.6	107.3	117.8	40.1
	Information communication technology waste recycled and re-used (externally)	9.5	14.2	19.6	5.2
	Composted	27.6	9.6	19.2	11.5
	Anaerobic digestion	32.2	30.5	28.0	2.7
	Incinerated/energy recovery	28.0	32.2	25.1	10.3
	Landfill	0.5	0.8	0.2	0.2
Financial indicators (£)	Total disposal cost	87,783	91,317	40,754	40,754

Waste

In 2020/21, our total waste arising at our Exeter site was 53.3 tonnes – a significant decrease on our 2019/20 figure of 171.2 tonnes due to the absence of the majority of our staff from our building due to the COVID-19 lockdown restrictions.

We continue to strive to keep our total waste to a minimum through initiatives such as selling old office furniture for re-use and ensuring that all our IT waste is either re-used or recycled. We continue to send all our residual waste for incineration for Energy from Waste at a local facility in Plymouth.

We work closely with our suppliers and contractors to ensure that they remove all of their waste and packaging from our sites. At our headquarters contractors are briefed on our waste and recycling policies.

Water			FY17/18	FY18/19	FY19/20	FY20/21
Non-financial indicators (m³)	Water consumption	Imported (potable)	33,280	35,694	33,693	19,603
		Abstracted (borehole)	21,334	20,019	20,534	27,508
		Grey water (harvested rainwater)	-	-	-	-
		Recycled water (discharge from cooling towers)	6,499	7,149	5,498	4,633
Financial indicators (£)	Water supply costs		66,467	68,311	64,897	39,987

Finite resources (Water)

We have metering at our headquarters to monitor and record our onsite water usage, most of which goes to cool our HPC.

We use a mix of mains water and softened borehole water for this purpose. In July 2020, our borehole enhancement project was completed, increasing our water softening capability to enable us to meet a higher proportion of the demand from the borehole. A portion of the incoming mains cold water is still used to mix with the softened borehole water in order to prevent corrosion issues occurring with the cooling towers as advised by our water treatment specialist.



Professor Penelope Endersby
Chief Executive
30 June 2021

Biodiversity action planning

We are proud to have retained the Wildlife Trusts' Biodiversity Benchmark Award for our headquarters site where our staff-led Biodiversity Working Group continues to work closely with colleagues in our Property Management team to protect and enhance biodiversity. Our ongoing work includes grassland management to benefit different butterfly species and promote botanical diversity. Due to the COVID-19 lockdown, we were unable to complete the usual number of butterfly transects, bird surveys and reptile refugia checks during the year. However, we have been able to complete some biodiversity enhancement works on site including a seasonal pond to promote amphibians and planting some Aspen, Wild Cherry and Black Poplar trees.

Sustainable procurement

We continue to focus on developing links with Small and Medium Sized Enterprises (SMEs), delivering real benefits in terms of agility, flexibility and innovation. Expenditure with SMEs averaged 36.7% of spend in the last financial year, therefore exceeding the Government Target of 33% of spend with SMEs by 2022. In addition, the Commercial team are closely involved with the Environmental Policy Committee and are currently developing a baseline of supplier carbon footprints to support our aim to achieve Net Zero emissions by 2030. Having led the initiative to move electricity tariffs to a "green" tariff from 100% sustainable sources this year, the Commercial team is now developing strategies to incentivise suppliers to sign up to real, sustainable reductions in their carbon footprints as part of our overall approach to procurement.

As a signatory to the Government Prompt Payment Code, we are committed to making timely payments to suppliers, and are actively promoting and enforcing the cascade of such terms from strategic suppliers to their related sub-contractors.

Corporate governance report

Directors' report

The following items, required as part of the Directors' report, are included in the Governance Statement on page 26:

- Composition of the Met Office Board.
- Disclosure of other interests held by members of the Met Office Board.
- Disclosure of personal data-related incidents.

Statement of the Met Office and Accounting Officer's responsibilities

Under section 4(6)(a) of the Government Trading Funds Act 1973, HM Treasury has directed the Met Office to prepare a statement of accounts for the 2020/21 financial year in the form and on the basis set out in the Accounts Direction issued on 24 December 2020 and in guidance on accounting for grants received during 2017.

Accounts are prepared on an accruals basis and must give a true and fair view of the Met Office's state of affairs as at 31 March 2021 and of the income and expenditure, changes in taxpayers' equity, and cash flows for the financial year. In preparing the accounts, the Accounting Officer is required to comply with the requirements of the Government Financial Reporting Manual and in particular to:

- observe the Accounts Direction issued by HM Treasury, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis;
- make judgements and estimates on a reasonable basis;
- state whether applicable accounting standards, as set out in the Government Financial Reporting Manual, have been followed, and disclose and explain any material departures in the financial statements;

- prepare the accounts on a going concern basis; and
- confirm that the Annual Report and Accounts as a whole is fair, balanced and understandable and take personal responsibility for the Annual Report and Accounts and the judgements required for determining that it is fair, balanced and understandable.

HM Treasury has appointed the Chief Executive of the Met Office as the Accounting Officer for the Trading Fund. Her responsibilities as Accounting Officer, including responsibility for the propriety and regularity of the public finances, for which she is answerable, for keeping of proper records and for safeguarding the Met Office's assets, are set out in Managing Public Money published by HM Treasury.

As the Accounting Officer, I have taken all the steps that I ought to have taken to make myself aware of any relevant audit information and to establish that Met Office's auditors are aware of that information. So far as I am aware, there is no relevant audit information of which the auditors are unaware.

Governance statement

Scope of responsibility and purpose of the governance statement

As Accounting Officer, it is my responsibility to ensure that there is a sound system of governance, risk management and internal control in place; and that Met Office business is conducted in accordance with Managing Public Money to ensure public money is safeguarded, properly accounted for and used economically, efficiently and effectively.

The Governance Statement, for which I, as Accounting Officer, take personal responsibility, gives a clear understanding of the dynamics of the Met Office and its control structures. These control structures provide an adequate insight into the business of the Met Office and its use of resources to enable me to make informed decisions about progress against business plans and, if necessary, steer performance back on track. In doing this, I am supported by a governance framework that includes the Met Office Board, its Executive Sub-committees, Internal Audit and senior management.

This statement also explains how the Met Office has complied with the principles of good governance and reviews the effectiveness of these arrangements.

Governance structure

Our governance structure

My colleagues and I, as members of the

Executive Board, remain accountable to and open to challenge, advice and scrutiny from the Met Office Board. In turn, both the Executive Board and the Met Office Board are accountable to and act under delegated authority from our Ministerial Owner at the Department for Business, Energy and Industrial Strategy (BEIS).

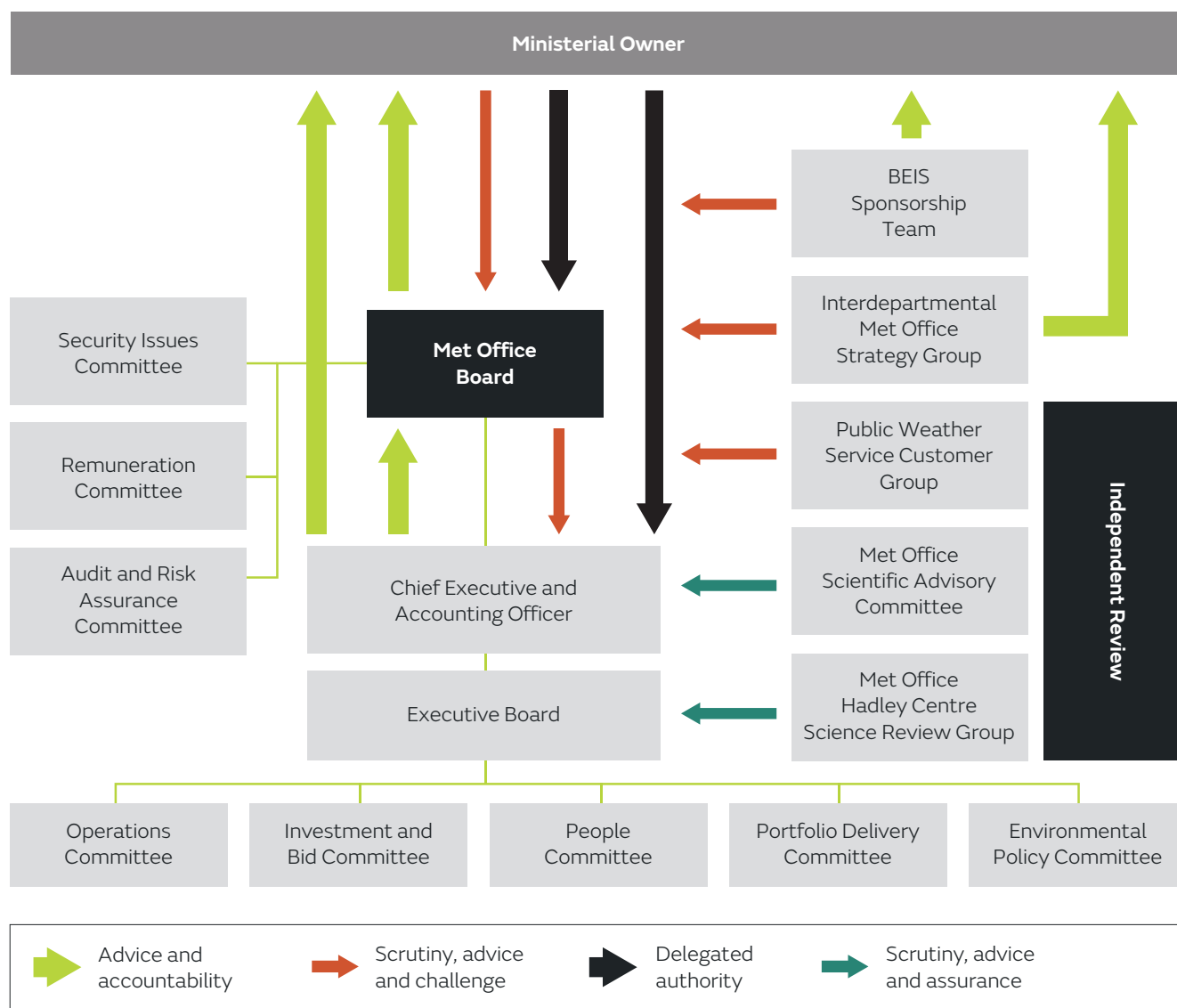
Following the launch of our refreshed Corporate Strategy last year, we undertook a review of our operating model which led to a revision of Directorate structure, with a view to aligning this with effective strategic delivery and meeting the evolving needs of our customers. Planning for our organisational redesign was undertaken during the early stages of 2020. Implementation of the new structure began at the beginning of the financial year. During this phase, a number of new senior appointments were made and the future team structures for all staff members were confirmed. Great care was taken particularly in light of the pandemic to ensure full operational services were maintained during the process. We will move to the full operating capability of the new structure during the new financial year. The Executive Board and I have ensured there is a clear allocation of roles and responsibilities within operational departments to facilitate the implementation of strategic objectives.

As part of the change we created a new Markets Directorate led by Ian Cameron, to provide one consistent interface to manage our customer and stakeholder relations. We welcomed Simon Brown as Services Director to head up and ensure the resilience of our delivery of ongoing services to customers and the public. Elizabeth Harris joined us as Programmes

Director to oversee and co-ordinate the delivery of our significant portfolios of strategic and business change. We also created a wider Extended Leadership Team of Associate Directors and a subset of Principal Fellows to support the Executive Board in strategy implementation and business delivery.

The Executive Board, which I chair, brings together, through the Executive Directors, the activities of the Directorates. It co-ordinates the oversight and delivery of our business operations. The Executive Sub-committees support the Executive Board in its management and implementation of its responsibilities. In addition to the four Executive Sub-committees in operation last year, we created the Environmental Policy Committee to oversee the development of our net zero strategy and our Environmental Management System. As part of the organisational redesign, we reviewed the roles of these Executive Sub-committees resulting in a number of changes to their remits in the new financial year to facilitate co-ordination of the new Directorate structure as effectively as possible.

For the majority of the year, the Governance Group, incorporating the Risk Management, Internal Audit and Legal functions, continued to report to me, as Accounting Officer, to ensure a direct flow of information on risk and assurance to the Executive Board. As part of the reorganisation the Governance Group was incorporated into the Office of the Chief Executive Officer. This still reports to me but has some additional responsibilities to ensure the efficient operation of the Executive and Met Office Boards, as well as their Committees.



There are a number of working groups providing specialist advice to the individual committees.

NOTE: The Audit and Risk Assurance Committee provides advice and assistance to both the Board and the Accounting Officer; it also has the role to receive relevant reports from the Accounting Officer.

Role of the Met Office Board

The Met Office Board challenges and supports the Executive team and carefully scrutinises its proposals and performance, particularly in relation to the development of the Met Office's long-term business strategy and delivery of the Corporate Plan. It agrees and monitors performance against annual Key Performance Indicators that are aligned with strategy. In addition, the Met Office Board takes an overview of corporate risk and works with the Executive Board to agree the organisation's risk appetite.

Met Office Board composition

The Chair is responsible for leading the Board and ensuring that it is effective in discharging its role. He is supported by additional non-executive directors (NEDs), chosen to ensure an appropriate mix of skills and experience. The Met Office Board has three committees – the Audit and Risk Assurance Committee, the Remuneration Committee and the Security Issues Committee, each chaired by a non-executive Board member or the Board Chair.

The Board's membership aims to be diverse and to incorporate a range

of skills, experience and viewpoints. Overall Board composition aims to reflect a range of backgrounds and an appropriate mix of expertise to guide the Met Office's Strategy including scientific expertise, experience of financial reporting and organisational controls and the ability to champion the work of the Met Office. Besides a BEIS representative on the Board, appointments are made through the government's Public Appointments process and approved by the Minister. In addition, a Trade Union representative has right of attendance at Board meetings.

The Board remained unchanged for the majority of the year. Robert Drummond's term of office came to an end in March 2021 when he stepped down. Sir John Beddington, who has provided the Board valuable longstanding service, including a spell as acting Chair, will step down in the new financial year. After an appointment process with a strong and diverse field of candidates, three new independent non-executive directors were appointed. Professor Jordan Giddings, Anusha Shah and Christine Ourmières-Widener bring experience in the fields of scientific research and innovation, environmental engineering and aviation respectively.

Met Office Board activities in 2020/21

During 2020/21, the Met Office Board held six regular Board meetings. A summary of each Board meeting is published on the Met Office website.

As a result of COVID-19 restrictions all Board meetings were held virtually. Despite the change in format, the Board meetings benefited from active participation by the Directors and covered the full range of agenda items, allowing the Board to function normally throughout the year.

Given the circumstances that prevailed for the year, a key area of discussion related to the working arrangements in place during the pandemic. The Board was keen to ensure staff well-being and mental health were prioritised and actively supported by executive management, while still maintaining our ability to fulfil our commitment to deliver critical services to our customers while working remotely. In this context the Board reviewed workforce data and new working arrangements. It considered the resilience, controls and risks around these arrangements as well as the lessons learnt in responding and adapting to the pandemic. The Board has also looked forward to the

potential opportunities to adopt new, more flexible, working arrangements after lockdown.

Following the launch of the new corporate strategy in October 2019, the Board reviewed the development of the strategy and the progress of the associated strategic actions. A key element of the strategy, following the award of funding announced by the Minister in February 2020, was the procurement of the Met Office's new supercomputer capacity. With increasing computing capacity, large scale data management has never been more central to the Met Office's planning. The Board held several sessions considering data strategy and the infrastructure platforms needed to handle the data. The wider data landscape and the increasing prevalence of partnerships and collaboration among international meteorological services were debated in this context.

The Chair of the Public Weather Service Customer Group (PWSCG) attended sessions at two Board meetings. The agreement with the PWSCG was extended for this financial year and a new customer agreement is being developed for the next four years, aiming to deliver enhanced outcomes for the Met Office's largest government customers and the wider public.

With the approach of the COP26 conference in Glasgow at the end of 2021, the Board reviewed the work of the Hadley Centre Climate Programme, which has been leading UK climate research for 30 years. The Board also engaged with the development of the Met Office's own net zero strategy, to ensure its activities aligned with the scientific need to address climate change.

The Board regularly discussed the Met Office's budget, financial performance and progress in meeting targets and key performance indicators (KPIs). As a result of external circumstances which included delays to the government's

comprehensive spending review and potential variations in customer income and funding streams during the pandemic, particular focus was paid to financial risks. A close watch was kept on cash resources and exercises were completed to assess different short- and long-term financial scenarios. The Board also devoted time to the development of the Met Office's corporate KPIs. These were considered in the context of the corporate strategy and aligned with longer-term objectives, while setting specific individual year targets focused on enhancing the impact and benefit of the Met Office's work and delivering its strategic purpose of helping people make better decisions to stay safe and thrive.

The Board receives comprehensive management information, in the form of dashboards and financial reports, allowing the Directors to assess financial and business performance effectively and objectively. The quality of information provided was assessed in the annual board effectiveness review and was rated highly by all Directors.

In previous years the Board arranged a number of meetings at the sites of key strategic partners to enhance mutual understanding and to foster constructive relationships. This has not been possible during the pandemic. Instead, a number of key customers and guests have been invited to attend Board sessions virtually. These have included the Civil Aviation Authority, the Environment Agency and the Maritime and Coastguard Agency, as well as a presentation from Switzerland by the co-author of a World Bank Global Fund for Disaster Reduction and Recovery report on partnerships in national meteorological services.

These virtual sessions proved very successful and while there remain benefits to visiting customers on site on some occasions, we will consider more online meetings in future years in order to reduce our carbon footprint.

Audit and Risk Assurance Committee

The Audit and Risk Committee (ARAC) supports the Board in its responsibilities to assure that the organisation's system of risk management, control and governance is designed appropriately and works as intended to meet the needs of the Met Office. The Committee met four times during 2020/21 to review the organisation's performance and the framework for assessing and managing risk. It met with, and received reports from, the Chief Executive and other senior executives. It reviewed the work of external and internal audit and met regularly with the Corporate Risk Manager and risk owners. In line with good practice, the Chair met separately with the Head of Internal Audit and the External Audit Engagement Director without members of the executive management present.

The results of the Internal Audit team's work, including assurance ratings for individual audits and summaries on the progress of the implementation of agreed actions, were reported to members of the Committee on a monthly basis, as well as at each Committee meeting. The Chair of ARAC reported to the Met Office Board after each meeting.

The Committee reviewed the nature and status of key corporate risks, along with details of mitigating actions being taken. A number of key strategic risks were looked into in more detail, particularly those related to the procurement of the supercomputer and the programmes designed to deliver the associated supercomputer benefits.

Science and technology assurance frameworks were reviewed by the Committee, identifying key controls and the role of external bodies in providing assurance on matters requiring subject matter expertise.

In addition, the Committee received compliance reports on whistleblowing, counter fraud measures and data protection.

BEIS Sponsorship Team

The BEIS Sponsorship Team advises BEIS Ministers on the management of the Government's interest in the Met Office. A BEIS representative sits on the Met Office Board and its committees.

Role of Chief Executive and Accounting Officer

In my role as Chief Executive, I am responsible for the day-to-day leadership and management of the Met Office. I am accountable to the Ministerial Owner and the Met Office Board (acting, where appropriate, on the Ministerial Owner's behalf) for the performance of the Met Office in accordance with the Met Office Framework Document and Corporate Plan. I am also Accounting Officer for the Met Office, personally responsible and accountable to Parliament for the organisation and quality of management in the Met Office, including its use of public money and the stewardship of its assets. As Chief Executive, I chair the Executive Board, which is responsible for supporting me in the implementation of the Strategy agreed by the Met Office Board. I completed Accounting Officer's training during the year.

Additional review bodies

The following bodies provide additional independent review of Met Office activities:

- **Interdepartmental Met Office Strategy Group (IMOSG)** – comprising relevant government departments, the devolved administrations and the Met Office, IMOSG meets periodically to review, at a strategic level, Government's overall priorities for the Met Office.

- **Public Weather Service Customer Group (PWSCG)** – oversees the Public Weather Service from a customer point of view, ensuring the quality, suitability and value for money of the service provided. The PWSCG comprises independent members and representatives from government departments, agencies, emergency responders, local authorities, the Scottish and Welsh Governments and the Northern Ireland Assembly. The PWSCG is chaired by Vice Admiral Duncan Potts and its Annual Report is available through the Met Office website.

- **Met Office Scientific Advisory Committee (MOSAC)** – provides an independent assessment of the quality and relevance of the Met Office's scientific research which underpins our weather, climate and oceanographic services. The Committee comprises external independent experts in the field of climate science, meteorology, oceanography or numerical weather prediction drawn from UK universities, and from meteorological services and climate institutions of other countries. MOSAC is chaired by Dr Gilbert Brunet.

- **Met Office Hadley Centre Science Review Group (SRG)** – provides an independent review, on behalf of BEIS and the Department for Environment, Food and Rural Affairs, of the climate research carried out by the Met Office Hadley Centre. The SRG is chaired by Professor Ted Shepherd.

Board and Committee attendance for the period 1 April 2020 to 31 March 2021

This table will be finalised after attendees at March ARAC and Board meetings are known.

Board or committee member	Dates served	Met Office Board	Audit and Risk Assurance Committee	Remuneration Committee	Security Issues Committee
Total meetings during period		6	4	2	2
Non-Executive Directors					
Rob Woodward Chair		6/6	4/4	2/2	2/2
Professor Sir John Beddington		6/6	-	1/2	2/2
Professor Alan Thorpe		6/6	3/3	1/2	2/2
James Partington BEIS Representative		6/6	3/4	1/2	-
Hunada Nouss Chair of ARAC		6/6	4/4	2/2	2/2
Robert Drummond	Until 22 March 2021	5/5	3/3	1/2	-
Catherine Quinn Chair of Remuneration Committee		6/6	4/4	2/2	2/2
Professor Jordan Giddings	From 15 March 2021	1/1	-	-	-
Christine Ourmières-Widener	From 15 March 2021	1/1	-	-	-
Executive Directors					
Prof Penelope Endersby Chief Executive		6/6	4/4	2/2	2/2
Nick Jobling Chief Financial Officer		5/6	3/4	-	-
Professor Stephen Belcher Chief Science and Technology Officer		5/6	-	-	-
Tammy Lillie Chief People Officer		6/6	-	2/2	-
Stephen Marshall Interim Chief Operating Officer	Until 27 November 2020	4/4	-	-	-
Simon Brown Services Director	From 28 September 2020	4/4	-	-	-

NOTES:

1. Following an initial 3-year term Robert Drummond was reappointed to serve as non-executive Director until 22 March 2021.

2. Jane Lancaster attended all Board Meetings as the Prospect Union Representative. Clare Wastenev, who is Head of Legal and Governance at the Coal Authority, attended Board meetings as an observer under the BEIS 'Open Boards Scheme'.

2. Rob Woodward, Professor Penelope Endersby and Nick Jobling were not members of ARAC but are regular attendees and are therefore included for completeness.

3. Neil Hartley (Director of Finance at the Intellectual Property Office) attended ARAC as a co-opted member to provide additional financial expertise. He stepped down after the December meeting. Penny Holt (Chief Financial Officer at the National Physical Laboratory) was co-opted to ARAC in his stead and attended the March 2021 meeting.

4. Andrew McKean attended the September Board and October ARAC as Acting CFO on behalf of Nick Jobling.

5. Alan Thorpe attended the May ARAC meeting as an observer. He was then appointed to ARAC and attended the remaining three meetings as a member of the Committee.

6. James Partington - Paul Riches attended the ARAC instead of James Partington in May so there was a BEIS representative at all 4 meetings.

7. The National Audit Office appointed agents are invited to attend ARAC meetings where applicable and have been in attendance at 2 meetings.

8. An additional Board meeting was held on the morning of 1 July 2020 to sign off the annual report and accounts.

9. Anusha Shah has also been appointed as a new Non-Executive Director. Her contract did not commence until 1 April 2021 to allow for the completion of formal clearance checks and she will attend her first Board meeting in the new financial year.

Work of the Met Office Board and Committees

Evaluation of Board performance

The performance of the Met Office Board and the Audit and Risk Assurance Committee is evaluated each year. The 2019/20 review used a structured questionnaire, as used in previous years, to assess progress in the development and performance of the Board. The review demonstrated continued positive progress overall. Feedback was collated and reviewed by the Board to identify a number of action points for ongoing improvement. For 2020/21 an independent review will be conducted by an external firm.

The performance of the Executive Board and Committees is also subject to regular evaluation and review to gather feedback in order to continually improve their performance.

Conflicts of interest

The Met Office maintains a public Register of Interests that details company directorships and other significant interests held by Board members which may conflict with their responsibilities. The register has been reviewed at every Met Office Board meeting. Where appropriate, conflicts of interest were declared during 2020/21 and, where there was any perceived conflict, the member in question was excluded from the relevant conversation and any decisions made on that subject. The register is available to view by applying in writing to my Private Secretary at the Met Office, FitzRoy Road, Exeter EX1 3PB.

Compliance with the Corporate Governance Code

Where applicable, the Met Office has complied during 2020/21 with the provisions of Corporate Governance in Central Government Departments: Code of Good Practice April 2017.

Risk management

Risk management strategy and how the risk profile is managed

The Met Office continues to actively manage those risks that may impact upon the achievement of the Met Office Strategy.

Day to day risk management is fundamental to the continuing success of the Met Office's business. The identification, mitigation and escalation of risks is embedded as a key activity of Executive Directors and other senior leaders, across all business areas, programmes and projects.

Our risk management is aligned with Government best practice, in particular The Orange Book. We adopt a pragmatic approach, seeking to achieve a balance between mitigation and acceptance of risk, with targets set for individual risks. Our Corporate risk management processes support this and enable us to assess the potential impact of identified risks against our corporate risk appetite. This means that we can understand our risks and respond proportionately.

Accountability and responsibility framework for risk management

The Met Office Board and Audit, Risk and Assurance Committee review corporate risks on a regular basis. Internal ownership and management of corporate risks is provided by the Executive Board and Directors, who drive risk management from the top down, ensuring all major decisions are subject to risk assessment and effective mitigation. Bottom up risks and issues are also fed into the process from the sub-committees of the Executive.

Corporate risks are formally reviewed at Executive Board meetings on a quarterly basis, with a monthly summary provided between these

quarterly reviews. The Executive has also undertaken two dedicated risk refresh sessions during the year to ensure that our corporate risks remain relevant and accurately reflect latest developments, both internal and external to the Met Office. Individual Executive Directors also review risks within their directorates at least on a quarterly basis.

The Executive sub committees review significant business risks, opportunities and issues relevant to their area of control. They support and challenge the Executive Team in identifying risks and opportunities, highlighting areas where risk management could be enhanced and addressing those areas with the relevant managers.

The risk management role of other senior managers includes understanding and communicating the risk process and reporting requirements. This includes maintaining a risk register for each major activity and escalating matters where necessary.

Risk management information is used throughout the organisation:

- to inform the annual planning process;
- to inform key business decision-making processes such as corporate investment appraisals; and
- to inform the assurance needs of the organisation.

Risk appetite

Our risk appetite is the amount of risk we are willing to seek or accept in the pursuit of our objectives. The Met Office's risk appetite framework was reviewed and approved by the Met Office Board in January 2021. We have defined thirteen primary risk categories, each of which has a defined risk appetite statement.

These risk appetite statements provide clear, consistent guidance for

decision-making throughout the Met Office, setting an appropriate balance between uncontrolled innovation and excessive caution. Consideration of risk appetite improves the quality of risk conversations and enables us to prioritise our risks and manage them in an efficient manner.

Our risk appetite framework is reviewed annually to reflect any change to the organisation's corporate objectives and the external risk landscape.

Risk management assurance

The Corporate Risk Manager works across all levels of the Met Office to ensure quality and consistency in risk management. This includes undertaking quality assurance checks (to encourage compliance with risk management processes) and identifying areas of the business where risk management needs strengthening. Risk management training has been delivered online during the last year to raise awareness and offer practical advice on implementing effective management actions.

In the past year, an increased focus has been placed on ensuring the new Enterprise Portfolio Office manages its risks in line with existing corporate risk management techniques and templates. The Corporate Risk Manager has also worked cross-office to improve understanding of the new risk categorisation and associated risk appetite statements. Plans include a review of our impact criteria and potentially the introduction of a new tool to improve the ease and consistency of our risk reporting across the organisation.

The Audit and Risk Assurance Committee reviews the Corporate Risk Register three times per year and undertakes deep-dive reviews on specific risks. This gives the

Committee the opportunity to seek assurances on the management of risk from risk owners and the Corporate Risk Manager.

Key risks and issues arising

The 2020/21 financial year has proven to be unprecedented with the ongoing COVID-19 pandemic dominating the risk landscape. Our corporate risks reflect these challenges and acknowledge the potential opportunities that have arisen. Over the course of the year the number of risks, opportunities and issues being managed have increased. During 2020/21 our corporate risk register has included the following key risks and opportunities:

- ensuring the risks and issues presented by the COVID-19 pandemic are being effectively managed so that we continue to provide our critical services during these unprecedented times;
- communicating the value of our services at a time of increased pressure on public finances with the aim of securing an adequate funding settlement for future years;
- ensuring delivery of the approved supercomputing capability and of related programmes of change;
- maintaining our operational resilience during the pandemic, ensuring that our observations network is maintained, and our staff are able to deliver whilst working remotely;
- ensuring the Met Office was well prepared for the UK's exit from the EU at the end of the Transition Period;
- enhancing our approach to cyber security and ensuring heightened staff awareness during a period when the prevalence of malicious attacks has generally increased, often targeting increased vulnerabilities associated with home working;

- managing the opportunity to share our world leading expertise in climate science to support the UK Government in the run up to COP26.

- embracing the positive aspects of the new ways of working enforced by the COVID-19 pandemic, including but not limited to work/life benefits to current employees and opening up new avenues for recruitment where location is less of a limiting factor.

Other control and governance structures

Internal financial control

Financial authority and control are delegated throughout the Met Office. Different controls are applied depending on the level of financial commitment. Significant investments or commitments are subject to additional formal authorisation by the Investment and Bids Committee, Met Office Board or our owning Department, BEIS, depending on value.

Budgets, monthly forecasts and key performance indicators are used to monitor financial performance during the year. Variances and exceptions are highlighted, and corrective action is taken where necessary.

As well as ongoing operational controls, our audit plan assesses the potential risks around financial controls and any opportunities for fraudulent behaviour. Internal audits are conducted as part of planning to assure against these risks.

Quality Management System

To ensure the provision of robust and reliable services to its customers, the Met Office implements a Quality Management System (QMS) in line with international standards (ISO9001). The QMS is subject to interim reviews by external

auditors every six months and full re-certification every 3 years. This financial year audits were conducted remotely; nonetheless, positive feedback was received from the audits and full tri-annual recertification was achieved in July 2020. The auditor commented on the noticeable improvement in our governance and the excellent understanding of strategic direction in evidence from top to bottom of the organisation. An Environmental Management System (EMS) is also operated in line with ISO14001 and recertification was also obtained in July 2020.

Counter fraud

In April 2019, the Met Office was assessed as 'Met' on 11 of the 12 mandatory requirements within the Government Counter Fraud Functional Standard – GovS 013 – and 'Partially Met' on the remaining one, which related to our Counter Fraud Strategy. In June 2020 we provided an updated Counter Fraud Strategy to Cabinet Office as evidence of our compliance with all 12 mandatory requirements. We are awaiting feedback on the Strategy from BEIS and confirmation of our full compliance.

As an early adopter of GovS 013, we have volunteered to peer review the evidence of some other BEIS Arm's-length bodies (ALBs) as they seek to comply with the Standard. This is expected to take place in the next financial year. This exercise may also enable us to benchmark our own performance against peer organisations.

Alexander tax review

We promote transparency of the tax arrangements of our non-employed staff by ensuring we are fully compliant with the provisions in the Review of the tax arrangements of public sector appointees, HM Treasury, 2012. Contractor tax obligations are all assessed under HMRC IR35 regulations, ensuring that the correct amount of tax is paid.

Business-critical models

The Met Office is compliant with the principles in The HM Treasury Aqua Book: Guidance on Producing Quality Analysis for Government. The Met Office puts Quality Assurance at the heart of its development processes for all our business-critical models (for example, the Unified Model). The Met Office is in the process of developing major new systems:

- IMPROVER, a probabilistic post-processing system for use with ensemble weather prediction models and;
- Next Generation Modelling Systems, a new programme of work reformulating and redesigning our weather and climate prediction systems to fully exploit future generations of supercomputer.

Quality analysis/assurance throughout all development, including the application of secure segregated development processes, and the validation of the modelling system outputs ensures our models and codes are effective, efficient and safe to deploy, to preserve operational resilience.

Governance of knowledge and information assets

Knowledge and Information Management governance and policy making is managed under delegated authority from the Executive Board by the Chief Information Officer (CIO) who is also Senior Information Risk Owner (SIRO). The CIO is also the Executive Lead for Data, with overall accountability and ownership of the organisation's data and information assets. These roles are supported by Information Asset Owners (IAOs) with accountabilities for data and data services, and for corporate information.

Information Asset Guardians (IAGs) support the Data and Corporate IAOs in discharging their responsibilities. Together these roles ensure

information within their information portfolio is fit for purpose, used, shared and managed in accordance with its risk and criticality to the delivery of Met Office business objectives.

The Head of Data is responsible for organisation-wide non-corporate data and data services aligned with the vision and principles in the Data Strategy Framework, to provide open access to our data wherever possible and to innovate, operate in and stimulate the UK and global economies.

Governance of data and data services

The CIO enforces the principles for data and data services. The Executive Board and its Committees provide organisation-wide governance of knowledge and information including data and data services.

The Data Management Group, chaired by the Head of Data, agrees the actions to implement the Data Strategy Framework, escalating to the CIO and on to the Executive as appropriate. There is governance in line with each of the four data types (observations, predictions, guidance and research), across the data management lifecycle. There are two demand-side accountable owners for governing access to and best use of public task data and non-public task data, aligned with the external national and international data landscape.

The Data Management Group reviews the ongoing development of a data roadmap linking the external demand for our data with the life-cycling of data and data services.

Data IAOs identify and manage data assets and maintain a Data Catalogue, contributing to a review of responsibilities for data assets and their use in data services. IAOs review their Information Asset Registers and conduct Business Impact Assessments on their identified valued assets.

Governance of corporate information

The Head of Knowledge and Information Management is responsible for organisation-wide strategy and policy setting for corporate information assets and for ensuring the delivery of the Knowledge and Information Strategy. They also manage the training and awareness programme for the IAO and IAG community.

The organisational re-design has resulted in changes to the areas of accountability for some collections of corporate information assets and this has resulted in the reallocation of assets across IAOs and the identification of some gaps in asset ownership. New owners are being allocated for these gaps, in line with organisational changes, as individuals are appointed to senior management positions. Business Impact Assessments have been conducted with all IAOs in post to enable continuous review of the assets identified in the Asset Registers. Where assets are transferred to other IAOs these will be picked up during the 2021 review process along with any new assets identified by newly appointed IAOs. All new IAOs receive appropriate training.

The Corporate Information Management Group (CIMG), chaired by the Head of Knowledge and Information Management, provides a forum for the exchange of ideas and gives input on specific aspects of the approach and continued improvement in the way we manage corporate information assets. It did not meet in 2020 due to the impact of COVID-19 and changes arising from organisational restructure but is scheduled to meet in 2021.

Information security

Information security is owned at Executive Director level by a Senior Information Risk Owner (SIRO).

The SIRO is supported by Information Asset Owners (IAOs) who manage information assets across the whole of the Met Office, and one or more Information Asset Guardians (IAGs) support each IAO. The IAOs and SIRO work together to ensure business-critical and sensitive information assets are risk managed appropriately so that the value of our information assets is protected as described by our risk appetite. The CISO (Chief Information Security Officer) reports to the Associate Director of Technology and is responsible for the Security Risk Advice team, Business Continuity, Security Testing and Cyber Security Operations Centre (CSOC).

There have been no significant cyber or personal data breaches in 2020-21. However, the European meteorological community has experienced an increase in more sophisticated phishing attacks and therefore we have taken steps to review, invest in and strengthen security defences, taking into account the risk appetite of the organisation. The cyber and information security functions have responded to rapidly changing business needs due to COVID-19, specifically in relation to adapting security controls and guidance in support of remote working requirements.

As part of our regular activities the security testing team conducts ongoing internal exercises to assess the vulnerabilities of our infrastructure. In addition, we use external providers to conduct penetration tests across parts of our network to simulate realistic attack scenarios and ensure our defences adapt to the rapid evolution of new threats. This year testing highlighted that recent investments in cyber security were having a positive impact and had improved our resilience; however, as the range of threats continues to grow, further action will be required from our Cyber Security Enhancement Programme.

There is a Security and Resilience Management Group (SRMG), which meets quarterly, delivers wider governance and oversees cyber security, physical security and business continuity. The SRMG reviews risks to Met Office resilience, progress with improvement plans and reports progress to the Operations Committee.

The Met Office has evidenced how it complies with the Security Policy Framework and the four Cabinet Office Security Standards by completing the Departmental Security Health Check. We have also maintained certification against the National Cyber Essentials scheme, which helps us to demonstrate a good foundation of information security compliance to our partners and customers.

During 2020/21 the organisation has delivered the following, as part of its Cyber Security Enhancement Programme:

- the launch of an innovative new cyber security training campaign. This training consists of bite sized monthly modules which aim to create a culture of awareness and continuous improvement. In light of an increase in recent attacks, this training has never been more important and our staff have responded exceptionally well both in terms of uptake and behaviour;
- improvements in tooling and a survey of our hardware and software assets. This is particularly important due to remote working;
- significant improvements to automated patching and vulnerability management including the implementation of evergreen patching for browsers.

Controls around the protection of personal data continue to have a high priority. During the year there have been a small number of low-level personal data breaches.

All data breaches are referred to our Legal Manager (acting as the Met Office's Data Protection Practitioner) to determine the requirement for onward reporting to BEIS (the data controller) and to determine whether individual cases carry sufficient risk as to require reporting to the Information Commissioner's Office (ICO). No data protection incidents were reported to the ICO during 2020/21.

Monitoring governance performance and effectiveness

Internal Audit annual opinion

The Head of Internal Audit has given moderate assurance over the adequacy and effectiveness of the Met Office's systems of governance, risk management and internal control. The moderate rating is consistent with the prior year, but the audit findings overall indicated improved assurance. The opinion is based upon all the internal audit work performed (assurance and consultancy), engagement with other assurance providers such as the National Audit Office (NAO), Lloyd's Register Quality Assurance (LRQA) reviews of ISO compliance, the Executive Board and supporting Committees, the Corporate Risk Manager and staff in general. The opinion considers new findings as well as action taken by management over the last year to address issues.

Corporate governance within the Met Office continues to improve. An audit of governance gave a moderate assurance rating, reflecting the changes to the structure of the organisation and greater clarity around roles and decision making between the Executive Board, its sub-committees, and the Directorates.

Internal Audit assessed the systems of governance, risk and control through a planned programme of assurance-generating work throughout the year. All audits are risk based and the audit plan was adjusted to pay particular attention to the risks and impacts of COVID-19. One audit gave positive assurance over the Met Office's approach to managing the risks and impacts upon staff, customers, systems and business continuity. A lessons learned exercise ensured processes have been strengthened, where needed.

Annual assurance statements were obtained from Executive Directors describing the extent to which, and how, they have complied with internal rules, regulations and adjusted to the impact of COVID-19. Internal Audit reviewed these statements and found no material issues or trends.

An external assessment conducted on behalf of the Institute of Internal Auditors found that the Internal Audit function complies with the Standards, Definition, Core Principles and the Code of Ethics, which form part of the mandatory elements of the Public Sector Internal Audit Professional Standards and the Institute of Internal Auditors' International Professional Practices Framework, the globally recognised standard of quality in Internal Auditing.

Accounting Officer review

I have based my opinion of our system of governance, risk management and internal control on a number of lines of evidence. These include the Internal Audit opinion, findings of external audits including the National Audit Office and ISO9001 and ISO14001 during the year, Directors' annual assurance statements, the view of our Audit and Risk Assurance Committee and routine monitoring of performance and control systems through our Executive Board's oversight of directorate and corporate KPIs.

I agree with the internal auditor's opinion that we have moderate but improving control overall. The new governance structures are well bedded in and we are finessing their use. There are plans in place to address all improvement areas raised, most especially organisational and process design and clarity and cyber assurance.

Significant governance and control issues

The FP7 audit

The issues which were raised by this audit relate to an earlier period and were addressed by the adoption of successively more mature timerecording systems. We continue to engage in a process of resolution with the European Commission regarding the historic audit. Progress has been made during the 2020/21 financial year, which has allowed us to refine and reduce the provision made in the financial statements.

Accounting Officer's conclusion

Taking into consideration all of the evidence provided with regards to the production of the Annual Governance Statement, I conclude that the organisation's overall governance, risk management and internal control structures are effective.

Remuneration and staff report

Remuneration report

Remuneration policy

The remuneration of those who serve on the Met Office Board is disclosed within this report.

The following Executive members of the Met Office Board were members of the Senior Civil Service:

- **Professor Penelope Endersby,**
Chief Executive

The following Met Office Board members are also members of the Executive Board and are Met Office employees:

- **Nick Jobling,**
Chief Financial Officer
- **Professor Stephen Belcher,**
Chief Science and
Technology Officer
- **Simon Brown,**
Services Director
(from 28 September 2020)

Tammy Lillie is a Met Office Board member and a member of the Executive Board. Until 31 July 2020 she was engaged through an agency as Interim People Director. On 3 August 2020 she became a Met Office employee as Chief People Officer.

Andrew McKean was Acting Chief Financial Officer between 1 and 14 April 2020 and between 6 September and 12 October 2020 and so is included in this report.

The following Met Office Board members were also members of the Executive Board and were engaged through an agency:

- **Stephen Marshall,**
Interim Operations Director
(until 27 November 2020)

The Constitutional Reform and Governance Act 2010 requires civil service appointments to be made on merit on the basis of fair and open competition. The Recruitment Principles published by the Civil Service Commission specify the circumstances when appointments may be made otherwise.

Unless otherwise stated, the officials covered by this report hold appointments which are open ended. Early termination, other than for misconduct, would result in the individual receiving compensation as set out in the Civil Service Compensation Scheme. Further information about the work of the Civil Service Commissioners can be found at <http://civilservicecommission.independent.gov.uk/>.

Total remuneration includes salary, non-consolidated performance-related pay, benefits-in-kind and severance payments. It does not include employer pension contributions and the Cash Equivalent Transfer Value (CETV) of pensions.

Salary includes gross salary, overtime, non-consolidated pay, recruitment and retention allowances. Performance-related payments reflect performance levels attained as assessed during the appraisal process. Payments are non-consolidated and non-pensionable and represent part of Executive remuneration, which is at risk and must be re-earned each year. Amounts shown in the table relate to the performance attained in the relevant year and are paid in the following year.

Pay multiples (audited)

The banded remuneration of the highest-paid Director in the Met Office in the financial year 2020/21 was £150,000 to £155,000 (2019/20 £150,000 to £155,000). This was 3.6 times (2019/20 3.7 times) the median remuneration of the workforce, which was £42,440 (2019/20, £40,759). In 2020/21, no employees (2019/20, nil) received remuneration in excess of the highest-paid Director.

The above disclosures do not take account of amounts paid to contractors as it is not possible to distinguish the amount received by individuals from the cost to the Met Office. The annualised costs of some contractors exceed the amount paid to the highest paid director above. This includes contractors who were also Directors and their cost to the Met Office has been disclosed elsewhere in the remuneration report.

Remuneration (audited)

2020/21						2019/20					
	Salary	Other taxable allowances	Performance - related pay	Pension benefits ¹	Total		Salary	Other taxable allowances	Performance - related pay	Pension benefits ¹	Total
	£'000	£'000	£'000	£'000	£'000		£'000	£'000	£'000	£'000	£'000
Penny Endersby	125-130	-	5-10	59	195-200		125-130	-	-	269	395-400
Nick Jobling	110-115	-	10-15	45	165-170		105-110	-	5-10	33	145-150
Stephen Belcher	135-140	-	10-15	54	200-205		135-140	-	10-15	54	200-205
Tammy Lillie (from 3 Aug 2020)	60-65 (90-95 full year equivalent)	15-20	10-15	24	95-100 (130-135 full year equivalent)		-	-	-	-	-
Simon Brown (from 28 Sep 2020)	45-50 (90-95 full year equivalent)	15-20	5-10 (10-15 full year equivalent)	18	65-70 (130-135 full year equivalent)		-	-	-	-	-
Andrew McKean (between 1 and 14 April 2020 and between 6 September and 12 October 2020)	10-15 (80-85 full year equivalent)	-	0-5	9	20-25 (95-100 full year equivalent)		5-10 (70-75 full year equivalent)	-	0-5	-	5-10 (75-80 full year equivalent)

1 The value of pension benefits accrued during the year is calculated as (the real increase in pension multiplied by 20) plus (the real increase of any lump sum) less (the contributions made by the individual). The real increases exclude increases due to inflation or any increases or decreases due to a transfer of pension rights.

2 P Endersby's performance related pay is set under Senior Civil Service arrangements. Amounts disclosed under 2020/21 were earned in 2019/20 and paid in 2020/21. The amount for 2020/21 had not been finalised at the time of signing.

3 Tammy Lillie was appointed Interim People Director on 19 February 2019. She was engaged through an agency until 31 July 2020 at a full year equivalent cost of £215-220k (2019/20 - £215 - 220k). She was employed by the Met Office from 3 August 2020 as Chief People Officer.

4 Stephen Marshall was appointed as Interim Operations Director on 24 February 2020 until 27 November 2020. He was engaged through an agency at full year equivalent cost of £180-185k (2019/20 - £180-185k).

Pension entitlements for each director (audited)

	Accrued pension at pension age as at 31 March 2021 and related lump sum	Real increase in pension and related lump sum at pension age	CETV at 31 March 2021	CETV at 31 March 2020	Real increase in CETV
	£'000	£'000	£'000	£'000	£'000
Penelope Endersby	50-55 plus a lump sum of 115-120	2.5-5 plus a lump sum of 0-2.5	956	884	35
Nick Jobling	30-35	2.5-5	589	535	30
Stephen Belcher	25-30	2.5-5	352	297	34
Tammy Lillie (from 3 August 2020)	0-5	0-2.5	16	0	11
Simon Brown (from 28 September 2020)	0-5	0-2.5	10	0	7
Andrew McKean (between 1 and 14 April 2020 and between 6 September and 12 October 2020)	20-25	0-2.5	345	343	1

Civil service pensions

Pension benefits are provided through the Civil Service pension arrangements. From 1 April 2015 a new pension scheme for civil servants was introduced – the Civil Servants and Others Pension Scheme or alpha, which provides benefits on a career average basis with a normal pension age equal to the member's State Pension Age (or 65 if higher). From that date all newly appointed civil servants and the majority of those already in service joined alpha. Prior to that date, civil servants participated in the Principal Civil Service Pension Scheme (PCSPS). The PCSPS has four sections: Three providing benefits on a final salary basis (classic, premium or classic plus) with a normal pension age of 60; and one providing benefits on a whole career basis (nuvos) with a normal pension age of 65. These statutory arrangements are unfunded with the cost of benefits met by

monies voted by Parliament each year. Pensions payable under classic, premium, classic plus, nuvos and alpha are increased annually in line with Pensions Increase legislation.

Existing members of the PCSPS who were within 10 years of their normal pension age on 1 April 2012 remained in the PCSPS after 1 April 2015. Those who were between 10 years and 13 years and 5 months from their normal pension age on 1 April 2012 switch into alpha sometime between 1 June 2015 and 1 February 2022. Because the Government plans to remove discrimination identified by the courts in the way that the 2015 pension reforms were introduced for some members, it is expected that, in due course, eligible members with relevant service between 1 April 2015 and 31 March 2022 may be entitled to different pension benefits in relation to that period (and this may affect the Cash Equivalent Transfer Values

shown in this report – see below). All members who switch to alpha have their PCSPS benefits 'banked', with those with earlier benefits in one of the final salary sections of the PCSPS having those benefits based on their final salary when they leave alpha. (The pension figures quoted for officials show pension earned in PCSPS or alpha – as appropriate. Where the official has benefits in both the PCSPS and alpha the figure quoted is the combined value of their benefits in the two schemes.) Members joining from October 2002 may opt for either the appropriate defined benefit arrangement or a defined contribution (money purchase) pension with an employer contribution (partnership pension account).

Employee contributions are salary-related and range between 4.60% and 8.05% for members of classic, premium, classic plus, nuvos and alpha. Benefits in classic accrue at the rate of 1/80th of final pensionable earnings for each year of service. In addition, a lump sum equivalent to three years' initial pension is payable on retirement. For premium, benefits accrue at the rate of 1/60th of final pensionable earnings for each year of service. Unlike classic, there is no automatic lump sum. Classic plus is essentially a hybrid with benefits for service before 1 October 2002 calculated broadly as per classic and benefits for service from October 2002 worked out as in premium. In nuvos a member builds up a pension based on their pensionable earnings during their period of scheme membership. At the end of the scheme year (31 March) the member's earned pension account is credited with 2.30% of their pensionable earnings in that scheme year and the accrued pension is uprated in line with Pensions Increase legislation. Benefits in alpha build up in a similar way to nuvos, except that the accrual rate is 2.32%. In all cases members may opt to give up (commute) pension for a lump sum up to the limits set by the Finance Act 2004.

The partnership pension account is an occupational defined contribution pension arrangement which is part of the Legal & General Mastertrust. The employer makes a basic

contribution of between 8.00% and 14.75% (depending on the age of the member). The employee does not have to contribute, but where they do make contributions, the employer will match these up to a limit of 3.00% of pensionable salary (in addition to the employer's basic contribution). Employers also contribute a further 0.50% of pensionable salary to cover the cost of centrally-provided risk benefit cover (death in service and ill health retirement).

The accrued pension quoted is the pension the member is entitled to receive when they reach pension age, or immediately on ceasing to be an active member of the scheme if they are already at or over pension age. Pension age is 60 for members of classic, premium and classic plus, 65 for members of nuvos, and the higher of 65 or State Pension Age for members of alpha. (The pension figures quoted for officials show pension earned in PCSPS or alpha – as appropriate. Where the official has benefits in both the PCSPS and alpha the figure quoted is the combined value of their benefits in the two schemes, but note that part of that pension may be payable from different ages.)

Further details about the Civil Service pension arrangements can be found at the website www.civilservicepensionscheme.org.uk.

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A

CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies.

The figures include the value of any pension benefit in another scheme or arrangement which the member has transferred to the Civil Service pension arrangements. They also include any additional pension benefit accrued to the member as a result of their buying additional pension benefits at their own cost. CETVs are worked out in accordance with The Occupational Pension Schemes (Transfer Values) (Amendment) Regulations 2008 and do not take account of any actual or potential reduction to benefits resulting from Lifetime Allowance Tax which may be due when pension benefits are taken.

The real increase in CETV, reflects the increase in CETV that is funded by the employer. It does not include the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

Staff report

Staff numbers as at 31 March 2021 (audited)

	Full time equivalents			
	Male	Female	31 March 2021	31 March 2020
Directors	6	3	9	8
Other permanent staff	1,261	728	1,989	1,938
Met Office employees total	1,267	731	1,998	1,946
Temporary/agency staff			129	127
Total			2,127	2,073

Staff costs (audited)

	2020/21	2019/20
	£ '000	£ '000
Salaries, performance-related pay and allowances	90,752	81,328
Social security	9,438	8,368
Pension contributions	21,264	19,789
Early retirement and exit costs	676	(69)
Temporary/agency labour costs	14,769	10,115
Total staff costs	136,898	119,531

Diversity

The Met Office values difference, openness, fairness and transparency to make work a better experience for our employees and help us to achieve our primary objectives.

One of the main objectives of our plan was to transform our pay model to enable us to retain and reward a highly skilled and agile workforce. We have continued to deliver a new pay model that focuses on gender pay equality, is related to performance and enables us to recruit and retain world-class staff while adhering to the Government's pay policy. A copy of our Gender Pay Report is available on our website.

We review our practices to ensure we do not discriminate unfairly or unlawfully, and actively seek to make the Met Office fully inclusive for all employees and applicants. As part of this we participate in the government's Disability Confident scheme. We have adopted the Workplace Adjustments Passports

and introduced mental health awareness training and fully trained mental health first aiders across the organisation.

We support a range of staff-led diversity action groups with participants across the organisation. This improves work-life balance and flexible working for the benefit of all, including disabled employees. To support and encourage women pursuing education and careers in science, technology, engineering and maths, we have achieved Bronze Athena Swann accreditation. We provide British Sign Language opportunities with accredited trainers. We provide leadership and commitment to these and similar initiatives by developing and monitoring our Diversity Action Plans and Diversity Policy.

Sickness and absence data

In 2020/21 the average working days lost per person was 2.73 (2019/20 5.1 days).

Consultancy expenditure

In 2020/21 the Met Office spent £296,000 on consultancy costs (2019/20 - £1,671,000).

Staff turnover

In 2020/21 the Met Office had a staff turnover rate of 4.9%. Staff turnover is calculated as the number of leavers within the financial year divided by the average of staff in post during the financial year.

Staff engagement

The Met Office participates in the annual Civil Service People Survey. This survey looks at civil servants' attitudes to, and experience of, working in the Civil Service. This was carried out in October 2020 and includes a composite 'Employee Engagement Index'. In 2020 the Met Office's engagement index was scored at 72% compared to 66% in 2019.

Off-payroll engagements

Off-payroll engagements as of 31 March 2021, for more than £245 per day and that last for longer than six months.

Number of existing engagements as of 31 March 2021	116
Of which...	
Number that have existed for less than one year at time of reporting.	25
Number that have existed for between one and two years at time of reporting.	60
Number that have existed for between two and three years at time of reporting.	31
Number that have existed for between three and four years at time of reporting.	8
Number that have existed for four or more years at time of reporting.	2

New off-payroll engagements, or those that reached six months in duration, between 1 April 2020 and 31 March 2021, for more than £245 per day and that last for longer than six months.

Number of new engagements, or those that reached six months in duration, between 1 April 2019 and 31 March 2020	64
Of which...	
Number assessed as caught by IR35.	64
Number assessed as not caught by IR35.	-
Number engaged directly (via Personal Service Companies contracted to BEIS) and are on the Met Office payroll.	-
Number of engagements reassessed for consistency/assurance purposes during the year.	-
Number of engagements that saw a change to IR35 status following the consistency review.	-

Off-payroll engagements of board members, and/or, senior officials with significant financial responsibility, between 1 April 2020 and 31 March 2021.

Number of off-payroll engagements of board members, and/or, senior officials with significant financial responsibility, during the financial year.	2
Total number of individuals on payroll and off-payroll that have been deemed 'board members, and/or, senior officials with significant financial responsibility', during the financial year.	11

Fees paid to non-executive directors (audited)

	2020/21	2019/20
	£'000	£'000
Rob Woodward	35-40	35-40
Professor Sir John Beddington	20-25	20-25
Doctor David BurrIDGE (until 28 August 2019)	-	10-15 (20-25 full year equivalent)
Robert Drummond (until 22 March 2021)	10-15 (15-20 full year equivalent)	-
Hunada Nouss	15-20	15-20
Catherine Quinn	15-20	15-20
Professor Alan Thorpe	15-20	5-10 (15-20 full year equivalent)
Professor Jordan Giddings (From 15 March)	0-5 (15-20 full year equivalent)	-
Christine Ourmières-Widener (From 15 March)	0-5 (15-20 full year equivalent)	-

James Partington attended in conjunction with his responsibilities at the Department for Business, Energy and Industrial Strategy and is not entitled to receive separate remuneration in undertaking Met Office duties.

Exit packages (audited)

Exit package cost band	Number of compulsory redundancies		Number of other departures agreed		Total number of exit packages by cost band	
	2020/21	2019/20	2020/21	2019/20	2020/21	2019/20
£0 - £10,000	-	-	1	-	1	-
£10,000 - £25,000	-	-	-	-	-	-
£25,000 - £50,000	-	-	3	-	3	-
£50,000 - £100,000	-	-	3	-	3	-
£100,000 - £150,000	-	-	1	-	1	-
£150,000 - £200,000	-	-	-	-	-	-
Total number of exit packages by type	-	-	8	-	8	-
Total cost £'000	-	-	532,186	-	532,186	-

Parliamentary accountability and audit report

Remote contingent liabilities

The Met Office owns a 5% share of Mercator Ocean at a cost of €100,000. Mercator Ocean is the co-ordinating entity for Copernicus Marine Services, in which the Met Office participates.

The organisation is a 'société civile' (a not-for-profit organisation) under French law, meaning it has unlimited liability. As a shareholder the Met Office is exposed to liability risk in proportion to the shareholding. The organisation protects its shareholders through contractual mechanisms and through insurance. Also any residual claim would first be met from the assets of the organisation. Any contingent liability is considered to be extremely remote. In addition any contingent liability will cease to exist should the Met Office dispose of the shares, which it is able to do with six months' notice.

Losses

During 2020/21 the Met Office incurred reportable losses of £477k. £387k related to contractual payments made where the Met Office was unable to fully benefit due to COVID-19 restrictions being in place. A further £91k relates to the write-off of a bad debt following a customer entering administration.



Professor Penelope Endersby
Chief Executive
30 June 2021

Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament

Opinion on financial statements

I certify that I have audited the financial statements of the Met Office for the year ended 31 March 2021 under the Government Trading Funds Act 1973. The financial statements comprise: the Statement of Comprehensive Income, Statement of Financial Position, Statement of Cash Flows, Statement of Changes in Taxpayers' Equity; and the related notes, including the significant accounting policies. These financial statements have been prepared under

the accounting policies set out within them. The financial reporting framework that has been applied in their preparation is applicable law and International Accounting Standards as interpreted by HM Treasury's Government Financial Reporting Manual.

I have also audited the information in the Accountability Report that is described in that report as having been audited.

In my opinion:

- the financial statements give a true and fair view of the state of the Met Office's affairs as at 31 March 2021 and of its retained loss for the year then ended; and
- the financial statements have been properly prepared in accordance with the Government Trading Funds Act

1973 and HM Treasury directions issued thereunder.

Opinion on regularity

In my opinion, in all material respects the income and expenditure recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Basis of opinions

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK), applicable law and Practice Note 10 'Audit of Financial Statements of Public Sector Entities in the United Kingdom'. My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my certificate.

Those standards require me and my staff to comply with the Financial Reporting Council's Revised Ethical Standard 2019. I am independent of the Met Office in accordance with the ethical requirements that are relevant to my audit of the financial statements in the UK. My staff and I have fulfilled our other ethical responsibilities in accordance with these requirements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Conclusions relating to going concern

In auditing the financial statements, I have concluded that the Met Office's use of the going concern basis of accounting in the preparation of the financial statements is appropriate. Based on the work I have performed, I have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Met Office's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

My responsibilities and the responsibilities of the Accounting Officer with respect to going concern are described in the relevant sections of this certificate. The going concern basis of accounting for the Met Office is adopted in consideration of the requirements set out in HM Treasury's Government Financial Reporting Manual, which require entities to adopt the going concern basis of accounting in the preparation of the financial statements where it anticipated that the services which they provide will continue into the future.

Other information

The other information comprises information included in the Performance Report and the Accountability Report but does not include the parts of the Accountability Report described in

that report as having been audited, the financial statements and my auditor's certificate thereon. The Met Office and the Accounting Officer are responsible for the other information. My opinion on the financial statements does not cover the other information and except to the extent otherwise explicitly stated in my certificate, I do not any form of assurance conclusion thereon. In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If I identify such material inconsistencies or apparent material misstatements, I am required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact.

I have nothing to report in this regard.

Opinion on other matters

In my opinion:

- the parts of the Accountability Report to be audited have been properly prepared in accordance with HM Treasury directions made under the Government Trading Funds Act 1973;
- the information given in the Performance Report and Accountability Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which I report by exception

In the light of the knowledge and understanding of the Met Office and its environment obtained in the course of the audit, I have not identified material

misstatements in the Performance Report and the Accountability Report. I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- adequate accounting records have not been kept or returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the parts of the Accountability Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of remuneration specified by HM Treasury's Government Financial Reporting Manual are not made; or
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

Responsibilities of the Met Office and Accounting Officer for the financial statements

As explained more fully in the Statement of Accounting Officer's Responsibilities, the Met Office and the Accounting Officer, are responsible for:

- the preparation of the financial statements in accordance with the applicable financial reporting framework and for being satisfied that they give a true and fair view;
- internal controls as the Met Office and the Accounting Officer determine are necessary to enable the preparation of financial statement to be free from material misstatement, whether due to fraud or error;
- assessing the Met Office's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Met

Office and the Accounting Office anticipates that the services provided by the Met Office will not continue to be provided in the future.

Auditor's responsibilities for the audit of the financial statements

My responsibility is to audit, certify and report on the financial statements in accordance with the Government Trading Funds Act 1973.

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a certificate that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

I design procedures in line with my responsibilities, outlined above, to detect material misstatements in respect of non-compliance with laws and regulation, including fraud.

My procedures included the following:

- Inquiring of management, The Met Office's head of internal audit and those charged with governance, including obtaining and reviewing supporting documentation relating to the Met Office's policies and procedures relating to:
- identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
- detecting and responding to the risks of fraud and whether they

have knowledge of any actual, suspected or alleged fraud; and

- the internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations including the Met Office's controls relating to Managing Public Money, the Government Trading Funds Act 1973 and The Meteorological Office Trading Fund Order 1996;
- discussing among the engagement team and involving relevant internal and or external specialists, regarding how and where fraud might occur in the financial statements and any potential indicators of fraud. As part of this discussion, I identified potential for fraud in the following areas: revenue recognition and posting of unusual journals;
- obtaining an understanding of the Met Office's framework of authority as well as other legal and regulatory frameworks that the Met Office operates in, focusing on those laws and regulations that had a direct effect on the financial statements or that had a fundamental effect on the operations of the Met Office. The key laws and regulations I considered in this context included the Government Trading Funds Act 1973, The Meteorological Office Trading Fund Order 1996, Managing Public Money and employment, taxation and pensions legislation.

In addition to the above, my procedures to respond to identified risks included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with relevant laws and regulations discussed above;
- enquiring of management, the Audit Committee and in-house legal counsel concerning actual and potential litigation and claims;

- reading minutes of meetings of those charged with governance and the Board;
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

I also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

A further description of my responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of my certificate.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Report

I have no observations to make on these financial statements.

Gareth Davies

Comptroller and Auditor General

National Audit Office
157-197 Buckingham Palace Road
Victoria
London
SW1W 9SP

1 July 2021

Accounts

Statement of comprehensive income for the year ended 31 March 2021

		2020/21	2019/20
	Notes	£ '000	£ '000
Revenue	3	258,748	249,349
Operating costs	4	(251,900)	(234,000)
Operating profit		6,848	15,349
Finance income	5	10	302
Finance expense	6	(2,455)	(1,992)
Net finance expense		(2,444)	(1,690)
Profit for the financial year		4,404	13,659
Dividend payable to Department for Business Energy and Industrial Strategy	12	(6,500)	(8,500)
Retained (loss)/profit for the year		(2,096)	5,159
Other comprehensive (expenditure) / income:			
Net loss on revaluation of property, plant and equipment		(253)	3,095
Net gain on revaluation of intangible assets		1,363	1,497
Revaluation reserve realised on impairment of non-current assets		-	-
Net gain / (loss) on cash flow hedges	15	(2,166)	4,500
Other comprehensive income for the year		(1,057)	9,092
Total comprehensive income for the year		(3,153)	14,251

The notes on pages 50-69 form part of these accounts.

Statement of financial position as at 31 March 2021

		31 March 2021		31 March 2020	
	Notes	£ '000	£ '000	£ '000	£ '000
Non-current assets					
Property, plant and equipment	7		135,866		147,404
Intangible assets	8		284,889		242,799
Derivative financial assets	15		-		836
Other financial assets	22		91		91
Total non-current assets			420,846		391,130
Current assets					
Inventories	9	1,649		1,391	
Trade and other receivables	10	64,386		60,703	
Derivative financial assets	15	870		1,173	
Cash and cash equivalents	11	29,834		49,258	
Total current assets			96,739		112,525
Total assets			517,585		503,655
Current liabilities					
Trade and other payables	12	(73,540)		(87,836)	
Borrowings	14	(18,745)		(13,839)	
Derivative financial liabilities	15	(1,087)		(59)	
Provisions for liabilities and charges	16	(181)		(4,082)	
Total current liabilities			(93,553)		(105,816)
Non-current assets plus net current assets			424,032		397,839
Non-current liabilities					
Trade and other payables	12	(20,369)		(20,699)	
Borrowings	14	(133,439)		(103,820)	
Derivative financial liabilities	15	-		-	
Provisions for liabilities and charges	16	(185)		(129)	
Total non-current liabilities			(153,993)		(124,648)
Assets less liabilities			270,039		273,191
Capital and reserves					
Public dividend capital			58,867		58,867
Revaluation reserve			36,442		41,109
General reserve			174,946		171,265
Hedging reserve			(216)		1,950
Total Government funds			270,039		273,191

The notes on pages 50-69 form part of these accounts.



Professor Penelope Endersby
Chief Executive
30 June 2021

Statement of cash flows for the year ended 31 March 2021

		31 March 2021	31 March 2020
	Notes	£ '000	£ '000
Cash flows from operating activities			
Operating profit		6,848	15,349
Adjustments for non-cash transactions:			
Depreciation charges (net of capital grants)	4, 7	9,242	9,124
Loss on disposal of property, plant and equipment	4	(639)	73
Amortisation	4, 8	12,263	12,571
Impairment of property, plant and equipment		-	-
Deferred grants released		(161)	(206)
Decrease / (increase) in inventories		(258)	353
(Increase) in trade and other receivables		(4,156)	(3,725)
Increase in trade and other payables		(3,386)	4,698
(Decrease) / increase in provisions for liabilities and charges		(3,845)	(1,970)
Net cash inflow from operating activities		15,908	36,267
Cash flows from investing activities			
Payments to acquire satellite data		(52,769)	(60,313)
Payments to acquire property, plant and equipment		(6,919)	(4,749)
Capital grants received	13	-	220
Proceeds from sale of property, plant and equipment		674	1
Payments to acquire intangible assets (excluding satellite data)		(41)	(57)
Payments to acquire other financial assets		-	-
Interest received		10	302
Net cash outflow from investing activities		(59,045)	(64,596)
Cash flows from financing activities			
Dividends paid		(8,500)	(8,500)
Loan advance received		49,000	38,000
Loan repayments		(16,787)	(13,068)
Net cash inflow from financing activities		23,713	16,432
Net increase in cash and cash equivalents	11	(19,424)	(11,897)
Cash and cash equivalents at 1 April		49,258	61,155
Cash and cash equivalents at 31 March	11	29,834	49,258

The notes on pages 50-69 form part of these accounts.

Statement of changes in taxpayers' equity for the year ended 31 March 2021

	Public dividend capital	Revaluation reserve	General reserve	Hedging reserve	Total
	£ '000	£ '000	£ '000	£ '000	£ '000
Balance at 1 April 2019	58,867	39,979	162,644	(2,550)	258,940
Comprehensive income					
Profit for the financial year	-	-	13,659	-	13,659
Dividend	-	-	(8,500)	-	(8,500)
Retained profit for the year	-	-	5,159	-	5,159
Other comprehensive income					
Movement on foreign currency cash flow hedge	-	-	-	4,500	4,500
Net gain on revaluation of satellite assets	-	1,497	-	-	1,497
Net gain on revaluation of property, plant and equipment	-	3,095	-	-	3,095
Revaluation reserve realised as impairment of property, plant and equipment	-	-	-	-	-
Revaluation reserve realised on disposal of property, plant and equipment	-	(14)	14	-	-
Transfers between reserves	-	(3,448)	3,448	-	-
Total other comprehensive income	-	1,130	3,462	4,500	9,092
Total comprehensive income for 2019/20	-	1,130	8,621	4,500	14,251
Balance at 31 March 2020	58,867	41,109	171,265	1,950	273,191
Comprehensive income					
Profit for the financial year	-	-	4,404	-	4,404
Dividend	-	-	(6,500)	-	(6,500)
Retained profit for the year	-	-	(2,096)	-	(2,096)
Other comprehensive income					
Movement on foreign currency cash flow hedge	-	-	-	(2,166)	(2,166)
Net loss on revaluation of satellite data	-	1,363	-	-	1,363
Net gain on revaluation of property, plant and equipment	-	(253)	-	-	(253)
Revaluation reserve realised on disposal of property, plant and equipment	-	(7)	7	-	-
Transfers between reserves	-	(5,770)	5,770	-	-
Total other comprehensive income	-	(4,667)	5,777	(2,166)	(1,056)
Total comprehensive income for 2020/21	-	(4,667)	3,681	(2,166)	(3,152)
Balance at 31 March 2021	58,867	36,442	174,946	(216)	270,039

A description of the nature and purpose of each reserve is provided in Note 1.

The notes on pages 50-69 form part of these accounts.

Notes to the accounts

01 Accounting policies

Basis of preparation

These financial statements have been prepared on a going concern basis and in compliance with an Accounts Direction dated 24 December 2020 and in accordance with Section 4(6) (a) of the Government Trading Funds Act 1973. These statements also comply with the principles laid out in the 2020/21 Government Financial Reporting Manual (FReM) issued by HM Treasury, including additional guidance on the treatment of capital grants issued to the Met Office on the 20 February 2015.

The accounting policies contained in the FReM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context. Where the FReM permits a choice of accounting policy, the accounting policy which has been judged to be most appropriate to the particular circumstances of the Met Office for the purpose of giving a true and fair view has been selected.

The particular policies adopted by the Met Office are described below. They have been applied consistently in dealing with items that are considered material to the accounts.

The accounts have been prepared under the historical cost convention, modified to account for the revaluation of property, plant and equipment, intangible assets and inventories.

Accounting developments and changes IFRSs, amendments and interpretations in issue but not yet effective or adopted

There are a number of IFRSs, amendments and interpretations that have been issued by the International Accounting Standards Board that are effective for financial statements after this reporting period. The Met Office has not adopted any of these revised standards early and none are anticipated to have a future material impact on the financial statements of the Met Office.

IFRS 16 Leases is due to be adopted for 2022/23. The Met Office has taken the option to implement early from 1 April 2021. It replaces IAS 17,

removing the distinction between operating leases (off-statement of financial position financing) and finance leases (on-statement of financial position financing) for lessors. IFRS 16 requires the recognition of all leases with terms over 12 months to be recognised as finance leases. This will result in the recognition of a right-to-use asset, measured at the present value of future lease payments, and a liability in the statement of financial position.

The Met Office has a number of leases currently recognised as operating leases (see notes 3 and 18). Instead of charges under these leases being recognised directly in the statement of comprehensive income, the cost of these leases will be recognised through depreciation charges of right-of-use assets and finance charges on the associated liabilities. Whilst the overall cost of these leases will remain largely the same, the classification and timing of cost recognition will change. The Met Office will also recognise additional right-of-use assets and lease liabilities.

A summary of the estimated impact on the 2020/21 financial statements if IFRS 16 were applied is as follows:

Statement of financial position		
	£'000	
Right-of-use assets		4,473
Lease liabilities		(2,320)
Net impact on statement of financial position		2,153

Statement of comprehensive income	Operating profit	Retained profit
	£'000	£'000
2020/21 total under IAS 17	6,849	(2,095)
Operating lease costs	456	456
Depreciation on right-of-use assets	(909)	(909)
Interest on lease liabilities	-	(21)
2020/21 total under IFRS 16	6,396	(2,569)

Critical accounting policies and key judgements

Revenue from contracts with customers

Revenue comprises the accrued value of services (net of VAT) supplied to the private sector, Government departments and the wider public sector.

The majority of Met Office revenue is recognised against performance obligations delivered over time. These obligations are either simultaneously received and consumed by customers (e.g. forecast services or data sales), or are specialised, with no alternative use and an enforceable right to income for work performed to date (e.g. research).

A smaller number of performance obligations are recognised at a point in time where appropriate (e.g. training). Revenue for these obligations is recognised on completion of the service.

Revenue is either recognised on a cost-plus basis or based on the proportion of total services to be provided where the price is fixed.

Where payments received from customers are greater than the revenue recognised under the contract, the amount in excess of the revenue recognised is treated as a contract liability and included within trade and other payables. Where revenue is recognised as contract activity progresses and subject to the contractual arrangements, revenue is accrued. To the extent that the revenue is in advance of an invoice being raised, the amount is shown as a contract asset within trade and other receivables.

Other revenue

The Met Office receives revenue from funders where an agreement does not meet the requirements of IFRS 15 to be classified as revenue from contracts with customers. The

agreements provide for funding to be given where agreed criteria are met or services performed. However, they do not contain an enforceable right for these services and so cannot be considered performance obligations.

Revenue for these agreements is recognised as the agreed criteria are met or services performed. The amount of funding is fixed and so revenue is recognised based on the proportion of criteria/services which have been met.

Valuation of property, plant and equipment

All property, plant and equipment are carried at fair value. In arriving at fair value a number of methods are used dependent on the nature of the asset.

Freehold land and buildings

Freehold land and buildings in continuing use are revalued by qualified valuers every five years, in accordance with the Practice Statements and Guidance Notes set out in the Appraisal and Valuation Manual of the Royal Institution of Chartered Surveyors. Valuations are based on fair values for existing use from market-based evidence, except where the asset is considered specialised. These are assets where due to their location and/or specification, market-based evidence is either not available or does not reflect the full characteristics of the asset. Specialised assets are valued on the basis of depreciated replacement cost.

The quinquennial valuations are supplemented by a 'desk based' review carried out by a qualified valuer for the Exeter headquarters building and Science Park properties and for other assets by annual indexation using appropriate price indices.

The Met Office Headquarters land buildings assets were subject to a full valuation on a DRC basis by Montagu Evans as at 31 March 2021. This valuation was carried out in anticipation of a transfer of the asset

to the Government Property Agency as part of a wider UK Government initiative to manage government owned office space. This transfer is expected to happen during the 2021/22 financial year.

Assets classed as Information Technology use historical cost as a proxy for fair value due to the shorter lives of these assets.

Depreciation on revaluation

Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset, and the net amount is restated to the revalued amount of the asset.

EUMETSAT satellite data

The UK is a member of a member of the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) and the Met Office, as the UK National Meteorological Service, has the right to receive all EUMETSAT data, products and services to fulfil its official duty. The Met Office uses the data to generate its weather forecasts and climate predictions used to deliver services to its customers.

The Met Office makes contributions to satellite programmes operated by EUMETSAT. This share is determined by the UK's Gross National Income (GNI) compared to other member states. Each programme consists of multiple identical satellites over the life of the programme. These contributions are capitalised as intangible assets as a right to access and utilise data generated by the programme over its useful life.

Satellite programme life cycle and treatment of contributions

Programme stage	Activity	Treatment of contributions
Research	Scoping and design.	Expensed.
Development and construction	Development, construction, launch and commissioning of first satellite in programme.	Capitalised as intangible assets in the course of construction.
Operational	Becomes primary programme. Data received from first satellite. Remaining satellites in programme constructed, launched and commissioned.	Reclassified as satellite data assets and amortised. Additional contributions capitalised.
Post-operational	No longer primary programme. Data continues to be received as satellites maintained as 'hot-spares' or repurposed until final decommissioning.	Expensed.

Treatment of contributions to satellite programmes generating operational data

Contributions are treated differently at each stage of a programme's lifecycle (above).

Valuation

Intangible assets in the course of construction are valued at historic cost. Progress reports provided by EUMETSAT are used to identify any impairments and ensure that the programmes are still viable.

Once a programme becomes operational, it is revalued annually at the lower of depreciated replacement cost (DRC) and value in use.

The value in use calculation measures the expected future cashflows generated from the use of EUMETSAT satellite data and discounts this at an appropriate rate to determine a value that will be generated from the use of the data.

Amortisation

EUMETSAT satellite data assets are amortised using the straight-line method to allocate the costs of the programmes over their estimated useful lives. The amortisation charged in a period is calculated as the net book value of contributions made to date, plus the estimated amount of contributions over the remainder

of the programme's operational life divided by the number of years remaining in the programme's operational life. This method reflects the principle that the economic benefit of satellite data remains constant between individual satellites and over the programme's life.

Judgements and uncertainty in estimating future contributions

The value of contributions by the UK is determined by the UK's GNI relative to other member states. The share is fixed for three year periods based on an average GNI in the previous three years.

As contributions are paid in Euros, the value of future payments is also sensitive to future changes in exchange rates. Where contributions are hedged, the sterling contract value is used. For unhedged commitments a single planning rate is used. This rate is reviewed at least annually.

Judgements and uncertainty in estimating useful life

The useful lives of operational satellite programmes are initially based on design lifetimes specified by EUMETSAT. On successful launch of the final satellite in a programme, the useful life of the programme is reviewed and adjusted based on:

- actual lifetime of previous satellites in the programme,

- any issues experienced with existing satellites in a programme,
- expected operational dates for satellites in any successor programme.

Actual useful lives have historically exceeded design lifetimes and programmes have continued to produce data beyond the point where a successor programme has become operational. The useful life of a programme is therefore usually extended to match the expected operational date of its successor programme.

The lifetime is reviewed at least annually as planning assumptions for successor programmes are updated. These planning assumptions are subject to a high degree of uncertainty as the design and construction of the first satellite in the programme carries a high degree of risk.

De-recognition of satellite data assets

Once a programme has been replaced by its successor, its satellites may continue to generate useful data for open ended period. Individual satellites may be used as 'hot-spares' and provide backup to the new primary programme or may be repurposed to provide additional data.

Current and successor programmes and their life/planning assumptions

Programme	METEOSAT (Geostationary)	EUMETSAT Polar System
Current primary programme	Second Generation (MSG)	First Generation (EPS)
Remaining life at 31 March 2020	3.75 years	4.25 years
Remaining life at 31 March 2021	3.75 years	4.00 years
Successor programme	Third Generation (MTG)	Second Generation (EPSSG)
Planned to be operational	Q4 2023/24	Q1 2024/25

Whilst a programme continues to generate data a programme asset is retained in the statement of financial position at a nil net book value. Any asset is only de-recognised when the final satellite in that programme has been decommissioned.

Computer software and software licences

Assets classed as computer software or software licences use historical cost as a proxy for fair value due to the shorter lives of these assets.

Capital grants

Grant funded property, plant and equipment assets are capitalised at their fair value on receipt. Where the donor has imposed a condition on how the future economic benefits embodied in the grant are to be consumed, the grant is deferred within liabilities and is carried forward to future financial years to the extent that the condition has not yet been met. This will usually result in the grant being deferred until the asset is completed and in active use.

The grant is then released to the income statement to match depreciation costs associated with the asset. Where no condition is imposed, the grant is recognised immediately in the income statement.

Grant-funded assets are otherwise accounted for in the same way as other property, plant and equipment.

Key accounting policies

Research and development

The Met Office receives funding for a variety of research and development activities. This funding is treated as revenue attributable to the relevant business programme. Externally funded research and development costs are recognised based on the stage of completion of the project. Related revenues are recognised on an equivalent basis and in accordance with the revenue recognition policy outlined above. All research expenditure is charged to the income statement. Development expenditure is recognised in the income statement in the period in which it is incurred unless it is probable that economic benefits will flow to the Met Office from the asset being developed, the cost of the asset can be reliably measured and technical feasibility can be demonstrated. Where these criteria are met, it is capitalised as an intangible asset.

Retirement benefits

Met Office staff are covered by civil service pensions arrangements. These are unfunded multi-employer defined benefit schemes. However, since the Met Office is unable to identify its share of the underlying assets and liabilities they are accounted for as defined contribution schemes.

Contributions are paid at rates determined from time to time by the scheme's actuary. The Government Actuary's Department conducted a full actuarial valuation as at 31 March 2016. Details can be found in the resource accounts of the Cabinet Office: Civil Superannuation (www.civilservicepensionscheme.org.uk).

Full provision for early retirements is normally made in the year of retirement.

Property, plant and equipment

Recognition

Plant, equipment and information technology expenditure is capitalised where the useful life exceeds three years and the cost of acquisition and installation exceeds £10,000 (excluding VAT).

Depreciation

Freehold land and assets in the course of construction are not depreciated.

Depreciation on other assets is calculated to write off the cost, or value, by equal instalments over the asset's estimated useful life. The lives assigned to the principal categories of assets are as follows:

Freehold buildings

Not exceeding 50 years

Plant and equipment

3-30 years

Fixtures and fittings (inc. leasehold improvements)

5-25 years

Information technology

2-12 years

Intangible assets

Computer software and licences

Where computer software forms an integral part of any hardware equipment (e.g. an operating system) this is capitalised under the hardware asset as a tangible asset.

Computer software and licences are capitalised where the useful life exceeds three years and the cost of acquisition and installation exceeds £10,000 (excluding VAT).

Amortisation is calculated using the straight-line method to allocate the cost of software and licences over their estimated useful lives of three to five years.

Financial assets

Trade and other receivables

Financial assets within trade and other receivables are initially recognised at fair value, which is usually the original invoiced amount or transaction price, and are subsequently carried at amortised cost adjusted for loss allowances for expected credit losses. Loss allowances are measured using lifetime expected credit losses under IFRS 9's simplified model.

Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and current balances with banks and qualifying institutions, which are readily convertible to cash and are subject to insignificant risk of changes in value and have an original maturity of three months or less.

Cash also includes any surplus funds held by EUMETSAT that are attributable to the Met Office.

Other financial assets

The Met Office holds an interest in Mercator Ocean. Mercator Ocean is a not-for-profit entity and co-ordinates the Copernicus marine services, which provides free and open access to constantly updated information about the global ocean and the seas of the

European region. The Met Office has a right to dispose of the interest at the same value as purchased. The interest is therefore held at amortised cost.

Financial liabilities

Trade and other payables

Financial liabilities within trade and other payables are initially recognised at fair value, which is usually the original invoiced amount, and subsequently carried at amortised cost.

Borrowings

Borrowings are recognised initially at the proceeds received. After initial recognition, financial liabilities are subsequently measured at amortised cost using the effective interest method.

Derivative financial instruments and hedge accounting

The Met Office uses derivative financial instruments such as foreign currency contracts to hedge the risks associated with changes in foreign exchange rates in relation to amounts payable to certain international bodies. The payments are in respect of annual subscriptions and contributions, including payments for satellite programmes.

The Met Office policy is to buy forward foreign currency for payments to international bodies as soon as amounts can be reliably estimated. The use of financial derivatives is governed by the Met Office's hedging strategy, approved by the Met Office Executive Board, which provides written principles on the use of financial derivatives consistent with the Met Office's risk management strategy. There is no trading activity in derivative financial instruments.

All the Met Office's derivative financial instruments are designated as cash flow hedging instruments. At the start of a hedging transaction, the Met Office documents the relationship between the hedged item and the hedging instrument together with its risk

management objective and the strategy underlying the proposed transaction. The Met Office also documents its assessment, both at the start of the hedging relationship and on an ongoing basis, of the effectiveness of the hedge in offsetting movements in the cash flow of the hedged items.

To the extent that the hedge is effective, changes in the fair value of the hedging instrument arising from the hedged risk are recognised directly in other comprehensive income rather than in the income statement. The ineffective portions of any gain or loss on the hedging instrument are recognised in the income statement.

Derivative financial instruments are initially measured at fair value on the contract date and are remeasured to fair value at subsequent reporting dates.

Capital and reserves

Public dividend capital

Public dividend capital represents the capital invested by the Ministry of Defence in the Met Office on becoming a Trading Fund on 1 April 1996. Following a Machinery of Government change during 2011/12, the public dividend capital held by the Ministry of Defence was transferred to the Department for Business, Innovation and Skills. In 2016 the Department for Business, Energy and Industrial Strategy was created from the Department for Business, Innovation and Skills and the Department of Energy and Climate Change.

Public Dividend Capital is not an equity instrument as defined in IAS 32 Financial Instruments: Presentation.

General reserve

The general reserve represents the cumulative retained net income (after dividends) since the Met Office became a Trading Fund.

Revaluation reserve

The revaluation reserve reflects the unrealised element of the cumulative balance of indexation and revaluation adjustments to assets. Increases arising on revaluation are taken to the revaluation reserve. A revaluation decrease is charged to the revaluation reserve to the extent that there is a balance on the reserve for the asset and, thereafter, to the income statement.

Hedging reserve

The hedging reserve represents hedging gains and losses recognised on the effective portion of cash flow hedges.

02 Operating segments

Following an internal re-organisation in January 2021, the Met Office has no separate reportable business segments. The previous reportable segments, Government Services and Business Group now form part of a single segment covering all Met Office income from the provision of weather and climate services.

More than 80% of Met Office revenue is derived from UK sources. The Met Office Executive does not review the business on a geographical basis. A geographical analysis would not be necessary to aid users' understanding of these financial statements.

03 Revenue

A. Disaggregation of revenue from contracts with customers (as restated)

	2020/21	2019/20
	£'000	£'000
Revenue (contracts with customers)		
Citizen and Media	121,299	125,353
Defence	34,175	30,267
Energy and Environment	17,201	16,308
International	7,142	10,630
Transport	18,944	20,698
UK Government	24,850	24,219
Total revenue (contracts with customers)	223,611	227,475
Other revenue		
UK Newton Fund	19,373	16,701
Strategic Priorities Fund	7,274	3,607
EU Horizon 2020 and FP7	1,590	1,566
Supercomputer programme	6,900	-
Total revenue	258,748	249,349

All revenue relates to products and services transferred over time.

Payments under the Eurocontrol contract are normally received several months after the service has been provided and are based on a fixed charge. During the year, reduced aircraft volumes meant that these payment arrangements were modified. For payments relating to months between February 2020 and May 2020 only 51% of the charge payable was received (£5.1m in total) and this was received via the Department for Transport rather than Eurocontrol. The remaining 49% is anticipated to be received during 2022 under existing contractual arrangements allowing for revenue to be recovered up to two years after the period to which it relates. Payments resumed for months commencing June 2020, in September 2020. The Department for Transport will recover monies owed to them separately.

Other revenue includes income generated by agreements that do not meet the requirements of IFRS 15.

The Met Office is a delivery partner for the Newton Fund Weather and Climate Science for Service Partnership and the Strategic Priorities Fund under grant agreements with BEIS. Revenue is recognised as costs associated with delivery of the programmes, by the Met Office and third parties, are incurred.

The Met Office also participates in the European Union's Horizon 2020 programme, and its predecessor the 7th Framework programme (FP7). These provide funding for research and innovation activities. The Met Office recognises revenue over time as costs are incurred and to the extent that those costs are recoverable under the rules of each programme.

The Met Office receives separate funding for the procurement, installation and running of the next generation supercomputer.

The categories used to disaggregate income have been restated to reflect an internal restructure carried out in January 2021. The underlying business activities are unchanged.

B. Assets and liabilities related to contracts with customers

	2020/21	2019/20
	£'000	£'000
Receivables included in trade receivables	15,202	23,418
Contract assets included in accrued income	20,690	6,786
Contract liabilities included in deferred income	16,524	16,034

Contract assets relate to amounts owed for work undertaken but for which no invoice has been raised at the reporting date. Contract assets are transferred to receivables when an invoice is raised. Contract liabilities are amounts received in advance from customers. Revenue is recognised and amounts transferred as work against these contracts is completed.

During the period £14,236,000 (2019/20: £17,828,000) of revenue was recognised that had been included in the contract liability at the start of the period.

C. Transaction price allocated to remaining performance obligations

The majority of Met Office revenue is derived from agreements with Departments or other bodies within the UK Government. Even where agreed for multiple years the amounts are subject to review as part of the UK Government Budget and Comprehensive Spending Review processes. The actual revenue recognised in each year will depend on performance against priorities agreed with customers during each financial year, and the Met Office's progress against them.

In accordance with the practical expedient in IFRS 15, the Met Office does not disclose information on unsatisfied performance obligations where the original underlying agreement is of less than 12 months duration.

04 Operating costs

		2020/21	2019/20
	Note	£ '000	£ '000
Staff costs			
Salaries, performance-related pay and allowances		90,752	81,328
Social security		9,438	8,368
Pension contributions		21,264	19,789
Early retirement and exit costs		676	(69)
Temporary/agency labour costs		14,769	10,115
Total staff costs		136,899	119,531
Equipment and services (net of government grant income)		63,755	57,985
International services and subscriptions		17,227	16,746
Depreciation (net of government grant income)		9,243	9,219
Amortisation		12,264	12,476
Accommodation		14,752	14,691
Travel and subsistence		755	4,089
Other operating costs		(2,995)	(737)
Total operating costs		251,900	234,000
Operating costs include the following:			
Audit fees		76	75
Apprenticeship levy		419	380
Operating leases - plant and machinery		114	165
Operating leases - other		782	765
Foreign currency (gains)/loss		231	(339)
Net loss on disposal of non-current assets		(639)	73
Release of government grant income	13	(9,641)	(17,664)
Research and development expenditure		59,317	59,019
International services and subscriptions comprise the following:			
European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT)		4,129	3,680
European Centre for Medium-Range Weather Forecasts (ECMWF)		8,936	8,167
World Meteorological Organisation (WMO)		2,596	2,334
Network of European Meteorological Services (EUMETNET)		887	1,036
Other international services and subscriptions		679	652
		<u>17,227</u>	<u>15,869</u>
Membership of these organisations enables the Met Office, on behalf of the UK, to engage in and benefit from, the European meteorological satellite programme and to receive support in its provision of medium-range weather forecasts and associated research. Membership also enables the Met Office, on behalf of the UK, to promote and benefit from co-operations between members in the exchange of observational data and forecasts, together with a widening range of environmental programmes.			
Government grants are analysed as follows:			
BEIS Current Supercomputer		8,838	16,720
BEIS Polar Satellite Transfer		291	360
Environment Agency Weather Radar Network Renewal		162	206
Department for Transport LIDAR project		345	344
UKRI (NERC) Monsoon 2 network upgrade		5	34
		<u>9,641</u>	<u>17,664</u>

05 Finance income

	2020/21	2019/20
	£ '000	£ '000
Interest receivable	10	302
Total finance income	10	302

06 Interest payable and similar charges

		2020/21	2019/20
	Note	£ '000	£ '000
On Department for Business, Energy and Industrial Strategy loans	14	2,455	1,992
Total interest payable and similar charges		2,455	1,992

07 Property, plant and equipment

The movements in each class of assets were:

	Land and buildings	Fixtures and fittings	Plant and equipment	Information technology	Assets under construction	Total
	£ '000	£ '000	£ '000	£ '000	£ '000	£ '000
Cost or valuation:						
At 1 April 2020	85,419	12,066	83,350	106,459	2,256	289,550
Additions	-	75	314	2,432	4,358	7,179
Transfers	-	102	850	3,986	(4,938)	-
Disposals	(136)	(200)	(109)	(1,627)	-	(2,072)
Revaluation	(2,902)	54	794	-	-	(2,054)
At 31 March 2021	82,381	12,097	85,199	111,250	1,676	292,603
Depreciation:						
At 1 April 2020	189	6,899	52,542	82,516	-	142,146
Charged during year	2,353	1,011	3,903	11,163	-	18,430
Transfers	-	-	-	-	-	-
Impairment	-	-	-	-	-	-
Disposals	(101)	(200)	(109)	(1,627)	-	(2,037)
Revaluation	(2,278)	6	470	-	-	(1,802)
At 31 March 2021	164	7,713	56,808	92,052	-	156,737
Net book value:						
At 1 April 2020	85,230	5,167	30,808	23,943	2,256	147,404
At 31 March 2021	82,217	4,384	28,391	19,198	1,676	135,866

Property, plant and equipment (continued)

	Land and buildings	Fixtures and fittings	Plant and equipment	Information technology	Assets under construction	Total
	£ '000	£ '000	£ '000	£ '000	£ '000	£ '000
Cost or valuation:						
At 1 April 2019	85,305	11,600	82,129	104,553	1,531	285,118
Additions	-	155	277	2,514	1,685	4,631
Transfers		72	223	665	(960)	-
Disposals	-	-	(949)	(1,273)	-	(2,222)
Revaluation	114	239	1,670	-	-	2,023
At 31 March 2020	85,419	12,066	83,350	106,459	2,256	289,550
Depreciation:						
At 1 April 2019	145	5,766	48,263	64,969	-	119,143
Charged during year	2,243	1,009	4,151	18,820	-	26,223
Transfers	-	-	-	-	-	-
Impairment	-	-	-	-	-	-
Disposals	-	-	(875)	(1,273)	-	(2,148)
Revaluation	(2,199)	124	1,003	-	-	(1,072)
At 31 March 2020	189	6,899	52,542	82,516	-	142,146
Net book value:						
At 1 April 2019	85,160	5,834	33,866	39,584	1,531	165,975
At 31 March 2020	85,230	5,167	30,808	23,943	2,256	147,404

All land and buildings are held as freehold. The net book value of freehold land and buildings includes £14.9m of freehold land, which has not been depreciated. Freehold buildings are depreciated in full over their estimated life (not exceeding 50 years).

The freehold assets which comprise the Met Office's property portfolio were subject to a quinquennial valuation for financial reporting purposes in 2016/17 (values as at 31 March 2017), in accordance with the Royal Institute of Chartered Surveyors (RICS) Valuation Standards (6th Edition) by external valuers the Valuation Office Agency, who are regulated by the RICS.

The bases of valuation adopted is Existing Use Value as defined in the Standards. In carrying out the valuation, a number of the assets were identified as specialised as a result of their location and/or specification. As a result they are considered to be assets which would rarely, if ever, sell on the open market. For these assets the Depreciated Replacement Cost methodology has been used.

The Met Office Headquarters land buildings assets were subject to a full valuation on a DRC basis by Montagu Evans as at 31 March 2021. This valuation was carried out in anticipation of a transfer of the asset to the Government Property Agency as part of a wider UK Government initiative to manage government owned office space. This transfer is expected to happen during the 2021/22 financial year.

The sources of information and assumptions made in producing the various valuations are set out in the valuation report.

For further details of valuation and depreciation assumptions refer to Note 1 Accounting Policies.

The following net book values are included above for supercomputer related assets:

	2020/21 £'000	2019/20 £'000
Land and buildings	21,932	22,666
Information technology	9,635	17,501
Total	31,567	40,167

These assets are funded by capital grant.

08 Intangible assets

	EUMETSAT satellite data	Computer software	Software licences	EUMETSAT payments on account	CRC licences	Total
	£ '000	£ '000	£ '000	£ '000	£ '000	£ '000
Cost or valuation:						
At 1 April 2020	329,287	3,093	893	223,323	-	556,596
Additions	7,583	-	42	45,658	-	53,283
Transfers	-	-	-	-	-	-
Disposals	-	-	-	-	-	-
Revaluation	2,658	-	-	-	-	2,658
At 31 March 2021	339,528	3,093	935	268,981	-	612,537
Amortisation:						
At 1 April 2020	310,342	2,562	893	-	-	313,797
Charged during year	12,397	147	12	-	-	12,556
Impairment	-	-	-	-	-	-
Disposals	-	-	-	-	-	-
Revaluation	1,295	-	-	-	-	1,295
At 31 March 2021	324,034	2,709	905	-	-	327,648
Net book value:						
At 1 April 2020	18,945	531	0	223,323	-	242,799
At 31 March 2021	15,494	384	30	268,981	-	284,889

	EUMETSAT satellite data	Computer software	Software licences	EUMETSAT payments on account	CRC licences	Total
	£ '000	£ '000	£ '000	£ '000	£ '000	£ '000
Cost or valuation:						
At 1 April 2019	310,020	3,036	893	170,412	282	484,643
Additions	8,167	57	-	52,911	-	61,135
Transfers	-	-	-	-	-	-
Disposals	-	-	-	-	(282)	(282)
Revaluation	11,100	-	-	-	-	11,100
At 31 March 2020	329,287	3,093	893	223,323	-	556,596
Amortisation:						
At 1 April 2019	288,099	2,382	783	-	-	291,264
Charged during year	12,640	180	110	-	-	12,930
Impairment	-	-	-	-	-	-
Disposals	-	-	-	-	-	-
Revaluation	9,603	-	-	-	-	9,603
At 31 March 2020	310,342	2,562	893	-	-	313,797
Net book value:						
At 1 April 2019	21,921	654	110	170,412	282	193,379
At 31 March 2020	18,945	531	0	223,323	-	242,799

Intangible assets (continued)

The EUMETSAT satellite data intangible asset represents the value of all EUMETSAT observational data used in generating Met Office forecasts. This principally includes data from both the Meteosat geostationary satellite and polar orbiting satellite. The Met Office, as the UK's national meteorological service, has the right to access and use this data to generate its weather forecasts and climate predictions in fulfilling its Public Task. The Met Office makes contributions on behalf of the UK to EUMETSAT's programmes.

EUMETSAT payments on account represent the contributions made by the Met Office, on behalf of the UK, to the Meteosat Third Generation and Polar Second Generation satellite programmes. These programmes are currently in the build phase and are not expected to provide operational data until 2024 at the earliest.

Further information on the assumptions made and sensitivity of satellite asset data values to those assumptions is included in note 1 accounting policies.

09 Inventories

	31 March 2021	31 March 2020
	£ '000	£ '000
Meteorological equipment	1,611	1,350
Reserve equipment	16	13
Consumable stores	22	28
Total inventories	1,649	1,391

10 Trade and other receivables

	31 March 2021	31 March 2020
	£ '000	£ '000
Amounts falling due within one year:		
Trade receivables	15,276	23,501
Less: provision for impairment of receivables	(74)	(83)
	15,202	23,418
Other receivables	72	107
Accrued income	27,438	13,919
Prepayments	21,674	23,259
Total trade and other receivables	64,386	60,703

The carrying amount of receivables and current assets is a reasonable approximation to fair value.

Accrued income includes £352,000 relating to EU funding (£583,000 at 31 March 2020).

11 Cash and cash equivalents

		31 March 2021	31 March 2020
	Note	£ '000	£ '000
Balance at 1 April		49,258	61,155
Net change in cash and cash equivalent balances	18	(19,424)	(11,897)
Balance at 31 March		29,834	49,258
Cash held at commercial banks and in hand		2,276	1,876
Cash held with Government Banking Service		27,558	47,382
Balance at 31 March		29,834	49,258

The Met Office holds four Euro bank accounts, in which there were amounts totalling £712,000 at 31 March 2021 belonging to third parties (31 March 2020, four accounts totalling £535,000). They are held or controlled for the benefit of third parties on projects where the Met Office is the lead co-ordinator and are not included in Met Office cash balances or accounts.

The Met Office Board have ring fenced £5 million to meet the costs of any claims covered by the Met Office's decision to selfinsure against professional indemnity claims.

12 Trade and other payables

		31 March 2021	31 March 2020
	Note	£ '000	£ '000
Amounts falling due within one year:			
Trade payables		836	5,931
VAT		5,282	6,469
Other taxation and social security		4,520	4,161
Accruals		30,921	27,577
Dividend payable		6,500	8,500
Deferred income		17,278	17,684
Government grants	13	8,203	17,514
Total amount falling due within one year		73,340	87,836
Amounts falling due after more than one year:			
Government grants	13	20,369	20,699
Total non-current trade and other payables		20,369	20,699
Total trade and other payables		93,909	108,535

13 Government grants

		31 March 2021	31 March 2020
	Note	£ '000	£ '000
Government Grants at 1 April		38,213	55,657
Deferred funding reclassified as grants		-	220
Grants recognised through the Statement of Comprehensive Income	4	(9,641)	(17,664)
Government grants at 31 March		28,572	38,213
Amounts falling due within one year		8,203	17,514
Amounts falling due after more than one year		20,369	20,699
The following balances are included in Government grants:			
BEIS - Current supercomputer		25,430	34,268
BEIS - Polar Satellite Transfer		876	1,167
Environment Agency Weather Radar Network Renewal (WRNR)		2,103	2,265
Department for Transport Volcanic Ash Lidar Network		163	508
UKRI (NERC) - MONSOON 2 network upgrade		-	5
		28,572	38,213

14 Borrowings

Loans from the Department for Business, Energy and Industrial Strategy repayable by instalments and bearing interest between 1.04% and 2.81% per annum.

	31 March 2021	31 March 2020
	£ '000	£ '000
Loans due:		
Within one year	18,745	13,839
Between one and five years	74,980	56,721
Over five years	58,459	47,099
Total	152,184	117,659

15 Derivative financial instruments

The following table details the forward purchase currency contracts outstanding at the year end.

	Assets	Liabilities	Total
	£ '000	£ '000	£ '000
As at 31 March 2020	2,009	59	1,950
Movement on fair value	(1,138)	1,028	(2,166)
As at 31 March 2021	870	1,087	(216)
Analysed between:			
Current	870	1,087	
Non-current	-	-	
	870	1,087	

The following table details the forward purchase currency contracts outstanding at the year end:

Contract maturity date	Commitment hedged	Foreign currency	Foreign currency value	Contract value	Forecast spot rate on maturity	Fair value	Assets	Liabilities
			'000	£ '000	Currency/£	£ '000	£ '000	£'000
29 April 2021	EUMETSAT	EURO	20,000	17,410	1.1724	(350)		350
1 September 2021	EUMETSAT	EURO	15,000	13,114	1.1696	(289)		290
4 January 2022	WMO	CHF	2,800	2,395	0.8572	870	870	
29 April 2021	EUMETSAT	EURO	3,096	2,822	1.1724	(182)		182
1 September 2021	EUMETSAT	EURO	4,500	4,112	1.1696	(265)		265
				39,853		(216)	870	1,087

Forecast spot rates are provided by the Debt Management Office of HM Treasury.

All cash flow hedges are in respect of forecast transactions. In line with IFRS 9, gains or losses on effective cash flow hedges are held in equity; material gains or losses relating to the ineffective portion of the hedge will be recognised in the Income Statement when the forecast transaction occurs.

16 Provisions for liabilities and charges

	Early retirement and exits	Dilapidations	Leaseholds	EU FP7 reclaim	Total
	£ '000	£ '000	£ '000	£ '000	£ '000
Balance at 1 April 2019	22	199	192	5,768	6,181
Provided in the year	-	75	-	-	75
Revaluation at year end	-	-	-	138	138
Written back in the year	-	(25)	-	(2,101)	(2,126)
Utilised in year	(2)	-	(55)	-	(57)
Balance at 31 March 2020	20	249	137	3,805	4,211
Provided in the year	-	38	-	-	38
Revaluation at year end	-	-	-	-	-
Written back in the year	-	(24)	-	(3,801)	(3,825)
Utilised in year	(2)	-	(55)	-	(57)
Balance at 31 March 2021	18	263	82	4	367

The Early Retirement and Exit Provision represents the outstanding liability for pension and severance costs as at 31 March 2021. For staff offered early retirement, the provision represents the full cost of meeting each individual's pension payments to normal retirement age.

The Dilapidations Provision relates to contractual future costs of making good leasehold properties when they are vacated. There is no uncertainty as to the timing of amounts but the final amounts may change during final negotiations with the relevant landlord at the end of the lease.

The Leaseholds Provision is principally in respect of future cost of leasehold properties, which became surplus to requirements on relocation to Exeter.

The EU FP7 Recovery provision relates to a recovery process initiated by the European Commission under its FP7 funding framework. The recovery process is ongoing but is expected to be finalised in 2021/22.

The commitments provided for fall due in the following periods:

	Early retirement and exits	Dilapidations	Leaseholds	EU FP7 Reclaim	Total
	£ '000	£ '000	£ '000	£ '000	£ '000
Amounts payable:					
Within one year	2	121	55	4	182
Between one and five years	8	142	27	-	177
Over five years	8	-	-	-	8
Total	18	263	82	4	367

17 Related parties

The Met Office's parent department is the Department for Business, Energy and Industrial Strategy (BEIS). BEIS is considered to be a related party and during the year, the Met Office had material transactions with BEIS and with other entities for which BEIS is regarded as parent department. In addition, the Met Office had material transactions with a number of other public bodies, Government departments and their agencies, the Department for Environment, Food and Rural Affairs, the Cabinet Office, the Department for Transport, the Civil Aviation Authority, the Maritime and Coastguard Agency, the Environment Agency and UK Research and Innovation. None of the Met Office Board members, key managerial staff or other related parties undertook any material transactions with the Met Office during the year.

The Met Office manages the UK's membership of a number of international organisations: EUMETSAT, ECMWF, WMO, EUMETNET and ECOMET. As part of this, it sits on the relevant governing body of those organisations. The Met Office had material transactions with these entities during the year and these are disclosed in note 3 to the financial statements. There were no material outstanding balances with these organisations as at 31 March 2021 (31 March 2020 - nil).

The Met Office holds a 5% interest in Mercator Ocean. The Met Office participates in the Copernicus Marine programme, which Mercator Ocean co-ordinates. During the year the Met Office recognised £1.6m in revenue (2019/20 £1.9m) from Mercator Ocean. A trade receivables balance of £0.2m was outstanding with Mercator Ocean as at 31 March 2020 (2020 - £0.1m).

James Partington acted as an Met Office non-executive director during the year and is also an employee of our owning department (BEIS).

18 Notes to the cash flow statement

Reconciliation of cash and cash equivalents to movement in net funds.

	At 1 April 2020	Cash flows	At 31 March 2021
	£ '000	£ '000	£ '000
Cash at bank and in hand	49,258	(19,424)	29,834
Borrowings due within one year	(13,839)	(4,906)	(18,745)
Borrowings due after one year	(103,820)	(29,619)	(133,439)
Total net funds	(68,401)	(53,949)	(122,350)

19 Commitments under operating leases

Total future minimum lease payments under operating leases are given in the table below for each of the following periods.

	Land and buildings		Other	
	31 March 2021	31 March 2020	31 March 2021	31 March 2020
	£ '000	£ '000	£ '000	£ '000
Leases expiring:				
Within one year	633	763	151	152
Between one and five years	578	552	125	255
Over five years	287	337	-	-
Total	1,498	1,652	276	407

20 Capital commitments

	31 March 2021	31 March 2020
	£ '000	£ '000
Contracted but not provided for:		
Information technology	-	40
Equipment	572	551
Property works	413	521
Contributions for satellite data	34,902	36,314
Total	35,887	37,426

The commitment for satellite data represents the unpaid portion of the UK approved contribution to EUMETSAT programmes for the current calendar year.

21 Contingent Liabilities

During 2020/21 the Met Office received a legal challenge on the process of awarding a contract for the provision of supercomputing services. A trial date is expected for quarter two 2022, and the Met Office considers that it has a strong case to defend. No further details are given to avoid prejudicing the outcome of the legal process.

22 Other financial assets and remote contingent liabilities

The Met Office owns a 5% share of Mercator Ocean at a cost of €100,000 (£91,000). Mercator Ocean is the co-ordinating entity for Copernicus marine Services in which the Met Office participates.

The organisation is a “société civile” (a not-for-profit organisation) under French law, meaning it has unlimited liability, and its shareholders are exposed to liability risk in proportion to their shareholding. A remote contingent liability will therefore exist as long as the Met Office retains a shareholding in Mercator Ocean.

The organisation protects its shareholders through contractual mechanisms and through insurance. Also any residual claim would first be met from the assets of the company. Any contingent liability is considered to be extremely remote. In addition any contingent liability will cease to exist should the Met Office dispose of the shares, which it is able to do so at cost at any point within the first three years of ownership, and with six months' notice after this point.

23 Financial instruments and financial risk management

The Met Office's treasury operations are governed by the Met Office Trading Fund Order 1996, under the Government Trading Funds Act 1973 as supplemented by the Met Office's Framework Document. The Met Office's financial instruments comprise cash deposits, receivables, payables, loans and foreign currency forward exchange contracts. The main purpose of these financial instruments is to finance the Met Office's operations. The Met Office has limited powers to borrow or invest surplus funds. The main risks arising from the Met Office's financial instruments are foreign currency, liquidity and interest rate risks. The Met Office's policies for managing these risks are set to achieve compliance with the regulatory framework including the rules contained within Managing Public Money.

Credit risk

The Met Office is subject to some credit risk. The carrying amount of trade receivables, which is net of impairment losses (bad debt provision), represents the Met Office's maximum exposure to credit risk. Trade and other receivables consist of a large number of diverse government and non-government customers spread over a diverse geographical area.

Receivables are impaired where there is sufficient knowledge to indicate that recovery is improbable including the probability that customers will enter bankruptcy or financial reorganisation, that the customer is facing financial difficulties or that economic conditions are likely to lead to non-payment. The following provides details of trade receivables beyond the due date and impairments made:

As at 31 March 2021				As at 31 March 2020		
Trade receivables beyond the due date:	0-3 months	3-6 months	Over 6 months	0-3 months	3-6 months	Over 6 months
	£ '000	£ '000	£ '000	£ '000	£ '000	£ '000
Receivables beyond the due date - not impaired	3,937	17	-	980	27	-
Receivables beyond the due date - impaired	15	14	18	20	16	3
Total receivables beyond the due date	3,952	31	18	1,000	43	3

Liquidity risk

The Met Office maintains short-term liquidity throughout the year by management of its cash deposits. The Met Office aims to maintain cash levels to allow it to meet its short-term obligations. The Met Office holds cash deposits within the Government Banking Service. Under the Met Office Trading Fund Order and Framework Document, the sole provider of loan funding is the Met Office's sponsor department, the Department for Business, Energy and Industrial Strategy. Therefore, exposure to liquidity risk is limited to these arrangements. Loan funding requirements are anticipated to increase over forthcoming years to finance the UK contribution to the EUMETSAT satellite programme.

Foreign currency risk

The Met Office makes significant foreign currency payments for subscriptions and contributions to international meteorological organisations including payments for satellite programmes. These costs are funded by the Public Weather Service. In order to manage foreign exchange risk the Met Office policy is to buy forward foreign currency for payments to international bodies as soon as amounts can be reliably estimated. The forward currency contracts are in hedging relationships under IFRS 9 and the Met Office has elected to adopt IFRS 9 hedge accounting rules.

Details of forward contracts held can be found in note 15.

£16.1 million of expenditure was undertaken in foreign currencies which are not funded through the forward purchase contracts.

Interest rate risk

The Met Office finances its operations through retained profits. Amounts retained in the business but surplus to immediate requirements are held in our Government Banking Service account from where they earn overnight interest through being automatically swept up into the National Loans Fund. The Met Office may also be funded by additional monies from its sponsor department to fund specific strategic requirements.

Details of cash on deposit are included in note 11. The fair values of cash and cash equivalents approximate to book value due to their short maturities.

Significant accounting policies

Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised, in respect of each class of financial instrument are disclosed in Note 1 to the financial statements.

24 Events after the reporting period

The accounts were authorised for issue on the date the accounts were certified by the Comptroller and Auditor General. On 22 April the Met Office signed a contract for the provision of its next supercomputing capability. Further details are provided in the Annual Report.



ISBN: 978-1-5286-2756-6

CCS0621841242

www.metoffice.gov.uk

Produced by the Met Office 01660
Met Office and the Met Office logo are registered trademarks