Briefing to Incoming Associate Minister

An introduction to
Meteorological Service of New Zealand Ltd
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Welcome

This document is intended as a high level introduction to MetService, its roles and responsibilities, its areas of operation, and the key projects and issues currently identified within its public safety forecasting activities.

It is accompanied by, and intended to be read alongside, MetService's:

- FY2016/17-2018/19 Statement of Corporate Intent; and
- 2016 Annual Report.

Introduction

As this country’s oldest continuous scientific institution, MetService has a proud history of scientific enterprise and public social responsibility. August 2011 marked the 150th anniversary of the appointment of New Zealand’s first Director of Meteorological Stations, Dr Charles Knight. Through the years since, despite the pressures of structural change and funding uncertainty, the organisation’s focus on forecast quality and public safety has remained its driving force.

On 1 July 2017, MetService will celebrate its 25th anniversary as a State-Owned Enterprise. Its SOE status gives the organisation a unique position among its National Meteorological Service peers – that of a fully commercial operation able to compete successfully in multiple markets and sectors around the world, while also providing a comprehensive range of World Meteorological Organization (WMO) standard weather services to New Zealanders. Both sides of the business benefit each other and work closely in tandem, with the creativity and can-do attitude of MetService’s highly skilled staff at the core of this success.

MetService employees offer a diverse skillset – not only meteorologists and the engineers and technicians who maintain the observing network, but also graphics and information system developers, sales managers and communicators, to name a few – so our culture is one of high performance. MetService employs the best and most talented in their fields, and we widen their expertise with training focused on the outcomes we need. MetService is further investing in a number of initiatives to drive international growth, that delivers long-term value to shareholders.

MetService’s brand promise is ‘Empowering foresight’ and its brand personality is shown in the brand values on the left. They represent the things that make MetService and MetraWeather unique. The brand positioning ‘tagline’ is Powerful weather intelligence.
MetService operates as a commercially successful, international organisation with more than 260 employees in New Zealand, Australia, Asia and Europe. From our Wellington base, our international reach extends through our international brand MetraWeather with offices in Australia, Thailand and the UK. In 2013 MetService acquired a 49% stake in leading New Zealand oceanographic company MetOcean Solutions Ltd based in Raglan and New Plymouth. Through this science partner, MetService is now able to extend its reach into new markets.

Please see page 11 for more detail on our commercial services.

MetService’s cornerstone contract is with the Ministry of Transport. Public safety forecasting services such as severe weather forecasting and warning services for New Zealand, its coastal waters and the South Pacific high seas are provided under this contract, which provides a mechanism for the Minister of Transport to fulfil their obligations under the Meteorological Services Act 1990.

The contract also provides for the fulfilment of the Crown’s obligations as a member of WMO. Under the auspices of WMO, MetService also plays an important role in the Pacific region, providing the technology and people support to give South Pacific island nations time in advance to communicate and prepare for severe weather. A number of MetService staff are involved in supporting our activities in the Pacific, including a dedicated WMO Manager.

Please see pages 10 and 13 for more information about the services provided under this contract.

MetService builds on its safety-focused expertise to deliver highly-specialised services around the world under the MetraWeather brand, to weather-sensitive industries for which safety and risk management are critical, such as aviation, road transportation, marine, power generation and transmission, and mining. MetService also works with customers in other industries such as media, retail and power trading, for which it has developed advanced services by leveraging its core systems and capabilities.

MetService's strategic focus is first and foremost to maintain, secure and enhance delivery of safety-related services to the New Zealand public and to New Zealand-based and international client organisations. In addition, it will continue to build on its core capabilities to drive growth in its commercial services through a number of initiatives. Investment is also being made in the modernisation of core legacy systems and platforms to address technical debt and changing patterns in the way the public access and consume weather information.
The MetService Group

Ownership and governance

As a State-Owned Enterprise, MetService is wholly-owned by the Crown. The Shareholding Ministers are the Minister for State Owned Enterprises and the Minister of Finance. MetService operates as a commercial company under the Companies Act with a Board responsible for managing, by or under its direction or supervision, the business and affairs of the Company. This includes responsibility for the Company’s strategic direction with the ultimate aim of increasing shareholder value.

Anthony Howard, Chair
Anthony Howard has great depth and breadth of expertise in strategy development, go-to-market planning and execution, corporate governance, corporate restructuring, M&A, capital raising, company valuations, business strategies and planning. He has particular expertise and passion for facilitating a strong and constructive working dynamic between investors and owners. He is a Member of the Institute of Directors in New Zealand.

Judy Kirk, Deputy Chair
Judy Kirk is an experienced director with a wide knowledge of business, and runs her own consultancy providing strategic advice to organisations. Judy served as President of the New Zealand National Party from 2002-2009, is a Justice of the Peace and was appointed to be an Officer of The New Zealand Order of Merit in the Queen’s Birthday Honours 2011 for services to the community. She is currently Chair of the New Zealand Lotteries Commission and is a Member of the Institute of Directors in New Zealand.

Brent Armstrong
Brent Armstrong is a business consultant and former lawyer. Brent practised commercial law for 24 years, including as a partner in leading law firms in New Zealand and the UK. Returning from the UK in 2003, Brent has undertaken a wide range of consultancy assignments including implementing cross-border manufacturing joint ventures, advising on complex hydro-electricity engineering projects, providing governance and strategic commercial advice to start-up companies and serving as a board member of an engineering design company.

Margaret Devlin
Margaret Devlin is a professional director operating predominantly in the infrastructure and service sectors. She is a member of the National Infrastructure Advisory Board and the Waikato District Council Audit and Risk Committee, and holds a number of board roles in the Waikato region. Margaret is a Chartered Fellow of the Institute of Directors in New Zealand; a member of the Institute’s National Council and Professional Committee; and Chair of its Waikato branch. Margaret brings to the Board significant experience in both the retail and infrastructure sectors.
The Board Charter sets out the authority, responsibilities, membership and operation of the Board of Directors of MetService.

MetService’s Code of Ethics represents an elaboration of the core values of MetService, and is a fundamental aspect of good business practice. The Code is a framework of standards that Directors, employees, contractors and advisors of the MetService Group are expected to meet.
Structure

MetService consists of a group of companies that enables the organisation to operate commercially in national and international markets, including Australia, Asia, Europe, Middle East and Africa.

In New Zealand, the MetService brand has been well known and understood for many years as the country’s national weather service.

The MetraWeather brand takes MetService’s capability and expertise to the world, to give businesses a competitive edge through world-leading delivery of powerful weather intelligence.

In August 2013, MetService acquired a 49% stake in leading New Zealand oceanographic weather company, MetOcean Solutions Ltd. This investment is a key part of our growth strategy, helping springboard us into the international marine sector with established products and world-class expertise.

Management

The Executive Team comprises a wide spread of scientific and commercial expertise, and its members work together in an active, collegial and forward-thinking style – very much in keeping with MetService’s dual focus on commercial success and public good.

The Chief Executive’s office provides advice and support in the areas of communication, people & culture and legal to help achieve the company’s strategic and business plan objectives; inform and add value to business operations; and promote ethical business practices that reflect the company’s culture and values.
The roles of MetService

**National Meteorological Service**

The World Meteorological Organization (WMO) is the specialised agency of the United Nations for meteorology (weather and climate), operational hydrology and related geophysical sciences, and plays a global role in:

- Promoting cooperation in the establishment of networks for making meteorological, climatological, hydrological and geophysical observations;
- Promoting cooperation in the exchange, processing and standardisation of related data;
- Assisting technology transfer, training and research;
- Fostering collaboration between the National Meteorological and Hydrological Services of its Members; and
- Furthering the application of meteorology to public weather services, agriculture, aviation, shipping, the environment, water issues and the mitigation of the impacts of natural disasters.

New Zealand is a Member of the WMO and MetService operates many of the country’s weather-related National Meteorological Service (NMS) functions on behalf of the Crown.

Key aspects of these services are outlined below. Climate and water-related functions for New Zealand are provided by other agencies.

**Permanent Representative of New Zealand with WMO**

The Permanent Representative (PR) of New Zealand with WMO is Peter Lennox, MetService Chief Executive. The PR is the single point of contact within each country with whom the WMO Secretariat in Geneva stays in touch over any issues, whether they are weather, hydrology or climate related.

In New Zealand the PR is responsible not just for MetService participation in WMO, but also for coordinating WMO matters with other organisations such as the National Institute of Water and Atmospheric Research (NIWA), a Crown Research Institute.

**New Zealand’s Authorised Meteorological Warning Service**

Under the [Meteorological Services Act 1990](https://www.parliament.nz/en/laws/statutes/html/s45-0012-0025.html), the Minister of Transport is responsible for ensuring the provision of meteorological services in New Zealand, as follows:

2. **Meteorological services**
   
   (1) The Minister of Transport shall ensure the provision of the meteorological warning service referred to in section 3.
   
   (2) The Minister of Transport shall arrange for the provision of—
   
   (a) the making and issuing of forecasts of the weather; and
   
   (b) the collection and recording of such meteorological information as is necessary for the purposes of paragraph (a).


3. **Minister to designate meteorological warning service**

   The Minister of Transport shall from time to time designate a person who shall be responsible to provide the authorised meteorological warning service in New Zealand.

The Minister of Transport has designated MetService as the party responsible for providing these services, as specified in the commercial contract between MetService and the Minister of Transport. This contract is discussed in more detail on page 13 of this document.
MetService is also the responsible agency for issuing national warnings for severe weather (a civil defence emergency management hazard) under the National Civil Defence Emergency Management Plan Order 2005.

For more about our public communications as the country’s NMS, see News media and public engagement on page 12.

Commercial services

Customised weather intelligence

MetService and MetraWeather have commercial contracts in New Zealand and overseas with a wide range of clients in both weather-sensitive and weather-opportunistic sectors, delivering what we call ‘customised weather intelligence’ to their business:

Aviation:

MetService provides high quality CAA-certified aviation weather information required to conduct flight operations in New Zealand and the Asia-Pacific region. Forecasts and en-route planning tools are tailored to either recreational or commercial aviation requirements. From recreational pilots through to commercial airlines, MetService tailors weather information management and delivery systems to specific needs, helping aviators minimise their weather risk and operate more safely and efficiently.

Industry (roading, transport, retail logistics, sports management):

MetService has established innovative weather risk management solutions for transport agencies and road maintenance operations, including collaboration with the NZ Transport Agency to develop a winter road maintenance programme and with Downer Road Science to establish an innovative new road sealing forecast system. We also work with retail supermarket chains such as Asda and Waitrose, providing stock control and logistics management forecasting solutions, and provide general and spot location forecasts (both locally and internationally) to assist the All Blacks and other NZRU representative teams with decision-making for travel, training and match management.

Energy:

We work with energy generators and retailers, transmission system operators and energy traders across Western, Central and South Eastern Europe and Australasia, providing specialised software, dependable high-quality forecasts and observational data designed to give customers throughout the energy supply chain the essential insights necessary for them to make timely and effective business and trading decisions.

Weather presentation and communication

MetService and MetraWeather also work with commercial customers and journalists in New Zealand and overseas to deliver weather and other environmental information to the public and provide platforms for advertising messages:

Media:

MetService has a well-established international business providing high-end graphics and weather data to support broadcast television weather shows. We hold substantial market share in Australia, SE Asia and Western Europe and have invested in the development of a next-generation version of our market-leading Weatherscape XT system (‘Weatherscape XT Black Edition’). Commercial contracts with major local broadcast and print media also ensure the New Zealand public receive weather information through their preferred communications channels.
Interactive:

MetService’s consumer websites metservice.com and m.metservice.com and apps provide a comprehensive range of weather and environmental information to the public, delivered through innovative use of digital technology. On-site/app advertising is a key revenue generator for the company due to the popularity of these services; metservice.com is typically ranked (by Nielsen NetRatings) in the top 5 most visited NZ commercial website brands, with around 21 million average monthly pageviews (Google Analytics).

With the continued rise of mobile devices, average monthly visits to the mobile site have grown by over 21% year-on-year to 30 June 2016 (Google Analytics) and app downloads by 49.5% over the same period.

News media and public engagement

MetService’s weather communications strategy has two distinct areas of focus: news media relationship management and leading commentary on weather; and direct public engagement via social media.

Our team of Media Shift forecasters, led by two experienced Communications Meteorologists, interact with the news media to ensure that the public receive authoritative and relevant weather information (including forecasts and Severe Weather information, as well as expert commentary on weather events and phenomena) through all major news sources. This same team leads our engagement with the public on Facebook, Twitter and Instagram.
MoT contract for public safety weather services

Overview

MetService’s contract with the Minister of Transport to provide public-safety weather services to New Zealanders is expected to account for approximately 39% of the company’s FY16/17 revenue, and covers:

- Delivery of core public-safety weather forecasts and warnings, and operation of an appropriate weather observation network to support those services, which together meet the obligations of the Minister of Transport under the Meteorological Services Act (1990);
- New Zealand’s international obligations with respect to weather services for the international community – e.g., South Pacific high-seas marine forecasts and warnings, etc.; and
- Representation of New Zealand at the WMO.

A key aspect of the services provided under the contract is that they are delivered to specifications established by the WMO, which ensures that the Crown is providing New Zealanders with public-safety weather services that meet appropriate international standards. This in turn supports a high level of professional standards across the rest of MetService’s operations, placing the company in a strong competitive position in commercial markets.

MetService’s Statement of Corporate Intent contains non-financial KPIs for Warnings Performance, Observing Network Uptime and WMO Staff Participation. In addition the Minister of Transport receives updates from MetService on a quarterly basis.

MetService works closely with the MoT to ensure that the contract meets New Zealand’s public-safety requirements and international obligations, under commercial terms that reflect MetService’s responsibilities as an SOE.

Contract terms

This price structure includes some additional safety services (General Aviation weather service from year one and Otago radar from year four), as well as provision for investment in infrastructure to support the existing level of service and to address risks to business continuity arising from MetService’s centralised Wellington facility and legacy IT systems.

Since MetService became an SOE in 1992, the proportion of its revenue derived from the MoT contract has fallen from 65% to 42% in FY2015/16. MetService’s FY2017-19 Business Plan reflects a continuation of this trend, reducing MetService’s reliance on the contract through its focus on value-added commercial services for both business and consumer markets. However, the contract will continue to play an important role in supporting MetService’s core competencies in meteorology, and the services provided to the public – particularly severe weather warning services – have significant impact on MetService’s public profile and brand reputation.

To maintain safety levels to the highest of international standards, the new contract terms include investment in strengthening service resilience and migration from legacy infrastructure. Other R&D investment in this area will focus on modernising severe weather services, leveraging new satellite-based and modelling technologies, and establishing efficiency gains through the forecasting process.
Key projects and challenges

Resilience

MetService’s vulnerability to natural disaster, or other events that may adversely affect its Wellington operation, is a major business risk that continues to be addressed in this planning period. An extended disruption to its Wellington operation has the potential to seriously compromise core safety services. An important feature of the FY2017-19 Business Plan is therefore a programme of investment in IT and forecasting infrastructure to mitigate this risk.

Our Auckland office was formally opened last October, with the number of meteorologists there now at six. Temporary relocation of several additional meteorologists to Auckland after the Kaikoura earthquake was a useful and successful test of our growing capability to provide forecast services independently of Kelburn. The Kaikoura earthquake has also prompted us to bring forward the complete fit-out of our Auckland facility for completion in 2017.

Open Data

MetService is enthusiastically contributing to the review of Government policies regarding public access to meteorological data (open data), led by the Ministry of Business, Innovation and Employment. The outcome of the review may have the potential to impact upon our current funding model.