



COVERSHEET

Ministers	Hon Nicola Willis	Portfolio	Finance
	Hon Paul Goldsmith		State Owned Enterprises
	Hon Judith Collins KC		Science, Innovation and Technology
Title of Cabinet paper	Weather Forecasting System Review Recommendations	Date to be published	15 November 2024

List of documents that have been proactively released

Date	Title	Author
September 2024	<i>Weather Forecasting System Review Recommendations</i>	<i>Office of the Minister of Science, Innovation and Technology</i>
September 2024	<i>Weather Forecasting System Preliminary Regulatory Impact Statement</i>	<i>Ministry of Business, Innovation and Employment</i>
17 September 2024	<i>Cabinet minute: EXP-24-MIN-0051</i>	<i>Cabinet Office</i>

Information redacted

YES / NO-(please select)

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Some information has been withheld for the reasons of confidential advice to government and legal professional privilege.

In Confidence

Office of the Minister of Finance

Office of the Minister for State Owned Enterprises

Office of the Minister of Science, Innovation and Technology

Cabinet Economic Policy Committee

Weather Forecasting Review Recommendations

Proposal

- 1 This paper seeks in-principle agreement for the National Institute of Water and Atmospheric Research Limited (NIWA) to acquire the Meteorological Service of New Zealand Limited (MetService), with MetService being retained as New Zealand's authorised meteorologist.

Relation to government priorities

- 2 It is crucial that public services are delivered efficiently, effectively and responsively. The current weather forecasting system institutional arrangements are fragmented.
- 3 The Inquiry into the North Island Weather Events (NISWE) found New Zealand's emergency management system is not fit-for-purpose, and there are some significant gaps we need to address. The acquisition of MetService by NIWA will help create a more cohesive weather forecasting system through the integration of relevant capability, provide financial and investment efficiencies, and improve public safety by ensuring a single authoritative source for severe weather alerts. The approach enhances the government's response to the NISWE Inquiry.
- 4 This proposal also aligns with work being considered by the Science System Advisory Group (SSAG), which has been appointed to provide advice to the Government on strengthening the science, innovation and technology system, including relevant elements of natural hazard forecasting and warning arrangements. Confidential advice to Government

Executive Summary

- 5 Weather forecasting is very important to public safety and the economy in New Zealand and is even more so in the context of severe weather events. However, the current fragmented system poses risks to public safety, property, infrastructure and the economy. This fragmentation leads to inconsistent public messaging during emergency and weather events, inefficiencies from duplicated efforts, inadequate integration between climate, weather and wider natural hazard risk science domains, and missed opportunities for innovation. A cohesive weather forecasting system is critical for effective emergency management.
- 6 The Weather Forecasting System Review (WFS Review), completed in 2024, examined arrangements for national weather forecasting services, structural configurations for MetService and NIWA, and the need for enhanced data access. It

found institutional settings are the root cause of many inefficiencies and inconsistencies in the system.

- 7 To best position New Zealand for the future, the Reviewer recommended a re-integration of public good meteorology services with climate science, hydrology, and oceanography through NIWA acquiring MetService. The review also contained broader recommendations relating to monitoring and funding—in particular, improved data access arrangements to support the application of weather data and modelling by external parties.
- 8 We endorse the proposal for NIWA to acquire MetService as a wholly owned subsidiary. However, further work is needed to understand the legislative changes required to permit the transaction, including employment obligations, competition impacts, consideration of any Treaty of Waitangi obligations, access to weather data, and any fiscal impacts. A detailed policy proposal will be brought back to Cabinet, with substantive advice on those issues.

Background

- 9 Driven by the increased frequency and severity of extreme weather events, the significance of weather forecasting has grown. Climate projections indicate a continued escalation of extreme weather events, with increased risks to people, property, infrastructure and the economy. The links between the weather forecasting system and emergency management will become even more critical for informing a timely and effective response.
- 10 Public weather forecasting in New Zealand provides considerable net benefits to society, and the Government has a role in ensuring the provision of public good weather forecasting, which the market is unlikely to provide.
- 11 MetService is a state-owned enterprise focused on forecasting and warnings service, and NIWA is a Crown Research Institute that undertakes climate and atmospheric research and longer-term forecasts. The current weather forecasting system, with two separate entities, is fragmented, leading to inefficiencies and inconsistencies in service delivery and misses opportunities for technological developments. New Zealand's weather forecasting system needs to go beyond what existing arrangements are expected to deliver.
- 12 A connected weather forecasting system where intelligence is shared and effectively communicated is critical to support emergency management entities in their timely decision-making during severe weather events. Better integration between climate science, weather and climate forecasting, hydrology, and coastal hazards will enable a cohesive understanding of hazards and improve our planning for, and resilience to, severe weather events.
- 13 The Ministry of Business, Innovation and Employment (MBIE) and the Treasury commissioned the WFS Review to consider the most efficient and effective arrangements for the weather forecasting system.
- 14 The WFS Review builds on three previous system reviews since the establishment of MetService and NIWA (in 2001, 2006, and 2018). The previous reviews identified

problems associated with the existing system settings and considered options to incentivise MetService and NIWA to work more closely, including establishing a Memorandum of Understanding in 2006. However, the desired level of collaboration has not materialised, and current arrangements do not best support future needs.

Review findings

- 15 The WFS Review found that the current institutional arrangements, with two public weather forecasting entities, appear to be the underlying cause for many issues in the current system. The review found the current system:
 - 15.1 is inefficient, evident by duplicated effort and investment;
 - 15.2 lacks integration between climate science, forecasting, hydrology and coastal hazards;
 - 15.3 involves public uncertainty during severe weather events as a result of inconsistent messaging from two Crown-owned weather forecasters;
 - 15.4 results in decisions that are not always informed by the latest information, leading to increasing risk to the public;
 - 15.5 results in missed opportunities for system improvements; and
 - 15.6 has data access and management arrangements that are restrictive for external parties and limit innovation.
- 16 The reviewer considered a long list of options in relation to funding, delivery and regulation and how to best position New Zealand to meet future forecasting needs and challenges.
- 17 The review recommended that NIWA acquire MetService, initially as a wholly owned subsidiary, with MetService being retained as a brand as New Zealand's authorised meteorologist so that operations are not disrupted, and trust is maintained. Further work would then be undertaken on whether the final configuration of the two entities will best meet New Zealand's needs for the delivery of core public weather forecasting.
- 18 Best practice being adopted internationally (for example, Japan) is the integration of weather and geological hazards forecasting and warning systems. The recommended option is a step towards this outcome.
- 19 The review also recommended improving data access to support the application of weather data and modelling by external parties. This would include reviewing data access policies and systems and moving as quickly as possible to ensure full transparency regarding what data exists and making publicly funded data easily available with any costs and access arrangements justified.
- 20 The review found to best leverage the capabilities available and existing systems and structures, integrating NIWA and MetService would best position New Zealand for future weather events and provide the greatest benefits.

Government response

- 21 While further work is required, shareholding Ministers of NIWA and MetService support the Reviewer’s recommendation of NIWA acquiring MetService.
- 22 NIWA and MetService have indicated support for the WFS Review’s recommended option, which is critical for effective integration.
- 23 Endorsement of the recommendation for NIWA to acquire MetService now will:
 - 23.1 start to address urgent issues within the current system, ensuring unified public weather warning communications;
 - 23.2 support a more coordinated response to any future severe weather events, which could improve public safety, reduce damage to property and infrastructure, and reduce adverse impacts on the economy;
 - 23.3 provide efficiencies by aligning public good weather forecasting activities;
 - 23.4 involve less risk than is inherent in large contemporaneous structural reforms, while maintaining continuity of service provision; and
 - 23.5 Confidential advice to Government
[Redacted]
- 24 Officials are working through potential options regarding data access arrangements, and the associated options, costs, benefits, risks and impacts. Access to data must be consistent with the Commerce Act 1986.¹
- 25 This paper seeks Cabinet endorsement of the direction and intent of the review and to proceed with work to understand other implications of the transaction, with in-principle agreement for the acquisition. We intend to return to Cabinet with substantive advice on the outstanding issues.

Implementation

- 26 The acquisition of MetService by NIWA will require legislative change. As the Bill is not currently in the 2024 Legislation Programme, we propose to include the Bill in the Legislation Programme with a category 7 priority (with policy development expected to continue in or beyond 2024). Confidential advice to Government [Redacted]
- 27 Confidential advice to Government [Redacted]

¹ In 2021, the Commerce Commission closed its investigation under the Commerce Act into NIWA’s and MetService’s price and non-price terms on which competitors can access data. The investigation was closed without reaching a conclusion on whether a contravention had occurred on the understanding the agencies would reach commercial access arrangements with competitors and in accordance with principles outlined by the Commerce Commission.

Risks

- 28 Organisational change inherently involves risk, including cost, disruption and uncertainty for staff. While the initial acquisition will essentially be a ‘lift and shift’, strong governance will be important for overseeing the transition and ensuring important research and science capability is retained.
- 29 Legislative change can also take time to embed. It will be important to protect the brands of MetService and NIWA and support staff through the process.
- 30 Failing to act on the recommendations will maintain the status quo, which the review has found increases risks to public safety, property, infrastructure and the economy from decisions not being informed by the latest information.

Financial Implications

- 31 There are no direct financial implications resulting from this paper. However, the acquisition of the shares of MetService by NIWA will have financial implications. These implications are in relation to the acquisition price for MetService’s shares, and for professional and legal fees needed to inform and progress the legislation and acquisition processes.
- 32 It is too early to quantify these implications, Confidential advice to Government
[Redacted]
- 33 Further financial implications may also arise in relation to any proposals for more open data access due to revenue foregone. Once we have considered advice from officials on this, we will provide proposals on options and set out the impacts, costs, benefits and risks of those at that time.

Legislative Implications

- 34 Legislative change will be required to remove MetService from the State-Owned Enterprises Act 1986. The Crown Research Institutes Act 1992 will not require any amendments.
- 35 Further work is needed to work through other legislative issues that may be required.
Legal professional privilege
[Redacted]

Impact Analysis and Regulatory Impact Statement (RIS)

- 36 A preliminary Regulatory Impact Statement is attached.

Use of External Resources

- 37 The WFS Review was undertaken by Sapere and cost \$318,000. The cost was split equally between MBIE and the Treasury from within existing baselines.
- 38 Legal professional privilege
[Redacted]

Consultation

- 39 MBIE, the Treasury, the Ministry for Regulation, the Department of Prime Minister and Cabinet, the Ministry of Transport, the National Emergency Management Agency (NEMA) and the Public Service Commission were consulted.
- 40 The parties consulted indicated support for the approach recommended. NEMA supports the recommended option as a step towards a fully integrated natural hazard forecasting and warning system.
- 41 As part of the WFS Review, the Reviewer met with over fifty stakeholders involved in the weather forecasting system and the survey employed in the review received over 145 responses providing further input for consideration.

Communications

- 42 MBIE and the Treasury will publish the interim and final Sapere Review reports with appropriate redactions on their website, following Cabinet approval of this paper.

Proactive Release

- 43 The contents of this paper will be proactively released within 30 business days after Cabinet decisions have been made, with appropriate redactions.
- 44 Officials will publicly release the interim and final WFS Review reports following Cabinet agreement of this paper.

Recommendations

The Minister of Finance, Minister of Science, Innovation and Technology and the Minister for State Owned Enterprises recommend that the Committee:

- 1 **Note** the Weather Forecasting System Review (WFS Review) Final Report concludes there is a compelling case for changes to the weather forecasting system and recommends the reintegration of MetService and NIWA to provide public good weather forecasting services.
- 2 **Agree**, in-principle, to the National Institute of Water and Atmospheric Research Limited (NIWA) acquiring the Meteorological Service of New Zealand Limited (MetService), with MetService being initially retained as New Zealand's authorised meteorologist, subject to further work (outlined in recommendations 3 and 4) being completed.
- 3 **Note** further work is required to understand competition impacts, fiscal implications, Treaty of Waitangi obligations, Government Superannuation Fund obligations, funding and monitoring arrangements, and legislative implications of the transaction.
- 4 **Note** the Weather Forecasting System Review also recommended access to weather data be made more open within the weather forecasting system, further work will be carried out to understand options to improve data access arrangements along with the associated options, costs, benefits, risks and impacts.

5 **Note** substantive advice on the structure of the transaction and other policy considerations required will be provided before we seek Cabinet's final approval to proceed with the acquisition.

6 Confidential advice to Government
[Redacted]

7 **Agree** to the inclusion of the Bill in the 2024 Legislation Programme to enable the implementation of these proposals, with a category 7 (with policy development expected to continue in or beyond 2024).

8 **Note** officials will publicly release the contents of this paper and the final and interim Weather Forecasting System Review reports, with the appropriate redactions, within 30 business days of Cabinet approval.

Authorised for lodgement

Hon Nicola Willis

Minister of Finance

Hon Paul Goldsmith

Minister for State Owned Enterprises

Hon Judith Collins

Minister for Science, Innovation, and Technology

Appendices

Appendix One: Preliminary Regulatory Impact Statement