

Priority Action 13: Focus leadership practices to re-orient culture away from customisation and experimentation and towards reliable, efficient and consistent documented processes				
Options that could provide savings, enhance efficiency or increase revenue for the Bureau				
Option 14: Increased automation and outsourcing of observations				
Option 15: Explore options to limit forecaster intervention in site-specific web forecasts				
Option 16: Centralise media services and establish protocols for media activity				
Option 17: Foster private sector service providers who can offer tailored services or broadcast high quality presentation of general purpose weather information				
Option 18: Review level of investment in research activities to free up budget and reduce pressure on computing capacity				
Option 19: Review and rebalance relative investment in long term climate modelling and medium-term seasonal outlook				
Option 20: Cease or reduce the Ionospheric Prediction Service or offer it as a commercial service				
Option 21: Apply a consistent cost-recovery model to all services delivered to state/territory fire agencies				
Option 22: Explore options to obtain revenue from advertising on the Bureau's website				
Option 23: Phase out seasonal prediction development and modelling and rely on products generated elsewhere				
Option 24: Fund delivery of improved seasonal forecasting services by:				
(c) Identifying potential offsets from government beneficiaries of any additional investment in seasonal forecasting services				
(d) Undertaking market research to establish industry willingness to pay for enhanced seasonal forecasting services				
Option 25: Lower yield options identified by the Bureau				
(a) Reduce staffing at remote observing stations				
(b) Close the training facility at Broadmeadows, Victoria				
(c) Consolidate forecasting functions for Northern Queensland				
(d) Outsource the Bureau's library				
Options to provide enhanced services where there is proven demand				
Option 26: Additional frontline meteorologists and specialised centres and systems				
(a) Enhanced severe weather units				
(b) National extreme weather centres				
(c) Integrated all-hazards decision system				
(d) Enhanced observation network				
Option 27: Upgrade to the Bureau's supercomputing capacity				
(a) Status quo				
(b) Step change				
(c) Further enhancements				
Option 28: Improved seasonal forecasting capabilities				
(a) Improved presentation of existing products				
(b) Enhanced capability – keeping pace with international standards				
Option 29: Explore use of social media to enhance data gathering from authorised and informal sources and to disseminate weather information				

Extract from: Munro Review

Chapter 4

Table 18 - Ionospheric Prediction Service Customer Database by Customer Type

Customer type	Number
HF radio users	419
Radio communications consultants	92
Geophysical and space	8
Scientific	76
Other	97
Total	692

Potentially the Bureau could meet the needs of its domestic customers by repackaging data sourced from overseas and cease its analysis and prediction services. The observations function could continue (as they contribute to meeting international obligations) and be integrated within the Bureau's Composite Observing System. This option could save up to approximately \$3 million per year.

This option seems reasonable and warrants further consideration. It is a stand-alone function that does not interact with other parts of the Bureau. There does not appear to be any general public value in this service, analogous to weather information. It is worth noting that the Bureau currently has some contractual obligations which may prevent an immediate exit from this area.

Option 21: Apply a consistent cost-recovery model to all services delivered to state and territory fire agencies

An international benchmarking study indicated that, on average, cost-recovery accounted for approximately 20% of revenue for the agencies examined.²⁰² As discussed in Section 2.4.1, the Bureau has steadily increased its level of external funding to the point where it is meeting this benchmark. The study reinforces that worldwide, weather information services are funded primarily as public goods. Nevertheless there are strong arguments for confining direct public funding to the basic product set and taking a more rigorous approach to cost-recovery for other products.

Variations between jurisdictions in delivering services to state and territory fire agencies were highlighted in Section 1.1.6. As a general rule, the Bureau provides enhanced weather information to fire agencies about potential and actual wildfires as part of core services. Weather information required for prescribed burning (a major wildfire risk mitigation activity) must be purchased by agencies as an additional service. In New South Wales and Victoria the Bureau provides embedded meteorologists as a cost-recovered service, with

similar arrangements proposed for Western Australia.

The Australasian Fire and Emergency Service Authorities Council advised that it is working with the Bureau to develop a national set of fire weather products.²⁰³ This work will assist in determining which services should be provided on a cost-recovery basis.

A more consistent approach to cost-recovery from state and territory fire agencies should:

- provide greater equity across jurisdictions; and
- reduce duplication of effort within the Bureau and enable its regional staff to better respond to requests for services outside the standard product set.

On Bureau estimates, this option would result in a potential increase in the Bureau's revenue of up to \$1.5 million per annum.

Option 22: Explore options to obtain revenue from advertising on the Bureau's website

The opportunity to obtain revenue from advertising on the Bureau's website was considered by previous reviews in 1997 and 2008. This option was rejected in the past in the absence of whole-of-government guidelines. However, there have been rapid changes in the online environment generally and it may be that at this juncture advertising is more acceptable than when the matter was last considered.

Since 2008 annual hits to the Bureau's website have increased from 9 billion hits to approximately 33 billion, making it one of the most frequently visited websites in Australia. Over the same period there has been a rapid evolution of online business models including both free and subscription news services. Arguably there is greater public acceptance of advertising as part of the online 'contract' and comparable meteorological agencies internationally do carry advertising on their websites – including the UK MetOffice, Canadian Weather Office and New Zealand MetService.

Given the budgetary challenges faced by the Bureau in meeting growing demand for all its services, this Review considers it would be worth revisiting the question. Desirably, this examination would be in the context of whole-of-government policy settings for website advertising. However, the characteristics of the Bureau's online presence suggest that it is likely to be the pace-setter in developing such policies.

Extract from: Government response to Munro Review

Option 22:

Explore options to obtain revenue from advertising on the Bureau's website.

Government response

The Government has decided to proceed with permanent advertising on the Bureau's website to continue to support Government priorities and the Bureau's services. This decision replaces the 2012-13 Budget measure to trial website advertising for 12 months.

A publicly available advertising policy will govern the types of advertising permitted on the Bureau's website.