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**LEGISLATIVE COUNCIL**  
**Question Without Notice**

**13 June 2023**

**Hon Martin Aldridge MLC to the Minister for Emergency Services.**

My question without notice of which some notice has been given is to the Minister for Emergency Services.

I refer to your media statement from 31 May 2023 titled "Review of the Australian Fire Danger Rating System under way", and I ask:

1. When will the Department of Fire and Emergency Services (DFES) complete their review into the Australian Fire Danger Rating System (AFDRS)
2. When do submissions close for the National review of the AFDRS, and what is the expected timeline for this review to be completed?
3. How will stakeholders such as local governments, volunteers and community members be able to provide feedback into these reviews?
4. Please table the terms of reference for each review.

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**Answer**

The Department of Fire and Emergency Services (DFES) advises:

1. The Western Australian review effort will continue indefinitely in the context of continual improvement to the system. As issues are identified they are being dealt with and either fixed locally, or where that is not possible referred through the national processes.
2. The national review commenced on 23 February 2023 and will conclude by 30 June 2023. DFES has provided a significant amount of input into that review as issues have been internally identified or provided by external stakeholders.
3. This ongoing opportunity for feedback will continue through submission via [afdrs@dfes.wa.gov.au](mailto:afdrs@dfes.wa.gov.au) as has been the case since the new system was launched on 1 September 2022.
4. See tabled paper no. #####



Hon Stephen Dawson MLC  
**MINISTER FOR EMERGENCY SERVICES**  
**DIGITAL ECONOMY; SCIENCE; MEDICAL RESEARCH**

President

I provided an answer to the Hon. Martin Aldridge's question without notice 690 asked yesterday where the documents to be tabled were omitted, I would now like to table the information requested.





## AFDRS First Season Review Terms of Reference

### Introduction

This document sets out the Terms of Reference for undertaking the Australian Fire Danger Rating System (AFDRS) First Season Review for the Australasian Fire and Emergency Service Authorities Council (AFAC). AFAC have engaged Collaborative Consulting Co to undertake the AFDRS First Season Review.

### Context

Implementation of the AFDRS on 1 September 2022 represented significant change in the way the emergency management sector calculates, assesses, makes decisions and communicates fire risk across all Australian jurisdictions. The AFDRS represents the introduction of a nationally consistent approach for predicting fire behaviour and communicating public information and warnings of fire danger. Significantly, the AFDRS has the capability to adapt and incorporate new science as it becomes available.

The introduction of AFDRS required a 'rewiring' of how operational staff, decision makers, planners, fire behaviour analysts, meteorologists and many others work together to make operational decisions in the days leading up to and on days requiring an operational response. The AFDRS impacts how we communicate fire risk with communities and mitigate fire risk across different industry sectors and approaches to communicating and manage fire risk has traditionally varied across jurisdictions.

The AFDRS refers to more than the technology that underpins the calculation of the Fire Behaviour Index. It encompasses the many aspects including providing the fuel inputs, the calculation engine, the outputs as used by a range of users for decision-making in various circumstances, the communication of predicted fire behaviour and the expected response of community. AFDRS also encompasses the capability development required to enable end-users to use AFDRS as a decision-support tool, and the governance arrangements that provided the authorising environment for implementation of AFDRS.

### Review Principles

In undertaking the first season fire review, reviewers and participants will be guided to observe the following principles:

- i. Engage genuinely with AFDRS' jurisdictional and key stakeholders.
- ii. Focus on the performance of AFDRS as a national system supported by a national program of work, noting there may be challenges experienced with the McArthur System that may not have been addressed by the AFDRS.
- iii. Focus on program level insight, rather than individual roles or performance.
- iv. Seek to identify insight for the purpose of continual improvement and future planning. This review will not develop a thorough account of past activity for the record.
- v. Acknowledge the support of the jurisdictions who are conducting their own reviews and contributing those findings for the purposes of this national review. This review will rely upon those findings and will not interrogate the veracity of findings of the various jurisdictions.
- vi. Draw on the expertise and experience of practitioners and subject matter experts (SMEs) of the various jurisdictions. The Reviewers are focused on drawing out and collating sector insight, not providing 'expert' assessment themselves.



## Review Components

As a system, AFDRS refers to the many interfacing components that enable its operation. For the purposes of the first season review, these components have been identified as:

1. **AFDRS technology.** This includes the AFDRS Fire Behaviour Index Calculation Engine, including web portals (fuel state editor, fire danger viewer) and the Bureau of Meteorology Fire Danger Calculator.
2. **Fire Science** regarding quality of the data inputs, performance of the models and accuracy of the FBI triggers that support decision-making.
3. **AFDRS campaign, public facing device design and messaging to communities** including understanding what commentary or feedback jurisdictions have received.
4. **Training** at all levels from introductory training for operational personnel to comprehensive training for Fire Behaviour Analysts.
5. **Governance structure** and change management arrangements.
6. Benefits realisation framework.

## Review Objectives

This first season review is an opportunity to learn from the lessons of season 2022/23 and inform approaches and enhancements for the next season and beyond. The objectives of this first season review are to:

- a) Consider the **main challenges that each jurisdiction and key stakeholders** experienced in the first season and identify national themes.
- b) Identify opportunities to **improve existing components<sup>1</sup> and functionality of the AFDRS** to support greater accuracy, and more efficient and effective operation of the AFDRS.
- c) Consider **opportunities for improvement based on key risks and anticipated impact** of the first season experiences of all jurisdictions and key stakeholders across all review components that can be addressed for next season (commencing 1 September 2023) and for future seasons.
- d) Identify opportunities to **better scope the AFDRS program** and how jurisdictions support the **continual improvement** of AFDRS.
- e) Consider how the **benefits framework** needs to be adapted to enable a **pragmatic approach to measuring the benefits** delivered by the AFDRS within each jurisdiction.
- f) Identify the **data requirements** and possible collection methods to support measuring AFDRS benefits.

## Review Timeline

The project supporting the AFDRS first season review commenced 23 February 2023 and will conclude by 30 June 2023.

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<sup>1</sup> Refers to the six Review Components, as defined.

