## AFAC25 Professional Development Program



# EMSINA Presents: From Space to Grassroots: pushing the frontier of spatial technology in emergency management

**Date:** Friday 29 August 2025 **Time:** 9.00am – 3.00pm

**Venue:** Perth Convention and Exhibition Centre (PCEC) **Cost:** Free

To register please visit www.afacconference.com.au/2025-pricing-registration

#### **Event overview:**

The Emergency management spatial network (EMSINA) in their goal to enhance and build awareness of spatial data and its applications in emergency management run an annual PDP at AFAC to explore issues and ideas in this space. Some of the themes we explore are:

- Can we use grassroots approaches at a global scale?
- How can we adapt technologies designed for national and global use to improve our emergency management outcomes?
- How best to use technology to improve information flow at all levels of response and recovery?
- How do we raise awareness of the most up to date technology, explore its potential and encourage innovation?

Spatial Information technologies comprise a range of disciplines which come together to provide valuable input across the Emergency Management sector. More commonly referred to as 'mapping', but definitely not just about making maps. Spatial Sciences are at the heart of dispatching, resource allocation, warnings, pre-incident planning, incident statistical reporting, fire & flood modelling, remote sensing, plume modelling, impact assessment, smart devices, artificial intelligence and field mapping- all key decision support areas in emergency management.

Through presentations, lightning talks and facilitated discussions, EMSINA will present examples of the use and the increased demand for Geospatial intelligence as used by emergency services, Local/State/Federal Governments and public information dissemination. During this professional development opportunity, you will see presentations from our Emergency Service Organisations and Government from across Australia along with some of the major vendors of location technologies. We will hear about the latest applications and tools that drive data driven decision making, trends and

common national scale directions and most important we will focus on what the future holds in an ever-increasing need for Geospatial in modern digital solutions. This program is coordinated by the Emergency Management Spatial Information Network Australia (EMSINA).

#### Who should attend?

This workshop is focused at all levels of emergency management to gain stronger understanding of the solutions across Australia as applied to emergency management. Essentially, anyone who has an involvement with, or is responsible for:

- making critical decisions in times of crisis;
- incident management personnel who need to know how spatial technologies are best applied for decision support;
- mapping of emergencies;
- emergency service front line workers interested in progressing mapping technologies to better enhance situational awareness;
- public information/media officers;
- digital systems champions taking our systems to the next level;
- members of the spatial sciences community; and
- location technology solution vendors

#### Registration inclusions:

This workshop includes catered morning tea and lunch.

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### Agenda:

| 9.00am  | <b>Welcome</b> Naomi Withers, MC for the morning, EMSINA AFAC25 coordinator, VIC DEECA   |
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| 9.05am  | Program plenary Danny Mosconi, DFES – Assistant Commissioner Metropolitan Operations   |
| 9.15am  | Be Ahead of Ready: transformational change to confront worsening natural hazard risk.  Andrew Gissing – Chief Executive Officer, Natural Hazards Reseach Australia.                      |
| 9.35am  | Improving the Australian Fire Danger Rating System in Western Australia Using Remote Sensing Products.  Rui Feix – Bushfire Data Systems Coordinator DFES – Bushfire Technical Services. |
| 9.50am  | Mapping Bushfire Prone Areas – New Data, Methods and Technology  Akeal Hayek – Senior Bushfire Spatial Analyst DFES – Office of Bushfire Risk Management                                 |
| 10.05am | Next generation Imaging technology – will it improve fire response?  Naomi Withers – Senior Spatial Systems Officer – DEECA  |
| 10.15am | Fire severity mapping in southwest WA: development and implementation Ricky Van Dongen – Remote Sensing Specialist DBCA – Remote Sensing and Spatial Analysis                            |
| 10.30am | Morning tea  |
| 11.00am | Earth Observation Update on latest EM initiatives.  Adrian Allen – Principal Consultant Remote Sensing, Landgate – Earth Observation   |
| 11.15am | Unseen but Essential: The Strategic Value of GIS in Emergency Management  Brandon Wilkinson Sector lead Government Solutions Engineering ESRI Australia                                  |
| 11.35am | Innovative Solutions in Emergency Management: A Joint Vision by Fujitsu and Hexagon Julian Fox – Fujitsu and Phil Braccia – Geospatial Global Research and Development Centre            |
| 11.55am | Spatial WA – Digital Twin for Exposure and Hazard Modelling Rod Nowrojee – Spatial WA Business Lead, DFES – Spatial WA   |
| 12.15pm | NSW Spatial Digital Twin Brenton Ray Team Leader – Data Intelligence EICU  |
| 12.30pm | <b>Lunch</b> Steve Forbes, MC for the afternoon , Chief Officer – ACT State Emergency Service  |
| 1.00pm  | Tsunami Evacuation Mapping for the WA Coastline Petina Blackwell– Intelligence Analyst DFES – Emergency Management Intelligence  |
| 1.15pm  | NSW State Emergency Service approach to supporting statewide Geospatial Kieran O'Fee, Spatial Analyst NSW SES  |
| 1.30pm  | Firemapper and RPAS inflight integration  Alex Godfrey Manager GIS and Operational Innovation NT Fire Rescue Service, Konrad Gebels – Fire Front Solutions                               |
| 1.45pm  | Using Satellite Imagery to Transform Disaster Preparedness Rory Donnelly – NGIS manager Earth Observations   |
| 2pm     | QFIMS: utilising open source technology for fire mapping Vicky Reynen, Fire Information Management Coordinator DBCA  |
| 2.15pm  | Panel Discussion (Prominent members from Industry) How AI will impact the future workforce and how we respond in emergency management.   |
| 3.00pm  | Close  |

Actual timings and talks are subject to change





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