

# Integrating simulation into CFA's performance improvement approach

CFA's Simulation Strategy



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# 1. Executive Summary

The purpose of the CFA Simulation Strategy is to integrate simulation into CFA's performance improvement approach over the coming five years. The Strategy sets forward the mechanisms to improve CFA's simulation capability and capacity to assist CFA to respond to external changes and internal demands.

The community and CFA members operate in a complex and dynamic environment where they are required to make decisions and act, despite incomplete, or at times contradictory information. The ability for simulation to illustrate and explain complex concepts and systems provides an important mechanism to support CFA to improve its performance across all areas of its business.

Simulation at CFA is well accepted and utilised in some key performance areas, with demand for simulation services and programs on the increase. However, there is a need to leverage CFA's existing simulation capability across the organisation to ensure it is utilised to its full potential. In addition, CFA would benefit from growing the use of simulation into performance streams where it has not previously been used.

The Simulation Strategy aligns with CFA's Performance Framework and the Chief Officers Capability Statement and outlines the following three goals for integrating simulation into CFA's performance improvement approach:

1. **Clear Leadership and Governance** for simulation services through the introduction of a new model to lead the management and development of simulation services and delivery into the future.
2. **Integrated Program Delivery** across and within performance streams to improve performance, drive interoperability and reduce duplication.
3. **Sustainable Capability** that ensures simulation systems, facilities and programs are appropriately resourced to deliver performance improvement and keep pace with the evolving needs of CFA and the community.

While the Strategy is focused on CFA's needs, it aligns with the Victorian multi-agency approach and encourages interoperability and collaboration.

The Strategy has been designed to deliver performance improvement for CFA. Clear leadership and governance, an improved operations model and an integrated approach to developing and maintain capability will all support CFA to achieve great efficiency and effectiveness across all performance streams.

## 2. Background and Context

### 2.1 Background to Simulation

Simulations illustrate different elements of reality in different contexts for different uses. Simulation offers the opportunity to observe characteristics of the system being simulated in a safe, contained, comfortable, repeatable, controllable, measurable environment. Unusual situations can be simulated that would otherwise be too rare to provide opportunities for observation and dangerous situations can be simulated in relative safety.

The ability for simulation to illustrate and explain complex concepts and systems makes it suitable to support performance improvement in all areas of CFA's business. In the emergency service context, simulations can be categorised in the following performance streams:

#### Operational Preparedness

Simulation complements operational experience by providing opportunities to build experience in core areas as well as high risk, infrequent events. Simulation offers members the opportunity to learn in a safe, controlled environment where mistakes can be made and used as learning opportunities. Simulation complements the 70:20:10 "Learning by Doing" learning model by enhancing core training, and providing opportunities for personnel to learn from others and gain experience through exercising and team based training.

#### Operational Support

Simulation can be used to assist in decision making by predicting the behaviour of natural hazards, such as the spread of wildfire, and allowing emergency managers to explore and evaluate alternate responses and courses of action. This supports emergency managers to make timely and evidence based decisions that minimise the cost to the community in lives and assets.

#### Community Readiness

Simulation can help communities understand their risks and their options for preparing for and responding to hazards. Simulation puts people in the position of experiencing a situation and having to make decisions "in the moment". Facilitator led debriefing helps participants unpack the experience.

#### Organisational Planning

Simulation can be used to model and test major investments in equipment, facilities, structures and even strategies and procedures. Simulation provides the opportunity to develop virtual prototypes for new facilities, vehicles or equipment and explore the function and performance of these under different scenarios. It can be used to assist in the refinement of requirements, determine cost efficiencies of alternatives, and/or guide investment decisions.

In the context of strategy, simulation can be used to explore strategy options, to test assumptions, explore unintended consequences and evaluate alternatives for effectiveness and efficiency measures. Simulation can even be used to experiment with “virtual” capabilities that has not yet been built, to focus research, development and manufacturing towards solving critical future problems.

CFA has recently introduced a Performance Improvement Framework comprising the following five key areas:

1. Planning
2. Measurement
3. Evaluation
4. Review
5. Continuous Improvement.

At the time of writing, CFA’s implementation of this framework is still being scoped and planned, however simulation largely contributes to the Continuous Improvement key area of the Performance Improvement Framework.

## 2.2 Simulation at CFA

CFA makes use of simulation in four performance areas:

### Operational Preparedness

Simulations are a core element of operational preparedness, where they are used in training and education in the form of drills, TEWTS, map exercises, burns tables and field exercises to complement and build on operational experience. Live fire simulation is a core element of individual training and skills maintenance. Exercising is used to develop skills in teamwork, communication and leadership, and to practice and test procedures and facilities in preparation for operational use.

In recent years, computer simulation has been added to the suite of tools available for operational preparedness activities, for example, the Vector Tactical and Vector IMT computer simulation systems have been in use since 2006. Demand for simulation to support operational preparedness is increasing and a number of new initiatives have commenced. This includes an extensive program of mobile training props that deliver hot fire training opportunities in scenarios such as vehicle fires and light industrial fires to brigades in their own districts.

### Operational Support

Over the past decade, simulations have played a growing role in the operational support function of the business. For example, the use of the Phoenix RapidFire fire spread model has experienced a significant take-up within CFA and other fire agencies. The Victorian Bushfire Behaviour Predictive Services Strategy addresses the establishment of a comprehensive capability for bushfire decision support, but does not address other hazards and scope for predictive simulation.



## Community Readiness

The increasing focus on community readiness and risk has seen an rapid uptake in recent years of the use of simulations for the education and engagement of communities in the making of decisions regarding their own safety.

For example, in 2013, the CFA participated in the collaborative community based emergency management planning processes used in Harrietville under the all hazards, all agencies approach. This process included a series of workshops and meetings where emergency services played a key role in supporting the community, business, government and agency stakeholders to understand the potential impacts of hazards such as bushfire, flood and landslide on the local community.

This process included the collaborative development and use of a bushfire scenario generated by computer modelling, integrated with local knowledge and experience, including the Harrietville volunteer fire brigade. Specialist CFA knowledge and advice supported the facilitated seminar style exercise, supporting participants to explore combined agency and community responses toward the simulated emergency as it unfolded.

## Organisational Planning

The use of simulation for organisational planning and investment support at CFA is yet to be fully realised and represents a significant opportunity. Initially this will require an extensive education program to build an understanding of the potential of this form of simulation.

More information on simulation in CFA can be found in the CFA Simulation Strategy background Document.

*“The first time I did the computer programmed simulation I wasn't very comfortable with it, but the second time I actually looked at it very differently. I found it less intimidating and realised it was ok to make mistakes. The pods were very good for providing realistic scenarios. It would be good to have time to work through scenarios slowly first and then again under pressure. This way volunteers can actually learn and build on their skills.”*

Volunteer D13



### 3. The Need for Change

The CFA is in the midst of a changing environment, community and sector context, to which the organisation is both responding and positioning itself for the future. The CFA Simulation Discussion paper identified five key drivers that are coming to bear on simulation at CFA:

- **The shift towards a multi-agency and multi-hazard environment.** The Victorian emergency services sector is in the midst of a shift towards a multi-agency and multi-hazard approach. This is changing the way agencies train and develop their personnel, as they focus on a more unified approach and on providing more opportunities for personnel from different agencies to practice working together under emergency conditions.
- **The need for more contemporary and effective engagement with communities in understanding and managing their risk.** CFA has previously used simulation in limited ways to support community programs. Expectations for greater sophistication and responsiveness are leading to a greater demand for simulation to support community education and engagement in understanding and making decisions about risk.
- **The demand for flexible and accessible training and exercising.** The regionally dispersed and volunteer nature of CFA is leading to an increasing demand for training and exercising to be more flexible and accessible at the local level. Simulation is in demand as a flexible and scalable training and development tool that has applications for locally based training, self-paced and on-line learning and exercise support.
- **Increasing community expectations of operational performance.** Recent inquiries and government policies have highlighted the need for CFA to demonstrate its professional approach to ensuring its members are prepared and have the expertise to meet community expectations. Simulation provides mechanisms for members and teams to develop, practice and test their knowledge and skills to ensure that their performance has achieved the level of mastery expected.
- **More effective use of funds and resources.** Funding pressure and changes in demographics, settlement and the workforce is affecting the composition of brigades and the availability of resources across the state. CFA's simulation services and tools have developed reactively in response to demand, driven by passionate individuals. A strategic investment approach needs to be taken to ensure CFA's resources are best placed to deliver value.

Additionally, CFA and the community are subject to a rapidly changing technological landscape, with the integration of technology into daily life now the norm. As a result, the expectation of CFA members and community is that CFA keep pace with technology change and drive innovation through its business. However, investment decisions must be operationally focused to resist technology for its own sake and, where appropriate, drive research and development.

In the development of the Simulation Strategy and following its release, stakeholders were asked to respond to these drivers through interviews and a survey. Their responses are summarised in the following table.

Driver for change	Stakeholder perspective
The shift towards a multi-agency and multi-hazard environment.	There is a desire to simulate a greater variety of hazards other than fire Multi-agency exercises are difficult to coordinate and plan
The need for more contemporary and effective engagement with communities in understanding and managing their risk	Community activities are limited by access to suitable facilitators Communities have diverse needs requiring diverse simulation systems
The demand for flexible and accessible training and exercising.	More training should be delivered locally by local members There is a demand for more IMT exercises to be conducted
Increasing community expectations of operational performance	Members noted they respond to a wide variety of incidents and need to build skills and experience accordingly Stakeholders echoed recommendations from the Victorian Bushfires Royal Commission and the Jones Report for more simulation and exercising to improve preparedness
More effective use of funds and resources.	Stakeholders believe simulation is not being utilised to its full potential The pool of facilitators available to regions needs to be expanded Members have innovative solutions to problems that could be better shared
Technological change	Members caution against technology for its own sake Access to ICT varies widely amongst brigades and communities Members develop innovative ways to use new technology that could be shared more widely

*“Simulation is a valuable visual and audible stimulus in presenting information that will evoke change in communities and individuals, The ability to offer this and present this in schools or at community events would be invaluable.”*  
BMT Member D12

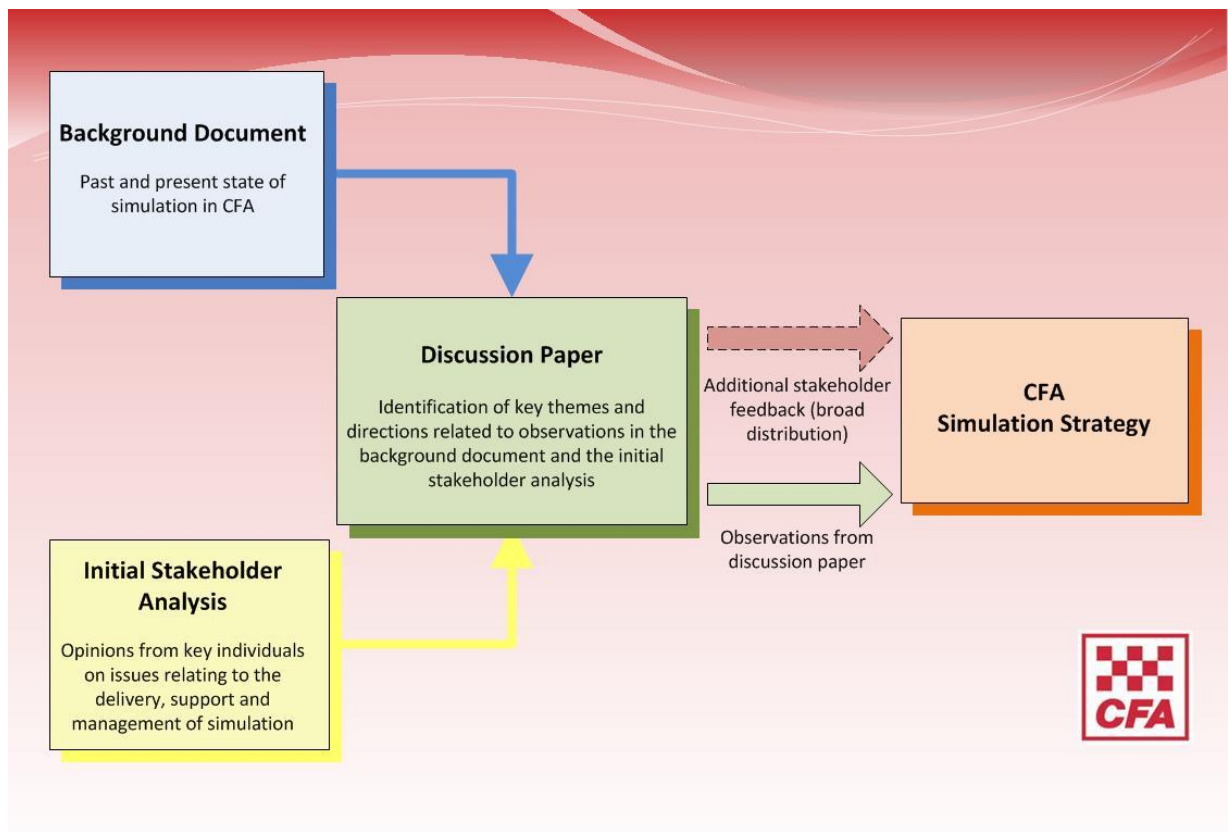
## 4. CFA Simulation Strategy Development Process

The CFA Simulation Strategy Project has been established to identify current and future needs for simulation and develop a strategy for the management and delivery of simulation across CFA.

The scope of this project is focused on CFA's core business responsibilities. However, it will align with relevant developments in the broader emergency management environment.

The project will deliver three products:

- **A Simulation Background Document** that comprises a survey of existing simulation use within CFA and a review of relevant literature and comparable industries.
- **A Discussion Paper** that summarises initial stakeholder analysis and identifies some key drivers for change.
- **A Strategy** that identifies the future direction for simulation and the pathway to achieve that goal.



**Figure 1 Approach for Development the CFA Simulation Strategy**

Significant stakeholder engagement and consultation has been undertaken in the development of this strategy, including the undertaking of a survey seeking responses to the Simulation Discussion Paper.

*“I think the simulation would need to accurately reflect most, if not all, current local environmental variables such as topography, fuel loading, weather etc. Ideally this should be overlaid with demographics, critical infrastructure, evacuation planning etc. However - we would also need to be VERY careful about over reliance on such a system. Local knowledge and experience must remain the final determinant.”*

BMT Member D13

## 5. Integrating Simulation into CFA's Performance Improvement Approach

CFA's simulation services and tools have developed over time to support CFA and community members to operate in a complex and dynamic environment.

CFA's current simulation capability is the result of the initiative of passionate, committed individuals and ad hoc funding, which has established initial capacity and increased demand as the profile of simulation grows.

The simulation strategy seeks to identify and prioritise those actions that will most effectively contribute to performance improvement. A number of key principles have underpinned the development of the strategy:

- The maintenance of service delivery performance will underpin all decisions and actions within simulation at CFA.
- The efficiency of centralised coordination will be balanced with the flexibility of regional delivery
- Innovation and creativity will be promoted and promulgated
- Different learning styles and preferences will be supported through multiple modes of delivery
- People are an integral component of simulation

### 5.1 Key areas for change

Performance improvement touches on every part of CFA's business. Simulation contributes to improved organisational and community performance by providing mechanisms for:

- Decision support, to analyse plans and courses of action.
- Research and experimentation in new capabilities, strategies, procedures and doctrine.
- Practice in working in environments that may otherwise be too dangerous.
- Gaining experience in situations that occur infrequently.
- Learning to operate equipment and facilities that are costly or unavailable.

Integrating simulation into CFA's performance improvement approach requires lasting change to provide for a sustainable, flexible and innovative simulation services delivery model.

This strategy contains a range of initiatives to support the integration of simulation into CFA's performance improvement approach under three goals:

1. **Clear Leadership and Governance** for simulation services through the introduction of a new model to lead the management and development of simulation services and delivery into the future.

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2. **Integrated Program Delivery** across and within streams to improve performance, drive interoperability and reduce duplication.
3. **Sustainable Capability** that ensures simulation systems, facilities and programs are appropriately resourced to deliver performance improvement.

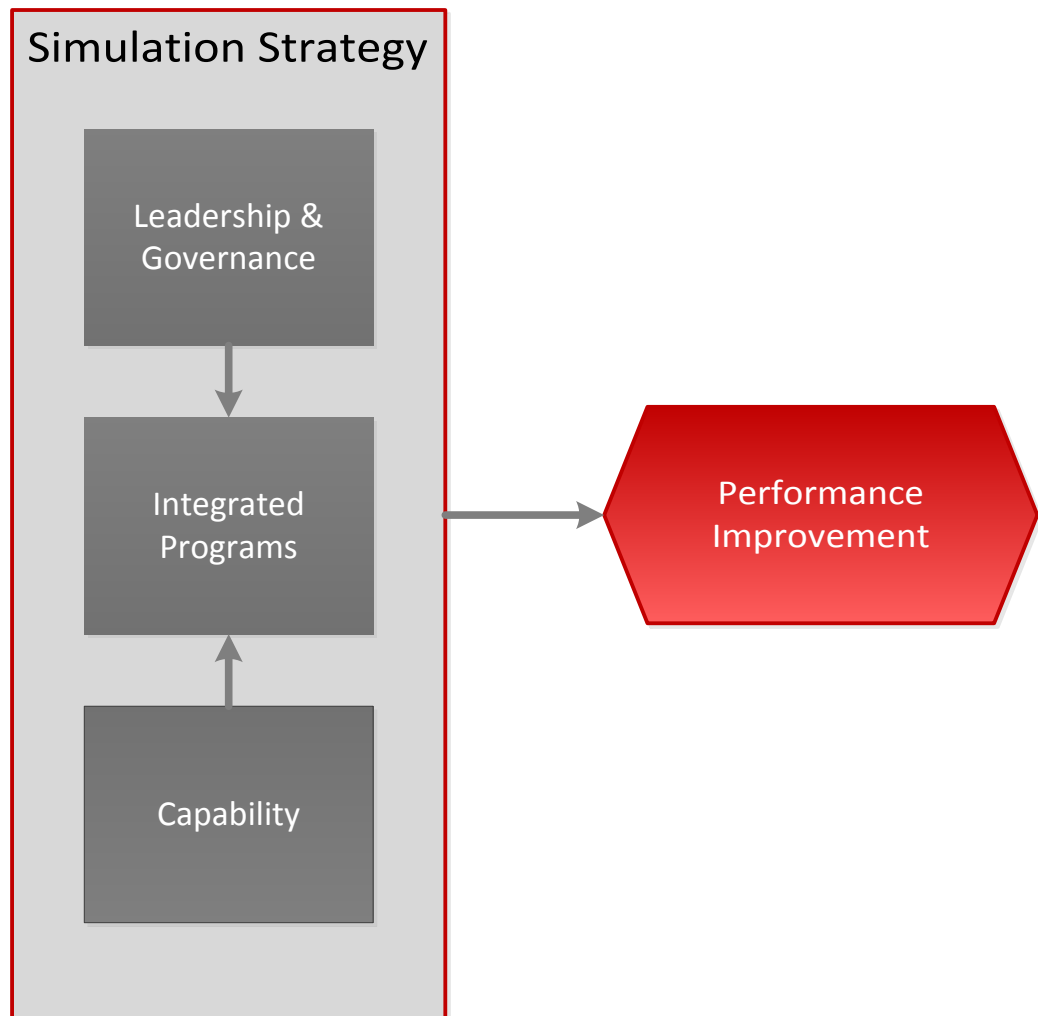


Figure 2 Simulation Strategy Model

The Simulation strategy will contribute to achieving the CFA's performance objectives through:

- ensuring that simulation programs are targeted at reducing the incidence and impact of hazards on the Victorian community
- establishing a governance and leadership framework that contributes to the ethical reputation of CFA and its members
- ensuring that simulation capabilities are sustainable and contribute to effective agency response and community resilience.

*"I think that simulations - in whatever form they take - are essential for CFA. At the grassroots level Brigades need to be able to train members effectively, consistently, realistically and in an entertaining manner. As we move up the command structure we need to be able to simulate incidents that are highly complex and may never have happened. If we can do this we will strengthen our readiness."*

BMT Member D13



## 5.2 Delivering our Goals

### Goal 1: Clear Leadership and Governance

**Institute clear accountability** for the integration of simulation into performance improvement, through the establishment of a governance framework to set priorities, ensure interoperability, and oversee planning and investment.

A single, authorised and central point of leadership will provide for the setting of common goals and standards, whilst providing different parts of the CFA business with the flexibility to meet their own particular requirements (see Figure 3). This proposed model promotes a unified approach across the four streams for simulation performance:

1. Operational Preparedness.
2. Operational Support.
3. Community Readiness.
4. Organisational Planning.

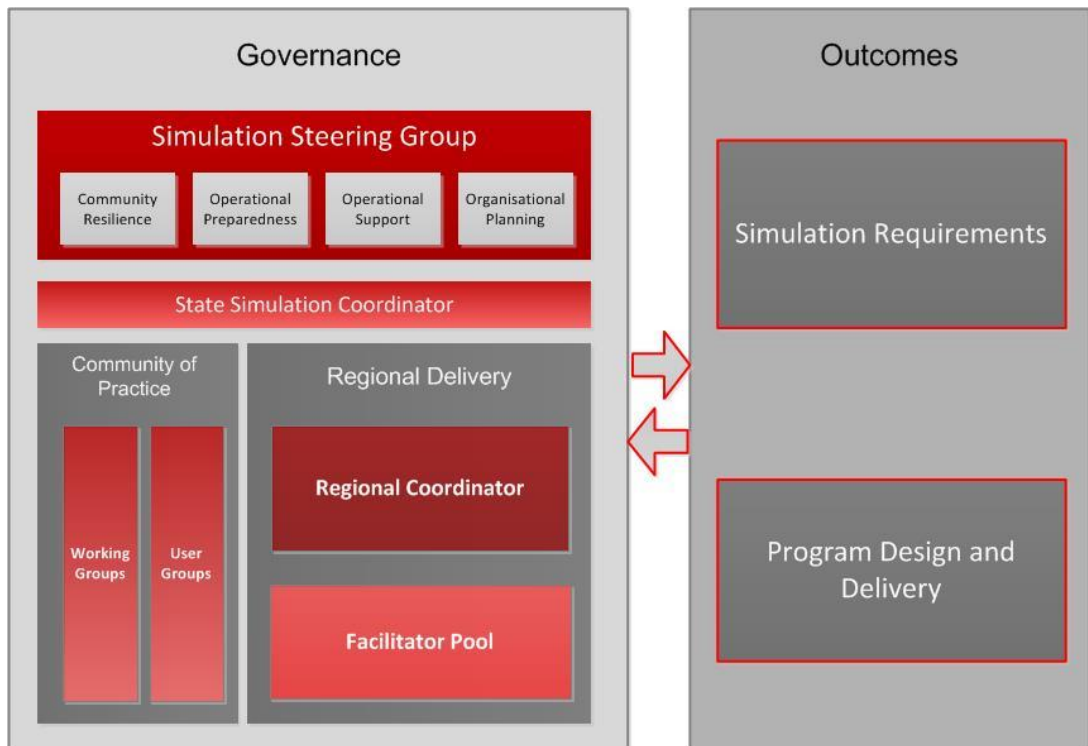


Figure 3 Simulation Governance Model

## The Simulation Steering Group

The **Simulation Steering Group** is made up of senior representatives from all of the CFA business units that use, manage or develop simulation programs. These representatives will collectively represent the four simulation performance streams. This group will ensure that CFA's simulation services align with CFA's Performance Improvement Framework and specific objectives of each business unit. They will oversee the development and delivery of the annual simulation services program and determine priorities, programs, products, technology, research and development. The steering group will seek opportunities to maximise return on investment through integration and reuse of simulation systems.

The Simulation Steering Group will direct the application of standards where they are deemed appropriate. This includes standards in delivery and performance as well as technical standards such as data and communications standards. It will also oversee liaison and cooperation with other state and interstate agencies and encourage opportunities for partnerships.

Finally, this group will ensure simulation requirements are managed effectively and accurately, including initial gathering, validation and change management. Specific simulation systems will be procured, developed and disposed of according to how well they meet the current requirements. The Simulation Steering Group will specify the methods for evaluating the effectiveness of simulation delivery against the stated requirements.

## The State Simulation Coordinator

The **Simulation Coordinator** is a dedicated resource, responsible for the effective delivery of the annual simulation services program and provides secretariat support to the Simulation Steering Group. The Simulation Coordinator liaises with the Regional Coordinators to coordinate the activities of the Working Groups and User Groups.

The State Simulation Coordinator also acts as a point of contact for external agencies and organisations. This ensures that partnerships are durable and include appropriate parts of the business.

## Community of Practice

Innovation and sharing of best practice will be fostered through establishing a **Community of Practice** for simulation coordinated by the Simulation Coordinator. The intent is to encourage those with an interest in simulation to share resources and experiences to build the level of simulation education within the organisation. This will assist the introduction of more complex programs in later years of the implementation plan.

Within this model, working groups and user groups will be formed to collect, refine and validate requirements for simulation systems and programs to meet the performance objectives.

**Working groups** are formed around a specific Simulation Program or subprogram and are drawn from the Regional Facilitator Pool and other subject matter experts. They provide a top down perspective on the analysis and development of simulation requirements to ensure they are focused on delivering business needs. Working groups will also assist the integration of simulation by supporting the development of common tools such as scenarios, guides, procedures and templates.

**User Groups** are formed from user of specific simulation systems. They provide a bottom up perspective on simulation requirements that drives continuous improvement and supports the collection of new requirements. User groups support testing and evaluation of simulation systems with a particular emphasis on field testing and practicality issues.

### Regional Coordinator

Simulation programs are primarily delivered and coordinated locally at regional level through a Regional Coordinator. The coordinator will also act as a point of contact for regional members seeking information and guidance and to disseminate information within the region.

### Facilitator Pool

Simulation facilitators are primarily drawn from regional members and coordinated at regional level. This provides a locally based, flexible and accessible pool of qualified and experienced facilitators who can support the delivery of simulation services across a variety of programs. They also use their experience and expertise to inform decision makers of opportunities to use simulation in new and innovative ways to further CFA performance objectives.

### Outcomes

The governance model oversees the design and development of simulation systems and programs. Simulation requirements are developed by program working groups and system user groups to meet the needs and priorities of CFA. Procurement and development of simulation systems is undertaken to satisfy those requirements, which are then realised through the design and delivery of simulation programs.

Each component is an element in a continuous improvement process where new requirements are identified and prioritised, existing systems and programs evaluated against those requirements, and changes introduced in an integrated manner to deliver improved outcomes.

The proposed Simulation Governance and Delivery Model will:

- Deliver a defined line of management and control for simulation at CFA
- Provide oversight of the delivery of an annual simulation services program, including:
  - Setting state-wide annual priorities for the program
  - Developing an annual plan for the program
  - Prioritising and managing resources for the simulation program
  - Developing state simulation capability and capacity
  - Setting priorities for research and development

## Integrating Simulation into CFA's Performance Improvement Approach

- Ensure the technology, asset and infrastructure platform for the simulation program is secure and reliable
- Establish and oversee common standards.
- Ensure the simulation program meets performance improvement requirements.
- Build a community of practice around simulation.

*"You can't be everything for everyone. Focus on a primary goal and do that well. Quality will sell in the end. Aim to get at least one quality winning simulation out to every group. Build this up each year."*  
Volunteer D9

## Goal 2: Integrated Program delivery

**Improve performance, drive interoperability and reduce duplication** through the targeted integration of simulation into and across key organisational programs.

CFA directorates and regions share common goals and needs. The specialised nature of simulation services and products means that a more integrated approach will benefit CFA.

A common operating model for simulation services will support integration of simulation into and across key organisational programs. It will provide CFA with a sustainable, fit-to-purpose and innovative simulation service.

The Simulation Governance Framework uses a community of practice approach comprising working groups and user groups to facilitate integration activities and oversee the recording and validating of requirements.

Integration of simulation will occur in two ways through both vertical and horizontal integration.

### Vertical integration

Refers to the use of one or more simulation systems, within a program stream, to deliver a coordinated outcome. For example, the initial training of a member might include:

- textbooks, case studies, lectures and demonstrations to build a basic understanding of theories and concepts
- computer simulation to contextualise basic fire fighting concepts and procedures
- live simulation at a fire ground to practice using equipment in a realistic setting

A vertical integration approach will ensure that each program stream targets and prioritises its simulation activities to achieve the desired improvement in performance in a planned and coordinated manner.

Working groups will work within streams and programs to define requirements and ensure that the most appropriate simulation is used to deliver effective performance.

### Horizontal Integration

Refers to the application of standards for simulation across the four program streams and, wherever practicable, the holistic and common use of simulation systems, tools, infrastructure and facilitators to achieve multiple outcomes in different program streams. For example, one simulation system, such as Phoenix Rapidfire, can be used to support training, operational support and community resilience.

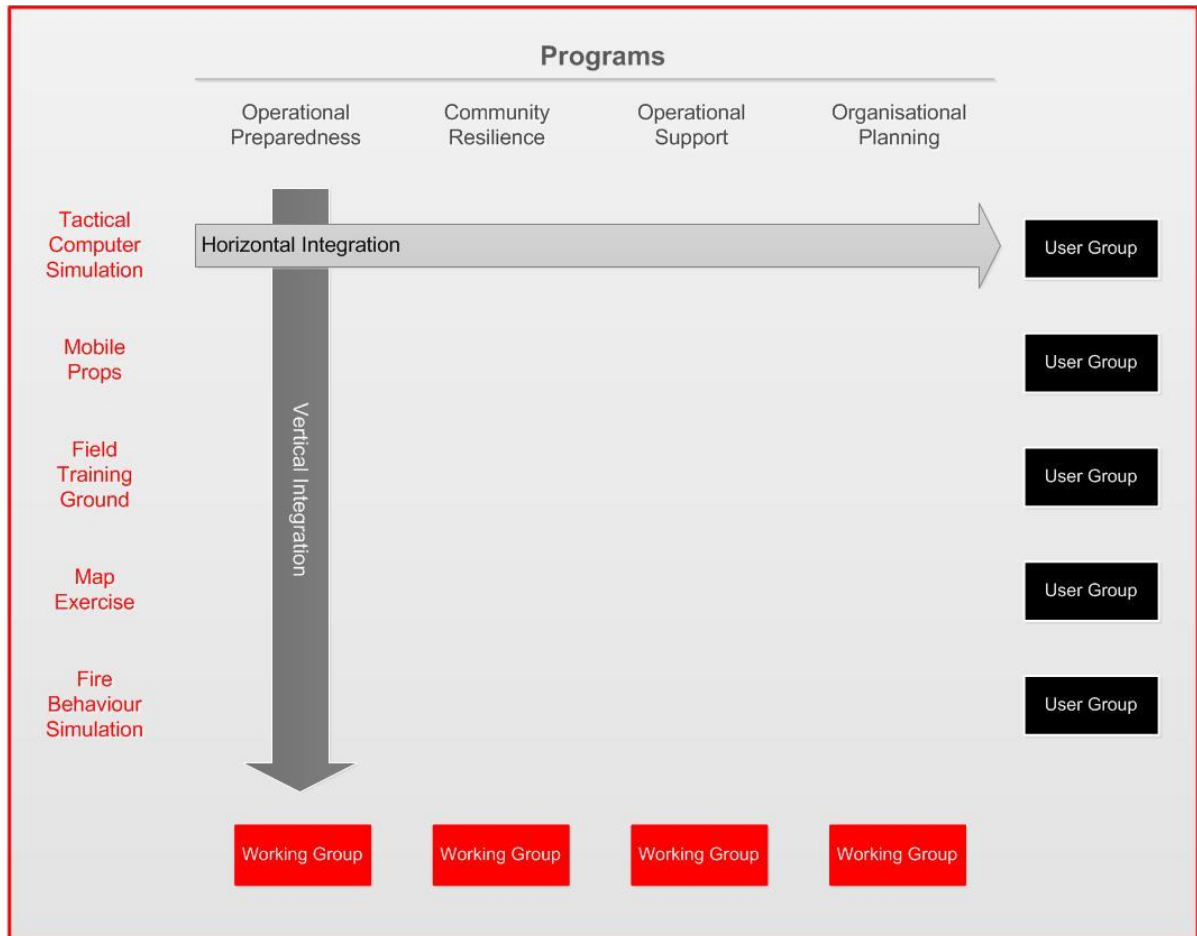
A horizontal integration approach will provide important opportunities to support

## Integrating Simulation into CFA's Performance Improvement Approach

interoperability and reduce duplication across program streams and CFA business units. In addition, efficiencies can be gained through the sharing of common resources.

Each simulation system will use its associated user group to coordinate the maintenance and refinement of requirements to drive continuous improvement.

See Figure 4 for the common operating model for the integration of simulation at CFA. In order to achieve integration, a dedicated effort for coordination and planning is required. The Simulation Steering Group will direct high level integration objectives, but more often, detailed integration and planning will happen at the program, system and regional level.



**Figure 4 Vertical and Horizontal Integration**

*“CFA is a geographically diverse 24/7 environment. The current methods of training have not been entirely successful in delivering effective high quality and consistent training to its volunteers and staff. The CFA have the opportunity to develop an electronic training environment that supports and enhances the current training operations. The computer training environment should include eLearn, stand-alone and group simulation, facilitator operated simulation training platforms.”*

Volunteer D14

**Goal 3: Sustainable Capability**

**Keep pace with the evolving needs of CFA and the community** by ensuring that resources, products, services and infrastructure are secure, reliable, adaptable and benchmarked against good practice.

In order to remain relevant and contribute to performance improvement, simulation at CFA must be able to operate across the four key program streams and keep pace with the changes that affect them.

Changes in the environment, demographics and land use, technology, learning and development practice, community education and engagement approaches and risk management methodologies, are all requiring CFA to develop new capability.

Currently, CFA is at risk of losing simulation capability it currently holds. For example, CFA’s current computer based tactical simulation program is at risk of failure. Whilst this program has proven to be a well-received and has enjoyed significant expansion in recent years, funding to maintain the two technicians who deliver it has ceased. If this is not addressed quickly, the capability may need to be rebuilt from scratch, taking years to regain.

Through the Simulation Governance Model, CFA will ensure that simulation resources, products and services will be developed and maintained through the seven inputs to capability.

Figure 5 describes the Capability Inputs to support a sustainable simulation service for CFA and provides principles to support decision making for each key input.

Capability Input	Principle for Simulation Decisions
<p><b>People</b></p>	<p>Simulation programs will ensure that they adequately identify the staff and skills needed to operate, deliver and support the program and underlying simulation systems.</p> <p>The Community of Practice approach will maximise the usage of the diversity of CFA membership to encourage innovative and adaptable solutions.</p>
<p><b>Organisation</b></p>	<p>Simulation will be governed through the Simulation Leadership and Governance Model.</p> <p>Simulation decisions will be made consistent with the Chief Officer’s Capability Statement.</p> <p>Simulation programs will identify how they relate to business units and what liaison and coordination is required.</p> <p>Simulation governance will ensure that innovative solutions are shared amongst members to promote good practice and avoid duplication.</p>



Capability Input	Principle for Simulation Decisions
<b>Information</b>	Simulation programs will identify their requirements for ICT support and may drive the development of new ICT capabilities.
<b>Support and facilities</b>	The support requirements for each simulation system will be identified in the management plans for the simulation programs and the facilities.
<b>Training</b>	<p>The training requirements of existing systems will be identified and a plan developed to satisfy them.</p> <p>New simulation systems will identify requirements for training technicians and/ or facilitators.</p>
<b>Equipment</b>	<p>The equipment needs of simulation systems will be identified and managed throughout a complete lifecycle including acquisition, maintenance and disposal.</p> <p>Simulation programs that make use of real equipment, such as the use of ICT equipment during an Incident Control Centre exercise, will identify what equipment and capabilities are required as part of the program plan.</p>
<b>Doctrine</b>	<p>Doctrine underpinning the use of simulation will be developed, including tools, procedures, guides and templates.</p> <p>Simulation programs will align with and support existing operational doctrine, techniques and procedures.</p> <p>Existing procurement and business and project management procedures and policies will be applied to simulation development and acquisition. Where policies require amendment or development to support simulation management, this will be undertaken.</p>

Figure 5 Capability Inputs to Simulation

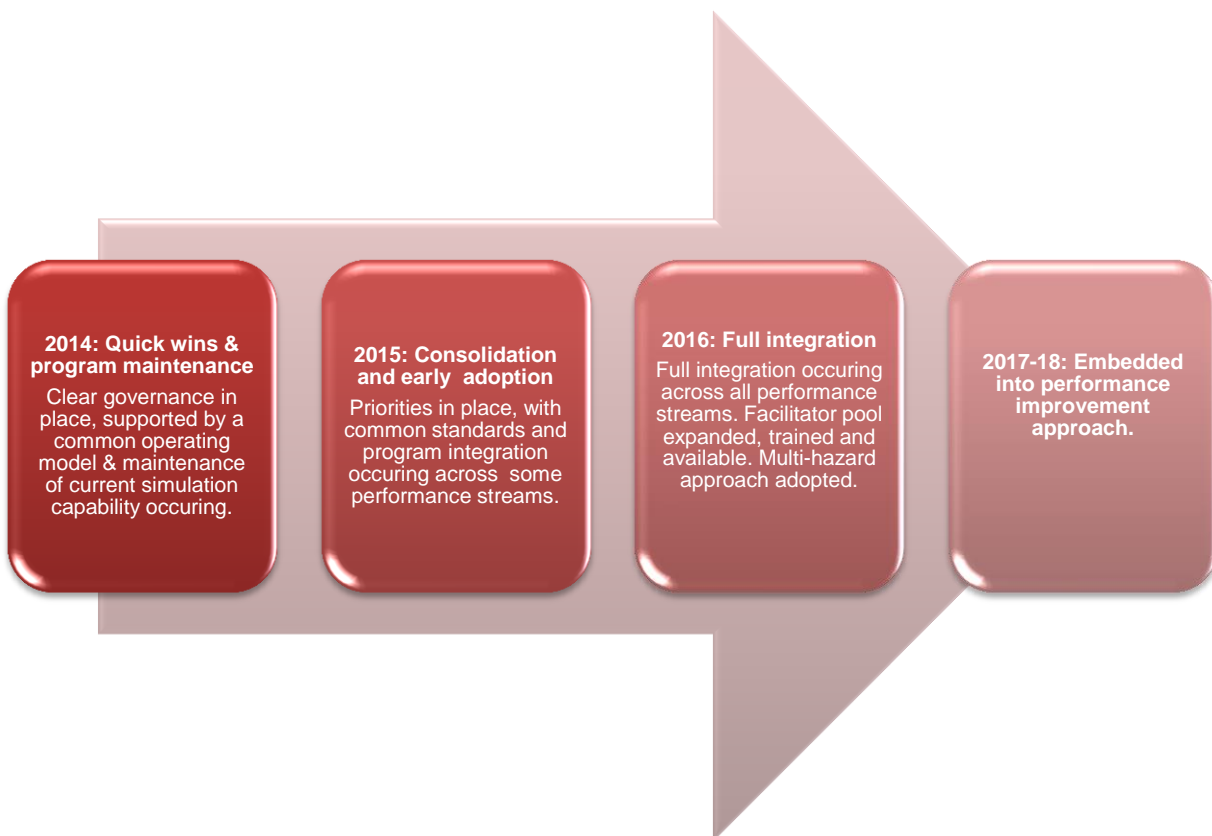
*“Simulation can help by making training one step closer to the real deal and takes away the imagination factor that doesn't exist at a real event. It can also ensure the right training is provided for the right situation.”*

Unnamed respondent D7

## 6. Implementation

The Simulation Strategy will be implemented over a five year period, with work expected to commence in mid-2014.

The progression of the strategy begins with pushing for quick wins to immediately put leadership in place and sustain existing successful simulation programs. See Figure 6 for an overview of the Implementation Plan.



**Figure 6 Implementation Overview**

Once the governance framework is established, existing simulation programs will be identified and evaluated. Where necessary, business cases will be developed to support the continuation, integration and resourcing of simulation programs.

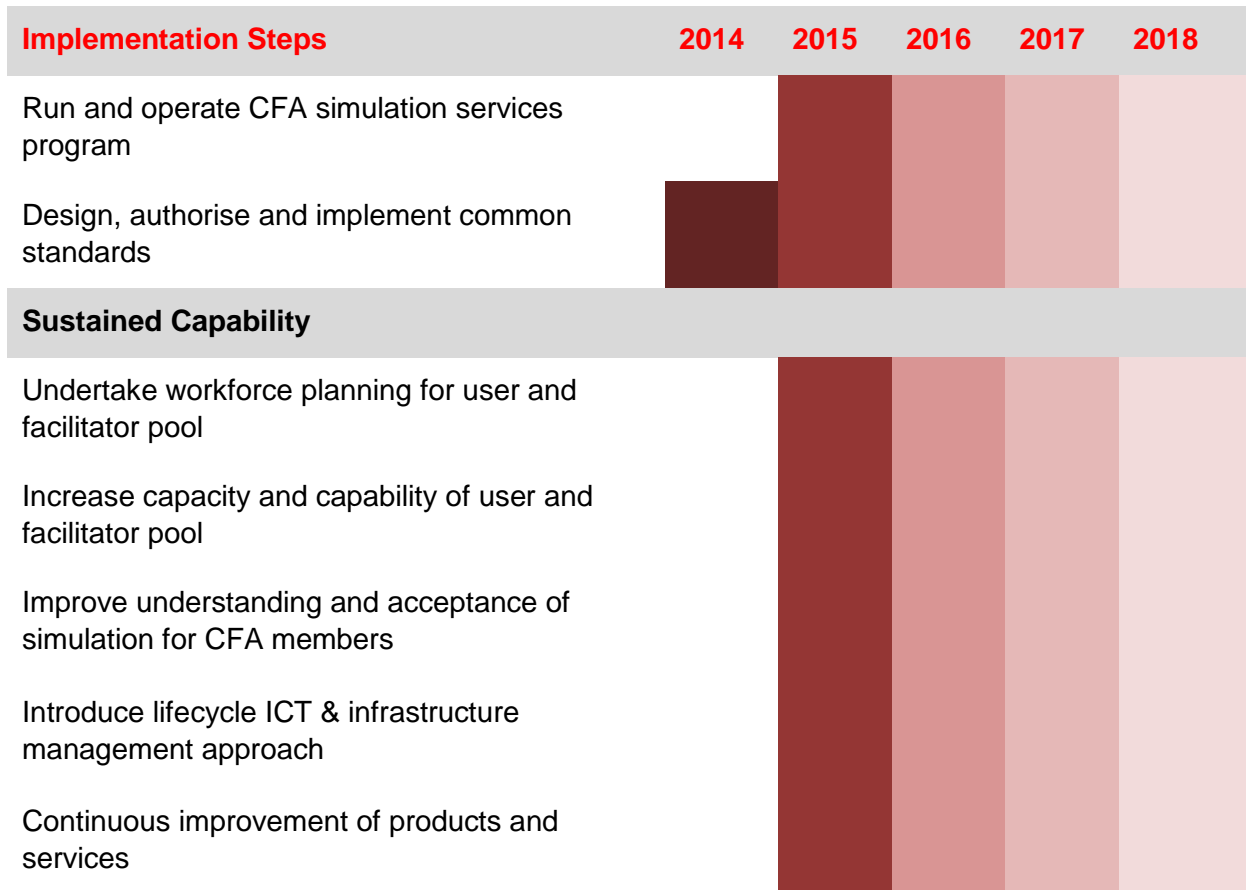
As the simulation capability matures and members gain a greater understanding of simulation, detailed needs analysis will identify gaps and build business cases to implement solutions. More complex programs can commence, such as expanding the operational support role for simulation and exploring opportunities for using simulation for long term organisational planning.

By the end of the implementation plan, CFA will have a detailed understanding of where and why simulation is used and how it contributes to performance improvement. A methodology for continuous improvement will be in place for all simulation programs which will be tied to the CFA performance improvement approach.

The table below describes the high level activities that need to be accomplished on an annual basis to achieve the strategy.

### CFA Simulation Strategy Overview Implementation Plan

Implementation Steps	2014	2015	2016	2017	2018
<b>Clear governance</b>					
Establish governance framework	█				
Develop roles and responsibilities	█				
Establish working groups and user groups	█	█			
Establish mechanisms for determining investment in simulation systems, products and infrastructure		█	█		
Develop and authorise Simulation Services Annual Plan	█	█	█	█	█
<b>Integrated approach</b>					
Establish common operating model	█				
Undertake an audit, evaluation and gap analysis of existing simulation systems, programs, facilities and resources	█	█			
Build on existing business cases, or develop new ones, to link programs to performance objectives and secure appropriate resources		█	█		
Identify new opportunities for using simulation to improve performance and build appropriate business cases		█	█	█	█
Implement new simulation programs as developed		█	█	█	█
Consolidate simulation program for operational preparedness stream	█	█			
Consolidate and expand simulation program for community readiness stream		█	█		
Expand simulation program for operational support stream		█	█	█	
Establish simulation program for organisational planning program stream.			█	█	█



## 7. Closing

The CFA Simulation Strategy describes a framework for integrating simulation into performance improvement to meet the Chief Officer's capability goals. This will be achieved by implementing the following three goals:

- **Clear Leadership and Governance** for simulation services through the introduction of a new model to lead the management and development of simulation services and delivery into the future.
- **Integrated Program Delivery** across and within performance streams to improve performance, drive interoperability and reduce duplication.
- **Sustainable Capability** that ensures simulation systems, facilities and programs are appropriately resourced to deliver performance improvement and keep pace with the evolving needs of CFA and the community.

By applying a coherent, targeted and integrated program of simulation development, governance and delivery across key business activities, CFA will maximise the benefits of simulation to prepare members and the community to respond to emergencies. CFA will be in a position to exploit and drive opportunities for collaboration with other agencies and organisations to improve performance across the emergency management sector.

The simulation strategy will provide CFA with the simulation capability to meet challenges, plan for the future and deliver high quality and professional services on behalf of the community.

## Appendix 1 | Glossary

<b>Performance Stream</b>	One of the four primary ways in which simulation is used to improve performance: Operational Preparedness, Operational Support, Community Readiness and Organisational Planning.
<b>Simulation</b>	The purposeful imitation of the operation of a real world process or system over time.
<b>Simulation Facilitator</b>	An individual who facilitates or guides the learning of participants in a simulation session.
<b>Simulation Program</b>	An activity, or set of related activities that, use(s) simulation as part of the delivery means.
<b>Simulation System</b>	A specific simulation, such as a computer software system or a physical model.
<b>Simulation Technician</b>	An individual with particular technical expertise who operates a simulation, usually in conjunction with a facilitator.

## Appendix 2 | References

CFA. (2013). CFA Service Delivery Strategy 2025 Discussion Paper.

CFA. (2014). Simulation Background Document. Retrieved from <http://cfaonline.cfa.vic.gov.au/mycfa/Show?pageld=intraImttpCapabilityFramework>

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