

EM-COP Concept of Operations

EM-COP CONOPS v1.0 3June15

Purpose of this Document

The purpose of this document is to provide guidance to users of EM-COP on the Concept of Operations (CONOPS) for use at incident, region or state tiers of emergency management within Victoria.

Assumptions

- Familiarity with the basic operation of EM-COP features such as logging in, joining an incident, creating rooms, the drawing tools, using the Whiteboard chat, adding EMCOP Log entries.
- An understanding of the emergency management doctrine in Victoria, in particular AIIMS and the emergency management arrangements.
- This document should be considered a living document that will evolve throughout the pilot period and into operational use once the EM-COP Project transitions from project mode to ongoing operations.

Concept of Operation

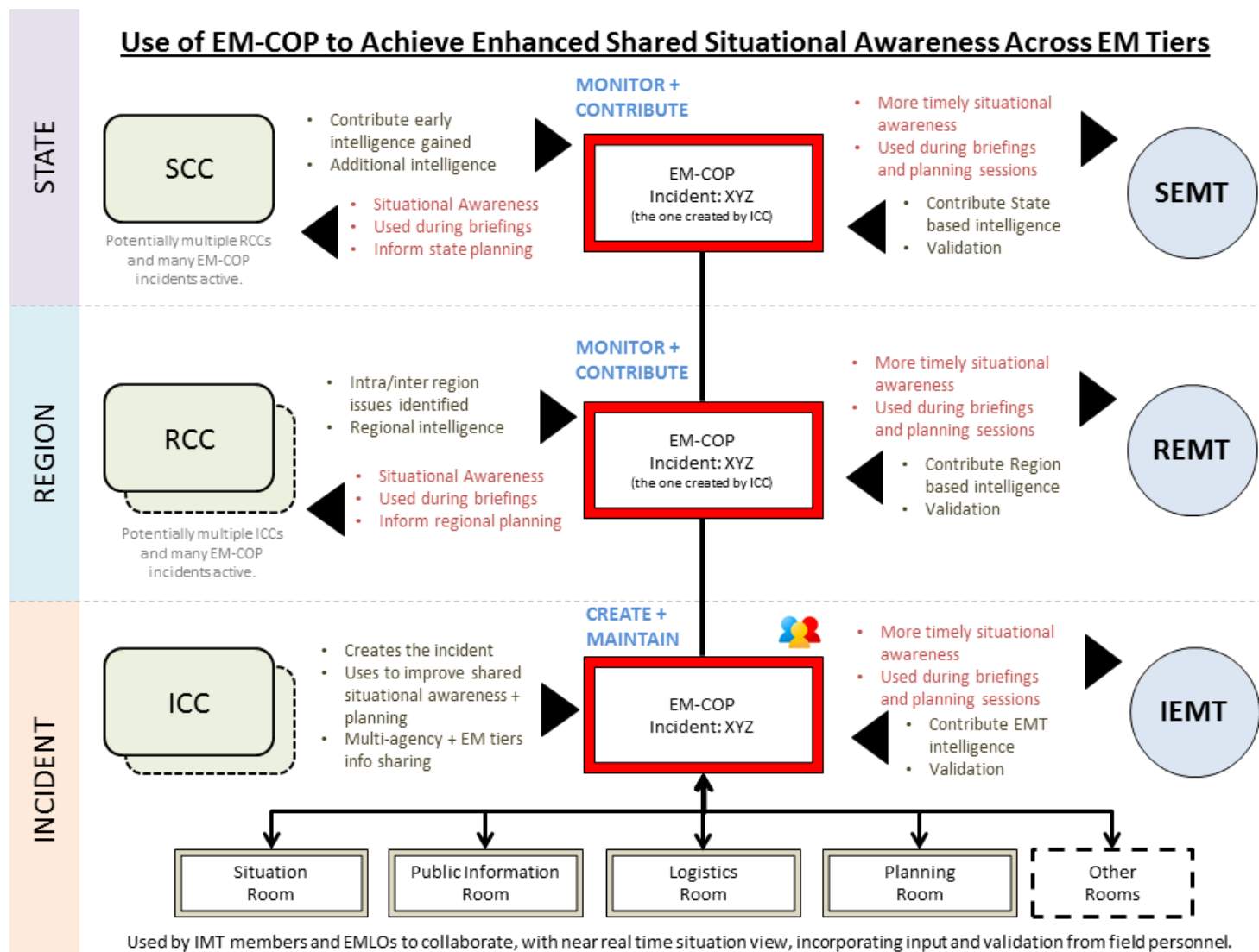
One of the key principles adopted by AIIMS is flexibility - adaptable to an all hazards, all agencies environment. EM-COP supports this underpinning principle and operates with a relatively flexible environment for users to work within. The concept of operations outlined below is designed to provide a level of consistency in our approach to using EM-COP within Victoria to support emergency management activities.

General Principles

- EM-COP should be used as a tool to assist and complement existing collaboration forums, information flows and decision support as per agreed EM doctrine in Victoria.
- Where incident management is likely to involve a level 2 IMT, or a large IMT, the Incident Controller should consider creating an EM-COP incident to assist with collaboration activities and to assist in building the Common Operating Picture (COP).
- For a COP to be successful the responsible owner must encourage and support active participation in using EM-COP for collaboration, encouraging access by all that need to view it, and encourage information sharing using EM-Log or direct input into incident rooms by those who have the information to share. e.g. EMLOs

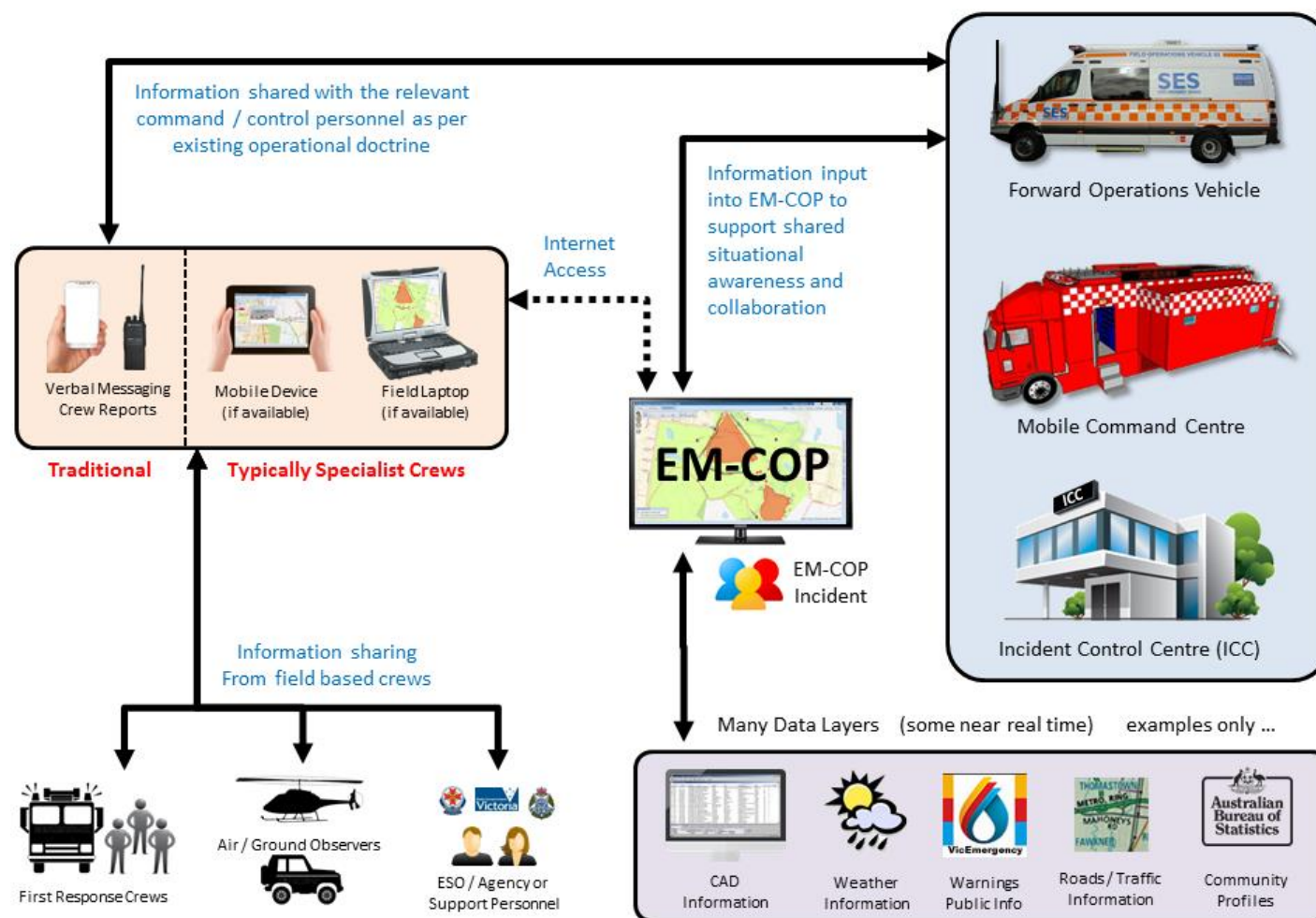
- Where possible, one instance per incident is desirable. If more than one EM-COP incident is created, every effort by the controlling body should be made to consolidate into one EM-COP instance with collaboration and situational awareness afforded by a single incident.
- EM-COP is particularly useful in assisting with emergency management planning activities, in addition to being invaluable during the reaction to an emergency event.
- EM-COP may be used at either State or Region tiers to facilitate the initial intelligence gathering activities for an evolving emergency event. The EM-COP intelligence created would later transfer to incident control as and when incident control is ready to receive and continue these activities.
- Personnel contributing emergency management information into an EM-COP incident should through existing doctrine, and as a result of a discussion with the controlling agency determine the appropriate location and format for the contribution. e.g. utilisation of new room, adding information to existing rooms, providing the information via the Log, etc.

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EM-COP – Information Flow Between Field Based Crews and Command/Control



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Incident, Region and State Tier – Use of EM-COP Incidents

EM-COP Incident	Incident Control	Region Control	State Control
Considerations Triggers for Creation	Incident Controller determination considering: <ul style="list-style-type: none"> Enhanced shared situational awareness Multiple agencies involved - collaboration Incident mud-mapping and planning Additional Intelligence requirements 	Regional Controller determination, typically: <ul style="list-style-type: none"> Regional Control Team activated 	State overview active at all times
Area of Interest	Incident Area of Operations	Emergency Management Region	State of Victoria
Scope of COP	Incident Operations	Regional Overview of Operations	State Overview of Operations
Responsible Owner	Incident Controller	Regional Controller	State Response Controller
Maintained by	Intelligence Unit/Section (where established) or Planning Section – Situation Unit	RCC Intelligence Officer (where established) or delegate endorsed by Regional Controller	SCC Tier 1, 2,3 - SCC Intelligence Officer (where established) SCC Tier 0, 1 – SCC EM Support Team – Intelligence Analyst
Nominal Period of Use	Duration of the Incident	Whilst the RCC is operational	Whilst the State Intelligence Function is being exercised.
Outcomes / Focus	To support Incident Controller with enhanced: <ul style="list-style-type: none"> Operational situational awareness Field observations and intelligence Operational Intelligence generation – 	To support the Regional Controller with: <ul style="list-style-type: none"> High level situational overview of significant operational activity across the Region incorporating: <ul style="list-style-type: none"> Impacted and Potential Impact Zones 	To support the State Response Controller with: <ul style="list-style-type: none"> View of the 8 EM Regions Line of control – ICCs and RCCs status across the State

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EM-COP Incident	Incident Control	Region Control	State Control
	<ul style="list-style-type: none"> INTCHECK process Development of future state scenarios Development of IAP – supporting planning Impact and consequence analysis Public Information – warnings / media Initial Impact Assessment planning Traffic management planning Evacuation management planning 	<ul style="list-style-type: none"> Current and predicted situation (including damage and losses) Control strategy Critical control factors Critical community and consequence issues. Line of control – ICCs status in Region Issues identification - <u>inter</u> & <u>intra</u> Region: <ul style="list-style-type: none"> Regional resource utilisation State resource utilisation e.g. aircraft Traffic management plans Incident Management Teams Evacuation management plans Future state scenarios – threat e.g. Wx Future state scenarios - emergency Critical infrastructure Public information – warnings / media Identification of risks and their consequences outlined in regional outlook products and RCT Action Plans Cross border (where relevant) operational activity in NSW and SA – location, trends, issues, etc. 	<ul style="list-style-type: none"> Outline of Interstate or International deployments – where, what, timings High level State Loss and damage assessment Issues identification between Victoria and relevant States, or in relation to International taskforces into or out of Victoria. Identification of state risks and their consequences outlined in state outlook products and SCT Action Plans Intelligence on new significant incidents developing – Rapid INTCHECK process
Key Collaboration Groups	<ul style="list-style-type: none"> IMT functional areas IEMT members ICC EMLOs EMLOs offsite Regional Control 	<ul style="list-style-type: none"> RCT REMT members RCC EMLOs EMLOs offsite Incident and State Control 	<ul style="list-style-type: none"> SCT SCC functional areas SEMT members SCC EMLOs EMLOs offsite

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EM-COP Incident	Incident Control	Region Control	State Control
			<ul style="list-style-type: none">• Regional Control• Other State Coordination Centres• CCC in Canberra
Frequency of Update (Currency of info)	As determined by the responsible owner. As a minimum, in line with existing timeframes for situation reporting, briefings and associated planning documentation. Where possible, as often as possible.	As determined by the responsible owner. As a minimum, in line with existing timeframes for situation reporting, briefings and associated planning documentation. Where possible, as often as possible.	As determined by the responsible owner. As a minimum, in line with existing timeframes for situation reporting, briefings and associated planning documentation. Where possible, as often as possible.

EM-COP Incident Rooms

EM-COP uses a concept of “rooms” within an incident to facilitate different map workspaces for collaboration between users. Rooms can be created for a specific theme allow the users with access to the room an opportunity to work together without drawing over the top of other users work. Rooms can be secured for access by certain users.

When a new EM-COP incident is created, the system automatically creates two initial rooms:

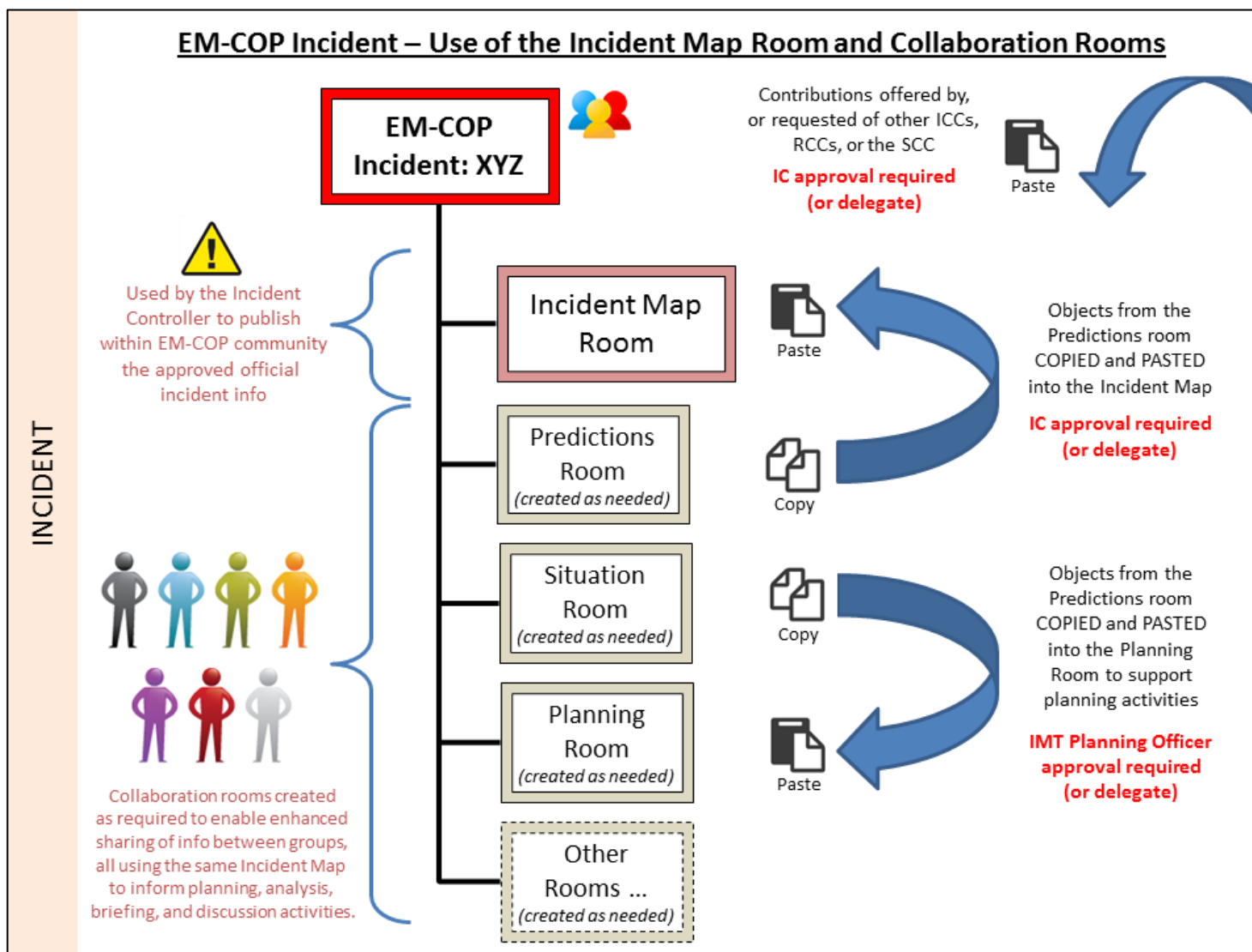
- ‘IncidentMap’ - publically visible room, but secured for write access by the creator of the incident. Considered the default ‘official incident’ room.
- ‘WorkingMap’ - a publically visible room intended for collaboration between users in the absence of any further rooms created.

The responsible owner of the EM-COP incident may determine that additional rooms are required to facilitate collaboration between users on specific themes.

As a minimum, the only official information is that copied into the ‘IncidentMap’ by an authorised user on behalf of the responsible owner once approved.

EM-COP incident rooms should indicate the currency of the information provided utilising the Whiteboard Chat log and potentially a text message object to indicate the currency and planned update frequency (where relevant). An expiry time is also recommended for any information with time criticality. This could be indicated via a note in the feature attributes, the ‘Whiteboard Chat’ or a text object visible to all in the map view.

Whilst flexibility exists in creating rooms for specific themes, where possible subsequent rooms covering the same theme should not be created unless they have a time slice or snapshot theme.



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Default Room Names

A number of default rooms names have been prepared so that users are more easily able to recognise the intended use for a given collaboration room and to reduce confusion with room names. Most of the rooms are aligned with AIMS functional area names and therefore should be more familiar to most EM personnel.

The default rooms are listed in the 'Create New Room' dialogue box. Permission should be sought from the EM-COP incident owner before a new room is created.

Room: 'IncidentMap' <ul style="list-style-type: none">• Considered the 'official' incident room information.• Locked initially to the creator of the incident.• Room permission for write will need to be given to users delegated to update the IncidentMap.• Typically information should be approved by the responsible owner before being shared publically.• May contain many layers of information created using the collaboration rooms.	Room: 'WorkingMap' <ul style="list-style-type: none">• Initial collaboration room in the absence of other rooms created for a specific theme.• Has no official theme for collaboration.	Room: 'Plans' <ul style="list-style-type: none">• Collaboration room.• Used by the Planning Section to develop plans.• Specific plans for evacuation, traffic management or initial impact assessment have their own rooms.• Used to support options analysis.
Room: 'Resources' <ul style="list-style-type: none">• Collaboration room.• Resources planning.• Mark-up of information supporting establishing the COP for the Resources Unit.	Room: 'ILU' <ul style="list-style-type: none">• Collaboration room.• Interstate or International deployments into, or external to our State.• Could be used to articulate where personnel from other jurisdictions are located within Victoria.	Room: 'SituationAnalysis' <ul style="list-style-type: none">• Collaboration room.• Current operational situation state capture.• Marking of known or potential risks.• Community profiles.• Development of future state scenarios.• Capture of intelligence from the INTCHECK process.• Field intelligence, observations, sensor information.

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Room: 'Mapping' <ul style="list-style-type: none"> • Collaboration room. • Preparation of EM-COP data for output to GIS mapping systems for specialist mapping work. • Collection of specifically imported GIS information via 'data uploads'. • Preparation of specific mapping tasks. 	Room: 'Investigation' <ul style="list-style-type: none"> • Collaboration room. • Investigation planning. 	Room: 'InformationWarnings' <ul style="list-style-type: none"> • Collaboration and special Publishing room. • Information and Warnings planning. • Creation of a publically visible, tailored incident map for the warnings and additional information for the community. • Specific permissions required to 'Publish' the room in the future. Functionality on hold.
Room: 'Media' <ul style="list-style-type: none"> • Collaboration room. • Media planning room. • Marking up community meetings. • Capturing social media issues. 	Room: 'Operations' <ul style="list-style-type: none"> • Collaboration room. • Marking up divisions and sectors. • Crew tracking and current tasking. • Line of control 	Room: 'Logistics' <ul style="list-style-type: none"> • Collaboration room. • Logistics planning. • Determining safe routes for logistics vehicles. • Marking up where supply is required.
Room: 'ImpactAssessment' <ul style="list-style-type: none"> • Collaboration room. • Impact Assessment planning. • Mapping phases of impact assessment by AO. • Marking up impact assessment data. • Impact assessment team tracking, marking AO. 	Room: 'ReliefRecovery' <ul style="list-style-type: none"> • Collaboration room. • Relief and recovery planning. • Marking up Relief Centre status, associated data. 	Room: 'TrafficManagement' <ul style="list-style-type: none"> • Collaboration room. • Traffic management planning. • Collating traffic management points, access status. • Alternate or detour routes marked.

Room: 'Evacuation'	[Secured Rooms]	[custom room names]
<ul style="list-style-type: none">• Collaboration room.• Evacuation management planning.• Key timings articulated.• Evacuation centres, staging areas, resources.• Evacuation routes mapped.	<ul style="list-style-type: none">• Once created only those with permission to collaborate in the room will see it and access it.• Used for sensitive collaboration work, perhaps with agencies or organisations that require a lower profile within the EM-COP community.	<ul style="list-style-type: none">• Custom collaboration rooms may be required to support collaboration on different themes not already listed.• Remember that rooms cannot be renamed or deleted once created – be careful what it is called.

Secure Incident Rooms

All rooms are visible to users of EM-COP by default. The responsible owner may also request certain rooms to be secured by changing room permissions for users which will effectively hide the room from all users. Rooms should not be secured without permission from the responsible owner.

- Note that these secured rooms are not visible to anyone unless they are given specific permission to contribute to the room.
- Consideration for managing the ongoing use of a secured room between shifts, in particular ensuring subsequent personnel are given permission to manage the secured room.

Use of the Whiteboard Chat

The whiteboard chat feature in EM-COP allows users to leave a persistent log entry (between users and logins) for a room within an incident. This feature is extremely useful to help convey information relating to what the user is seeing in the room on the map, perhaps to help set context and to provide a clearer understanding of the assumptions used when marking-up the map. Please don't use the whiteboard chat as a tasking tool.

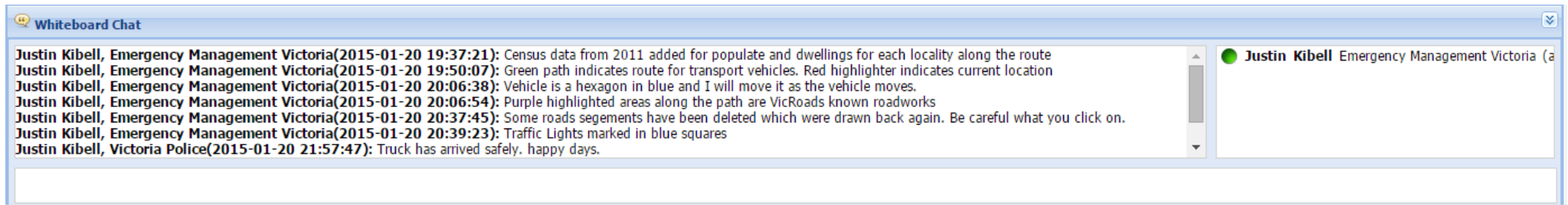


Figure 1 - Example of the Whiteboard Chat log

Suggestions for whiteboard chat log entries include:

- Status or currency of work in the room.
e.g. this room will remain inactive until day shift tomorrow 20-Jan-15
- Descriptions of what a collection of objects are describing in the room, adding additional context.
e.g. the most recent active fire edge data has been added based on line scans run yesterday and prepared overnight.
- Information that may have time sensitivity.
e.g. please note the traffic management points visible now expire after 2230 hrs tonight
- Verification status of objects.
e.g. observation water height photos for the flooding in Maffra have been sourced from social media and have not been verified by another source.

Mark-up Object Attributes

A range of simple drawing tools are available in EM-COP to facilitate marking up maps within rooms of an incident. Whilst the colour, shape, symbol or other visible attributes may mean something to the creator, it is important to ensure that other users viewing these mark-up objects understand what they convey and will be able to understand their context within the incident. Object edit history is maintained in EM-COP which includes who created and subsequently edited the object.

It is recommended that you always use the 'feature attributes' associated with every object to include some simple notes about the following meta-data:

- Age – time of collection or age.
e.g. Field intelligence collected may be days or hours old.
- Currency – how long will this information remain current?
e.g. this information will be considered too old by what time/date? Expiry time?
- Source – where did the information come from?
e.g. IAP, local knowledge, census data 2011, IMS, etc.
- Verification – has the information been verified? Is it trusted? Is it accurate?
e.g. unverified social media reports, incident ground radio traffic, reported on Channel 7 news

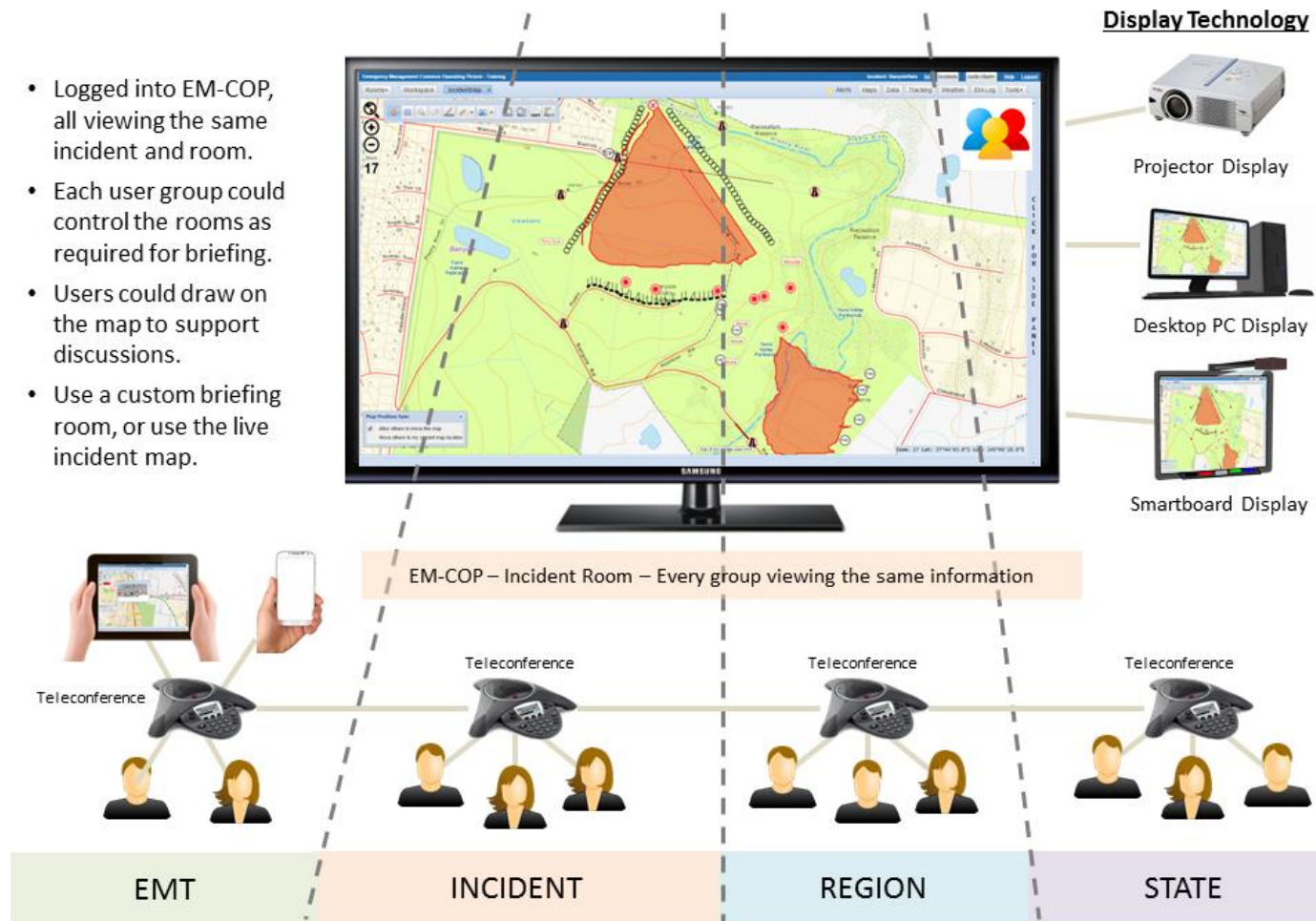
Specific considerations for your notes by the type of object are provided in the table below:

Polygons and Shapes	Drawing Symbols	Vertex Lines	Text
<ul style="list-style-type: none">• What does it represent?• Is the colour important?• Is the shape important?• Is the size accurate?• Is the polygon style important?	<ul style="list-style-type: none">• Does the symbol image easily convey what it is?• Is the exact location of the symbol important?• 	<ul style="list-style-type: none">• Is the colour important?• Is the line thickness important?• Is the line style important?• Is the positioning accurate?	<ul style="list-style-type: none">• Is the colour important?• Is the text size important?• Is the positioning important?• Is it clear what the text relates too?

EM-COP Use During Briefings and Planning Sessions

Example Use of EM-COP to Support Briefings / Planning Meetings via a Teleconference

- Logged into EM-COP, all viewing the same incident and room.
- Each user group could control the rooms as required for briefing.
- Users could draw on the map to support discussions.
- Use a custom briefing room, or use the live incident map.



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EM-COP Log – Adding Entries

When adding an entry into EM-Log you are requested to select a ‘Type’ for the information you are adding. To ensure your information can be found easily it is important to categorise the information correctly. The table below contains examples of the ‘Type’ of information that could be added:

Operations	Intelligence	Safety	Message
<ul style="list-style-type: none"> Situation information - SITREP Plans issued Control Centres – opening/closing 	<ul style="list-style-type: none"> Intelligence products e.g. outlooks Predictions and future state scenarios Modelling results Mapping products Field intelligence – observations 	<ul style="list-style-type: none"> Safety bulletins issued Safety issues identified relevant to all agencies involved Key safety messages 	<ul style="list-style-type: none"> Multi-agency meetings reminders e.g. SEMT, REMT ICT status messages – outages etc.

Management of Data Uploads (GIS Users)

- General users of EM-COP cannot by default upload layer files into EM-COP. A “GIS User” status is required.
- Users with this ability should upload their data files into EM-COP and move them under the relevant incidents to keep the “Uploads” folder orderly.
- Files that are not required and could be deleted as they are no longer needed, should be deleted by the GIS User that uploaded them. Don’t delete other files unless you have been given permission.

Public Information – “Publish” Rooms

This section is a placeholder for a future feature and its associated processes that are currently under development.

Management of EM-COP Incidents

This section is not to be confused with the Administration of EM-COP. The topics in this section are designed to provide context around the management of EM-COP incidents by users of the system in a collaborative environment.

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Resolving Duplicate EM-COP Incidents

- As per existing operational doctrine with other incident management systems, duplicate EM-COP incidents should be avoided to reduce potential confusion.
- It is recognised that this may happen as emerging incidents evolve over time. Every effort should be made with the line of control to migrate information generated in EM-COP incidents into one EM-COP incident owned by the appropriate person representing the incident/event.
- The owner of the EM-COP Incidents that need to be merged should be contacted to organise for their content to be copied across to the agreed EM-COP incident, and then archived to reduce confusion.

Archiving EM-COP Incidents

- The incident owner should make the decision to archive an EM-COP incident.
- EM-COP incidents that are not being used should be archived to help reduce the number of active incidents listed.
- The SCC Intel Officer will review current incidents on a weekly basis and identify and contact owners to consider archiving them if they seem un-used or clearly relevant to an incident or date that has passed.

Obtaining Technical Support

- If you have a technical problem with the application that is clearly not related to how EM-COP is used, the technical support team would prefer you used the built-in feedback tool.
- In the Tools menu you will find “email feedback report” which will allow you to add a description of your issue and submit it. This process will also capture who you are, the time and date, system information including the web browser and computing architecture, and a sample of recent EM-COP activity to assist with technical support.
- If the technical support requires immediate attention you should contact the SCC on (03) 9032 3600.

Obtaining Operational Use Assistance

- The EM-COP User Manual is available from the EM-COP Help menu.
- If you need to speak to someone, during business hours you may call (03) 9032 3600.

Revision History

Topic No	TBC
Topic Name	EM-COP Concept of Operations
Procedure Owner	Cain Trist, General Manager – Operations and Response, EMV
Remote Copies	None
Revision Date	Amendment Detail
1 June 2015	Inclusion of diagrams, minor changes to wording – Justin Kibell
25 Mar 2015	Further updates based on feedback – Justin Kibell
16 Mar 2015	Applied updates and feedback from MAIG meeting – Justin Kibell
17 Feb 2015	Updates based on initial feedback from EM-COP project team. – Justin Kibell
25 Jan 2015	Initial draft for comment by the EM-COP project team. - Justin Kibell.

End of Topic



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