

Photo courtesy of Barry Davies

PART E – THE EMERGENCY RESPONSE

In accordance with its terms of reference, the Inquiry is required to report on 'all aspects of the emergency response on 4 January, particularly measures taken to control the spread of the three main fires and to protect life, private and public property and essential infrastructure'.

Reference to 'response' in Tasmania Emergency Management Plan (TEMP) is descriptive and the function is not defined.¹ However, essentially it means action taken to prevent the development, escalation or continuance of an emergency event.

In examining and considering the response, especially considering the scale and impact of the Forcett fire on the afternoon of 4 January, it should be expected that there would be some initial confusion. By its nature, an emergency of this type will have high levels of disorder, uncertainty and poor information flows until there is appropriate control.

It is also imperative to make judgements on the situation faced by those responsible for responding to the emergency events, and to take into account that decisions are frequently made with limited information and under very stressful conditions. Hindsight and personal perspectives often distort what was realistic in the circumstances.

The response to any emergency event has the highest risk in the various aspects of emergency management for the people undertaking these activities, and it is essential to acknowledge the efforts of the many people involved in this way. There were many examples of selfless commitment to the wellbeing of others, and physical and moral courage in the decisions that were made, which should be a source of pride.

It is pertinent to reiterate that this Inquiry is directed at the 'strategic, systemic and organisational level' to identify areas of improvement so the community is adequately protected in the future — not 'individual fault finding'. Commensurate with this, it is not necessary for the Inquiry to examine every detail of what occurred, and it has not sought to do so.

I Tasmanian Emergency Management Plan (TEMP) Issue 6 2009, at p. 27.

In this Part of the Report the primary focus is on fire and police response activities; the actions of other response organisations are dealt with at the end of this Part. This should not be taken to imply or suggest that those activities are not significant or important; rather, that the primary response activities are those of the fire and police services.

Keeping Records

The Inquiry had access to different forms of record, such as logs and personal notes, some of which were well maintained. However, there is no full documentary record of every action or decision available. This is due to a lack of recording systems, an inability to make records in a timely way in rapidly developing conditions, and the personal practices of the individuals involved. It is particularly evident in field operations, but it also occurred in areas where facilities should have been available. Even here it is understandable that events may overwhelm physical recording methods. Systems to overcome these problems should be established wherever possible.

Shortcomings in this area were highlighted in the management of operations in Tasmania Fire Service (TFS) Incident Management Team (IMT) for the Forcett and Lake Repulse fires, especially with emergency '000' calls, and in identifying the strategies and tactics used by fire personnel in field operations. These matters will be discussed below.

A project to address part of this problem has been established as a priority by the State Emergency Management Committee and is being managed by Tasmania Police (TASPOL). Not being able to share information between agencies real-time has been identified as a significant capability gap.

The Emergency Information Management and Sharing Project is developing a business case for acquiring an electronic system which could be used by multiple agencies during response and recovery operations to manage and share information in a timely, secure and efficient way. Specific project objectives are to:

- enable personnel, groups and agencies with command, control and coordination roles to maintain situational awareness during emergencies
- assist IMTs develop and execute informed, timely and effective objectives, strategies and tactics
- enable the timely and efficient execution of planning and logistics functions including situation reports, resource requests, supply, finance and facilities.

Obviously this project goes beyond the present issue of keeping records. However, in the process of achieving the above aims, it will help achieve that outcome as well.

Recommendation 2 - that police and other emergency service agencies establish and maintain effective recording systems for emergency operations.

Recommendation 3 - that if a sound business case is developed, the Emergency Information Management and Sharing Project be supported.

Fire and Police Resources in the Affected Areas

While TFS and TASPOL have a flexible resource approach to responding to and managing major incidents and emergencies (that is, they have a scalable approach), initial action is often from within the local resources. Accordingly, it is useful to have an understanding of what those resource arrangements are.

Tasmania Fire Service

The Bicheno and Forcett bushfires occurred in the East Coast Fire District, which is part of the Southern Fire Region.

Two career staff manage the East Coast Fire District: a district officer and a field officer. In early January, there was an acting district officer and the substantive field officer on duty.

There are eight volunteer brigades on the Tasman and Forestier Peninsulas and in the areas directly surrounding the Forcett bushfire.

The Bicheno bushfire was adjacent to the Northern Fire Region and there are four volunteer brigades in the area. Due to the potential of both the Lake Repulse and Forcett bushfire, control of the Bicheno bushfire was transferred to the Northern Fire Region on the morning of 4 January.

The Lake Repulse bushfire is in the Midlands Fire District, which is part of the Southern Fire Region. Two career staff manage the Midlands Fire District: a district officer and a field officer. Both officers were on duty and available during early January.

There are four volunteer brigades directly around the area of Lake Repulse.

Tasmania Police

The Bicheno and Forcett fires occurred in the South-East Division, which is part of the Southern Police District. A restructure of the Division and District, beginning I January 2013, combined the former Sorell Division with Bellerive Division to create the new South East Division. A new divisional inspector began in his position at the same time.

There are three stations in the area of the Forcett fire: Sorrell, with 11 personnel (including two sergeants), and Dunalley and Nubeena, with one personnel each.

There are three stations in the area of the Bicheno fire: Bicheno with two personnel, Swansea with two personnel (including one Sergeant), and Orford with two personnel.

Responsibility for the Bicheno fire was transferred to the Northern District on 5 January 2013.

The Lake Repulse fire occurred in the Bridgewater Division. An Acting Inspector was the Divisional Inspector. There are three stations in the area: Bushy Park, Maydena and Hamilton, with one personnel each. Support was immediately available from New Norfolk with nine personnel (including one Sergeant) and Bridgewater with 26 personnel (including six sergeants).

It should be noted that not all of these personnel would have been available when the fires occurred.

Active Fires in the State and the Fire Risk

The fire risk for 3 and 4 January was significant.

Bureau of Meteorology personnel contacted TFS on 31 December about the expected fire conditions for 4 January, as severe fire danger ratings were expected for the South East and Upper Derwent Valley Districts. Contact continued over the following days as forecasts were updated. Fire ratings depicted in table E.I were issued at 4.00pm the previous day, except for 3 January when they were updated at 8.30am.²

District												
	King Island	Furneaux Islands	North West Coast	Central North	North East	East Coast	Midlands	Upper Derwent Valley	South East	Central Plateau	Western	
Thurs 3 Jan	High	High	High	Very High	Very High	Very High	Very High	Severe	Severe	Very High	High	
Fri 4 Jan	Very High	Very High	Very High	Severe	Severe	Extreme	Severe	Extreme	Extreme	Severe	Very High	

Table E.I

The ratings for the Upper Derwent Valley and the South East Districts were Severe for 3 January and Extreme for 4 January. However, there were significant ratings for other areas of the State. Total fire bans were issued for the Southern Fire Region on 3 January and for the State on 4 January.

A high fire risk was already being experienced by TFS over the summer period. Significant rainfall deficits leading up to and including October to December 2012 had led to a number of fires occurring.

From the beginning of November through to the end of December 2012, there had been 580 vegetation fire incidents recorded. Most were quickly extinguished, but a number became campaign fires.

From 3 to 5 January, there were 66 bushfire incidents recorded, seven requiring significant resource commitments by TFS. A number of these were major fires and they are set out in table E.2.

Fire Name	Address	Date Started	Fire Size (Ha)	TFS Region	
Lake Repulse	Dawson's Road	3/01/2013	11,609	Southern	
Richmond	Middle Tea Tree Road	3/01/2013	168	Southern	
Forcett	Inala Road	3/01/2013	25,233	Southern	
Giblin River	South West	3/01/2013	44,522	Southern	
Bicheno	Tasman Highway	3/01/2013	4,943	Southern**	
Nubeena	Storm Lea Road	3/01/2013	334	Southern	
Steppes	Interlaken Road	4/01/2013	1,481	Southern	
Montumana	Speedwell Road	5/01/2013	3,167	North West	
Buckland	Tasman Highway	5/01/2013	672	Southern	

Table E.2 Major Bushfires that occurred on the 3, 4, 5 January 2013

**Fire was managed by the Northern Region.

It is worth noting that for the fire risk and fires that started, TFS was required to consider risks across a broad area of the State and in multiple locations. On occasions it is not easy to forecast which fires will develop into major or significant ones, and consequently, what priorities to adopt in allocating resources.

On the evening of 3 January, TFS used the Phoenix-Rapidfire model to predict fire behaviour and was aware of the forecasted fire behaviour for 4 January (a more detailed discussion is provided on predictive modelling in PART C). It is sufficient to note here that the model was applied to the Forcett fire; the forecast and actual fire paths are depicted in the figures E.3 and E.4 below. The fire was forecast to reach Dunalley by 3.00pm and it actually reached Dunalley at 3.30pm. Flanking fires had a greater rate of spread than was forecast.

Figure E.3 Phoenix-Rapidfire Prediction for 3.00pm 4 January 2013.





Figure E.4 Actual fire location for 3.00pm 4 January 2013.

Response Timelines

Schedules outlining the time at which key events occurred, and decisions and actions made, for TASPOL and TFS have been developed for each fire examined by this Inquiry. These schedules provide an overview and positioning of these events, decisions and actions, and they are attached at Appendix E.I. It should be noted that these schedules are not a complete record.

Establishing the Emergency Management Arrangements

Arrangements were established to manage the Lake Repulse, Forcett and Bicheno fires. Some of these arrangements were initiated early on 3 January, as part of standard procedures, before the fires started. This section of the Report simply describes these initial arrangements and their efficacy, where relevant, will be discussed in following sections.

Standard arrangements are implemented by TFS and TASPOL on days of Total Fire Ban:

- TFS tasks two brigade crews to every report of a fire, establishes and pre-positions strike teams (comprising a number of fire crews, according to risk) and sets up Incident Management Teams (IMTs) in each Regional Headquarters
- TASPOL increases the number of patrols in fire risk areas and initiates a program to monitor known or suspected arsonists.

The Inquiry was told this occurred in the Southern Fire Region and the Southern Police District on 3 and 4 January.

Forestry Tasmania, Parks and Wildlife Service (PWS) and paper manufacturer Norske Skog activate their own standing arrangements in response to the forecast weather conditions, and all did so for 3 and 4 January:

- Forestry Tasmania rostered on duty officers, increased fire tower manning, conducted fire patrols, and appointed standby machinery resources
- PWS pre-deployed personnel and a helicopter into identified areas, conducted fire patrols, and prepared daily fire action plans
- Norske Skog increased fire tower manning, conducted fire patrols, and placed resources on standby.

The various initial incident and emergency management structures are described in the following paragraphs. It should be noted that there were a number of changes as operations progressed, which have not been outlined here.

Tasmania Fire Service

Incident Control

A multi-agency IMT was established at 10.00am on 3 January at Cambridge. The North and North West Regions had small IMTs established to deal with initial action on fires starting. Some of these teams reported to the Regional Fire Controller in their respective Regional Fire Operations Centre.

The Southern Region IMT was given responsibility for the Lake Repulse fire at 1.00pm on 3 January. There was a fire commander in position at the fire.

The Richmond and Forcett fires started almost simultaneously. Both fires were managed locally on 3 January. The Richmond fire was contained on this day and later extinguished.

The Southern Region IMT was given responsibility for the Forcett fire early on 4 January. A fire commander was in place on the fire ground. Sector Commanders were positioned for specified areas until the fire crossed the Arthur Highway at around midday.

The Bicheno fire was managed locally on 3 January by PWS personnel and local brigades. At 10.00am on 4 January, the Northern Region IMT was given responsibility for the fire, though the fires were situated in the Southern Region. This action was taken due to the expected workload in the Southern Region.

Initially the fires were small and continued to be managed locally. A PWS officer was appointed as the Fire Commander to manage the fires.

The IMT established in the North West Region was precautionary as there were thunderstorms in the area. It was mainly staffed by PWS personnel. On 4 January it was disbanded as the resources were required elsewhere.

Regional Fire Operations Centre (RFOC)

An RFOC was established in all three TFS Fire Regions on both 3 and 4 January.

The Southern Region RFOC began around 10.00am on 3 January and was part of a regional briefing at 10.00am.

The North and North West Region RFOCs also began at 10.00am on 3 January.

State Fire Operations Centre (SFOC)

The SFOC began in the morning of 3 January and TFS Deputy Chief Officer was appointed as the State Fire Controller.

Tasmania Police

Police Forward Command Post (PFCP)

The Acting Divisional Inspector at Bridgewater Division established a PFCP at Bridgewater on 3 January and developed an operation for the Lake Repulse Fire.

In the South East Division, the Divisional Inspector was informed about the Forcett fire on 3 January and established a PFCP at Bellerive at 8.00am on 4 January. Command Posts were also positioned on 4 January: in the morning at Sorell, in the early afternoon at Nubeena, and in the evening at Dunalley. Other mobile posts were established at various locations, such as Primrose Sands, but they could not be described as Command Posts.

The significance of the Bicheno fire from a police perspective was not realised until the early hours of 5 January, and following that an inspector from the Northern District took active control. A PFCP was not established initially, as a flexible approach was taken to the location of command in the field.

Police Operations Centre (POC)

After a briefing at the SFOC at 3.30pm on 3 January, the Southern District Commander directed that the POC be established, with a capacity to be upgraded to a regional coordination centre if required.

Functional roles for the POC were identified and assigned early on 4 January and the POC was activated at 9.00am to manage the police response to the fires burning in the Southern District.

Southern Regional Emergency Management Committee (SREMC)

Some members of the SREMC were provided with a briefing at 8.30am on 4 January from TFS, outlining the fire risk for the Lake Repulse and Forcett fires, including modelling predictions. A further briefing was provided by TASPOL and TFS at midday, and the full SREMC met at 6.00pm that night.

The SREMC operated under a mission to 'coordinate and [oversee] emergency management and recovery in Southern Tasmania relevant to the bushfires'.

Security and Emergency Management Advisory Group (SEMAG)

The SEMAG met at 10am on 4 January and was provided with a briefing by TFS, again outlining the fire risk for the Lake Repulse and Forcett fires, including modelling predictions.

At a SEMAG meeting at 5.00pm that day, the State Controller highlighted the importance of having a single person in control. A decision was subsequently made to appoint the police Southern District Commander to be in charge of the incident.

Police Operations Commander

Until his appointment to be in charge of the incident, the Southern District Commander was the Police Operations Commander and the Southern Regional Controller. Another commander assumed the role of Police Operations Commander for this district for the duration of the fires.

The Northern District Commander assumed responsibility for the Bicheno fire as the Police Operations Commander at 8.00am on 5 January. To manage police operations, he:

- appointed an inspector to be responsible for each of the fires under his control, including the Bicheno fire
- established a Police Operations Centre at Launceston Police Headquarters
- positioned himself at the Northern RFOC so he could obtain more timely and detailed information on the fires.

Multi-Agency Control and Coordination

The arrangements in the Tasmania Emergency Management Plan (TEMP) were applied, but they were not the most effective for timely focussed multi-agency control and coordination arrangements.

There are two preliminary comments to make before discussing this topic:

- networking based on personal knowledge and relationships, while necessary and an important attribute, is not a substitute for sound structures, processes and systems. This comment was raised informally with the Inquiry on a number of occasions, suggesting that networking is an effective alternative to appropriate emergency management arrangements
- on 4 January, and for some time after that, not only were there fires over broad areas, with a devastating impact on communities generally and in particular, there was also the very real concern that there were multiple fatalities. There was sufficient evidence at that time to treat this fire as an emergency at the highest level.

The TEMP has a section on command, control and coordination in the part on response, and it indicates that the specified Management Authority has control at the scene of the emergency. Presumably it is intended that control would apply to all aspects of the response. In the case of these fires, TFS is the designated Management Authority. It is indicated as well that State authorities may assume overall control, including by the Regional Controllers or the State Controller.

The TEMP refers to coordination, with the advice that additional support for response can be provided through liaison with other authorised officers identified in the TEMP or by requesting a coordination centre be opened.³ Comments to the Inquiry indicated that coordination was achieved through liaison officers, briefings, networking and incidental to other activities.

Notably, the TEMP does not have any detail on how coordination might operate or formalised arrangements. It is apparent that response coordination is not seen as a specific functional requirement. There were instances where a more structured approach to coordination would have been beneficial, for example with evacuations, road closures and the Rapid Impact Assessment process.

The TEMP refers to control⁴, with the State controller assuming overall control of the response for 'a prolonged or significant State or national emergency'. Control in this case is described as being 'focussed on broader Whole-of-Government and community impacts of the emergency, rather than on the tactical management of the emergency itself', and that 'this work usually takes place at the State Crisis Centre with the SEMAG/SEMC members'.

The 2009 Victorian Bushfires Royal Commission examined the role of leadership and was concerned about divided responsibility and the need to identify a single individual who had clear responsibility for the control of the response to major bushfires. A number of comments by the Commission are relevant:

The Commission endorses this idea of an active leader: during a statewide disaster or an emergency it is this type of leadership that is needed ... strong leadership would have required not only the presence of the leaders at all crucial times but also the active oversight of those further down the chain of command ... "Active oversight" does not mean issuing directions to the incident management team ... rather, it means monitoring the activities of those with direct control of response activities, informing oneself of the situation on the ground and seeking information and feedback from subordinates. ...

Effective emergency management requires the successful execution of leadership functions at all levels, but it is the individuals with statewide responsibility, those who communicate and are accountable to government, to whom the highest expectations are attached. ...

... this delegation of powers and functions (formal or informal) does amount to an abrogation of responsibility or a transfer of accountability. ...

It follows that clear lines of authority for operational matters are necessary to support the command and control arrangements ...

The Commission observed a disturbing tendency among senior fire agency personnel – including the Chief Officers – to consistently allocate responsibility further down the chain of command, most notably to the incident control centres. ...

Nor is it either the Chief Officer's role to take direct control while the operational response is sound and incident-level management structures are operating effectively.⁵

This issue was being examined by the Victorian Bushfires Royal Commission in the context of multiple fire agencies managing fires. This situation for fire agencies does not apply here, as TFS

⁴ TEMP, at para. 3.3.20.

⁵ Final Report, Volume II, PART ONE, at pp. 75 – 79.

was the lead agency. There was no ambiguity about this arrangement in Tasmania. However, there is still a need to have a single-person responsible for ensuring all response operations are effective in a multi-agency approach, such as the State Controller.

This Report has previously raised that the legislation in Tasmania does not define the role and duties of the State Controller, and the TEMP only outlines the arrangements described above. Looking at the model and structures in place, it would be very difficult to achieve the active and applied leadership envisaged by the Victorian Bushfires Royal Commission for this position.

An emergency of this nature would suggest that the State Controller should have personally taken control. Having a State Controller appointed under the *Emergency Management Act 2006* must mean something. Duties are not specified in the legislation. However it is not unreasonable to assume that it was intended the State Controller would personally take control of certain emergencies.

The Deputy Commissioner of Police, who was the Acting Police Commissioner and State Controller at the time of the fires (and hereafter referred to as the State Controller), told the Inquiry that:

- he expected the State Controller should take statewide control where there was an impact on multiple regions or it was a complex and protracted emergency, to ensure a coordinated approach
- the State Controller was primarily responsible for everything.

The State Controller said:

- he took personal control, notwithstanding the appointment of the Southern Regional Controller to be in charge of the incident (which will be discussed below)
- he had regular meetings and contact with the Fire Chief and the Southern Regional Controller to stay informed
- he met with the SEMAG in the State Crisis Centre
- no issue was raised with him about the effectiveness of the arrangements, which he considered worked well
- that although SEMAG does not have an operational role, membership is the equivalent of the State Emergency Management Committee, and he met with this Group initially daily in the State Crisis Centre, as envisaged by the TEMP.

The issue of who was in charge was complicated by the appointment of the Southern Regional Controller to 'take charge'. Discussion on this occurred in a SEMAG meeting at 5.00pm on 4 January. From comments attributed to the State Controller when he raised this at the SEMAG meeting, it appears that his intention was to give effect to findings of the Victorian Bushfires Royal Commission (that there should be a person clearly in control). The Chief Fire Officer took issue with this.

Minutes of the SEMAG meeting at 5.00pm record 'SEMAG agreed that although TFS was lead authority for firefighting that the SREMC has lead for the overall recovery'. It is interesting that an advisory body, such as SEMAG, is purporting to make a significant policy decision like this.

The Southern Regional Controller, who was at the meeting, did not understand the decision in that sense. In the TASPOL submission to the Inquiry, which he prepared, this appointment was described as '... one single person in control of coordinating and oversighting the emergency response and recovery arrangements'.⁶ He told the Inquiry that he recalled the State Controller discussed with him at 1.10pm the need to appoint him 'in overall command of the event'.

The apparent appointment was followed up with an email to the Southern Regional Controller at 6.30pm that day (a copy of which is attached at Appendix E.2), confirming:

... that as of the SEMAG meeting tonight the Acting Commissioner as the State Emergency Management Controller officially activated the arrangements for Southern Regional Emergency Management Controller to take charge of this incident as such he is operating under the State Emergency Management Act 2006. TFS will retain responsibility for the fire ground.

The fact that the appointment was made verbally and followed up with an email, in addition to the wording of the appointment, suggests that this form of appointment has not been considered in the State emergency management planning or prepared for. For instance, it would be expected that there would be a reference to it in the TEMP and some form of template prepared.

If it was intended to clearly designate a single person in control, there are difficulties with the wording of the appointment. To 'take charge of this incident' is clear, but there is no reference to which incident; the appointment is then qualified by the phrase the 'TFS will retain responsibility for the fire ground'. It is difficult to understand how the appointee is to take charge of the incident if the fire ground is excluded. Consequently, the wording of the appointment is ambiguous and does not achieve its purpose.



Image courtesy of Bernard Plumpton

It may well be that the appointment is expressed in this way because of objections raised by the Chief Fire Officer at the SEMAG meeting. The Southern Regional Controller told the Inquiry that when he discussed the intended appointment with the Chief Fire Officer, the Chief Fire Officer seemed uncomfortable with it. The State Controller explained that there was some discussion with the Chief Fire Officer who felt that he (the Chief Fire Officer) should be in charge. The State Controller's position was that TFS was the lead agency for the fire, but that the emergency was bigger than the fire (for example, including recovery). The Chief Fire Officer told the Inquiry that he did raise concern about another person being in charge of fire operations, and that he was not sure whether it was intended that the person be in charge of the Forcett fire or the Southern Region.

It is not clear to the Inquiry whether the minutes of the SEMAG meeting accurately record the SEMAG meeting. The Southern Regional Controller told the Inquiry that the minutes of the SEMAG and SREMC meetings don't reflect his appointment as the controller. It is noted that there is no list of attendees at the meeting and very little content on the conduct of the meeting.

Emergencies are not the occasion for disputes or uncertainty about who is in charge of command, control or coordination to occur.

The level of appointment reflects another problem in how this issue was conceived. A police commander is fourth in seniority down from the police commissioner, and nominating such a position to be in charge of the TFS Chief Officer would not be reasonable thing to do. This again raises the question of what levels emergency management responsibilities are set at for police.

Further difficulties arise if it was intended to appoint an overall incident controller. The term is not found in any plans or the emergency management legislation. It is possible that it was intended that the appointee would continue to be described as the Southern Regional Controller, now with a wider mandate. If this was the case, then it is difficult to understand why an appointment (as it occurred) was necessary. However, the major difficulty is whether the appointee could effectively perform the role envisaged, with or without the fire ground exclusion.

The State Controller also told the Inquiry that he considered he was in charge, which is difficult to reconcile with the fact of his appointment of the Southern Regional Controller to be in charge. More likely, the State Controller was reflecting the ongoing responsibility a person in a command position has when they appoint a delegate, rather than the active management of operations required of the person in charge.

There is no structure provided for in the TEMP for this role to operate at a State level; either for the State Controller or an appointment of this nature. The Southern Regional Controller continued to chair the SREMC and this was the primary focus for the discharge of the responsibilities of his appointment to the 'in charge' position. He considered that the Committee was responsible for supporting him in overseeing the emergency and immediate recovery arrangements, and that his appointment transformed it into a Coordination Committee.⁷ He informed the Inquiry that the 'SREMC had responsibility for coordinating and [overseeing] the management of the emergency which included the response and recovery arrangements'. This Committee met twice a day for three days and then once a day, which would not have been adequate if the Committee had an active operational response role. Moreover, a committee, whether meeting frequently or not, is not the most appropriate mechanism from which to manage an operational response. Apart from being an inappropriate mechanism, attending committee meetings can consume valuable time with possible adverse consequences, highlighted in the section of this Report on the Initial Police Operations. A number of committees can also lead to duplication of effort.⁸

In reality, the role of the SREMC was to primarily concentrate on recovery operations. The Southern Regional Controller was able to meet regularly with the Police Operations Commander as their respective centres were physically alongside each other, to discuss police operational matters. Another aspect of their relationship is that they were of the same rank, again reinforcing the inappropriateness of the 'in charge' appointment. However, no difficulties arose in practice.

The Inquiry is surprised that for this emergency, police at higher levels did not have key leadership roles. When asked about whether a police officer at a higher level should have been appointed to this role, the State Controller explained that there were few senior police in TASPOL (they are the Commissioner, Deputy Commissioner and two Assistant Commissioners). The Inquiry is not convinced this is a satisfactory reason as, regardless of any other duties those officers may have, this emergency was the most important there was at the time for TASPOL. Effective leadership is important at all stages, but more so in the initial stages of an emergency. At this time, the most senior people would be expected to be in charge.

In summary, it appears to the Inquiry that the Deputy Commissioner, as the Acting Commissioner and State Controller, may have been continuing to take overall responsibility, but he cannot be regarded as being the designated person in charge of managing the emergency response to the fires as he had purportedly appointed the Southern Regional Controller to this role. The ambiguities indicate this was not an effective appointment and clearer arrangements should have been made. Given the nature of the emergency it would normally be expected that either the State Controller or another very senior police officer would have been in charge.

The emergency management arrangements being applied were consistent with that envisaged by the TEMP. However, a more robust concept of operations would improve the effectiveness and efficiency of emergency management. This will be discussed in PART J of the Report.

Recommendation 4 – that the role and expected duties of the State Controller be clearly defined in the Emergency Management Act 2006.

Recommendation 5 – that the State Controller (or an alternate if they are not available) be expected to personally take an active role in controlling and coordinating response and recovery operations, depending on the nature and scale of the emergency, and until other identified arrangements for ongoing operations are established.

⁸ Submission No. 66, at p. 2. Comment by the Department of Infrastructure, Energy and Resources on the duplication between SEMAG and SREMC meetings.

Recommendation 6 – that in multi-agency response and recovery operations, arrangements be made so it is unambiguous who is in charge of these operations.

Recommendation 7 – that a structure and facilities be established for the State Controller or other person managing multi-agency response and recovery operations.

Emergency Powers

The Inquiry has not examined the legal authority for normal fire operations. It has examined areas where the need for authority could be regarded as different from those operations — such as road and area closures and evacuations — and whether emergency powers were required.

Road closures

An issue arose concerning the closure of Arthur Highway for the Forcett fire during the morning of 4 January. This was done to limit the number of people coming into the Tasman and Forestier Peninsulas, given the single highway access.

Police:

- have authority to temporarily close any public street or restrict its use where an officer is 'satisfied that there is an obstruction or danger to traffic' or this may arise⁹
- may or if requested by a fire officer, shall close any street, road etc. in the 'vicinity of a fire'.¹⁰

These provisions may have been used by police depending on the proximity of any obstruction or danger or the vicinity of a fire. The requirements of the legislation may have been limiting factors in closing the Arthur Highway in advance of the fire, to restrict the number of people coming on to the Tasman and Forestier Peninsulas.

Following the initial impact of the fires, police sought to close various roads and areas. Again, the above limitations may have been an issue for ongoing operations in some areas, though there was clearly more scope for using these provisions.

Evacuations

Police may direct evacuations, in fire operations in respect to any person 'who is in or on any land or premises that is burning or is threatened by fire'.¹¹

Crime scene declarations

Police can make a declaration of a 'crime scene' or a 'serious incident site' under the *Police Offences Act 1935*,¹² and they did this on two occasions. The first was at 10.00am on 5 January where a Crime Scene Declaration was made, though there is uncertainty as to whether it was intended to use the crime scene provision. The reason outlined in the declaration notice was

⁹ Vehicle and Traffic Act 1999, at s. 56B.

¹⁰ Fire Service Act 1979, at s. 47(3)(a).

II Fire Service Act 1979, at s. 47(3)(c).

¹² Police Offences Act 1935, at ss. 63 and 63B.

more in line with a Serious Incident Site Declaration. This declaration was revoked at 2.10am on 7 January simultaneous with a Serious Incident Site Declaration being made, which itself lapsed after seven days. Copies of these notices are at Appendix E.3.

These declarations enable police to do a number of things in managing and controlling the areas prescribed in the declaration notice. For instance, police can close roads, direct people to leave and prevent people from entering the site (for more detail, see the *Police Offences Act*).¹³

TASPOL later obtained legal advice, which indicated these declarations were likely to be invalid, as it was not intended that they should cover such a large area as they purported to do so.¹⁴

Provisions in the *Emergency Management Act 2006* could have been used. Section 40 enables the State Controller to authorise the use of emergency powers set out in in Schedule I of the Act. These include power to evacuate people and control the movement of people in any area. The Southern Regional Controller told the Inquiry that he did not consider it necessary to use the emergency powers in the *Emergency Management Act 2006*. Looking at the subsequent legal advice on the declarations made, it would have been advisable to have used the emergency powers provided in the *Emergency Management Act 2006* instead.

A process for the authorisation of the emergency powers is set out in section 40 of the Act. The State Controller must be satisfied that an emergency 'is occurring or has occurred' and due to that emergency there are 'reasonable grounds' for the exercise of the powers to protect people and property. It is not dependent on any form of declaration of emergency being made under the Act, but it needs to be specified or confirmed in writing and is limited to a maximum period of seven days. An extension for a further period of seven days is obtainable with the Minister's consent.

Significantly, the definition of 'emergency' in the Act includes an event which 'threatens' harm and is a 'significant threat of occurrence', and envisages action to 'prevent the possible resulting event' or 'mitigate the risks'.¹⁵ However, emergency powers in the Act do not appear to extend to a threatening event. This is an area that should be considered for clarification or extension.

A declaration of a state of emergency can be made by the Premier under section 42 of the *Emergency Management Act 2006*. However, the grounds on which a declaration can be made are very limited, as the Premier must be satisfied that other emergency powers are or may be insufficient without access to the special emergency powers which come with this declaration. In these circumstances, it is extremely unlikely that a declaration of a state of emergency would be justified except in the most extreme or unusual of emergencies.

Access to emergency powers is just one reason for declaring an emergency event. The Victorian Bushfires Royal Commission said:

the Commission considers that declaring a state of disaster would offer benefits beyond the grant of additional powers. First, it would provide symbolic recognition of the gravity of a situation – a recognition that on 7 February might have sharpened the focus of emergency services agencies on community safety factors such as warnings.

¹³ Police Offences Act 1935, at ss. 63A and 63C.

¹⁴ Letter to the Acting Commissioner of Police on 15 January from the Principal Legal Officer.

¹⁵ Emergency Management Act 2006, at s. 3.

Second, it would place the State's political leaders firmly in charge of the emergency, reassuring the public that their government had the situation in hand and facilitating rapid mobilisation of Cabinet and high-level government attention if required.¹⁶

It is also the Inquiry's experience that declarations of emergency serve a number of purposes, which includes conveying a clear message to those responding and dealing with the emergency and the community affected by the emergency and the community generally. For example, the South Australia State Emergency Management Plan sets out a number of considerations for making a declaration:

What is to be achieved by the declaration?

- Full activation of State Plan including State and Zone Coordination Centres, and State Functional Service State Control Centres
- To support the Control Agency (Has a request been received from the Control Agency or the Coordinating Agency)
- Are further resources required?
- Is coordinated public information required?
- Are section 25 powers required for any agencies, including support agencies?
- To support recovery operations
- To signify seriousness of the event
- Is a determination required as to the Control Agency?
- To directly manage response and/or recovery operations.¹⁷

It should be noted that this list applies to the needs of the South Australia legislation and Plan and therefore applies to the scheme of arrangement in place there.

The Victorian Bushfires Royal Commission also recommended introducing a graduated scale of emergency declarations.¹⁸ This approach is similar to the one that is in place in South Australia where a 'major incident' or 'major emergency' may be declared by the State Coordinator (Police Commissioner) or a 'disaster' may be declared by the Governor.

Coupled with this approach, it would be more appropriate in an emergency situation not to have to identify specific emergency powers and how they are to apply. Flexibility, certainty and timeliness are important and this form of arrangement would be more suitable to these occasions.

A number of advantages are available from this approach:

- a declaration can be pre-emptive in that it applies where an emergency has occurred, is occurring or is about to occur
- there is an identified trigger for emergency powers to be accessed
- emergency powers are all available and do not have to be individually specified
- declarations at the lower end have a more reasonable threshold
- having a process for activating State plans at a lower emergency threshold level

17 South Australian Sate Emergency Management Plan – Government Version, at p. 79.

¹⁶ Final Report, Volume II, Part One at p. 86.

means that a more realistic exercising of these arrangements can occur in a State where significant emergencies are not common and arrangements are not coming from a 'cold start' should they escalate.

The second point is different from the current Tasmanian legislation, which seems to allow more direct access to emergency powers. The current provisions do still require the State Controller to make a decision on specific powers and then endorse their use through an instrument. In that way there is little difference in the mechanics required, but the substance is far more effective.

The final point is important in that it helps provide enhanced capability when significant emergencies occur. Indeed, it should be the practice of emergency services to activate State level arrangements wherever reasonable, to assist developing their capability, and plans should be made accordingly.

The Inquiry notes the comments on recommendation 13 from the Victorian Bushfire Royal Commission in the schedule of responses to the recommendations, in the attachment to submission No. 84, identifying that the current legislation replaced a graduated declaration approach. The Inquiry recommends this position be reconsidered.

Recommendation 8 – that the Government reconsider the current position on emergency declarations in the Emergency Management Act 2006 and the Act is amended to provide:

- a graduated scale of emergency declarations
- the ability to make a declaration when an emergency has occurred, is occurring or is about to occur
- the ability for the State Controller (or whatever the person in overall control of response and recovery operations is called) to make one or more declarations
- a declaration to enable access to all emergency powers.

Recommendation 9 – that the Tasmania Emergency Management Plan enable, and all organisations with a role in emergency management activate, emergency plans at lower threshold events to practice their arrangements and achieve a 'hot start' in escalating events.

The Influence of Communications Issues

As in most emergencies, there were difficulties with communications for the emergency services and the community, which was exacerbated by modern communication practices and expectations.

Note that TFS management of communication and emergency calls for IMTs will be examined in the section on the New Fire Arrangements and the effect of power and telecommunications issues on recovery will be examined in PART F.

Networks

TFS and TASPOL operate on different radio systems, although there is some prospect of interoperability.

TFS network is a wide-area talk group/system based on the administrative boundaries of fire districts. It uses a number of radio sites and frequency channels in the VHF 70–85 MHz band radio spectrum.

All TFS mobile and portable radios have a common channel plan, allowing access to radio channels operated by Forestry Tasmania, PWS, the State Emergency Service (SES), Ambulance Tasmania, local councils and private forest companies. There is also the ability to use a number of conventional alternate local channels as incident control channels where necessary. These channels, along with portable repeaters, can be used for large scale fires when required. The portable repeaters can be deployed to support incident management or pre-deployed as required.

The network also supports a paging system.

All brigades are fitted with radios and local exchange line (telephone) to ensure local communications are available in emergencies.

Regional communications are linked to the Emergency Communications and Dispatch (FireComm) centre.

All radio base site and control systems have back-up power. Remote sites have four day battery capacity.

The TASPOL radio network uses an EDACS (Enhanced Digital Access Communication System) trunked technology system. It operates in the 800MHz band of the radio spectrum. It shares this network with the SES and Tasmanian electricity entities.

Radio sites are interconnected so they can operate over wide areas, and multiple repeaters allow a number of radio transmissions to occur concurrently. All sites in the network are compatible with analogue and digital talk groups.

Mobile and portable radios are provided to vehicles and personnel. Operations are based on talk-groups, a linked group of users, rather than wide area channels. These are programmed in to the radios based on geographic areas or functional duties, and are selected by users as required or automatically occur when users move through different geographic areas. There is also a direct mode where communications can occur directly between radios.

TASPOL radios are connected to a call-taking and dispatching service as well.

Radio networks do not provide 100% coverage throughout Tasmania (which is a common issue for other jurisdictions) due to the rugged terrain in some areas and other radio communications obstacles.

In general, radio systems were effective for each agency, with some problems experienced in different locations caused by patchy coverage, overloaded systems, poor practices and a lack of operator knowledge on proper usage. Radios were the least effective form of communication in the Lake Repulse fire.¹⁹ These matters are well known to the agencies and it should not be necessary for the Inquiry to provide any recommendations on action that should be taken.

¹⁹ Tasmania Police, January 2013 Tasmanian Bushfires, Internal Debrief Report, at p. 25.

Of more immediate concern to this Inquiry is the lack of interoperability between police and other emergency services radio systems. One of the serious problems in most emergencies of any scale is a lack of awareness and knowledge of what is occurring in the field by those with management responsibilities and agencies other than the control agency. People within an agency at least have the ability to monitor radio traffic to achieve an understanding of what is occurring in the field. Other agencies, as a general rule, do not have this ability. Moreover, personnel from the different agencies do not have the capacity to communicate with each other in the field so they can respond to an emergency in a coordinated way and/or be protected from dangers which may threaten them.

This interoperability issue is well known within the emergency services and government sectors, but there are significant barriers to providing a solution, including the cost of introducing new technology and, sometimes, entrenched commitments by agencies to their own network.

Advice to the Inquiry is that a measure of interoperability is currently possible by developing an interface between TFS and TASPOL systems. Often there will be security issues for police in allowing direct access to their systems by other agencies or organisations. At present, there is the technical possibility of scanning some TASPOL communications, which is already a security weakness. There may be technological measures which can be taken to provide satisfactory security arrangements if systems are linked during emergencies.

The Whole of Government Radio Network project has been examining this issue in Tasmania for some time. The project concept is to develop a single radio network for government use, and agencies would transition from current separate radio networks over time to this single system. A new integrated network could be operating from 2020. From experience, the Inquiry is aware that the introduction of these systems can be significantly delayed because of cost and technical issues.



Image courtesy of Bernard Plumpton

In acknowledging the barriers to establishing an integrated system, options for achieving better interoperability should be explored, such as linking networks and cross-placing radios in vehicles and at locations between police and emergency services.

An associated project, the Emergency Services Computer Aided Dispatch (CAD) project, would also assist with interoperability and greater efficiency in emergency communications. The TASPOL Command and Control system was developed and implemented in 1989. There are support issues for the current system and it is operating on aged technology.

TFS operates under a different CAD system which does not have the same difficulties as the TASPOL system, but Ambulance Tasmania may need replacement technology.

A common CAD system is a matter the Government could consider in due course.

Mobile phones and internet

A compounding effect of these fires on communications, particularly for the Forcett fire, was the dependency on mobile phones and the use of the internet, and the loss of electricity power to key communication sites and within the fire grounds.

Police and emergency services personnel, whether as part of their organisations' policies or not, make a substantial use of mobile phones to communicate between themselves and their supervisors and managers.

The impact of the loss of communications varied depending on the location of the person using a mobile phone and the communications site, and whether or not it lost power.

Members of the community lost mobile communications in the same way and because of an inability to charge batteries. Some land lines, such as cordless phones, were also no longer operative.

As phone communications was lost, this limited the efficacy of the emergency alert messages. In addition to these effects, the loss of electrical power, telephone connections and batteries affected the ability to communicate and access information through the internet.

Recommendation 10 – that all agencies and the Government support moving to an integrated communications technology for police and the emergency services.

Recommendation 11 – that police and other emergency services examine options for achieving radio interoperability between them in the absence of an integrated radio system.

New Fire Management Arrangements for the Fire Agencies

New fire arrangements at management level were established for the 2012–13 fire season. These arrangements are examined in the context of those already in place. Fire strategy and tactics will be dealt with in a separate section. Concerns have been raised about the design, implementation and effectiveness of the new arrangements and some of the associated practices.

The new arrangements are modelled on the Australasian Inter-service Incident Management System and consisted of:

- a State Fire Operations Centre
- a Regional Fire Operations Centre
- Incident Management Teams.

These are discussed below.

State Fire Operations Centre (SFOC)

The SFOC was set up for the first time. Discussion documents were the only documents available on its role.

The SFOC is intended to support the State Fire Incident Controller (which is the Chief Officer or their delegate) where there is a significant emergency event or one is imminent, in the early coordination and management of the incident/s. It is also intended to support Regional IMTs when they are initiated.

Within the SFOC, the State Controller is supported by the State Fire Control Team, which consists of a number of functional roles such as operations, planning and information.

A written log of all critical decisions and actions is to be maintained.

Regional Fire Operations Centre (RFOC)

The RFOC model was trialled in various forms in regions over a number of years and this model was initiated in all Regions for the 2012–13 fire season. Documents relating to this initiative are a 2011 management proposal for a regional coordination centre and a management proposal dated March 2013, of which the Inquiry was assured was the extant document.

The model proposed a centre to coordinate response and suppression activities in a region when significant or multiple incidents occur.

A regional coordinator is appointed by the Regional Controller and a three tiered approach is taken to managing incidents:

- Level 1 incidents: a local incident controller is put in place, supported by the Regional Incident Control Centre (RICC)
- Level 2 incidents: a forward command post is established, with the planning and logistical needs performed by the RICC
- Level 2 incidents (significant) and Level 3 incidents: an IMT is appointed to a specific incident or complex of incidents. The RICC would continue to monitor activities and become a contact point for the IMT for regional resourcing requests.

The Inquiry was told that the RFOC does not have control of the fire and only acts to support the Incident Controller. When an IMT is established, the RFOC has a limited role in supporting the event as the IMT has resources to perform support functions. This begs the question of who the IMT and Incident Controllers are reporting to.

Functions for the RFOC are to:

- monitor and disseminate information on the weather, including predicted conditions and warnings
- provide initial planning and logistical support for developing Level 1 and 2 situations, including options and strategies during transitional command stages
- coordinate regional responses according to priority and threat
- liaise with other agencies
- provide web updates
- develop and disseminate community advice and alerts, in consultation with Incident Controllers
- assist IMTs with access to regional resources.
- provide status reports and advice to State and Regional commanders
- communicate with other RFOCs if they are established.

Primary reasons for the new model are to alleviate issues from the transition of command and to increase fire service preparedness.

It should be noted that there are no detailed documents (such as standard operating procedures) for implementing the new model. Instead, it appears this occurred through briefings to staff, including partner agencies, before the 2012–13 fire season.

Incident Management Teams (IMTs)

For the 2012–13 fire season, IMTs were centralised at regional headquarters rather than located nearer fire events as previously done.

Implementation of these new arrangements was an issue. This was identified in the Australian Fire and Emergency Service Authorities Council Audit Review (AFAC Audit) conducted following the fires.²⁰

The AFAC Audit considered the SFOC was effective in performing its role and contributed to the 'overall success of fire management'. However, the AFAC Audit identified a number of issues:

- a lack of finalised policy and procedures
- the high reliance on individual knowledge rather than formal process
- some confusion over changing roles between the Multiagency Coordination group and SFOC
- resourcing and people capacity to staff the SFOC and its associated structures

²⁰ AFAC Audit-Review, The Tasmanian Fires of January 2013, May 2013.

• the embedding of processes and knowledge within partner agencies; such as PWS and Forestry Tasmania.²¹

The AFAC Audit also commented on the importance of training in the new arrangements and finalising supporting documents, such as role statements; and that these implementation issues were mitigated to some extent by the good relationships TFS has with partner agencies through the development of inter-agency protocols and working relationships. Pre-season briefings were important as well and helped overcome the lack of documented detail.²² The AFAC Audit also identified the vulnerability caused by a lack of back-up staff for extended operations.²³

Similar findings were made about the RFOC.²⁴

The Inquiry endorses these findings of the AFAC Audit. For instance, in the Bicheno fire, there was confusion over the command structure, the form of support to be provided to the Divisional Commander (Fire Commander), and the quality of the mapping with Incident Action Plans (IAPs).

A PWS officer was notified of two fires at 4.20am on 4 January, one at Butlers Point and the other at Lilla Villa. TFS crews had responded to the Lilla Villa fire. He was told that he was a Divisional Commander for the Butlers Point fire and TFS were running the Lilla Villa fire. When he made an aerial observation he discovered the Freshwater Lagoon fire, which he took as well. With some other staff he began to manage his fires from a PWS office at Coles Bay, but was concerned that he was not getting support for logistics and preparing material, and later, to help evacuating people from the area. This may have partly been due to a misunderstanding of the role of the new IMT model.

At around midday on 4 January, the PWS officer was told that the IMT in the Northern Region had been set up and he was to take over the Lilla Villa fire as well. A TFS Group Officer had initially responded to the Lilla Villa fire and had control of this fire with the Bicheno Brigade Chief and the northern end of the fire ground. Though he continued with some rest breaks, he was not aware that the PWS officer had been allocated the Lilla Villa fire as well, even on 5 January. On 5 January, another TFS officer arrived and assumed control of this part of the fire, apparently without approval from the IMT. On 6 January, another TFS officer came in and 'took over' some back burning operations. There were also some interpersonal issues with the Bicheno brigade and animosity towards PWS personnel, which potentially may have had a negative impact on fire operations.

There was also concern from the PWS officers that Incident Action Plans (IAPs) they received over a number of days were limited and the maps attached were only copies of fire maps they had prepared and sent to the IMT. They also had to copy and distribute the IAPs they received. Communications with the IMT were poor and the staging area at the Bicheno fire station was not well used.

This situation highlights problems with IMTs being remote from fires.

²¹ AFAC Audit, at p. 22.

²² AFAC Audit, at p. 22.

²³ AFAC Audit, at p. 23.

²⁴ AFAC Audit, at p. 24.



Image courtesy of Jon Marsden-Smedley

The AFAC Audit commented that the main area of concern for IMTs was the need to develop a good understanding of the changing role of the RFOC once an IMT is established. The AFAC Audit found there was some confusion, but the arrangements worked adequately during the fires.²⁵

An operational review was also conducted by TFS after the fire season. This also acknowledged that the concept of the new arrangements was 'not yet to be fully understood or practiced by all'. It concluded that '... it proved a model that suits the State of Tasmania and once embedded in the command and control culture of TFS and its partner fire fighting agencies is one that should serve the State well'.²⁶ The Inquiry is not as sanguine about the arrangements and is surprised that issues with continuity of line-of-control, incident action plans and communications for IMTs have not been considered.

Line-of-Control

The Inquiry was not able to clearly identify the line-of-control requirements for local incident controllers and IMTs. This is not documented and the Inquiry received conflicting views. If the RFOCs are only supportive of incident controllers and do not have responsibility for fires and a directive role, who does? Further, once fires are taken over by IMTs they are outside the RFOC structure and, regardless of what role the RFOC may have had, who do they report to? Is it the Regional Controller or the State Controller? And, for the control to be effective it must be a practical one, not a theoretical construct.

²⁵ AFAC Audit, at p. 24.

²⁶ Operational Review, Tasmanian Bushfires 2012/13, Tasmania Fire Service, at p. 24.

In Victoria, the fire agencies have agreed-on State Command and Control Arrangements for Bushfires, including a policy on line-of-control for bushfires.²⁷ This policy states:

The line-of-control refers to the connection between the Controllers at each tier of emergency management. The line-of-control for bushfire is Incident Controller, Regional Controller and State Controller and people appointed to these positions for the duration of the bushfire season.

The purpose of the line-of-control for bushfire in Victoria is to ensure an operational, informational and evaluative connection between the controllers at each tier so that the FSC (sic Fire Services Commissioner), who has legislative accountability for the control of major fire, is assured that the needs of the community are met.

Acting on behalf of the FSC, the State and Regional Controllers monitor the fire behaviour potential and possible consequences of all bushfires and exercise control, at their respective tier, over the potential of bushfires to become major fires. On days of high fire risk, State and Regional Controllers may exercise control authority, at their respective tier, over all fires.²⁸

The Victorian policy also makes the point that a necessary support mechanism for line-ofcontrol is that:

Controllers at each tier of control must have a process for recording their decisions and those made within Control Teams and Emergency Management Teams, and a process for maintaining and storing these records.²⁹

The Australasian Inter-service Incident Management System also specifies that the Incident Controller is responsible for determining the appropriate strategies and developing an appropriate Incident Action Plan, and provides:

At a small incident, the Incident Controller may develop a mental Incident Action Plan ... Should the incident develop beyond that catered for in a pre-incident plan and standard operating procedures, so should the Incident Action Plan. For incidents that have a potential for extended involvement, the Incident Action Plan should be documented. However, during rapidly escalating incidents it can be extremely difficult for a written plan to be prepared in the initial stages. Nevertheless, an assessment of the situation should still occur and an objective be determined. As soon as practicable, a written plan should be prepared, in case the incident increases in complexity and to record the information for subsequent incident analysis and debriefs.³⁰

²⁷ State Command and Control Arrangements for Bushfire in Victoria 2012, version 2, September 2012.

²⁸ State Command and Control Arrangements for Bushfire in Victoria, at p. 5.

²⁹ State Command and Control Arrangements for Bushfire in Victoria, at p. 11..

³⁰ The Australasian Inter-service Incident Management System, Revised Edition 2011, at pp. 33 and 84.

Incident Action Plans (IAPs)

The instructions on IAPs include a one page summary option, and the procedure is to only use this:

At a Level I Fire – where a full IAP is not warranted. However, in these situations, there still needs to be clearly stated objectives for managing the fire, an understanding of who is undertaking each task, what the command structure is, and a briefing of safety issues.

At a larger incident where the situation has changed rapidly and the IAP prepared for that operational shift no longer applies. New objectives and strategies are required for the current shift of operations only.³¹

It would be a good practice to always make a written record — either after the event in a small incident, or in preparation for managing a larger event — and to embed it in organisational culture.

A written record of objectives, strategies and tactics was not consistently made by incident controllers in the field. This problem is compounded by the delay in preparing IAPs by an IMT. Difficulties are more than simply keeping good records. The Inquiry has been told IMTs should be forward looking and it takes 3 to 4 hours to prepare an IAP, sometimes even longer.

These difficulties are illustrated in the Forcett fire. A written record of this action plan was not made by the incident controller in the field, either on the evening of 3 January or in the morning of 4 January. There were discussions with the IMT for the Lake Repulse Fire, based at the Southern Regional Headquarters at Cambridge, during the evening on 3 January, to take over the Forcett fire. Advice to the Inquiry varied as to whether the IMT took over on 3 January, but did not begin preparation until the morning of 4 January, or did not take over until the morning of 4 January. In any case, work to prepare an IAP for the Forcett fire did not begin until the morning on 4 January.

The IAP was approved by the Incident Controller, now in the IMT, at 1.00pm — too late to be delivered and implemented before the fire ran out of control. Effectively, this meant there was no documented plan for the Forcett fire at this time, despite TFS having been called to it almost 24 hours earlier. It also meant that the only plan operating at this time was the mental plan developed by the Fire Commander in the field and/or the application of TFS Six Operational Priorities (these are discussed below in the section on fire strategy and tactics).

Looking at how long it took to prepare an IAP in an IMT, the Inquiry sought information on opportunities to prepare a quicker and simpler plan. The summary template, referred to above, is available, but was not used in this fire, despite the weather forecasts and predictive modelling. In its report, the AFAC Audit found:

... the IAP Summary template was evident for the Dawson Road – Lake Repulse fire, [however] there was no documentation provided to demonstrate its use on the first active day at any of the other fires, when such a summary should have been available.³²

³¹ Incident Action Plan summary document Version 1.2 November 2010, at p.1.

Obviously this reflects serious problems with the transition from a field incident controller to an IMT. This is even more concerning with the line-of-control issues referred to above. A failure to solve this problem could lead to an over-reliance on the Six Operational Priorities, rather than developing plans specifically for the conditions of particular fires, and a poor fire management culture.

A quicker process for developing and documenting fire plans should be found.

However, deficiencies in planning do not mean that there was no control from the IMT. Subject to communications issues, the operations officer would normally have direct contact with the incident controller in the field and can give advice and direction to them as required.

Concerns were raised with the Inquiry on a number of aspects related to the importance of local knowledge and experience in suppressing fires, particularly in the initial stages. This issue is relevant to the new approach to centralising the location of IMTs, sometimes quite remotely from the fires they are managing. Locating an IMT some distance from a fire would reduce the chance of people within the IMT having an understanding of the local topography and conditions, and what is occurring with the fires.

An inquiry by a Senate Select Committee in 2010 examined the issue of local control during bushfires.³³ In considering this issue the Committee was focussed on the importance of early response to successful fire suppression.³⁴ Two comments by the Committee are pertinent:



Image courtesy of Warren Frey

33 Senate Select Committee on Agricultural and Related Industries, The Incidence and Severity of Bushfires Across Australia, 2010.

34 Senate Select Committee on Agricultural and Related Industries, at p. 107.

The committee received considerable complaint about the negative consequences of restrictions on local decision-making and local action once control of a bushfire suppression effort has passed to a centralised incident control structure. The basis for this complaint was the inability of locals on the ground to exercise their local knowledge and respond quickly to changing circumstances hampers bushfire suppression.

The committee understands that bushfire emergencies do require a formalised incident control structure to ensure that suppression measures in one area are not countering efforts in another or risking the lives of fire fighters. However, it appears ... that this objective is impeding the legitimate actions of fire fighters on the ground, who are attempting to deal with changing conditions in the most effective way. The benefits of a centralised incident control structure are totally nullified if fires are allowed to burn out of control while local fire fighters wait for approval to respond by those likely to be unfamiliar with local and up-to-date conditions. The committee is of the view therefore that bushfire agencies should review their incident control management systems to 'better incorporate local knowledge and expertise and better understanding of the needs and circumstances of local rural communities in the management of major bushfires'.³⁵

A related matter was referred to in the AFAC Audit; namely, the use of volunteer members in TFS management areas. This was put in the context of limited resources being available to TFS. The Inquiry understands that a volunteer brigade member was used in a planning role in an IMT during the fires, and this might be a means of supplementing resources as well as building local knowledge capability within IMTs.

Associated with this is the command structure at fires. For example, fire grounds can become divided, with a number of divisional commanders appointed. Having a single person in control at the fire ground is important for line-of-control and it could also be a means of bringing local knowledge into IMT decision making. This could be achieved by locating an experienced local brigade officer with the person in charge of the fire ground. The Inquiry is aware that this practice occurs frequently with TFS officers in the field; for example, a sector commander in the Forcett fire took a local brigade officer with him in his vehicle. A more structured and systematic approach would be of benefit.

Predictive modelling was a new capability for the IMTs and the failure to use this form of information effectively in the Forcett fire will be commented on in various parts of the Report. It does not appear that the IMT used the simulation for the Forcett fire, possibly due to their` late take-over of this fire.

Communications within the IMTs

The Inquiry received complaints from TFS personnel in the field, particularly with the Forcett fire, that they had difficulty communicating with the IMT. The radio operators had little understanding of operational requests and issues raised by TFS personnel; TFS personnel received little response to their requests. Communications personnel in the IMTs were not the normal FireComm operators, but volunteers brought in for the task.

³⁵ Senate Select Committee on Agricultural and Related Industries, at pp. 112 and 116.

The Inquiry was also told that emergency calls received by FireComm were referred to the IMTs for attention on pieces of paper and there was not a logging system in place to account for their management. Radio channels used by the IMT were not always audio-recorded as the FireComm channels are. Communication issues between FireComm and IMT communications also seem to have been a problem, as there were numerous occasions recorded in the Forcett fire call log when critical information could not be passed on as the IMT was not contactable.

This situation, despite the best of intentions, is not satisfactory. In emergencies the most effective and efficient systems should be used, and there needs to be proper management and accountability, especially receiving and dispatching of emergency '000' calls.

Recommendation 12 – that Tasmania Fire Service establishes suitable systems and practices for recording fire management objectives and tactics.

Recommendation 13 – that Tasmania Fire Service examines options for developing and issuing fire management objectives and tactics from Incident Management Teams in a more timely way, including 'quick' plans.

Recommendation 14 – that Tasmania Fire Services and its partner agencies establish a means of monitoring and reviewing the effectiveness of centralising the location of Incident Management Teams.

Recommendation 15 – that Tasmania Fire Service considers measures to bring local knowledge into Incident Management Team operations.

Recommendation 16 – that Tasmania Fire Service reviews its position on fire ground management to determine whether a unified command model at the fire ground should be adopted.

Recommendation 17 – that Tasmania Fire Service reviews its position on using local experienced officers on the fire ground in the command model in a structured and systemic way.

Recommendation 18 – that fire agencies continue to develop their predictive modelling capability for use in actively managing fires.

Recommendation 19 – that Tasmania Fire Service reviews the communication systems used for all emergency management operations, ensures operators are qualified, and ensures there is appropriate accountability.

Fire Strategy and Tactics

The approach taken to a fire and the methods used can have a significant impact on the outcome. The AFAC Audit did not conduct a detailed tactical review of the fires.³⁶ Many comments were made to the Inquiry about TFS strategy and tactics, and the Inquiry has also identified some issues which require close attention.

It is important to remember that most fires are suppressed in a timely way. There were a number of examples of this with the fires the Inquiry is examining, for instance at Freshwater Lagoon (the Bicheno fire).

However, often the focus is on matters that are not successful in a timely way, or the definition of just what is successful is problematic. This means successful operations tend to be overlooked. Indeed, for police and the emergency services it is a fact of life that successful proactive operations that prevent or mitigate the risk often result in people considering that the risk was not a real one in the first place.

Some submissions to the Inquiry were complimentary of TFS staff and operations; others raised concerns. The latter were mainly directed at career officers and include: they don't have local and country knowledge and experience, are more experienced at structure fires, are generalists and lack experience in particular fires, are risk averse, don't hit fires hard enough initially, let fires burn as they are easier to suppress when they come out, don't know how to blackout or mop up properly, are reluctant to do back burning, and won't work at night.

It is difficult to objectively examine some of these concerns. Sometimes concerns are perceptions that may be influenced by interests the holder may have. Others may be quite real, but are difficult to assess within the scope of this Inquiry; for instance, being risk averse. Despite the difficulties, the Inquiry has sought to examine some key areas with the primary purpose of seeking improvement where it is needed. Processes for constantly maintaining focussed and appropriate fire strategies and tactics should be an essential aspect of all agencies engaged in fire suppression activities, especially TFS.

Recommendation 20 – that Tasmania Fire Service, Forestry Tasmania, and Parks and Wildlife Service have a process for ensuring fire strategy and tactics are appropriate and remain focussed.

Pre-deployment and Preventative Arrangements

Plans to deal with fires should have a proactive element wherever possible as this will increase the chance of successful operations. When there are multiple fires it will sometimes be difficult to decide which fires have the greatest potential for damage or are more amenable to proactive action to mitigate risk. This difficulty should not mean that proactive action is not taken.

In terms of the Forcett fire, TFS was aware of the weather forecast for 4 January and had a prediction model indicating that without changing the fire situation, the fire could run into Dunalley by around 3.00pm. It was also recognised — even expected — that the Arthur Highway would be cut by the fire and that access to the Tasman and Forestier Peninsulas would be difficult.

The State Controller was aware of the predictive model on the evening of 3 January. Some action appears to have been taken that evening to alert the community of the location of the fire at Copping. It seems that no other significant proactive action was taken. While there is some debate about when the Forcett fire was handed to the IMT, the Incident Controller for the IMT is clear that he did not receive the Forcett fire until about 8.00am on 4 January, and then began preparing an IAP. He acknowledges the IMT should have taken over the fire earlier. It should also be noted that the IMT finished around 9.00m/10.00pm that night, leaving only a skeleton crew over night with a watching brief. An IAP could have been prepared overnight.

No proactive action was taken to pre-deploy fire resources on the Tasman and Forestier Peninsulas or initiate different measures to warn people of the risk. The IMT Incident Controller told the Inquiry that there were not enough resources to pre-deploy. On the warnings issue, contrast this situation with police action to warn people in the Lake Repulse fire.

It may also be that TFS personnel dealing with the Forcett fire had expected they would change the fire conditions before the forecast weather conditions occurring later in the day, but this is unlikely.

Recommendation 21 – that Tasmania Fire Service ensures that planning for active fires includes a proactive approach wherever possible.

Initial Suppression Action

Questions were raised about a lack of commitment to suppressing fires in their initial stages, particularly if they are in bush settings. Sometimes this is due to a misunderstanding of accessibility, safety and scale issues. However, in most cases it would be expected that this is the best time to suppress a fire and it would be expected that this would be an important tactical approach imbedded in all fire operations. It would be appropriate for TFS to reinforce this as an important principle in its operations.

Recommendation 22 – that Tasmania Fire Service considers adopting a primary tactic of an aggressive first attack on fires.

Six Operational Objectives

The way people process and interpret information and choose ways of responding to it is frequently shaped by personal knowledge, experience and values. Organisational context, especially in the form of culture, is also a factor in determining understanding and the way activities are conducted within and by that organisation.

Doubtless these influences operate within TFS and other organisations with a role in managing fires, and leaders and managers need to be aware of and alert to both the positive and negative elements. Attention should be given to actively shaping the way people see and think about issues in order to obtain the best outcome for the community. Imbedding desirable knowledge, skills, traits and values in an organisation is important.

One method is to provide a framework within which problems are considered, such as with TFS Six Operational Priorities.

Using principles or priorities in this way is a very powerful instrument for influencing organisational behaviour in a positive way, provided it is done in the correct form and without negative consequences. TFS developed and publicised a set of priorities following the Victorian Bushfires Royal Commission, which are set out below. An organisational explanation of the priorities is set out at Appendix E.4.

The AFAC Audit considered this initiative to be one of the successes of TFS operations in the fires.³⁷ It was also the Inquiry's experience that these priorities were readily recalled. Not all fire services in Australia have operational priorities in this form. An example from Victoria is outlined below to help provide an appreciation of the appropriateness of TFS priorities:



Strategic Control Priorities

- Protection and preservation of life is paramount this includes:
- Safety of emergency services personnel; and
- Safety of community members including vulnerable community members and visitors/tourists located within the incident area.
- Issuing of community information and community warnings detailing incident information that is timely, relevant and tailored to assist community members make informed decisions about their safety.
- Protection of critical infrastructure and community assets that support community resilience.
- Protection of residential property as a place of primary residence.
- Protection of assets supporting individual livelihoods and economic production that supports individual and community financial sustainability.
- Protection of environmental and conservation assets that considers the cultural, biodiversity, and social values of the environment.³⁸

Both sets of priorities are intended to apply in descending order. However, the TFS six operational priorities are intended to operate when fires burn out of control, whereas the Victoria set is not so limited. Some of the Victorian priorities may differ because they apply more broadly. Equally, it may be argued that the TFS priorities would be better with a broader remit.

Protection of life is the highest priority in the Victorian model and it could be expected this should be the case for TFS as well. Vulnerable people are included in the Victorian model in this first priority and specifically mentioned as the second priority for TFS. On this point it may be considered that the TFS model would be better to refer to 'people at risk' rather than 'vulnerable people', as 'people at risk' may include those who would not otherwise be considered to be 'vulnerable' in the sense that the priority means.

³⁷ AFAC Audit, at p. 42.

³⁸ State Command and Control Arrangements for Bushfire in Victoria 2012, at p.6.

Issuing warnings is a high priority for both models.

Differences between the models occur with other specified assets to protect. The emphasis of TFS model is less on individual homes or buildings; it also specifies fewer assets, like those supporting individual livelihoods or with conservation values.

The TFS model also refers back to fire suppression as the lowest operational priority for fires burning under severe or catastrophic conditions. The description for this priority does not refer to fires out of control and is written in a general way, which may cause some confusion with firefighters.

Setting priorities serves a very useful purpose in providing some structure to fire operations, especially when there is limited time to prepare a plan or there are extreme conditions under which firefighters are operating. It is imperative that they communicate correctly and lead to sound decision making.

Where it is difficult to set objectives and direct operations, such as when there are fast moving and difficult fire conditions, these priorities provide a framework which can be translated into decisions and actions in the field. In this way they operate in a similar way to the military concept of 'mission command', encouraging and empowering subordinates to use initiative and exercise judgement in pursuit of the mission.³⁹ It should be noted that this concept is problematic for military organisations without supportive cultures and capabilities. This should serve as a warning that the use of priorities may not be a panacea and should be used carefully.

Of particular concern to the Inquiry is that the priorities will be seen and used as a one-size-fits-all plan, leading to a lack of attention to developing fire specific plans. Moreover, there is a risk that there will be inappropriate priorities set for assets and groups of people not mentioned and a lack of flexibility to changing conditions. By way of comparison, in Victoria, in addition to the operational priorities, the Fire Service Commissioner will still issue their 'intent' for particular areas.⁴⁰ Flexibility and tailoring the plan to fit the circumstances appear to be highly desirable features to maintain.

These issues can be considered in the context of the Forcett fire when it ran towards and beyond Dunalley. Fire and police personnel engaged in an emergency warning process in front of the fire, advising people to relocate to the Dunalley Hotel as a nearby safer place and/or to go on to Nubeena. This had the effect of facilitating the movement of people in a way which may conflict with the policy of 'not fleeing at the last minute'. All nearby fire crews fell back to and protected the Dunalley Hotel where a large number of people were gathered, as the 'fire front' went through. More detail on this topic is provided in the section on relocations and evacuations.

Recommendation 23 – that Tasmania Fire Service critically reviews the operation of the Six Operational Priorities to determine whether they are appropriate and effective.

³⁹ Transforming Command, The Pursuit of Mission Command in the U.S., British and Israeli Armies, Eitan Shamir, Stanford University Press, 2011, at p. 3.

⁴⁰ See for example, the Fire Services Grampians Region Readiness & Risk Management Plan, Fire Services Commissioner Victoria, at para. 2.1

Recommendation 24 – that Tasmania Fire Service considers what adjustments may be necessary to the promotion and use of the Six Operational Priorities to ensure plans are suitable for the circumstances of each fire.

Suppression of the Fires at Dunalley

The Inquiry received submissions expressing concerns that not enough was done to protect buildings in Dunalley after the fire front passed. These concerns are illustrated by the following extracts from submissions:

... In fact he lost his own property across the road. The grass caught fire in front of his place, the ... fire brigade was there, we asked them if they could put the grass out but they said no they were there to protect lives and not property ... After they left my husband and his brother went to check on the sawmill and the houses, the school was still there. They were gone for ³/₄ hour and on the way back it was venting out of the roof, but they couldn't find any brigades.⁴¹

... I question whether it was necessary to withdraw the fire crews from Dunalley, while untrained and under-resourced townsfolk, who remained, tried to limit the impact of the blaze ... In these cases, it was not a raging forest fire that caused the destruction, but merely spot fires lit by embers, or by fire spreading house-to-house ... Many of the houses that survived did so because a resident or neighbour stayed (or returned) and saved them, often by incredibly basic means. Fire crews could have been usefully deployed in these areas without unnecessarily endangering them ...

... I am, however, completely astonished that they did not return to the town after the danger of the fire front had passed. At that stage there were many eminently controllable fires which could have been extinguished...Dunalley was left to burn while the fire crews were off chasing the fire down the Peninsula...I can assure you that buildings continued to burn down through the night, from fires spreading house-to-house or small spot fires eventually taking hold ...

One of the saddest outcomes of the fire was the completely avoidable loss of the school, which occurred hours after the fire-front had passed through town ... My wife counted 19 fire engines drive past this fire, ignoring it \dots^{42}

From the family's description of the day's events, there was a sense that some homes and buildings burnt needlessly and that there was a lack of fire fighting crews in the town available to put out the fires.

For example, after the main fire came through Dunalley, household B indicated that they attempted to put out spot fires surrounding a home (that was not their own) that had not burnt during the main fire ... Eventually one of the group left to find a fire service crew to request help in containing the spot fires. When the fire crew arrived, the household members were told to evacuate the area and given directions on how to get to the Dunalley Hotel safety, the fire crew then left. The

⁴¹ Submission No. 33.

⁴² Submission No. 42.

household members felt that the fire crew should have stayed and attempted to save the house.⁴³

As the fire moved towards Dunalley on 4 January, a number of crews converged on that location and the Fire Commander arrived at 2.30pm. Fires were spotting into Dunalley at that time. TFS priorities were to:

- evacuate people from Dunalley, to the Nearby Safer Place (NSP) of the hotel or further south to Nubeena
- protect community assets (hotel, bridge and school)
- fall back to the hotel if need be.

At Dunalley there were 15 to 20 fire crews. One crew was from the Dunalley Brigade and as it was composed of local people, the Fire Commander allowed it to take its own action. Crews were patrolling warning people and putting out spot fires. There were two crews at the school and they laid out hoses to protect the school. The weather began to worsen and the fire behaviour was extreme, with a severe ember attack.

At 3.30pm on 4 January, the decision was made to withdraw the crews to the hotel because of the fire conditions. The Dunalley crew was at Boomer Bay protecting houses. Notwithstanding the conditions, the Fire Commander and an accompanying brigade member continued to patrol Dunalley to warn people.

The fire came through the town, crossed the canal and headed south. As this was occurring, at 4.10pm a sector commander and another crew left the hotel to travel towards Murdunna to warn and evacuate people. After this crews began moving back in to Dunalley, though the number of crews and the time at which they went in to Dunalley is uncertain. It included the Northern Strike Team from Cambridge with a number of its crews.

Emergency calls were being dispatched to the Fire Commander from people seeking TFS assistance. There were many calls being received by TFS at this time. Between 2.00pm and 10.00pm, FireComm received 313 '000' calls and most related to the Forcett fire. The calls had the effect of disrupting fire operations as crews attempted to respond. However, there were many instances where crews couldn't respond because of their lack of availability or limited access to the area where assistance was required. In addition to the fire conditions, power poles and lines and other debris were on the roads. Many calls went without a fire response.

Ember attacks continued in Dunalley and properties continued to catch fire. The conditions were such that it was difficult to suppress fires with any certainty. The Inquiry was told that properties would reignite after fires had been extinguished and once a building was alight, it was difficult to put the fire out. Apart from spot fires, generally crews did not attempt to extinguish fires in buildings.

There are mixed views about this approach. The Inquiry was shown in Murdunna an area where crews actively protected houses and were able to save them when nearby houses were destroyed. The Dunalley fire crews also reportedly saved many houses.

A member of the Dunalley crew described the priorities as saving people and houses, including
the bridge and the school. They went to Boomer Bay when the fire arrived as they saw that houses were under threat. A number of houses were protected and then they made a decision that once a house was on fire it couldn't be saved — there were too many properties being threatened and fires would reignite. After a short time they returned to Dunalley. In Dunalley, they attempted to suppress a fire in a house to prevent building-to-building ignition.

A fire was extinguished at a local café.

The Station Officer with the Northern Strike Team told the Inquiry that he didn't see any building-to-building ignition, but the team didn't try to extinguish any house fire that was burning really well. The Strike Team put out spot fires to prevent any other property catching fire. He said that if they had more resources they could have saved more property, but couldn't obtain any more resources.

The school was a priority for the Dunalley crew and they checked it 3 to 4 times. It was also a priority for the Station Officer with the Northern Strike Team. He was at the school when the fire arrived and checked on it when he returned to Dunalley. The school reportedly caught fire between 4.00pm and 4.30pm and the Station Officer said that if they had more resources (specifically, breathing apparatus and heavy tankers) they could have saved it (there was breathing apparatus available with some of the crews in Dunalley). The Station Officer told the Inquiry that when he left Dunalley at about 9.00pm, the school was burning from end-to-end.

At about 9.00pm, the Fire Commander and the Station Officer with the crews from the Northern Strike Team left Dunalley and ceased fire operations. The Fire Commander told the Inquiry had been directed to leave by the IMT, that he should get out now or he probably wouldn't get out. He said he was thinking of the next day and began looking for an access point to see if they could get more crews in.

The Station Officer used his initiative and made his own decision, though he discussed it with the Fire Commander. The Station Officer said that at the time he left, there were still houses on fire and the school was burning. The Dunalley brigade crew was the only crew remaining in Dunalley and did not finish until around 7.00am to 8.00am on 5 January.

Control of the fire ground was handed over to a sector commander who had travelled further down the peninsula. He was apparently near Murdunna when the Fire Commander left Dunalley, then moved towards Eaglehawk Neck and was not in a position to take effective control of the fire ground at Dunalley. The only time he came to Dunalley during the night was at 4.30am on 5 January.

A number of calls for assistance were still being received at around this time. As the crews were leaving there was a call that the bridge at Dunalley was on fire, and a crew was sent back to check it out. At 10.15pm a call was received from a person with five children in a house at Dunalley that was back under fire threat because of a wind change. Another was received at 10.31pm from a resident of Dunalley with a house under ember attack.

A radio log also recorded transmissions from a TFS member who was at Dunalley for other duties:

- at 9.12pm, TFS member advised FireComm that he was in the main street of Dunalley and 'there are a lot buildings that could be saved if we had some crews'
- a FireComm operator attempted to put him through to the IMT, but the phone was not answered
- TFS member informed the FireComm operator there was also a house next to the bakery that was just catching fire, but could be saved if they got a crew there
- a FireComm operator attempted to contact the IMT over the radio; again, there was no answer
- TFS member made another call, this time that the bridge was on fire
- a FireComm operator made contact with the IMT. A radio call was put out for any crew in the Dunalley area. No crews answered
- the Fire Commander, who had left Dunalley, advised the IMT that the only crew left at Dunalley was the Dunalley crew. A pager message was sent to this crew to attend the bridge
- the Station Officer from the Northern Strike Team indicated over the radio that he had sent a crew back to the bridge.

There is no further reference to the house near the bakery catching fire or sending any other crews in to Dunalley to protect houses.

Later in this part is comment on the deficiencies in the communications arrangements in the IMT, which may explain why it was difficult for the FireComm operator to contact the IMT, and why messages of properties on fire and how they were handled were not recorded.

The Incident Controller informed the Inquiry that when the fire took off, the IMT was still trying to find out where all the resources were on the fire ground and they didn't have enough resources to get around everything. They weren't able to obtain a good picture of what was happening and where everyone was until the night on 4 January, and as they didn't have an IAP, they were totally reactive at this time. Further, that it was overwhelming between 1.00pm and the evening.

The Operations Officer also said that he was overwhelmed by the workload. He left the decision on whether crews should go back in to Dunalley to the Fire Commander.

The Inquiry has some concerns about how the fires were handled in Dunalley and there are questions remaining.

While it is acknowledged that these were extreme fire conditions and fire crews had worked for extended periods, crews left Dunalley and there was a lack of effective control when there were active fires and properties were on fire and under threat. Apart from leaving the Dunalley crew, which had worked just as long as the other crews, no other action to protect Dunalley appears to have been taken at this time.

Another concern for the Inquiry, despite the limitations of this form of modelling, is the apparent little use by TFS of the predictive modelling that the Forcett fire would reach Dunalley.

Finally, comments on the application of the emphasis on warnings and TFS six priorities are required:

- there is a need for flexibility, which has been mentioned previously, and the ability to return to a fire suppression focus when appropriate. Since the fire front had passed in Dunalley, was the fire still regarded as 'out of control'? Should there have been a more explicit shift to property protection and how should that have been communicated to the crews so that consistent action was taken?
- Dunalley highlights that it can be expected property loss will increase when there
 is a greater emphasis on warnings and protecting life, and when TFS priorities are
 applied. This in turn raises the issue of what level of emphasis is required. It is not
 so much an issue of balance as it is not possible to weigh up the number of lives
 versus the number of properties rather it is about an appropriate level of warning
 activity and properly assessing the risks. For example, a risk-averse approach would
 see more warnings, perhaps when they are not justified, and less fire suppression.
 There does not seem to be any consideration of this issue or attempt to resolve it
 by TFS.

Recommendation 25 - if it is considered more information is required on action to suppress the fires in Dunalley and why fire operations did not continue, the Department of Justice should conduct an independent examination of this matter.

Recommendation 26 – that Tasmania Fire Service reviews operational practices to ensure there is continuity of fire operations when fire suppression action is required.

Rural Knowledge and Experience

A number of submissions to the Inquiry raised concerns about the extent TFS has or incorporates rural knowledge and experience into its operations. Some of these relate to particular tactics, such as back burning, which will be discussed in other sections (the comments and references in the section above on IMTs are also relevant to this issue).

One submission suggested that landowners should be:

- contacted by emergency services at the start of each fire season so that these services can become familiar with the property features (for example, access and water points)
- warned about fire threats early so they can prepare their properties
- contacted by emergency services so they can provide local intelligence and information of assistance to firefighters.⁴⁴

Another submission made the point that many farmers are working multi-generational properties; they care about them and the environment; and the skills and experience of rural property owners should be used to manage their properties in the public interest. Recommendations were made that:

• councils provide the contact details of brigade officers to property owners so the brigades can obtain local knowledge

• local brigade chiefs have full control of decisions during firefighting.⁴⁵

Further submissions highlighted the following issues:

- local landowners should be consulted in the early stages of fires to secure resources and obtain cooperation⁴⁶
- strong volunteer bush brigades should be maintained so not only are their resources available, but their local knowledge and experience is also maintained⁴⁷
- TFS's takeover of the management of brigades has meant local independence and decision making has been lost fire fighters felt compelled to seek instructions from the control centre at Cambridge for the simplest of decisions.⁴⁸

No doubt a strong local volunteer brigade capability is essential and there will be further comments on this in the later section on resources. At the present the issue is on strategy and tactics.

There will be tensions between local autonomy and the need for Government agencies to act in a professional and accountable manner, and to scale up operations where fires are beyond the capability of local resources. At the point of these tensions there will be different opinions. Tasmania has the advantage of a consolidated fire service, bringing together rural, urban, volunteer and career personnel. Arrangements with PWS and Forestry Tasmania are mature and stable. This should facilitate concentrated and united operations to protect the community. The Inquiry is not satisfied that there is sufficient justification, on the material it examined, to consider separating TFS into urban and rural components.

The advantages of a consolidated organisation and partnerships with other organisations will only remain with constant vigilance by those entrusted to lead the respective organisations. In this regard, one challenge for TFS is to maintain an organisation which values and encourages local volunteer participation, and incorporates the knowledge and experience rural communities have about fire management. In the pursuit of this outcome, TFS should ensure it has a well-developed strategy.

Recommendation 27 – that Tasmania Fire Service reviews its integration of rural local knowledge and volunteer brigades into fire operations, develops and maintains appropriate strategies, and aims to be a best-practice fire service in this regard.

Back Burning

Whether back burning operations should have been conducted or not is a contentious issue in the initial stages of the Forcett fire.

A landowner approached the Incident Controller at the Forcett fire on the evening of 3 January to ask if this tactic was to be used. No back burning operations were conducted on 3 and 4 January by TFS.

⁴⁵ Submission No. 52.

⁴⁶ Submission No. 75.

⁴⁷ Submission No. 75.

⁴⁸ Submission No. 53.

Submissions received by the Inquiry raised this issue:

Nothing could have been done to mitigate the fire, once the extreme weather conditions occurred. However given that the conditions were forecast and there were known to be fires burning at least 24 hours prior, a major back burning effort undertaken on the Thursday evening/night may have reduced the Friday fires and given a chance to control them.⁴⁹

Tas Fire personnel at Hazelwood on the Thursday afternoon/evening appeared to only be listening to the decision makers in Hobart who even 5 weeks after the fire were unaware that it had been wet and drizzly at Copping that night ... my brother ... and myself were desperately seeking approval to back burn on the Thursday evening or Friday morning but the "Head Office said NO" so everybody, except one crew went home! ... A back burn from the highway and ... paddocks up to the fire front (a distance of 200–300m) would have been risky, but the alternative of doing nothing was much more catastrophic.⁵⁰

Feedback ... suggests that there was a widespread reluctance among fire chiefs to use back burning as a tactic during fires, reflecting their excessive caution on the part of fire managers who have perhaps come from an urban background and have no hands-on familiarity with fire behaviour in the bush.⁵¹

Local volunteer brigade crews attended the Forcett fire when it was first reported on 3 January, including some very experienced volunteers from the Dodges Ferry Brigade. The Incident Controller was a senior station officer from TFS. He acknowledged being approached by a local landowner on the issue of back burning and after discussing it with the volunteers, decided not to back burn. He told the Inquiry that he didn't believe it would be a successful tactic due to the weather, it was resource intensive, there were a lot of structures in the vicinity, and he only had enough night crews to do patrols. In his opinion, the only possible area to back burn was in the Red Hills area; however, spot fires had already started, and therefore back burning was no longer an option.

Of the two senior brigade members present, one agreed with the decision as there was not enough personnel for the terrain the fire was in. His view was that back burning was out of the question. The other was in favour of back burning but was instructed that under no circumstances were they to light another fire.

The IMT Incident Controller for the Forcett fire told the Inquiry that, although he did not have responsibility for the fire on 3 January, it was unlikely any back burning could have been done on 3 or 4 January.

It did appear to the Inquiry that there were generally different opinions on whether to back burn or not, but the Inquiry did not observe any reluctance by Incident Controllers, including TFS personnel, to use back burning as a tactic in managing fires provided that conditions were conducive to its use.

⁴⁹ Submission No. 53.

⁵⁰ Submission No. 70.

⁵¹ Submission No. 75.

The Inquiry received information that a person not attached to a brigade attempted some back burning near the location of the Forcett fires on the morning of 4 January, a fire ban day.

Blacking Out and Mopping Up

In both the Bicheno and Forcett fires, spot fires came out of areas of previous fire activity, at Lilla Villa and Wettenhall Flat respectively. These fires had started a considerable time before the spotting occurred and were attended by TFS crews. There was the opportunity for them to be extinguished, not just contained. Contrast that with two fires in the Coles Bay area attended by PWS crews, at Freshwater Lagoon and Butlers Point. The former was successfully blacked out before the adverse weather occurring on 4 January, and the latter was later overrun by the fire which originated from Lilla Villa.

It was suggested to the Inquiry that brigade training for blacking out was not adequate, and the circumstances of these fires raise the issue of whether TFS practices and techniques provide sufficient emphasis on and skills to successfully black out and mop up, rather than be contained and patrolled.

Recommendation 28 – that Tasmania Fire Service reviews its approach to blacking out and mopping up, including its policies, operating procedures and training.

Working at Night

When interviewed by the Inquiry about action taken at the scene of fires, some TFS personnel said they didn't undertake suppression activity at night. This approach was explained as being for safety reasons, because of the heightened risks at night in bush settings (for example, with falling trees). Minimal crews were allocated to night shifts, usually with a patrolling brief.

Working at night:

- is often the best time to successfully manage fires, as weather conditions tend to moderate
- maintains the continuity of fire fighting operations
- prevents any gains made during the day from being lost.

It should be noted that it was the practice of some TFS crews to not start again on the fire ground until around 9.00am to 9.30am after a number of hours of preparation, when perhaps they should start earlier.

The Inquiry is aware of situations where suppression activities did occur at night, including in bush settings (what exactly is a bush setting, for the purpose of this practice, is one of the undefined elements, which makes the practice unclear). It should also be noted that brigades are often initially called to attend fires at night, particularly for lightning strikes.

Norske Skog fire personnel told the Inquiry that they actively fight fires at night, putting in fire breaks and control lines, and expressed concern at receiving reduced crews and resources for night shifts.

TFS does not have a policy on this issue and the only reference the Inquiry can find to a policy position is in the risk register, where there is an indication that for bushland fires with an extreme risk rating, night time fire suppression activities are to be banned.

The Inquiry could not get a clear position from TFS on this issue. It is quite unsatisfactory to have such a vague and ill-defined approach with considerable currency in TFS, and a high potential for ad hoc decision making to have an idiosyncratic impact on fire management operations.

Recommendation 29 – that Tasmania Fire Service reviews its approach to fire management operations at night, and develop and effectively implement unambiguous policy and operating procedures.

Air Support for Fire Operations

Tasmanian bushfire agencies coordinate the use of aircraft for fire operations through two main processes:

- the National Aerial Firefighting Centre (NAFC)-contracted aircraft. Tasmania normally uses five NAFC-contracted aircraft: two positioned in the north of the State and three in the south. These aircraft can be re-positioned depending on risk. On 4 January, all NAFC-contracted aircraft were deployed to the fires. NAFC provides a pool of aircraft from around Australia from which agencies can resource additional aircraft when seasons are busy. NAFC assisted with the re-positioning of four additional aircraft for the 2012–13 fire season
- the Aircraft 'call when needed' register. This register provides a pool of local aircraft, with known aircraft type, capability and cost. In the lead up to 4 January, there were 12 aircraft available of varying size and capability.

An additional fixed wing and a medium helicopter water-bombing aircraft were brought in on 3 January ahead of the predicted bad fire weather.

From 3 to 5 January, the coordination of aircraft was done through the State Air Desk duty officer located in the SFOC. Aircraft were allocated to incidents through a priority process.

Use of aircraft is carefully managed and assessed. In the right conditions, aircraft can be effective at slowing or halting the forward movement of the head fire, especially when aircraft arrive at the fire at a relative early stage of the fire start. However, they are expensive to operate.

Other factors to consider are:

- effective deployment of aircraft requires their use in coordination with ground crews. Ground crews are better able to mop up the fire once aircraft have reduced the forward movement and its flame height
- quick turnaround times are required. If the turnaround time of a helicopter is five or more minutes, it would be considered relatively ineffective as the fire is likely to reestablish itself and gain forward momentum before the aircraft can return to 'knock the fire down'
- tree canopy density can also affect the use of aircraft. Where the tree canopy density is too thick it is unlikely the water drop will penetrate the canopy and suppress the fire

- there needs to be ready access to a water supply. Most helicopters can access water from water holes, slow running rivers or creeks and, if properly prepared, the open sea
- refuelling facilities must also be available close by. Refuelling facilities can be established on a sports oval or similar open space with good approach and departure access. Mobile fuel tankers and trailers and drums can be used from sports fields or similar open spaces. Fixed wing aircraft will generally use an airfield as close as possible to the incident
- safety is paramount. Factors such as smoke and visibility, heat, fatigue and regular rest breaks for pilots in arduous conditions are critical to safety. Many fires are also managed in mountainous and undulating topography, which creates dangers for aircraft.

On the morning of 4 January, there were a number of aircraft deployed to the Lake Repulse and Forcett fires. Flying conditions were good early, though cockpit temperatures would have steadily increased, contributing to pilot fatigue.

As the weather conditions worsened in the afternoon, so too did the flying conditions. This was predominantly due to smoke, heat, debris and the strengthening wind. It would have been difficult to hover to pick up water and accurately drop water from above.

There were many examples where aircraft were used effectively to help ground crews and protect property, crews and/or people relocating from fire risk areas. There are examples of aircraft extinguishing spot fires ahead of a main fire, giving people more time to evacuate ahead of the fire.



Photo courtesy of Andrew Skelly

Aircraft carried out reconnaissance, informing ground crews of spot fires, and provided a platform for firefighters to observe fire conditions and obtain intelligence for fire operations.

This bushfire season, Tasmania trialled the use of fixed wing water bombing aircraft. There were examples where these aircraft were able to respond quickly and to help with the containment of fire until ground crews could arrive. Long turnaround times due to ground infrastructure around the State may inhibit the fixed wing aircraft from being a long-term viable and cost-effective option. An evaluation of the use of fixed wing aircraft would be beneficial.⁵²

The Inquiry was not able to conduct a detailed examination of the use of aircraft at each fire.

It must be remembered that aircraft are not the panacea to fighting bushfires. They must be used collaboratively with ground crews to ensure an efficient and effective outcome. Aircraft are expensive so consideration must be given to the effective benefit verses cost.

Detailed procedures on deploying aircraft on days of fire risk were not available. It would be beneficial for fire agencies to rapidly activate aircraft to reports of fires at an early stage to increase their effectiveness. Pre-deployments should also be considered.

By way of example, on 3 January, a total fire ban day, the Lake Repulse fire started at 11.35am. Ground crews took 26 minutes to arrive and initiate fire fighting operations. Aircraft were not activated until 12.06pm and it then took 43 minutes to arrive at the fire. It is unlikely on this day that a single aircraft could have effectively helped to contain the head fire after this delay. Pre-positioning an aircraft into this high risk area may have been an option, and given the ready availability of water it may have been possible to hold the head fire until crews arrived.

There was a lack of detailed, formulated and implemented air operations policies and procedures. Many air operations documents are in draft form and several years old. The current and reviewed procedures appear to be well embedded and used regularly. Considering the high risk nature of air operations for firefighting, the Inquiry feels there needs to be a substantial amount of work done in order to establish, integrate and maintain air operations procedures across the fire agencies.

Recommendation 30 – that bushfire agencies evaluate the use and effectiveness of fixed wing water bombing aircraft.

Recommendation 31 – that bushfire agencies develop procedures for the automatic activation of aircraft to fires at pre-determined trigger points on high fire risk days.

Recommendation 32 – that bushfire agencies develop, implement and maintain air operations procedures.

Research, Development and Review Capability

It is apparent that the resources, capabilities and practices within TFS to effectively develop, document, implement change and review policies, operating procedures and operations are not sufficient for the task required of a modern, contemporary and accountable public sector organisation. This comment should not be taken to suggest a lack of willingness on the part of TFS to be progressive. To the contrary, the Inquiry has been impressed by the desire to learn and improve across the fire services in Australia generally, and TFS is no exception.

Recommendation 33 – that Tasmania Fire Service establishes sufficient resources and expertise to research, develop, implement and review its policies and operations.

Recommendation 34 – that Tasmania Fire Service documents and publishes its operational policies and procedures so they are accessible to and suitable for operational personnel.

Initial Police Operations

The initial police response differed for the various fires and was influenced by the apparent fire risk, transfer of information, scope of police operations and the initiative of those involved. It should be noted that this section is not intended to provide a detailed outline of police actions with fires, rather to examine how prepared police were and the extent to which they were proactive in their initial operations.

The Lake Repulse Fire

At 12.25pm on 3 January, the Acting Divisional Inspector at Bridgewater was advised on the Lake Repulse fire. He sought information on TFS needs, considered possible scenarios with his staff, identified a risk to Ellendale and briefed the Southern District Commander.

The Acting Divisional Inspector's priorities in his response to the situation were assisting TFS in the form of road blocks, and reassuring and informing the community. He brought in additional police and had eight patrols in the fire area up to 9.00pm. A visible police presence and speaking to people at the Ellendale shop and 'door knocking' homes in the area were done to reassure and inform the community. The fire was contained but not under control and a night shift crew was left in the area overnight.

At 7.45 am on 4 January, the Acting Divisional Inspector attended a management meeting with his District Commander, and was then present when a TFS briefing on the fires and the weather forecast was provided. He told the Inquiry that the 'catastrophic' description for impending day caused him to reconsider whether he had taken enough action. Arrangements had already been made for police to attend the Hamilton Police Station to be briefed and assigned tasks. These arrangements were augmented to provide him with a total of 14 single police units and six SES volunteers. He ensured all of his staff were properly briefed and 'on the same page'.

As the Acting Divisional Inspector was not confident in the timeliness and currency of the information TFS would provide, and was not being able to listen in on TFS radio system, he resolved to go into the area of the fire. Around midday, he moved to Hamilton; later he went into Ellendale and based himself at the Ellendale Fire Station, identifying this as the place where he would be the most accessible and able to obtain reliable information.

Police units travelled throughout the area in the potential path of the fire warning people of the fire and to be prepared for 'what was coming'. When the Acting Divisional Inspector was advised the fire was out of control, he directed a second round of contact with the community delivering an evacuation message. There were problems with this approach and message, but that will be dealt with in a separate section below, as will the issue of road blocks.

On 5 January, the Acting Divisional Inspector had fewer resources deployed; however, they were sufficient for the road blocks and reassuring the community.

It should be noted that the Acting Divisional Inspector had some previous experience with a large fire earlier in the 2012–13 fire season. However, this does not explain all of his approach, and the level of detail above has been provided as context for the approach taken with the other fires.

The Bicheno Fire

Local police at Bicheno were first informed on the fire (which would become the Bicheno fire) late on the night of 3 January. The Senior Constable attended the fire scene and left when it was contained early next morning. The Bicheno police checked on the fire at around midday on 4 January. There was no need for any police action on either occasion.

At about 4.10pm, they received a message from TFS to evacuate Courland Bay as the fire had broken its containment lines and was expected to impact on Courland Bay that afternoon. They went in to Courland Bay and with other TFS personnel, advised the few people there to leave. They did so and all left shortly before the fire front arrived and destroyed the houses.



Photo courtesy of Andrew Skelly

Later that day, they were asked to 'door knock' people in Harveys Farm Road to advise them to be ready to evacuate if the fire approached.

The Bicheno officers were unaware of what was happening at the southern end of the fire and there was no other police action apparently required. Bicheno is in the Southern Police District, however the Northern District Commander took an interest in this fire due to the events occurring with the Forcett fire and offered to take it over the next morning. He had a Northern District inspector contact Bicheno to ask whether they required assistance. Considering his current appreciation of the fire assistance was not needed.

At 5.00am on 5 January, a Bicheno officer was contacted because there was concern about the fire in Harveys Farm Road, and the situation was recognised as requiring more police attention. The Northern District Inspector arrived at about 10.30am to take over police operations. He operated from various locations, including the Bicheno Fire Station, and later had personnel to assist him. Police duties mainly related to road blocks and community warnings.

Mention has been made of the approach taken by the Northern District Commander in assigning inspectors to fires and positioning himself at the Northern RFOC. This approach was taken so he could obtain timely and reliable information of the fires. This approach seemed to be effective in the present circumstances, but it would be problematic to be so disconnected from the Police Operations Centre if the situation became more urgent, complex and larger in scale.

The Forcett Fire

The Dunalley Officer became aware of the Forcett fire shortly after it started on 3 January. He contacted TFS personnel to find out what they expected the next day; he was advised by the Incident Controller to get his family out and by a local brigade member that the fire could do anything, 'maybe go to Dunalley'.

The Dunalley Officer contacted a Sergeant at Sorell and following contact with his Divisional Inspector, the Dunalley Officer was told to take a 'wait and see approach'. The Dunalley Officer also spoke to the Constable at Nubeena and they decided to make plans for what to do in an emergency; for example, open the Nubeena Civic Centre as a refuge, use Dunalley station as a command centre, contact local services, and consider road blocks. Action was taken that day to 'door knock' the Copping/Kellevie area to provide advice to people about the fire.

The Nubeena Officer was rostered for a day off on 4 January but, given the potential of the fire, cancelled that and was on duty. He understood the fire could push south towards Copping, Dunalley and Connellys Marsh, and he confirmed with the Dunalley Officer that he had been told by his superiors that 'TFS would advise' on any action to take.

A hot day response and other preparations had been made by the Divisional Inspector by the time he was advised on the Forcett fire on 3 January. It was not considered a problem at that stage, but he was told that if it got worse the next day it could get away. He said he discussed the fire with the Dunalley Officer; however, it was probably the Sorell Sergeant (the Divisional Inspector was new to this Division and not familiar with the Sorell and peninsula areas, though his support Sergeant was).

On 4 January, the Divisional Inspector was on duty at his office and he had set up a PFCP at Bellerive. He did not attend a District Management Group meeting or a briefing on the fire situation as he believed the meeting was only about setting up the POC, and it was still a 'wait and see' approach. He felt there was still no evidence that 'it would be bad', but he advised the Dunalley and Nubeena Officers to get their families out, and was aware the Sorell Council was setting up an evacuation centre and that the Dunalley officer had set up the Dunalley Hotel as an evacuation point.

Police running sheet entries indicate the information from TFS which was passed on to the Inspector on 3 January and early on 4 January did not indicate serious concern for the Forcett fire.

The District Commander arranged his District Management Group meeting for 7.45am on 4 January and a SREMC meeting for 8.30am. It appears to have been difficult to get all members of the SREMC to attend at short notice and there were only a few members there for the 8.30am meeting. He established a POC with himself as the Commander. A SEMAG meeting was held at 10.00am, which he attended as an observer. He arranged and attended another SREMC meeting at midday and at 1.00pm attended a SRSC meeting to brief the committee. The District Commander had attended TFS briefings and was aware of the predictive modelling. He told the Inquiry that he believed the South East Inspector was at the management meeting.

Communications from the Divisional Inspector to the District Commander were about the possibility of the need for road blocks and the Divisional Inspector was informed a decision would be made at 1.00pm. He passed up concerns from the Dunalley officer about tourist numbers and on the need to close the Arthur Highway (this will be dealt with in the section on road blocks). It appears the Divisional Inspector did not receive any instructions from the District Commander. If this was the case, it is possibly because the District Commander believed he had been present at the earlier meetings and/or the District Commander was overloaded.

The Divisional Inspector told the Inquiry that as the morning went on, the Dunalley Officer was pushing for road blocks, but that in a fire TASPOL takes the lead from TFS. He also encouraged the Dunalley Officer to make the call to evacuate and establish road blocks. The lack of timely advice from TFS was an issue for the Inspector.

Some resources were pre-deployed, but more could have been done.⁵³ Mid-morning on 4 January, the Divisional Inspector sent a sergeant and two police to an area below where road blocks might be. Initially they were directed to conduct high visibility hot day response patrols (a heightened level of readiness for police on high fire danger days). Later they were sent to Nubeena and were told to meet another five police. They stopped at Sorell and Dunalley to receive briefings and arrived at Nubeena at 1.30pm, where they established a PFCP in the SES building to coordinate police operations. The Divisional Inspector also told the Inquiry he sent a sergeant and other police to Dunalley as there wasn't a sergeant at Dunalley. However, the Sergeant told the Inquiry he was sent to Sorell at about 1.45pm and self-activated to Dunalley with two constables, where he took charge.

The Divisional Inspector told the Inquiry that when the Forcett fire flared up and ran towards

⁵³ Tasmania Police Debrief Report, at p. 20. Consideration is being given to including re-deployment into the Hot Day Response.

Dunalley, they were overwhelmed at his PFCP. A lot of information was not recorded and they did not have enough resources there.

The Divisional Inspector also told the Inquiry that the fire flared up at Primrose Sands in the afternoon, and that a constable who had gone there to move his caravan 'ended up running the efforts' there. This was probably an off-duty inspector who took charge of the situation at Primrose Sands, arranging for police to warn the community and prepare them for evacuation in an organised manner.

Another inspector offered his services and took over from the Divisional Inspector at Bellerive at 7.00pm. He came into the PFCP at 5.30pm to familiarise himself. The Inquiry was told that very little was in place at the PFCP: only three people, including the Inspector. This relieving Inspector took action to establish the PFCP during the evening. He closed the PFCP at Sorell as it was duplicating action at Bellerive in organising personnel, and was not a PFCP.

There does seems to have been a communication breakdown in relaying information on the predictive modelling to the Inspector at Bellerive, which may be understandable when one considers all the meetings the District Commander was attending and what he was trying to achieve. This does highlight the need to ensure committee meetings do not encroach on response operations. It is also apparent that there was little proactive action taken, apart from police in the field, in dealing with the Forcett fire. Again, communication gaps and overloading responsible managers could have contributed to this.

Recommendation 35 – that Tasmania Police ensures planning emergency operations includes a proactive approach wherever possible.

Warnings and Alerts

Warnings and alerts were a significant aspect of response operations. However, they will be dealt with in detail in PART G and in the section on Relocations and Evacuations, where they are connected to those operations.

Road Closures and Traffic Management

Road closures and traffic management was a significant part of emergency management in the three fires the Inquiry is examining, mainly:

- the decision to close the Arthur Highway during the Forcett fire on 4 January
- the disruption to the community that the road closures caused.

In emergencies, especially fires, road closures are frequently necessary and it is difficult to implement these effectively for anything but a brief period of time without attracting censure from the community. That being acknowledged, given the impact on the community there should have been more flexibility in managing road closures, especially for the Forcett fire. This issue featured prominently in the Victorian Bushfires Royal Commission and was clearly a matter TASPOL and the emergency services should have been prepared for.

Reference has already been made in the section on Emergency Powers to the legal authority to close roads. It is not intended to make any further comment on the authority to close particular roads, as this is dependent on the prevailing circumstances and those who are interested can obtain legal advice or litigate for their own purposes.

Closing the Arthur Highway was generally intended to control the volume of traffic coming down into the Tasman and Forest Peninsulas and, considering the limited access to and from this area, to reduce the number of people who may have been at risk or affected by the Forcett fire or would impede or complicate emergency operations. As events occurred these concerns were quite appropriate. However this action had the potential of negatively affecting the activity of businesses dependent on tourism and other recreational and community activities. A submission received on the economic impact on Port Arthur confirms this concern.⁵⁴

These considerations explain why the decision on this matter was referred as high as SEMAG. Normally a decision on road closures would be made in the field, and possibly there was some risk averseness pushing the decision up to this level.

Requests to consider closing the Arthur Highway were made quite early and it was considered at a SEMAG meeting at 10.00am on 4 January, where the minutes record:

SEMAG noted that policy and strategy was currently being managed by TFS.

SEMAG discussed the issues associated with the closure of the Arthur Highway and consequences for communities, travellers and services in areas south of Dunalley.

SEMAG noted the need for early advice to be provided for people intending to travel through the area.

Police understood that a decision would be made on this issue at 1.00pm. Interestingly, the South East Division Inspector was encouraging his subordinate to make a decision in the field. Events simply overtook the decision and the Highway was closed by police at 11.52am due to the fire activity. This was too late to reduce the volume of traffic in any meaningful way.

There was generally the view among police that TFS, as the Managing Authority, would make decisions on road closures. On this occasion the decision to re-open the Highway was taken by the Southern Regional Controller (TASPOL Southern District Commander) who had been appointed to be 'in charge' of the incident.⁵⁵

It is quite understandable that there will be conditions in managing a fire where TFS will need roads to be closed; for example, where they are seeking to contain a fire along a road and have personnel and equipment on that road or where there is danger from smoke across a road. This interest is reflected in the section in the *Fire Service Act 1979* that provides brigade members with authority to close roads.⁵⁶ However, the Inquiry is concerned if police adopt the position that it is always a TFS decision to close or open roads in connection with a fire. As indicated above, events did lead to police closing the Highway.

⁵⁴ Submission No. 71.

⁵⁵ See the previous discussion on this in the section on Multi-agency Control and Coordination.

⁵⁶ Fire Service Act 1979, at s. 47.

Part of the reason for police deferring to TFS may be derived from section 47 of the *Fire Service Act 1979*, in that police may close roads under this provision but 'shall' close a road at the 'request of an appropriate fire officer'.⁵⁷

Another part of the reason may be that police do not see themselves as having a broad emergency management role in a fire situation, quite independent of TFS. This will be discussed in further detail in PART J of the Report, but it is sufficient to point out here that there will be occasions where police should act in the best interests of protecting the community on their own initiative. The TASPOL Emergency Traffic Management Points (TMP) Access Levels policy has an ambiguous position on this issue. It recognises police have an independent discretion, but then provides that where there is an IMT the relaxation of traffic restrictions requires authorisation from the Management Authority.

It would be unfortunate if practices have led police to a narrow interpretation of their role, and removing the mandatory requirement (in section 47 of the *Fire Service Act 1979*) should be considered for police if it is an impediment to a clear understanding of the police role. Police should, of course, act on a request from fire officers. The Inquiry did not examine any other mandatory elements in this provision.

Road closures, especially the Arthur Highway, had a significant impact on the community during response and recovery operations. They mainly affected people in the Forcett fire, but also occurred to a lesser extent for the other fires. An examination of the issue in the Forcett fire is sufficient for the purposes of understanding the matter and considering improvements.

By the evening of 4 January, roadblocks were in place on the Arthur Highway from the Old Forcett Road turn off in the north to Taranna in the south, a distance of 53km. Other road blocks were at the intersections of Sugarloaf Road and Carlton Road at Primrose Sands, Sugarloaf Road and Fulham Road at Primrose Sands, Arthur Highway and Marion Bay Road at Copping, and Fulham Road and Gellibrand Street at Dunalley.



Image courtesy of Marty Piesse

57 Fire Service Act 1979, at s. 47 (3)(a).



Figure E.5 Location of Police road blocks by the evening of 4 January 2013.

In effect the road blocks prevented access to towns including Forcett, Copping, Primrose Sands, Dunalley, Murdunna, Eaglehawk Neck, Tarana, Port Arthur and Nubeena. People north of the Old Forcett Road turnoff could not access anywhere south of that road block. Those who remained within areas encompassed by the road closures could in some cases access areas through 'back roads'. These were not secure areas from which people were fully excluded and people within the areas could move around freely.

Road closure points were moved on a number of occasions; at 11.00am on 10 January the point at Taranna was moved 9km north to Eaglehawk neck, and at 5.30pm on 10 January the point at the intersection of Old Forcett Road and the Arthur Highway was moved 5km south to the intersection of Sugarloaf Road and Arthur Highway.

At 11.30am on 11 January, all roads were re-opened to residents, property owners and business operators. At 6.00pm on 13 January, all roads were re-opened to the public with speed restrictions in place.

This issue drew most negative comments in the submissions received. It is not intended in this Report to itemise the submissions. The following points have been derived from submissions and the Inquiry's examination of the issue. Road closures:

- affected private fire operations by not allowing people and equipment through to be used for this purpose
- prevented land and home owners from entering to care for livestock and pets
- prevented people from entering to care for friends or relatives
- prevented people coming out of areas to obtain information, locate a friend or

relative, obtain medical treatment or needed supplies — as they knew they could not come back in again

- isolated people within the affected areas
- compounded the trauma people experienced with the fires
- limited the capacity to check on the welfare of people within affected areas
- limited the ability of people to take action to promote recovery, at a personal and community level
- caused anger, frustration and aggression
- negatively affected businesses.

Personal impacts are illustrated by the following excerpts from submissions:

'The Police road blocks were a problem. We understand that the Police had a job to do to keep people off dangerous roads when the fire was on and when burnt trees were a hazard ... but the 'no flexibility' rules enforced by the officers manning the road blocks caused us real problems when we wanted to get up the road to get a mobile phone signal or have our daughter deliver a generator and fuel or have an electrician come to our house to connect up the generator.'

'I am highly critical of the manner in which local residents who suffered a major disaster were treated by Police and those Police had obviously been directed by the hierarchy to follow a certain procedure and were ordered not to deviate from that procedure.'

'Residents who had fought the fire and did not leave their residence during the fire were refused entry when they left their homes to obtain necessary provisions and medications several days after the fires.'

'While I do not have a problem with preventing people from entering the area, it was not necessary to stop people who were already in the restricted zone from going out to get supplies. This caused a lot of completely unnecessary hardship for those who remained to save their houses. We were consistently told we were free to exit the cordon, but could not be guaranteed re-entry on our return.'

'The measures in place by the police that enabled people to readily leave, but not return, caused a great deal of aggravation and bad feeling, without achieving anything positive. People with a compelling reason entered the exclusion area, sometimes forcing their way through roadblocks when they knew the police manning them had no way of stopping them.

A system that recognised some people were well equipped to help and had legitimate reasons for being in the fire area should have been planned and implemented immediately after the fire. It could have facilitated their movement in and out, and alleviated a great deal of the ill-feeling that occurred, and still persists, towards the authorities.'

'The roadblocks were also poorly handled. There were numerous instances where critical equipment and supplies, such as medication or firefighting equipment and personnel were stopped and turned back at roadblocks, hindering the effects of people to respond and recover.'

'Farmers were denied access to help their injured and suffering livestock, as were animal aid organisations such as the RSPCA. People attempting to help themselves and restore their properties to basic order were refused the ability to access tools and materials. Damage done to their livelihoods was compounded by the refusal of police to let essential resources through blockades.'

'Police need to recognise that landowners have a responsibility/duty of care to their stock, and need to be allowed to access their property both during events to move stock, and after events to humanely put down animals which may have been affected if needed.'

'The manner in which the police managed road blocks needs to be looked at. A blanket order to prevent any movement by people directly involved in the fire situation [is] short sighted and only adds to the stress of the situation. There needs to be a degree of flexibility to allow those trying to manage stock, even conduct their business in the days following.'

"... we/staff/suppliers had to go through the torturous process of getting permission to use the road, and twice this was not granted. My wife was allowed to leave the Ellendale Rd, but was not allowed back in with some essential supplies. All affected locals had similar experiences, with some being treated very rudely by "out of town" police ...⁵⁸

Similar impacts and issues arose in the Victorian Bushfires Royal Commission and these should have been well known before the January fires.

In some ways the road closures operated in a contrary way to accepted policy in managing emergencies. For instance, they effectively operated as forced evacuations by preventing people from returning to their homes or to 'stay and defend' their properties. And the closures did little to support community resilience.

For some who remained within the areas affected by road closures and were not willing to leave for fear of not being able to return, their isolation was compounded by the loss of electrical power, which meant in many cases they could not communicate or obtain information.

TASPOL developed a policy described as Emergency Traffic Management Points (TMP) Access Levels in March 2010 and a copy is at Appendix E.5. As a broad policy position it may seem appropriate and sufficiently flexible for its purpose. Whether the policy was appropriate or not, there were problems with its implementation.

Flexibility was introduced in some areas. The Inquiry was told that in the Lake Repulse fire, the people were let in and out of the restricted areas in a controlled manner. There were power lines and trees down over Ellendale Road and Aurora Energy (Aurora) started its work on 5 January. Local people were allowed through on 7 January and the Inquiry was shown a list that was used for this purpose. The Acting Inspector also told the Inquiry that it was necessary to get a milk tanker through on this day and there appeared to be a 'decision making blockage' at the POC so he approved it at his level, as he did in escorting some

fruit pickers through. Anecdotally some similar flexibility also occurred on occasions in the Forcett fire.

At the Bicheno fire there were some issues with local TFS and police agreeing to open Coles Bay Road for short periods, as on one occasion there were fire operations underway along this road. Police were instructed that they had to receive approval from the IMT.

When interviewed by the Inquiry, the Incident Controller explained that on 5 January when this problem occurred he made an arrangement with police that all requests would come to the IMT. He said the arrangement was that the IMT wouldn't question their recommendation, but they needed to know for the safety of the public and fire crews. He said the decision making was handed back to the field by 7 January, and that it was his preference it should be managed 'on the ground'.

These instances illustrate some issues in implementation. The Forcett fire is not as straight forward, given the scale and complexity of the area affected by the fire. It should also be kept in mind that in the Forcett fire there were ongoing fire operations in areas that affected the community; there was extensive structural damage; and police, in the early stages, expected to find loss of life.

It should also be noted that police at road closure points took the brunt of people's frustrations and anger. They were often by themselves and had to deal with aggressive motorists who wanted to ignore police and push past them. Frequently there was a single officer at control points. Some submissions to the Inquiry complained of a poor attitude by police towards people who wanted to be allowed to enter the controlled area. Probably, police at these locations were feeling frustrated by their duties as well. The Inquiry was told that there is residual ill-feeling towards police because of the road closures and the way they were handled. More thought should have been given to implementation of the road closures and at the point at which they needed to be managed by police.

Some action was taken to mitigate the impact of the road closures through escorted convoys. These began for essential service vehicles to go in to the affected areas at 7.40pm on 6 January and they continued twice daily until the highway was re-opened. Escorted convoys began coming out of the affected areas at 11.15am on 7 January and they were also conducted twice daily thereafter.

By 2.00am on 8 January approximately 395 vehicles and 750 people had been escorted out of the affected areas. At times the convoys being escorted out contained 300 vehicles.

Buses were arranged to transport vehicle owners back in to the peninsula to recover vehicles. This began on 9 January and they continued daily until all vehicles had been removed.

Approximately 1 500 vehicles were escorted out of the affected areas of the Tasman and Forestier Peninsulas.

Other arrangements could have been made when the policy was developed. An example is provided by Victoria. There is a system of wrist bands developed for use in identifying people who can access closed areas and these are pre-prepared and ready for use. The fire services also identify equipment they may need from the public and private sectors before the fire

season and these are given an appropriate pass. Further, there is a simple instruction card prepared for multi-agency use that is distributed to and carried by people who may have to be involved in road closures. A copy is provided at Appendix E.6.

To be effective, if they are to be used in a large scale way and in complex circumstances, these systems should be prepared in advance. It is difficult to establish them in an ad hoc way.

Re-opening the roads was recognised early in the operation for the Forcett fire and was a priority. It was included in the minutes of the SREMC meeting at 11.00am on 5 January with the notation:

The responsibility to open roads belongs to TASPOL, in consultation with TFS. Police and TFS priority for today will be to reopen vehicular access.

The Southern Regional Controller chaired this forum and made the following points to the Inquiry:

The location of the road blocks is generally made at the lower levels. I continued to take advice from TFS for the opening and closing of roads. I also took advice from Aurora and DHHS.

Primarily the closure of the roads was about public safety. We had a lot of wind and there were trees and power poles and other infrastructure that needed work.

There was a lot of pressure on us to open the highway. I drove down early one morning to have a look myself (9 January), I was getting very frustrated.

The highway was opened on the Friday (11 January). It was a staged approach with only residents being allowed in and then we opened it to the general public.

Reasons for the continued closure were expanded upon in the TASPOL submission. The 'cause of the fire had not been established and it was unknown if people had died'; and it was still dangerous because:

Fires were still burning and not contained.

The roads had been damaged.

Downed power lines still posed a danger.

The risk of falling trees and power poles from fire damage was high.

A dangerous environment existed because of wind and unstable structures.

[There was] the health risk of asbestos in damaged and destroyed structures.⁵⁹

No point of time is given for these reasons and it is doubtful if they all continued for the whole period of the road closures. Closures are also said to have helped police with security arrangements; however, there were still people within the closed areas, and others could gain access from sea.

The IMT Incident Controller told the Inquiry that on 5 January their focus was to open the highway and TASPOL, the Department of Infrastructure, Energy and Resources and a small team were discussing all the options and issues; police had imposed special powers which basically handed the power to police.

The Inquiry is satisfied the importance of re-opening the roads in the Forcett fire was recognised early and was being addressed. Decision making may have been influenced by excessive caution to prevent death or injury. It is difficult to reconcile this with the fact that many people were already in the fire affected areas. The impact on people outlined above should also have been a key factor in decision making. If it was, the decision was to err on the side of not being responsible for any harm to people. Another consideration was to minimise the area affected; that is, move road closure points so fewer people are affected.

It may be that communication on the issues in a detailed way between the field and the Southern Regional Controller was not occurring as well as it might be on this issue.

Considering the size of some convoys, the number of emergency and other vehicles using the closed highway areas, and the number of people remaining within the affected areas who could have used the roads, it is difficult to understand how concerns for safety justified so much of the highway being closed for so long.

While it is recognised that it will be difficult to find a perfect solution, implementation of road closures in a more detailed and flexible way may have occurred. The prospect of getting it right is improved immeasurably by pre-planning.

It should also be noted that there is still confusion among TFS and TASPOL members involved in operations over which agency was/should have been responsible for road closure/opening decisions. This is another example where better coordination of response operations should have occurred.

Refer to PART F for further discussion on the effect of road closures on recovery.

Recommendation 36 – that Tasmania Police reviews its Emergency Traffic Management Points policy; and develops a multi-agency policy in the emergency management plans for road closures and traffic management, including clarity in decision making, coordination and sufficient operational flexibility.

Recommendation 37 – that arrangements are made for and appropriate pre-planning occurs to effectively implement the policy on road closures and traffic management.

Relocations and Evacuations

No lives were lost. This outcome is a significant achievement to which the approach to relocations/evacuations contributed. Major challenges caused by the number of people and the isolated locations were also dealt with. Nonetheless, there were shortcomings in the preparation for and implementation of relocations/evacuations which should be identified and dealt with.

TFS was the primary agency for decisions on evacuations for fires and TASPOL was a support agency.

There is no state-level policy on relocation and evacuations in the emergency plans, nor is there any reference to this topic in TFS and TASPOL Joint Bushfire Arrangements document. Even with a policy, implementation arrangements would need to be well developed.

As examples, a plan and a police evacuation guidance card are attached at Appendices E.7 and E.8 respectively.

For the purposes of this Report, the following terms are used:

- Relocation: the independent movement of people on their own volition away from an area that is likely to be impacted by an emergency with or without formal advice from a relevant authority
- Evacuation (or Directed Evacuation): the directed and planned movement of people from dangerous or potentially dangerous areas to safer areas by someone with legal authority to do so
- Immediate Evacuation: the evacuation of people at immediate risk with little or no planning and the decision to evacuate being made in the field.⁶⁰

Authority to evacuate in a bushfire situation is found in section 47 of the Fire Service Act 1979.

TFS policy, as is contemporary fire policy within Australia, is that the safest options when threatened by bushfires are to leave early or stay and defend, with leaving early being the safest option. People are advised not to 'flee at the last minute'.⁶¹ There is clear evidence that trying to relocate when a large bushfire is present has caused many fire fatalities.

Information supplied by TFS and available to the community provides advice and detail and the best way to plan for and approach a bushfire situation. This will not be outlined or reviewed by the Inquiry, except to draw attention to Community Fire Refuges and Nearby Safer Places:

- Community Fire Refuges (CFRs): these are buildings identified by councils to provide temporary shelter and other facilities for people relocating or evacuating from a bushfire. There are approximately 40 CFRs identified through regional emergency management committees, though they are variously described as Assembly Centres, Evacuation Centres or Recovery Centres. They are opened and managed by SES and local councils at the request of TFS⁶²
- Nearby Safer Places (NSPs): these are places of last resort where there is an imminent threat of a bushfire. They may include town centres, ground level water areas and open spaces. They are not regarded as a safe choice as there are risks in getting to and sheltering in them.⁶³

Community protection planning is an important project currently being undertaken by TFS. This involves developing Community Bushfire Protection Plans and Community Bushfire Response Plans to help the community in bushfire emergencies. Among other things, these

⁶⁰ These definitions should be developed specifically for any policy that is adopted.

⁶¹ See for example, TFS Bushfire Survival Plan 2012-13.

⁶² Submission No. 60, at para. 4.4.

⁶³ Tasmania Fire Service, Bushfire Survival Plan 2012-13, at p.15.

plans identify NSPs and vulnerable groups of people. Fifty three Community Bushfire Protection Plans and 45 Community Bushfire Response Plans had been developed earlier this year, with further progress still to be made.⁶⁴ Examples of these plans are provided at Appendix E.9. Developing Community Bushfire Mitigation Plans has not yet begun.

The Australian Red Cross manages a National Registration and Inquiry System, a voluntary registration system established by the Australian Government to support reuniting persons separated by disaster. Displaced persons are registered through evacuation centres or a State inquiry centre. TASPOL is the commissioning agency for Tasmania.⁶⁵

These arrangements are referred to here as they are connected to response operations; however, their operation is linked to recovery and more detail will be provided on that aspect in PART F.

In the Lake Repulse fire, as previously described, police acted proactively in approaching the community to warn them of the fire danger and to later direct an evacuation. In terms of relocation/evacuation, the Inquiry was informed that on the second occasion, police approached members of the community in the Ellendale, Fentonbury and Meadowbank areas and told them to leave.

Arrangements early on 4 January were that police would patrol until they were advised on the need to evacuate the area. There was some advice from TFS on evacuation, but police acknowledged it was not clear on the position they should take. It appears that police had a mixed approach to evacuation; some police provided advice and others directed an evacuation. People were initially told to go towards Westerway. A CFR was established at Ouse and later, another at New Norfolk. Police travelled throughout the area undertaking this operation.

The Acting Inspector told the Inquiry that the directed evacuation message was not appropriate and this was met with resistance from people. In the evening of 4 January, he developed a form of words to be consistently used:

Our best information is that your life and property is under imminent threat of danger from fire and that you should leave now. Are you prepared to stay and defend or leave?⁶⁶

This message was delivered to the POC on 5 January and he understood it was used by other police. Having to develop a message in this way highlights the lack of preparation on this issue. Police kept records during the Lake Repulse fire of people they approached to advise them to leave/direct evacuation, though it is not possible to be certain which were directed to leave:

- police went to 140 properties
- at 55 properties, a resident stayed to defend the property
- of these 55 properties, only five properties sustained any damage and that did not include any homes
- 12 of those who defended properties had a fire plan and only one of these recorded any property damage

⁶⁴ AFAC Audit, at p. 42.

⁶⁵ Submission No. 77.

⁶⁶ Tasmania Police Debrief Report, at p. 57.

- 91 of the people spoken to said they had a fire plan
- another 29 properties were vacant. It is not known whether people from these properties chose to leave because of the fire risk.

Many of those approached by police were involved in a form of agriculture. Farmers particularly do not appreciate being told to leave their properties and, anecdotally, are generally better prepared to defend them. At community meetings with police after the fires, some people took issue with being directed to evacuate and felt they were threatened by police with arrest if they didn't comply.⁶⁷ In a submission from a farmers' group, it is recommended that farmers be permitted to defend their properties at their own risk, even on catastrophic days.⁶⁸ It may well be too that the exercise of the evacuation authority was precautionary and motivated to some degree by risk aversity on part of those with responsibility for community safety. As well, considering the 'leave early or stay and defend' policy, the question arises as to whether it is appropriate to have an unfettered evacuation authority.

In Victoria, the fire evacuation legislation is limited to the exemption of those with a pecuniary interest in a property.⁶⁹ Adopting a similar approach in Tasmania, with a qualification that it is reasonable for a person with a pecuniary interest to remain, should be considered.

Opening a CFR at Ouse was also problematic. People complained they would have to go through the fire ground to get there and there was no discussion or consultation with police in establishing it. The latter point is consistent with the arrangements in place between TFS and the local council. However, as police will generally be providing advice to the community on relocations or managing evacuations, there needs to be coordination between the agencies.

In the Bicheno fire there are two aspects of evacuations to mention:

- TASPOL and TFS advice to the people in Courland Bay was not a directed evacuation; however, people chose to relocate, which appears to have been a very wise decision. A hall in Bicheno was established as a CFR
- PWS evacuated up to 1 000 people from the Isaac Point and Friendly Beach areas, in accordance with its established plans.

For the Forcett fire there had been some messaging in the evening of 3 January, and this will be dealt with in PART G. Times and specific action taken on 4 January for relocation and evacuation action are confused by the pace and scale of the events. After the fire became active and spotted over the Arthur Highway, it started to move very quickly towards Dunalley and other communities, such as Boomer Bay. Fire tactics appear to have been a mixture of warning people and structural protection.

The TASPOL debrief report indicates that as the fire was at its worst and approaching Dunalley, TFS did not commit to a decision that Dunalley should be evacuated despite advice from police on the ground that this action should be taken.⁷⁰

One Sector Commander and his crews went to the Carlton River/Primrose Sands area. The

⁶⁷ Tasmania Police Debrief Report, at p. 30.

⁶⁸ Submission No. 52.

⁶⁹ Victorian Country Fire Authoruty Act 1958, at s.31.

⁷⁰ Tasmania Police Debrief Report, at p.45.

other two Sector Commanders, their crews, some crews from the Northern strike team, which arrived at Forcett at about 1.30pm, and the Fire Commander went to Dunalley to regroup at the Fire Station. Warning people and structural protection was being done, but as the fire front approached, tactics seemed to change to an 'immediate evacuation' model. One Sector Commander told the Inquiry that priorities changed during the day from containment to structural protection to life protection. It was apparent that the Six Operational Priorities were being used.

At the Dunalley Fire Station, crews were advised that the plan was to get people out of Dunalley, protect major assets and fall back on the hotel.

The Dunalley Hotel had previously been arranged as a NSP; there was open space and facilities there and it was also identified as one of the community assets to be protected. Nubeena had been designated as a CFR. When the fire front arrived at Dunalley and there was a massive ember attack, all fire crews were sent to the hotel. A sector commander explained that nothing more could be done in Dunalley at that time. The hotel was protected by fire crews with what has been described as an Urban Interface Technique.

Police had also decided that Dunalley needed to be evacuated. All available police at that location left other duties and helped warn people to leave. They had previously been told to go to the hotel; now they were being directed to Nubeena.

Two Sector Commanders left the hotel to warn people at Murdunna. They drove through fire and smoke on the Arthur Highway to get through, obviously at great personal risk.

Both police and fire personnel moved through the communities telling all they could locate to head to Nubeena. Police went along the Arthur Highway, going into every property they could to pass on the message, and intending to go as far as Nubeena. When they arrived at Eaglehawk Neck, police learned that this community could be under particular risk from a wind change and they decided to evacuate it. The Sergeant told the Inquiry that the message was that people were strongly advised to go. They were told to go to the beach or the jetty as NSPs.

The approach taken in Dunalley through Murdunna and along the Highway to Eaglehawk Neck was in the form of an immediate evacuation directing people to the CFR at Nubeena and NSPs.

Meanwhile other relocation action was being taken. The fire was also threatening other communities, including Connellys Marsh, Primrose Sands, the Carlton River area and Dodges Ferry. People were relocating from these places. There were more fire crews at these locations and a TFS station officer had arrived after dealing with another fire.

At Primrose Sands it was done in a more organised fashion by an off-duty police inspector with the assistance of additional police who had been sent down in the afternoon. He consulted the Station Officer on the fire risk. Warnings through the community were done in a systematic way and the initial intention was to take people through Dodges Ferry, but due to the fire risk this changed to relocating to the beach as a NSP. The inspector then undertook relocation action in Dodges Ferry.

CFRs were established at Sorell, Nubeena, Port Arthur and, informally, at Dodges Ferry.

One consequence of the immediate evacuation approach is that it led to a movement of people in circumstances which is contrary to fire safety doctrine (leave early and do not flee at the last minute). How many people stayed with structures or moved to the CFR or NSPs is not known and cannot be assessed by the Inquiry in the time it has for its Report.

Another consideration is whether earlier proactive action, such as that done by police for the Lake Repulse fire, would have made a difference in creating a better prepared community and more orderly safer relocation of people. While no one was killed, there was significant disruption to people's lives and communities, which earlier proactive action may have reduced. Property loss may also have been reduced if fire personnel had not been diverted from fire suppression and property protection to warning people. These are matters for conjecture and there is further comment in the section on Fire Strategy and Tactics.

A fortunate feature of this area on the Tasman and Forestier Peninsulas is the direct access to sea water as a NSP for most people, and it was used extensively in this way.

The importance of water access was stressed in a submission from a couple at Connellys Marsh with a waterfront home they planned to stay and defend. They misjudged the risk, expecting their house would be safe by the water and found it was too late to leave. Fortunately they had a boat and could go offshore to protect themselves and came ashore a number of times to defend their house. They make the strong point that water access was a unique factor in the fires and many people 'took to boats or simply ran into the water'. The 'waterfront was a refuge and it could easily have been a disaster if the circumstances were different'.⁷¹ Other fortunate aspects were that the sea was calm, as people were not prepared to be in the water and the safety of boats was not compromised by the weather, and the tide was high.

The focus on warning people through the combined efforts of fire and police, even in an immediate evacuation mode, and the availability of water NSPs, are highly likely to have saved lives.

The movement of people, whether by relocation or evacuation, can be an immediate part of the response to any emergency, as well as an integral aspect of recovery. In the case of the Forcett fire, in a similar way to the road closures, the initial stages of relocating people was part of the emergency. This also underlines the key link between response and recovery.

Vulnerable people are at particular risk and it is well recognised that they should be catered for. Community Bushfire Response Plans do seek to identify vulnerable people. Various submissions stressed this point. The SES has begun a project to develop arrangements to support vulnerable people during emergencies. An evacuation policy should include this matter.

In its submissions to the Inquiry, Sea Rescue Tasmania outlined activities its members were engaged in to evacuate people from beach areas and in supporting response and recovery operations, starting in the late afternoon of 4 January.⁷² In its submission to the Inquiry, Volunteering Tasmania recommended a closer involvement of their organisation in emergency management.⁷³ These highlight the importance of engaging with the community and using volunteers and community resources, especially in areas and under conditions of special risk

⁷¹ Submission No. 28.

⁷² Submissions No. 10 and 51.

⁷³ Submission No. 68.

where different measures may need to be considered and taken and in recovery operations. Evacuations was an area where there was a lack of coordination on decisions to evacuate and how it should be implemented.

Apart from some discussion below on the role of municipal authorities in emergency management, an examination of the operation of the CFRs, their use as Recovery Centres and the registration of displaced people, will be addressed in PART F.

TASPOL has begun a project to develop an all-hazards evacuation policy and the Inquiry understands interim arrangements will be put into place for the 2013–14 fire season.

Recommendation 38 – that a state-level policy on evacuations be developed in the emergency management plans, including specific requirements for vulnerable people and guidelines for its implementation.

Recommendation 39 – that qualifying the evacuation authority in section 47 of the Fire Service Act 1979 be considered — by exempting those people with a pecuniary interest in a property from a directed evacuation where it is reasonable for them to remain.

Recommendation 40 – that arrangements are made and appropriate pre-planning occurs to effectively implement the policy on evacuation.

Recommendation 41 – that Tasmania Police be identified as the lead agency on evacuations.

Recommendation 42 – that decisions to open Community Fire Refuges and evacuation centres be coordinated with Tasmania Police.

Recommendation 43 – that emergency management plans specifically include processes for effectively engaging with local communities and using community resources, including volunteers.

Searching and Examining Affected Areas

Examining the areas damaged by fire was necessary for a number of reasons:

- an assessment of the damage was done to help with recovery planning (this is outlined below on the State Emergency Services and Other Agencies)
- a search was conducted by TASPOL to locate missing, injured or deceased people; and to investigate the cause of the fire.⁷⁴

A systematic approach was organised by TASPOL, comprising three stages:

- to 'look and listen'
- to 'lift and look'

⁷⁴ Submission No. 78, at pp. 13 and 14.

• to conduct a forensic examination.

Soon after the fire front had passed through Dunalley on 4 January, a multi-disciplinary triage team was flown in to the area. This team consisted of representatives from TASPOL, TFS, Ambulance Tasmania and Aurora; and its primary objective was to implement the first stage of the approach: to identify any injured or deceased people.

A search team was organised to start on 5 January with the second stage of the process: to 'lift and look'. This team's aim was to try to locate the occupants of damaged properties. This team had 70 personnel and was also multi-disciplinary, with representatives from TASPOL, the SES, the Australian Defence Force, and New South Wales Fire Service specialist building inspectors. The team was deployed each day of the program over six days. On 9 January, the team was supplemented by a specialist squad of Victoria Police officers.

The initial priority was Dunalley and searching then progressed to Forcett, Connellys Marsh and Murdunna. A search plan was developed, which was later enhanced by Geo-spatial Information Service staff from the Department of Infrastructure, Energy and Resources and aerial mapping by the Westpac Rescue Helicopter and Australian Federal Police facilities. Along with this search, once police had completed a site, a TFS fire scene inspection was conducted.

Over 1 000 properties and over 200 structures were searched and examined. A forensic examination was conducted of a number of bones fragments that were located. No human remains were found.

This process had not been used before and there were no procedures or protocols to follow. It was acknowledged that the lessons learnt could be used to develop a process for other potential mass-casualty emergencies.

Municipal Arrangements

PART C of this Report refers to the role of municipal councils under the *Emergency Management Act 2006.* The Act describes their role in similar terms to the State and Regional levels, which implies that they would operate in aligned ways. It is likely that it was not envisaged that municipal councils would have an operational role with police and the emergency services. The lack of specificity in the legislation creates ambiguity and the concept embodied in it leaves a gap in emergency management arrangements.

This problem is illustrated by the Tasman Council's operation at Nubeena. An Emergency Management Committee was established by the Council and they had prepared a Municipal Emergency Management Plan. The General Manager acted as the Municipal Coordinator. He told the Inquiry that the Committee did not meet or have a role in the emergency. He also said the council's Municipal Emergency Management Plan — running at 81 pages — was discarded as being unsuitable; he said he would want a document he could pick up and use quickly. But he explained he was 'not running the show and the scale of the emergency was too big for Council' and that 'it was obvious that the police and fire service were needed to run the show so he didn't look at the plan' (the SES Regional Officer covering this council told the Inquiry that the plan was more of a reference document).

A local recovery committee was established by the General Manager soon after the event, and

after that a joint Sorell/Tasman Affected Area Committee was set up. The CFR at Nubeena was also operated by the Council as an evacuation centre.

Expertise and resources are significant issues for councils in being able to undertake the duties expected of them. The General Manager of the Tasman Council made the point to the Inquiry that a pivotal matter is the scale and duration of an emergency relative to the council's size and capabilities. Considering the holiday season, number of people present in this area, and the isolation of the Tasman Peninsula, he said it was 'unrealistic and inappropriate or misleading' to specify the roles and responsibilities of a Council without ensuring these could be met.

This resourcing issue was reiterated by the Director of the SES, which supports the councils in preparing these responsibilities. The SES undertook a project to get councils to upgrade their plans. Of the I2 councils in the Southern Region, nine have recovery plans, though some are still in draft form. The resource capability and expertise within councils varies. Most perform the Municipal Coordinator's role 'off the side of their desk'.

The Sorell Council indicated its obligations in the Forcett fire were to:

- provide refuge to displaced persons
- provide support to the emergency services as requested
- plan and prepare the start of the recovery process
- maintain Council business services.

A planned Emergency Coordination Centre was not activated as there was very little support required from Sorell Council to the emergency agencies, and it was evident that coordination would be at the Regional level.

There are issues of preparedness for another part of the Report. However, the issues are also directly relevant to the concept of operations embodied in the *Emergency Management Act 2006* and the realistic role expected of municipal councils. There are two dimensions to this:

- can councils be expected to manage and coordinate operations at the municipal level, such as police and fire operations? There is no distinction between the municipal level and the regional and state levels in the Act. Clearly though, this is not expected. This then leaves a gap in how this might be achieved
- can councils deliver on what is expected of them?

Maintaining a role for municipal councils is important, especially for engaging community participation and resources, and building community resilience. More realistic roles for councils, provided the resources, expertise and capability are developed, are to:

- coordinate and manage council resources to support emergency operations
- establish and operate CFRs and related centres
- coordinate and manage local recovery operations
- maintain council services
- be actively involved in fire risk management.

The concept of operations for emergency management will be further discussed in PART J, including a model for addressing the gap in emergency management operations.

State Emergency Services and Other Agencies

The SES has an important role in emergency management, through a number of permanent personnel and a volunteer network, mainly providing support services.

The SES has only 24 permanent staff. Secondments from TASPOL provide two additional personnel working on specific projects. In January 2013, there were 540 SES volunteers in 35 units, though 20% are TFS volunteers as well.⁷⁵ A number of SES Emergency Operations Centres have been established.

Readiness preparations began for the SES on 3 January. Expected duties included establishing CFRs, conducting rapid impact assessments, supporting the SEMAG and SREMC; and unit responses in the field, such as helping police with road closures and warning the community. The Director of the SES told the Inquiry that SES work exceeded its capacity.

Much of the support provided by the SES related to recovery: for example, helping the Nubeena recovery and coordination centre. One of the permanent SES staff worked with the SFOC on fire operations, in various support roles.

One of the SES responsibilities is a Rapid Impact Assessment process. The purpose of this process was explained in the Department of Premier and Cabinet submission to the Inquiry:

After an emergency has occurred there is a need for the collection of timely and credible information on the impact of the event. The purpose of this information is to provide decision makers with details that can be used to set priorities in relation to the response to and recovery from the event.⁷⁶

The Rapid Impact Assessment Plan was only approved in November 2012 and it was used for the first time in the fires. Over 400 properties were visited between 5 and 10 January, and data was recorded on computer tablets. This proved to be a significant improvement on previous arrangements.

Police were critical of the coordination of this process, as it appears TFS and SES initiated the Rapid Impact Assessment procedure without consulting them. Police had a responsibility to search for injured or deceased people and there was confusion as to whether this aspect had been included or not.⁷⁷

Response, and recovery, operations were supported by a number of agencies and organisations. The Department of Infrastructure, Energy and Resources (DIER) had an important role. DIER told the Inquiry that it was contacted on 2 January for meetings on the bushfire risk and made arrangement to be ready. Responding to road infrastructure issues began on 3 January, primarily for tree inspection, felling and removal. DIER advised that it had a State Road and Bridge Emergency Management Plan and a Tasmanian Electricity Supply

⁷⁵ Submission No. 63, at p. 3.

⁷⁶ Submission No. 84, at p. 18.

⁷⁷ Tasmania Police Debrief Report, at p. 45.

Emergency Management Plan. The Inquiry is not able to say how quickly or effectively these plans were implemented.

An examination of the minutes of SREMC meetings indicates representation by a number of important organisations in this emergency; for example, Telstra, Aurora and Southern Water.⁷⁸ It is not clear how quickly and thoroughly all possible functional support was provided. These groups are mainly considered in recovery operations. They do often have an initial response role as well.

The TEMP refers to a coordination role in the structures provided, but there is no guidance on how it will be achieved. A structured approach to this area would provide a more comprehensive coverage of the support which might be required and a more timely way for it to be achieved. For example in South Australia, there are arrangements for the coordination to occur through a number of functional areas, like Agriculture and Animal Services, Communications and Defence. A State Controller is identified for each functional service and a plan is developed. Arrangements are in place for a centre to be established to coordinate these functional services. Approaching this matter by function also enables the services to be drawn together from across a range of organisations. This will be further examined in PART J.

Availability of Resources

Having sufficient resources to effectively manage response operations is both a real and a topical issue. At times police and TFS reported that they were overwhelmed by the volume of activity and stretched in their capacity. Though not desirable, it is understandable, and to some extent, it is expected, that there would be resource shortcomings where there are multiple significant fires with the risk of others occurring, and one on a scale, complexity and magnitude as the Forcett fire. The issues are whether resource availability was deficient and how improvements might be made for the future.

There were complaints by people that TFS didn't help them with the fires they were experiencing. In most cases this was a consequence of protecting people, attending higher priority fires, or having insufficient resources at that time for the volume of fire activity. It needs to be understood by the community that this will occur and it doesn't mean per se that TFS does not have sufficient resources. This is also part of the reasoning for building community resilience.

The resources available to TFS and TASPOL were the subject of submissions to the Inquiry. A substantial submission was made by the Tasmanian Branch of the United Fire Fighters Union of Australia, primarily on the issue of resourcing for TFS.⁷⁹ It was asserted that there has only been an increase of 36 full-time career officers since the 1967 fires and there were only 30 officers supporting approximately 5 000 volunteer fire fighters. Other resource issues raised include:

- the new fire arrangement for the SFOC etc. were significantly impeded by a lack of adequately-trained staff in key positions, a general lack of staff to appoint to all other positions, and fatigue associated with excessive hours
- only full-time qualified employees should be used in leadership positions
- spans of control should be limited to a ratio of I : 5 (that is, one leader to five personnel)

⁷⁸ Minutes of the SREMC meeting at 11.00am on 5 January.79 Submission No. 88.

- only qualified staff should be used in the communications area for call-taking and dispatch
- staff in command roles should have sufficient equipment
- staff managing staging areas should have adequate training
- non-rostered shift workers should be supported to maintain operational readiness and be used during emergencies
- staff fatigue needs to be managed.

In its submission to the Inquiry, the Police Association of Tasmania (PAT) also raised resourcing issues.⁸⁰ The PAT asked the Inquiry to examine why the emergency powers were not used and its relationship with an industrial award. This is an industrial issue and it is not a matter for the Inquiry to consider. A more relevant point made by the PAT involved budget issues for TASPOL and the recent reduction of police officers. It was asserted that TASPOL could not manage with its existing resources and had to request support from police outside the State. There were other resource issues raised, such as the number of vehicles available.

In a covering letter to the Inquiry, the Police Commissioner also outlined reductions in staff and vehicles and internal restructuring to meet budget reduction targets.⁸¹ He also described action taken due to the peak demands over the Christmas/New Year period and the implications of this for the availability of resources when the fires occurred. Notwithstanding this, he told the Inquiry that police volunteered to come back on duty and personnel worked extended hours in managing emergency operations.

The AFAC Audit made the following comment:

There are a number of risks associated with the small number of people in a relatively small agency filling the large number of portfolios required. The Audit-Review identified the potential for a single point of failure existing in a number of areas where the unavailability of an individual staff member could adversely impact a number of portfolios. Major events such as the January 2013 fires impacted quickly and soon exceeded TFS, FT and PWS staff capacity. The redeployment of corporate staff into operational support roles in particular, placed pressure on routine business functions.⁸²

Similar comments could be made about TASPOL, where a small number of personnel limit the organisation's capability, for instance the number and availability of inspectors. When there are small numbers of personnel available and expertise is an issue, care needs to be taken in building that expertise. Relying on a small number of skilled people can be a risk, for immediate availability in emergency situations and in extended operations. Multi-skilling — building a broader capability — is more often a better strategy.

Sufficient and suitable resources were an issue in a number of other areas. For example, people with expertise in managing CFR/evacuation centres were needed by councils.⁸³

⁸⁰ Submission No. 79.

⁸¹ Submission No. 78.

⁸² AFAC Audit, at p. 27.

⁸³ See submission by the Tasman Council and the Local Government Association Tasmania.

The Inquiry is not able make an assessment of these issues for a number of reasons:

- it would involve closely examining a range of organisations and their operations, which is beyond the scope of the Inquiry
- in terms of TFS and TASPOL, this process would require a complete analysis of the operation and effectiveness of these organisations, and this is not feasible
- the application of resources is also a matter of priorities. The January fires would have constituted such an emergency for both TFS and TASPOL that it was their highest priority. Resources should then have been re-allocated accordingly. Thus there should always be resources which can be applied to the highest organisational priorities.

These are qualified with the comment that capacity is dependent on the overall resources available, and the issues raised by the organisations are not without merit in that sense.

Hence the initial availability of resources, continuity of resources where operations are extended, and matching experience and expertise are relevant matters to consider here.

Emergencies of the nature of the January fires will extend the capacity of any emergency operation and it is not realistic to have enough resources available for every eventuality. Therefore supplementing capacity with resources from other sources is a responsible thing to plan for.

Fire services and police have very cooperative arrangements and relationships with their colleagues within Australia and in many places overseas, and additional resources are often made available between them in emergencies. These arrangements were put into effect on this occasion.

Police within Australia and New Zealand operate under an agreement to provide assistance to neighbouring states and assistance was arranged from Victoria Police and the Australian Federal Police. Detail is provided in the TASPOL submission.⁸⁴ There are logistics issues and obviously differences in operations; however, there were few negative issues in this support. Police have the capacity to swear-in police officers from other jurisdictions so they can exercise local police authority.

Fire services have similar arrangements and again, support was provided from within Australia and New Zealand. Detail can also be found in the AFAC Audit.⁸⁵

There are also complexities with fire assistance surrounding workplace health and safety, authority, immunity from legal liability, and responsibility for the cost of deployment.⁸⁶ Steps were taken to minimise this risk on this occasion. It would be unfortunate if these issues limited the availability of this mutual assistance, and fire authorities should make it a priority to resolve. As with police, there were logistic issues and differences in operational practices and skills.

Mutual support for police and fire services is a valuable and much appreciated service.

⁸⁴ Police Assistance to Neighbouring States Agreement and see submission No. 78, at pp. 28 -29.

⁸⁵ AFAC Audit, at p. 28.

⁸⁶ AFAC Audit, at p. 28.

Australian Defence Force assistance was also provided in searching damaged buildings and helping Aurora transport two heavy duty transformers from Queensland to the Tasman and Forestier Peninsulas. Established arrangements are in place for this to occur.⁸⁷

To support emergency operations, the State Emergency Management Committee (SEMC) has a project to establish a pool of employees across the public sector to be deployed to assist with the management or coordination of an emergency. A special emergency plan being developed for the SEMC will complement this and a draft of this was considered in July 2013.⁸⁸ The intention is to develop an initial surge capacity of 100 employees. These interoperability initiatives should provide positive results.

The AFAC Audit also referred to the training and development of 'experienced but no longer frontline retained and volunteer members [who] would provide an additional source of personnel for roles within both the SFOC and RFOCs ... The formation of a volunteer ''headquarters'' brigade would enable the building of such capacity'. ⁸⁹ The AFAC Audit also referred to 52 volunteers being trained Sector Commanders in TFS and not used in fire ground command roles until the later stages of the fires, on advice from the Retained and Volunteer Associations. ⁹⁰ The Inquiry is aware of a number of volunteers who did have command roles early in operations at the fires. Possibly there is scope for increasing this, just as there may be in using the skilled personnel within the forestry companies. The AFAC Audit suggests using these additional resources should be routine and not a redundancy issue.

In the section on Relocations and Evacuations above, there are comment and recommendation on engaging with the community and using community resources, and this is equally applicable in the broader resources context.

Resource capacity and capability is a relevant issue. Suggestions are made below on options to supplement resources.

However with good plans, there is the ability to maximise the effectiveness and efficiency of the resources available.

Recommendation 44 – that a review be conducted of the resource capacity and capability to provide effective and efficient emergency operations, including approved improvements.

Recommendation 45 – that further options to appropriately supplement the resources available for emergency management operations be examined.

Recommendation 46 – that the police and other emergency service organisations discuss their resource issues for emergency operations with the Government.

⁸⁷ Submission No. 78, at p. 28.

⁸⁸ Enhancing Interoperability Skills for the Management of Emergencies, Interoperability Arrangements for the Sharing of Skilled Resources in Tasmania, State Emergency Services projects.

⁸⁹ AFAC Audit, at pp. 27 – 28.

⁹⁰ AFAC Audit, at p. 28.

Recommendation 47 – that action be taken as a priority to resolve any legal issues on mutual assistance arrangement for fire services.

Effectiveness of Response Operations

How do you judge success in emergency response operations? This was a question considered in the Special Inquiry into the Perth Hills Bushfire 2011, and it was not able to be answered. In a parallel with this Inquiry, a significant bushfire emergency with no lives lost but enormous fire damage, it was concluded that the:

fact that no lives were lost should not be used to claim that the response to this fire was an unmitigated success, or the State's bushfire prevention, preparedness, response and recovery arrangements are as robust as they could be. ⁹¹

This conundrum is not lost on chief fire officers. At an Executive Forum this year, chief fire officers and commissioners considered this very issue, noting there were different ways to measure success; they too were unable to answer the question. ⁹²

There were no lives lost and this is something to be grateful for. It is highly likely that the focus on protecting life and issuing warnings was a major contributor to this outcome. But so too was the proximity to water and the availability of a broad range of nearby safer places. On the other hand, there was significant property damage and it is possible that the policies which save lives also result in higher property loss.

The context should not be forgotten in this assessment. Many other fires were successfully extinguished and properties protected separate to the Lake Repulse, Forcett and Bicheno fires. It is consequently not possible for the Inquiry to provide a definitive assessment on the overall success or otherwise of the response operations.

Examining the emergency management arrangements and how effectively they were implemented might have been a suitable form to make judgements by. However, shortcomings in those arrangements were evident, though the scale and complexity of this emergency may even have challenged better arrangements.

PARTS G and H are also relevant to response operations and have been taken into account in making these comments:

- some aspects of response operations were effective, but generally there were too many areas of response operations which could have been handled better for the Inquiry to be satisfied that they were as effective as they could have been
- generally the emergency management arrangements were not as ready as they should have been to respond to a major emergency
- greater use could have been made of the predictive modelling of the Forcett fire and preventative/proactive action taken, especially in warning and protecting Dunalley
- suppression activities for the fires at Dunalley particularly taking the Fire

91 "A Shared Responsibility", The Report of the Perth Hills Bushfire, February 2011 Review, Government of Western Australia, at p. 135.

92 "What does success look like for fire and emergency services?", in Fire Australia, Winter 2013, at p. 30.
Commander and crews out during the evening on 4 January while there were still active fires, and not establishing suitable alternative arrangements — is of concern to the Inquiry

- road closures and evacuations could have been handled better
- there are serious concerns with TFS communications arrangements for IMTs and how IMTs handled emergency calls
- TASPOL is dependent on regional level emergency management arrangements, and there are no structured arrangements at state level and, it appears, few established structural arrangements below regional level.

In summary, broad difficulties in the response arrangements and operations have been identified. This should not be taken to suggest that every aspect of those arrangements and operations is so categorised, rather it is an overall assessment:

- the concept of operations was not properly focused on response operations at a state level
- responsibilities were not clearly defined at a state level
- there was an over-reliance on committees
- there was no established structured arrangement for coordinating response operations across agencies and organisations
- plans were not sufficiently comprehensive and ready for implementation
- key policies issues were not determined and planned for
- facilities to support principal leadership roles in response were not well established
- arrangements were not designed to be ready for implementation
- there was not sufficient emphasis on proactive action
- there should be greater scope for the declaration of emergencies
- there should be broader access to emergency powers
- the need for three levels of emergency management is questionable
- interoperable emergency management communications are needed.

A number of recommendations have been made to improve response operations, especially for TFS and TASPOL, and it is not necessary to repeat them. In summary though:

- TFS should improve the control, continuity and accountability of its operations and ensure that the application of strategies and tactics are the most effective possible to fulfil its role
- TASPOL should expand its emergency management services to the community by making it a higher priority, broadening TASPOL's role in emergency management and developing organisation-wide capability.