



**PARLIAMENTARY STANDING COMMITTEE OF  
PUBLIC ACCOUNTS**

---

**REVIEW OF AUDITOR-GENERAL'S REPORT NO.10 OF 2013-14:  
*GOVERNMENT RADIO COMMUNICATIONS***

---

**MEMBERS OF THE COMMITTEE**

**LEGISLATIVE COUNCIL**

Hon Ivan Dean MLC (Chair)

Hon Ruth Forrest MLC

Hon Adriana Taylor MLC

**HOUSE OF ASSEMBLY**

Mr Scott Bacon MP

Ms Sarah Courtney MP (Deputy Chair)

Mrs Joan Rylah MP

## CONTACT INFORMATION

Post	Public Accounts Committee Legislative Council Parliament House Hobart TAS 7000
Telephone	03 6212 2300
Facsimile	03 6212 2345
Email	<a href="mailto:pac@parliament.tas.gov.au">pac@parliament.tas.gov.au</a>
Website	<a href="http://www.parliament.tas.gov.au/ctee/Joint/pacc.htm">www.parliament.tas.gov.au/ctee/Joint/pacc.htm</a>

## TABLE OF CONTENTS

Abbreviations list .....	iv
Charter of the Committee .....	v
Recommendations.....	vi
<b>1 Introduction and conduct of review.....</b>	<b>1</b>
Terms of reference .....	1
Conduct of the review .....	1
<b>2 Report No. 10 of 2013-14: <i>Government Radio Communications</i> -     Audit background and findings.....</b>	<b>3</b>
Audit objectives .....	3
Audit conclusions.....	4
Audit findings .....	5
Audit recommendations.....	7
<b>3 Committee findings.....</b>	<b>8</b>
<b>4 Recommendations.....</b>	<b>13</b>
<b>Appendix 1 - Government Radio Communications Questionnaire .....</b>	<b>.....</b>
<b>Appendix 2 - Hansard Transcript of Evidence .....</b>	<b>.....</b>

## ABBREVIATIONS LIST

AT	Ambulance Tasmania
DHHS	Department of Health and Human Services
FT	Forestry Tasmania
PWS	Parks and Wildlife Service
SES	State Emergency Services
TasGRN	Tasmanian Government Radio Network
TESI	Tasmanian Electrical Supply Industry
TFS	Tasmania Fire Service
WoG	Whole-of-Government

## CHARTER OF THE COMMITTEE

The Public Accounts Committee (the Committee) is a Joint Standing Committee of the Tasmanian Parliament constituted under the *Public Accounts Committee Act 1970*.

The Committee comprises six Members of Parliament, three Members drawn from the Legislative Council and three Members from the House of Assembly.

Under section 6 of the *Public Accounts Committee Act 1970* the Committee:

- must inquire into, consider and report to the Parliament on any matter referred to the Committee by either House relating to the management, administration or use of public sector finances; or the accounts of any public authority or other organisation controlled by the State or in which the State has an interest; and
- may inquire into, consider and report to the Parliament on any matter arising in connection with public sector finances that the Committee considers appropriate; and any matter referred to the Committee by the Auditor-General.

## RECOMMENDATIONS

Based upon its findings from the follow-up review of the Auditor-General's Report No. 10 of 2013-14: *Government Radio Communications*, the Committee recommends:

1. The appointment of an independent Project Manager to the Whole of Government Radio Network Project team be finalised;
2. The project be completed by 2020;
3. A new entity is established to manage the network into the future; and
4. All entities clearly document their Risk Management Plans.

# **1 INTRODUCTION AND CONDUCT OF REVIEW**

- 1.1 The Auditor-General's Report No. 10 of 2013-14: *Government Radio Communications* (the Report) was tabled in both Houses of Parliament in May 2014.
- 1.2 The Committee resolved, of its own motion, to examine the Report.
- 1.3 The Report presented the results of a performance audit which assessed the effectiveness and efficiency of Government radio communication networks.

## **TERMS OF REFERENCE**

- 1.4 The Committee's terms of reference were to follow-up on the findings and the implementation of the recommendations of the Report and report to both Houses of Parliament.

## **CONDUCT OF THE REVIEW**

- 1.5 On 20 August 2014 the Committee received a briefing from the Auditor-General on the Report.
- 1.6 The Committee resolved to undertake a follow-up examination of the Report on 3 September 2014.
- 1.7 The Committee developed and distributed a questionnaire to the relevant entities on 4 March 2015 and the last questionnaire response was received on 12 May 2015.
- 1.8 The purpose of the questionnaire was to determine the action taken by the State entities to implement the recommendations contained within the Report.
- 1.9 The Committee resolved on 3 June 2015 to invite all Government representatives to present verbal evidence.

1.10 Representatives of the relevant entities attended a joint public hearing held on 21 August 2015.



## **2 REPORT NO. 10 OF 2013-14: *GOVERNMENT RADIO***

### ***COMMUNICATIONS - AUDIT BACKGROUND AND FINDINGS***

2.1 This chapter presents an overview of the background to, and the key findings of the Audit.

#### **AUDIT OBJECTIVES**

2.2 The objectives of the audit were to assess:

- The effectiveness and efficiency of the current radio communications networks used by Tasmania Police, State Emergency Services (SES), Tasmania Fire Service (TFS), Ambulance Tasmania (AT), Forestry Tasmania (FT) and the Parks and Wildlife Service (PWS); and
- Whether the Whole-of-Government (WoG) radio network project is progressing towards delivering a more efficient and effective network.

2.3 The Tasmanian Electrical Supply Industry (TESI) was included in the audit as they are a user of the Tasmania Police radio network.

2.4 The project team and steering committee were also included in the audit due to their involvement in the WoG radio network project.

2.5 The following three audit criteria were applied:

- Are the existing radio networks performing effectively;
- Is there a strategic approach to providing radio network capacity; and
- Is the WoG radio network project effective?

## AUDIT CONCLUSIONS

2.6 The Audit concluded common findings in the areas of:

- Effectiveness of radio networks (security, reliability, coverage, interoperability and cost effectiveness);
- Existence of a strategic approach to providing radio network capacity; and
- Effectiveness of the WoG radio network project.

2.7 The Audit concluded that:

- Whilst outage information suggests the networks were reliable, it was found that the existing networks are not fully effective and efficient.
- There was a lack of strategic planning evident in the current networks. Whilst Tasmania Police prepared business cases for its network upgrades, this did not occur with the other networks.
- Little real progress has been made in implementing a WoG radio network.

## AUDIT FINDINGS

2.8 In examining the effectiveness of the performance of existing radio networks, the Report paid particular attention to the:

- Security of current networks;
- Reliability of current networks;
- Whether current networks provide adequate coverage;
- Interoperability of current networks; and
- Cost effectiveness of current networks.

2.9 The following Table 1 summarises the Audit findings in the area of effectiveness of performance of current networks.

**Table 1: Findings – Performance of current networks<sup>1</sup>**

Effectiveness	Police	TFS	AT	Forestry/ Parks	SES
Security	✓	×	×	×	×
Reliability	✓	×	×	×	×
Coverage	×	✓	✓	✓	✓
Interoperability	×	✓	✓	✓	✓
Cost effectiveness	×	×	×	×	×

✓ Satisfactory level of compliance

× Recommendation made

<sup>1</sup> Auditor-General Special Report No.10 of 2013-14 Government Radio Communications, pp. 21-35.

2.10 The following Table 2 summarises the Audit findings in the area of a strategic approach to providing radio network capacity.

**Table 2: Findings – Is there a strategic approach to providing radio network capacity?<sup>2</sup>**

<b>Strategic Approach</b>	<b>Police</b>	<b>TFS</b>	<b>AT</b>	<b>Forestry /Parks</b>	<b>SES</b>
Documented strategic approach	x	x	x	x	x
Business case for upgrades	✓	x	x	x	x
Compliance with ACMA requirements	✓	✓	✓	✓	✓
Compliance with foreshadowed COAG and ACMA requirements and recommendations	x	x	x	x	x

✓ Satisfactory level of compliance

x Recommendation made

---

<sup>2</sup> Ibid pp. 38-40.

2.11 The following Table 3 summarises the Audit findings in the area of whether the WoG radio network project is effective.

**Table 3: Findings – Effectiveness of WoG radio network project<sup>3</sup>**

Effectiveness of WoG Project		
Whether WoG radio network project is on track	✘	The project stalled due to lack of consensus regarding the consultant’s recommended 400MHz option (2006). The 2012 restart of the project has yet to obtain stakeholder support and consensus which appeared unlikely or difficult in the near future.
Likely success to the current approach to the WoG project	✘	Unlikely if the process largely ignores entities’ key concerns. The WoG project’s objectives should include meeting entity requirements, and stakeholders should participate in the project team.

✓ Satisfactory level of compliance

✘ Recommendation made

## AUDIT RECOMMENDATIONS

2.12 The Auditor-General made 11 recommendations in the Report based upon his findings. The status of implementation for each of the recommendations has been assessed by the Committee following the return of a questionnaire by each entity and evidence provided at the hearings.

---

<sup>3</sup> Ibid, pp. 42- 50.

### 3 COMMITTEE FINDINGS

3.1 The Committee's findings on the status of the implementation of audit recommendations, as detailed in Table 4, are based on the questionnaires completed by the entities and upon evidence provided at the hearing held on 21 August 2015. The questionnaires are attached at Appendix 1. The Hansard transcript of evidence is attached at Appendix 2.

**Table 4: Findings - implementation of audit recommendations**

Recommendation No:	Auditor-General's recommendation	Committee Findings				
		Police	TFS	AT	FT/ Parks	SES
1	Tasmania Police, TFS, AT and SES investigate ways of providing secure and confidential radio communications.	✓	✓	✓	●	✓
2	TFS and AT work together to resolve problems around congestion, particularly during the fire season.	●	✓	✓	●	●
3	TFS, AT, Forestry/Parks and SES set reliability standards and monitor against them. TFS, AT, Forestry/Parks and SES establish a register to record service outages and complaints regarding their networks. All service and complaint issues are resolved within pre-set targets.	✓	✓	✓	✓	✓

✓

Recommendation implemented  
 x Recommendation not implemented  
 ● Not applicable to this entity

**Table 4: Findings – implementation of audit recommendations (continued.)**

Recommendation No:	Auditor-General's recommendation	Committee Findings				
		Police	TFS	AT	FT/ Parks	SES
4	Until the outcome of the WoG project is complete (and interoperability is achieved), emergency services should investigate/implement methods for improving interoperability.	✓	✓	✓	✓	✓
5	Duplication of infrastructure be costed and taken into account when considering how best to proceed with the WoG network.	✓	✓	✓	✓	✓
6	Network managers develop and document strategic plans for the management of their radio networks.	✗	✗	✓	✗	✗
7	Network managers produce business cases for all major upgrades.	✓	●	●	●	●
8	Stakeholders involved with the WoG radio project re-engage positively to ensure a solution to the current impasse is achieved in the best interests of the stakeholders and the State as a whole.	✓	✓	✓	✓	✓
9	The WoG project's objectives should include meeting entity requirements and the consultant be asked to re-evaluate the revised set of objectives.	✓	✓	✓	✓	✓
10	The project team become independent from any of the entities involved in the WoG network.	✓	✓	✓	✓	✓
11	Government considers the establishment of a separate unit to implement and operate a WoG network if existing stakeholders fail to make significant progress toward an agreed WoG solution.	✓	✓	✓	✓	✓

✓ Recommendation implemented  
 ✗ Recommendation not implemented  
 ● Not applicable to this entity

### 3 COMMITTEE FINDINGS (continued)

The Committee finds:

- 3.2 Significant progress has been made since May 2014 in relation to the whole of government Tasmanian Government radio network (TasGRN) project.
- 3.3 The entities have made progress in relation to the provision of secure and confidential radio networks.<sup>4</sup>
- 3.4 TFS previously resisted such measures due to the perceived cost associated with a secure network and now recognises that it is a necessary component of the TasGRN project.<sup>5</sup>
- 3.5 AT and TFS have worked together to address the problems resulting from congestion during the bushfire season.
- 3.6 TFS technicians will be installing additional base stations in the rural and remote areas which will provide an independent radio channel extension to the East Coast and North-West Coast.<sup>6</sup>
- 3.7 It would be beneficial for entities to report to the Government in a coordinated manner in relation to service outages and complaints.
- 3.8 AT, TFS, PWS and SES have always had interoperability within the radio network. The interoperability gateway established in February 2015 with Tasmania Police closed the loop by bringing all of the agency services and fire partners into full interoperability.<sup>7</sup>
- 3.9 The entities are committed to rationalising the entire network and removing duplication in infrastructure.

---

<sup>4</sup> Mr Morgan, Hansard transcript of evidence 21 August 2015, p. 9

<sup>5</sup> Mr Freeman, Hansard transcript of evidence 21 August 2015, p. 14

<sup>6</sup> Mr Morgan, Hansard transcript of evidence 21 August 2015, p. 15

<sup>7</sup> Mr Tilyard, Hansard transcript of evidence 21 August 2015, p. 6



- 3.10 AT had a Strategic Plan at the time of the Auditor-General's review.
- 3.11 All entities, other than AT, need to progress the development of strategic plans.
- 3.12 The joint strategic plan of PWS and FT is being developed with completion expected by the end of the 2015-16 financial year.<sup>8</sup>
- 3.13 The corporate services function of Tasmania Police, TFS and SES was integrated in November 2014 resulting in the delay of the development of the entities' strategic plans.
- 3.14 The development of a consolidated strategic plan for Tasmania Police, TFS and SES is a business priority for completion this year.<sup>9</sup>
- 3.15 Although risk management measures are in place the lack of consolidation of the entities' Risk Management Plans remains a weakness and better documentation is required.<sup>10</sup>
- 3.16 All entities agree that business cases are required for all major upgrades.
- 3.17 There have been no major upgrades in recent history to justify a business case.
- 3.18 The perception that Tasmania Police were leading the TasGRN project as managers of the Police network caused past resistance among stakeholders. The decision of the TasGRN Steering Committee to appoint an independent Project Manager is intended to overcome this barrier.<sup>11</sup>
- 3.19 There has been significant disruption to the progress of the TasGRN project resulting from a technical solution to incorporate a single frequency.<sup>12</sup>
- 3.20 The technical impasse appears to have been overcome with consensus being reached by all parties that in order to meet the business needs of each entity the TasGRN may operate on different frequencies.<sup>13</sup>

---

<sup>8</sup>Mr Foss, Hansard transcript of evidence 21 August 2015, p. 27

<sup>9</sup> Mr Wilson-Haffenden, Hansard transcript of evidence 21 August 2015, p. 28

<sup>10</sup>Mr Tilyard, Hansard transcript of evidence 21 August 2015, p. 5

<sup>11</sup> *Ibid*, p. 24

<sup>12</sup> *Ibid*, p. 3

- 3.21 The TasGRN project is adequately resourced to progress the work to develop and document the business requirements of the project.<sup>14</sup>
- 3.22 There has been significant development in relation to the drafting of a set of new objectives to guide the project. Various consultants were engaged by the TasGRN Steering Committee as part of this process.<sup>15</sup>
- 3.23 The project team represents the interests of the entities and is independent of the entities involved in the TasGRN. A revised governance proposal was recently put to the TasGRN Steering Committee in relation to the governance arrangements.<sup>16</sup>
- 3.24 The entities recognise the need for a separate unit to manage the TasGRN. It is the intention of the TasGRN Steering Committee to facilitate the establishment of this separate unit including where it will be best placed to manage the network.<sup>17</sup>

---

<sup>13</sup> *Ibid*, p 3

<sup>14</sup> *Ibid*, p. 33

<sup>15</sup> *Ibid*, p. 30

<sup>16</sup> *Ibid*, p. 25

<sup>17</sup> *Ibid*, p. 33

## 4 RECOMMENDATIONS

4.1 Based upon its findings from the follow-up review of the Auditor-General's Report No. 10 of 2013-14: *Government Radio Communications*, the Committee recommends:

1. The appointment of an independent Project Manager to the Whole of Government Radio Network Project team be finalised;
2. The project be completed by 2020;
3. A new entity is established to manage the network into the future; and
4. All entities clearly document their Risk Management Plans.



Hon Ivan Dean MLC

Chair



**APPENDIX 1 – GOVERNMENT RADIO COMMUNICATIONS  
QUESTIONNAIRE**



Questionnaire

Report No.10 of 2013-4 *Government Radio Communications*



## **PUBLIC ACCOUNTS COMMITTEE**

### **QUESTIONNAIRE**

---

**Review of Actions taken in response  
to the Report of the Auditor-General  
No.10 of 2013-4 *Government Radio  
Communications***

---

**OVERVIEW**

To successfully undertake their core activities, emergency service organisations such as police, ambulance and the fire service rely on access to secure and comprehensive radio networks. An effective radio network could mean the difference between life and death.

Emergencies in recent times have highlighted gaps in interoperability between radio communication networks in Tasmania and instances of their lack of security and confidentiality. The Auditor-General's "performance audit confirmed existence of these difficulties and highlighted others such as the lack of reliability standards making monitoring difficult, lack of strategy, duplication of infrastructure and lack of clarity regarding operating costs." The audit also identified that a whole of government project aimed at resolving some of these difficulties achieved little real progress despite being established in 2006.

The emergency service organisations included for the purposes of the performance audit were:

- Tasmania Police with Tasmanian Electricity Supply Industry (Police/TESI);
- Tasmania Fire Service (TFS);
- Ambulance Tasmania (separate network but maintained by the TFS);
- Forestry Tasmania and the Parks and Wildlife Service (Forestry/Parks); and
- State Emergency Services (SES).

**Audit objective:**

The objectives of the audit were to assess:

- The effectiveness and efficiency of the current radio communications networks used by Tasmania Police, SES, TFS, Ambulance Tasmania, Forestry Tasmania and the Parks and Wildlife Service; and
- Whether the WoG radio network project is progressing towards delivering a more efficient and effective network.

**Audit Scope:**

The audit examined emergency services radio networks. Entities directly involved included the Tasmania Police, TFS, Ambulance Tasmania, Forestry Tasmania and Parks and Wildlife Service, and the SES.

The following entities were also included in the audit because they are clients of the radio networks and are involved in the WoG radio network project:

- TESI (using the Tasmania Police network)
- Project team and steering committee of the WoG radio network project.

**Audit criteria:**

The following three audit criteria were applied:

- Are the existing radio networks performing effectively?
- Is there a strategic approach to providing radio network capacity?



- Is the WoG radio network project effective?

**Auditor General's conclusion**

"the existing networks are not fully effective and efficient, there is a lack of strategic planning in the current networks, and there has been little real progress in implementing a WoG network"

**AMBULANCE TASMANIA**

In accordance with *Audit Act 2008* section 30, a copy of the Report by the Auditor-General was provided to the state entities indicated in the introduction of this report. A summary of findings, with a request for submissions or comments was also provided to the Minister for Health and Human Services.

The Department provided the following comment.

The Department of Health and Human Services (DHHS) have reviewed the report and accept and endorses each of the recommendations.

**REPORT RECOMMENDATIONS**

The Report made a total of 11 recommendations and the following section of the questionnaire provides the emergency service organisation the opportunity to demonstrate the actions taken in response to the recommendations of the Auditor-General. Supporting documentation can also be provided as an attachment to your response.

**AMBULANCE TASMANIA - RESPONSE TO REPORT RECOMMENDATIONS****AUDIT CRITERIA 1 - ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?**

*Security - Section 1.2 - Are Current Networks Secure?* Notes that Ambulance Tasmania uses 70MHz analogue network but would prefer a private and secure network to better safeguard confidential information under privacy protection legislation.

**Recommendation 1**

We recommend that Tasmania Police, TFS, Ambulance Tasmania and SES investigate ways of providing secure and confidential radio communications.

**Ambulance Tasmania response to Recommendation 1:**

The current analogue radio systems are not designed to be secure and users are trained to understand the system operates on an open communication process. The digital encrypted network is the only guaranteed solution to this technology feature.

In the meantime a range of "radio codes" are used that cannot be understood by untrained personnel outside the organisation.

Additionally, Ambulance Tasmania has completed pilot testing for an on board computer system that has been successful and contracts let for the rolling out across the entire fleet for an on board computer system that will exchange secure data, including patient details by the conclusion of the 2015 calendar year.

Ambulance Tasmania will include this as a business need in the development of a WoG radio network.

**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

*Reliability – Section 1.3 – Are the current networks reliable?* finds that while there is no evidence to suggest that the network was unreliable, there are no reliability statistics available and standards have not been set. TFS maintains Ambulance Tasmania's network under contract, which has in remote areas, been problematic particularly during the fire season when increased TFS traffic trended to congest the channels.

**Recommendation 2**

**We recommend that TFS and Ambulance Tasmania work together to resolve problems around congestion, particularly during the fire season.**

**Ambulance Tasmania response to Recommendation 2:**

In remote areas Ambulance Tasmania shares Tasmanian Fire Service's radio channels. It is these shared channels where congestion has occurred. Ambulance Tasmania has engaged a communications consulting firm (Rhumb Consulting) who have designed an extension to the Ambulance Tasmania radio network in consultation with AT and TFS radio technical staff. This extension of the network is at three additional locations in the state. The network extensions have been planned, schematics created and the project endorsed. Funding was provided by AT in this financial year. The installation is currently in progress and will be complete by the next Fire season.

**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

Reliability – *Section 1.3 – Are the current networks reliable?* finds that while there is no evidence to suggest that the network was unreliable, there are no reliability statistics available and standards have not been set.

**Recommendation 3**  
We recommend that:  
TFS, Ambulance Tasmania, Forestry/Parks and SES set reliability standards and monitor against them.  
TFS, Ambulance Tasmania, Forestry/Parks and SES establish a register to record service outages and complaints regarding their networks.  
All service and complaint issues are resolved within pre-set targets.

**Ambulance Tasmania response to Recommendation 3:**  
Ambulance Tasmania has developed a draft Memorandum of Understanding for the management of its network by Tasmania Fire Service. The final document will include the standard of performance and support described above.  
Network monitoring is in place for TFS and AT radio systems. Reliability standards will be included in Ambulance Tasmania's business needs for WoG radio network.

**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

**Interoperability – Section 1.5 – Are the current networks interoperable?** finds that while the networks operating at 70MHz (TFS/Ambulance Tasmania, Forestry Tasmania, PWS and SES) have effective interoperability and share channels, there is no direct interoperability with the Police network operating at 800MHz.

**Recommendation 4:**

We recommend that, until the outcome of the WoG project is complete (and interoperability is achieved), emergency services should investigate and implement methods for further improving interoperability.

**Ambulance Tasmania response to Recommendation 4:**

Ambulance Tasmania has maintained radio interoperability with the Tasmania Fire Service, Forestry, Parks and Wildlife and State Emergency Service for many decades and continues to do so.

In February 2015 the Interim Interoperability Gateway was established with Tasmania Police.

**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

*Cost Effectiveness – Section 1.6 – Were the networks cost effective?* finds that there is unnecessary duplication of management and infrastructure across the existing networks.

**Recommendation 5**

**We recommend that duplication of infrastructure be costed and taken into account when considering how best to proceed with the WoG network**

**Ambulance Tasmania response to Recommendation 5:**

Ambulance Tasmania operates a 70 MHz radio system. As stated this is managed by Tasmania Fire Service and there is minimal unnecessary duplication of infrastructure for this type of technology.

Ambulance Tasmania shares its radio infrastructure with other services.

Tasmania Fire Service provides a common network that is utilised by Tasmania Fire Service and Ambulance Tasmania to provide dispatch, radio and paging services.

All new requests for services, such as access to sites are in the first instance requested of other emergency services to ensure no duplication occurs. Memorandums of Understanding are being created to ensure ongoing sustainability and clarity in responsibility.

**AUDIT CRITERIA 2 – IS THERE A STRATEGIC APPROACH TO PROVIDING RADIO NETWORK CAPACITY?**

**Strategic Approach – Section 2.2 – Was there a documented strategic approach to the current networks?** Notes that Ambulance Tasmania has a strategic plan linking with its business plan objectives, however it contains no risk management.

**Recommendation 6**

**We recommend that network managers develop and document strategic plans for the management of their radio networks.**

**Ambulance Tasmania response to Recommendation 6:**

Ambulance Tasmania was the only organisation noted to have a strategic radio communications plan. The AG recommended time lines and a risk assessment be included in this document which has since been completed.

Ambulance Tasmania has previously engaged Rhumb Consulting to provide costed radio options in the event the WoG radio does not eventuate as a risk management mitigation strategy.

The WoG radio Steering Committee has strategic objectives and key objectives. These include designing, building and implementing a WoG radio network that meets the business requirements of all users. Additionally other strategic objectives include the establishment of a new network that utilises newer technology and functionality plus provides efficiencies through consolidating current infrastructure, equipment and procurement arrangements.



**AUDIT CRITERIA 2 – IS THERE A STRATEGIC APPROACH TO PROVIDING RADIO NETWORK CAPACITY? (CONT.)**

**Business Cases – Section 2.3 – Were business cases prepared supporting upgrades?** Notes the absence of businesses cases for upgrades to any of the existing networks aside from Tasmania Police.

**Recommendation 7:**  
**We recommend that network managers produce business cases for all major upgrades.**

**Ambulance Tasmania response to Recommendation 7:**  
Ambulance Tasmania is not planning any major upgrades to its current radio network and as such the development of Business Cases has not been necessary at this time.

--

**AUDIT CRITERIA 3 - IS THE WoG NETWORK PROJECT EFFECTIVE?**

**Recommendation 8:**

We recommend that stakeholders involved with the WoG radio project re-engage positively to ensure a solution to the current impasse is achieved in the best interests of the stakeholders and the state as a whole.

**Ambulance Tasmania response to Recommendation 8:**

Ambulance Tasmania is actively engaged in the current processes to develop the WoG radio project with the CEO representing Ambulance Tasmania on the Tas GRN Steering Committee. Extensive collaboration occurs on a weekly basis between technical experts of the emergency services. The implementation of the Interoperability Gateway has been testimony to the strong collaboration of the entities to deliver on the requirements of Government and the community.

**AUDIT CRITERIA 3 – IS THE WoG NETWORK PROJECT EFFECTIVE? (CONT.)**

**Recommendation 9:**  
We recommend that the WoG project's objectives should include meeting entity requirements and the consultant be asked to re-evaluate the revised set of objective.

**Ambulance Tasmania response to Recommendation 9:**  
DPEM has engaged Cube Pty Ltd to assist the steering committee in redefining the way forward in a new environment of technological choice which has not previously been available. This will assist in reconciling some of the long term technical concerns held by individual agencies which may now be able to be overcome through innovative solutions now available to the market. This initial workshop is scheduled for 16<sup>th</sup> April 2015.

**AUDIT CRITERIA 3 -- IS THE WoG NETWORK PROJECT EFFECTIVE? (CONT.)**

**Recommendation 10:**  
We recommend that the project team become independent from any of the entities involved in the WoG network.

**Ambulance Tasmania comment regarding Recommendation 10 (with indication of current involvement):**

This has been accepted by the steering committee and whilst the Project team will be hosted by DPEM all agencies represent the management group of the new entity and a new team is being established during the latter half of this financial year.

**AUDIT CRITERIA 3 – IS THE WOG NETWORK PROJECT EFFECTIVE? (CONT.)**

**Recommendation 11**  
We recommend that the Government considers the establishment of a separate unit to implement and operate a WOG network if existing stakeholders fail to make significant progress toward an agreed WOG solution.

**Ambulance Tasmania comment regarding progress toward Recommendation 11:**  
As above

**FORESTRY TASMANIA AND PARKS AND WILDLIFE SERVICE**

In accordance with *Audit Act 2008* section 30, a copy of the Report by the Auditor-General was provided to the state entities indicated in the introduction of this report. A summary of findings, with a request for submissions or comments was also provided to the Minister for Primary Industries, Parks, Water and Environment (DPIPWE) and Forestry Tasmania.

DPIPWE provided the following comment.

The report fairly represents the issues and current situation in relation to the VHF radio network managed and operated by the Parks and Wildlife Service (PWS) in partnership with Forestry Tasmania (FT).

Forestry Tasmania provided the following comment.

The report indicates that FT's radio network provides adequate cost-effective coverage over the difficult terrain managed by the organisation. Of the recommendations made in the report, FT notes in particular the need for a future strategy and that FT should be part of a whole of government working group that considers network requirements of all agencies in the future.

FT is comfortable that the current network can be supported for the next 10 years and welcomes any opportunity to review of whole of government solution that will provide a service that is similar in cost and effectiveness to the existing system.

**REPORT RECOMMENDATIONS**

The Report made a total of 11 recommendations and the following section of the questionnaire provides the emergency service organisation the opportunity to demonstrate the actions taken in response to the recommendations of the Auditor-General. Supporting documentation can also be provided as an attachment to your response.

**PARKS - RESPONSE TO REPORT RECOMMENDATIONS**

**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?**

Reliability – *Section 1.3 – Are the current networks reliable?* finds that while all transmitter sites receive an annual inspection with any maintenance problems identified and rectified, FT/Parks have no reliability standards or complaint records.

**Recommendation 3**  
We recommend that:  
- TFS, Ambulance Tasmania, Forestry/Parks and SES set reliability standards and monitor against them.  
- TFS, Ambulance Tasmania, Forestry/Parks and SES establish a register to record service outages and complaints regarding their networks.  
- All service and complaint issues are resolved within pre-set targets.

**Parks/Forestry response to Recommendation 3:**  
All sites are serviced annually (preventive maintenance) prior to the fire season.  
Faults and subsequent corrective actions are recorded on the Forestry database system "The Vault" for all sites. On average there would be 2-3 issues across the whole network per year, mostly due to severe weather conditions.  
Note: Forestry is externally certified to the ISO 14001 environmental standard and the AS 4801 OH&S standard, which requires the identification and management of non-conformances to be a routine part of business.

**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

*Interoperability – Section 1.5 – Are the current networks interoperable?* finds that while the networks operating at 70MHz (TFS/Ambulance Tasmania, Forestry Tasmania, PWS and SES) have effective interoperability and share channels, there is no direct interoperability with the Police network operating at 800MHz.

**Recommendation 4**

**We recommend that, until the outcome of the WoG project is complete (and interoperability is achieved), emergency services should investigate and implement methods for further improving interoperability.**

**Parks/Forestry response to Recommendation 4:**

Presently, all Parks and Forestry vehicles and handheld radios are programmed with the same frequencies, along with all frequencies used by the TFS and Norske Skog, so full interoperability between fire land management agencies presently exists.

Historically there has been little need that requires direct operability with Police networks.



**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

**Cost Effectiveness – Section 1.6 – *Were the networks cost effective?*** finds that there is some unnecessary duplication of management and infrastructure across the existing networks.

**Recommendation 5**

**We recommend that duplication of infrastructure be costed and taken into account when considering how best to proceed with the WoG network.**

**Parks/Forestry response to Recommendation 5:**

The existing network ownership and maintenance is cost shared between Parks and Forestry - based on an estimate of usage by each agency - however, both agencies can and do use any site to communicate if required. Note; other private and government users presently have a sharing arrangement with some of our buildings and infrastructure.

**AUDIT CRITERIA 2 – IS THERE A STRATEGIC APPROACH TO PROVIDING RADIO NETWORK CAPACITY?**

**Strategic Approach – Section 2.2 – Was there a documented strategic approach to the current networks?** Notes that no evidence was found of strategic planning for the Forestry/Parks networks.

**Recommendation 6**

**We recommend that network managers develop and document strategic plans for the management of their radio networks.**

**Parks/Forestry response to Recommendation 6:**

Presently we do not have a strategic plan in place for the current radio network; the existing system is operationally stable and has performed satisfactorily with relatively minor maintenance issues.

We agree for the need to develop a strategic plan in the future.

**AUDIT CRITERIA 2 – IS THERE A STRATEGIC APPROACH TO PROVIDING RADIO NETWORK CAPACITY? (CONT.)**

**Business Cases – Section 2.3 – Were business cases prepared supporting upgrades?** Notes the absence of businesses cases for upgrades to any of the existing networks aside from Tasmania Police.

**Recommendation 7**

**We recommend that network managers produce business cases for all major upgrades.**

**Parks/Forestry response to Recommendation 7:**

We agree.

Our existing network provides for the current operating needs of both Parks and Forestry. If a situation occurs whereby a major upgrade is required, a business case should be produced. In the advent of a bushfire, portable repeaters are available to be installed for the time required, and then removed; therefore, no major upgrades have been required.

**AUDIT CRITERIA 3 – IS THE WoG NETWORK PROJECT EFFECTIVE?**

**Recommendation 8:**

**We recommend that stakeholders involved with the WoG radio project re-engage positively to ensure a solution to the current impasse is achieved in the best interests of the stakeholders and the state as a whole.**

**Parks/Forestry response to Recommendation 8:**

We agree.

Parks and Forestry acknowledge the requirement to upgrade the existing network in the future, although the current 70MHz system is performing satisfactorily and will meet our needs for the next ten years.

Any new network developed must be able to provide a similar if not enhanced coverage to meet Parks/Forestry business needs. It also has to be noted that the existing system operates on a relatively small budget, and any new WoG network system would need to be similar in cost as the existing system.

Parks/Forestry welcomes any opportunity to participate in a WoG solution that will provide a service that is similar in cost and effectiveness to the existing system.

**AUDIT CRITERIA 3 - IS THE WoG NETWORK PROJECT EFFECTIVE? (CONT.)**

**Recommendation 9**

We recommend that the WoG project's objectives should include meeting entity requirements and the consultant be asked to re-evaluate the revised set of objective.

**Parks/Forestry response to Recommendation**

Agreed.

**AUDIT CRITERIA 3 - IS THE WoG NETWORK PROJECT EFFECTIVE? (CONT.)**

**Recommendation 10**  
**We recommend that the project team become independent from any of the entities involved in the WoG network**

**Parks/Forestry comment regarding Recommendation 10 (with indication of current involvement):**  
Concept supported.

**AUDIT CRITERIA 3 - IS THE WoG NETWORK PROJECT EFFECTIVE? (CONT.)**

**Recommendation 11:**

**We recommend that the Government considers the establishment of a separate unit to implement and operate a WoG network if existing stakeholders fail to make significant progress toward an agreed WoG solution.**

**Parks/Forestry comment regarding progress toward Recommendation 11:**

The establishment of a separate unit to implement and operate a WoG network is unlikely to resolve any impasse identified by agencies if the new network fails to provide similar operational requirements, agencies interoperability, or is beyond existing agencies resource availability to maintain.

**TASMANIA POLICE**

In accordance with *Audit Act 2008* section 30, a copy of the Report by the Auditor-General was provided to the state entities indicated in the introduction of this report. A summary of findings, with a request for submissions or comments was also provided to the Minister for Police and Emergency Management.

The Department provided the following comment.

I note and accept the Audit report findings that the TMRN does not have direct interoperability with other networks. However the Trunk Mobile Radio Network (TMRN) used by Tasmania Police is currently the only multi-agency network and therefore the benefits of TMRN in terms of radio features, redundancy, network availability and reliability are shared amongst all users.

I am pleased to see that the Audit Report contains recommendations in relation to the need to reduce duplication in the management, costs and infrastructure associated with the current situation. This is one of the objectives of the Interoperability (or WoG) Radio Project.

In conclusion, DPEM is strongly committed to the Whole of Government concept and to working with other key stakeholders, to focus on delivering a whole of Government solution within the timeframes endorsed by the Project Steering Committee.

**TASMANIA FIRE SERVICE**

Mike Brown, Chief Officer of the Tasmania Fire Service (TFS) provided the following comment.

TFS supports recommendations around reducing duplication (of both effort and infrastructure), the independent governance of the WoG network, and moves to progress in the program in general.

We must always be mindful that while there must be an overall objective of efficiency and effectiveness; EM communications systems must be robust and reliable, to maintain and ensure user and community confidence.

**REPORT RECOMMENDATIONS**

The Report made a total of 11 recommendations and the following section of the questionnaire provides the emergency service organisation the opportunity to demonstrate the actions taken in response to the recommendations of the Auditor-General. Supporting documentation can also be provided as an attachment to your response.



**TASMANIA POLICE - RESPONSE TO REPORT RECOMMENDATIONS****AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?**

**Security – Section 1.2 – Are Current Networks Secure?** Police and paramedics have the strongest need for security and confidentiality, however any person can purchase scanning units to listen in on emergency service broadcasts, and that analogue transmissions are considerably easier to scan than digital transmissions. To optimise coverage, the Police/TESI network operates in analogue transmission mode for all dispatch calls, therefore outside parties can easily scan the majority of Tasmania Police transmission as they are not scrambled due to cost.

**Recommendation 1**

**We recommend that Tasmania Police, TFS, Ambulance Tasmania and SES investigate ways of providing secure and confidential radio communications.**

At this stage, it is not possible to provide secure and confidential radio communications across the individual radio networks.

The existing analogue networks are not secure and were not engineered to be secure; the establishment of the state disaster radio plan in the seventies and eighties (after the 1967 bushfire) enabled a wide range of services including local councils as well and land management agencies to communicate on common radio channels in an all informed way during emergencies. The priority was having an all informed communications system and security was not a consideration.

The Trunk Mobile Radio Network (TMRN) is a digital capable network. The use of digital for Tasmania Police dispatch purposes was discontinued some years ago owing to coverage issues, however digital talk groups are regularly used when more secure communications are required. In 2014, following a network upgrade, Tasmania Police implemented a Digital Dispatch radio trial in the Northern District. This has not extended to other regions due to restricted coverage when operating in the digital mode. The trial is currently being assessed to determine whether it can be extended to other parts of the State. Radio network coverage using the TMRN will always be less in digital when compared to analog communications where the terrain is not 'line of sight'.

When discussing secure communications it is important to note the following:

- Digital does not necessarily equal secure. Encryption is the only secure radio method however it is not available with the current network configuration. The dispatch consoles cannot operate in encrypted mode and the radios would all need to be upgraded to gain true security.
- Digital communications are only available between Tasmania Police radios. The Tasmanian Electricity Supply Industry (TESI) and SES radios use a different algorithm and cannot communicate with Tasmania Police in digital mode.
- Digital communications are not used on the recently installed Interoperability Gateway as it would compromise the level of security provided by digital. ie other networks use analog only, hence all communications would be open.

- As part of the Whole of Government (WOG) Tasmanian Radio Network (TasGRN) project the capacity for secure communications will continue to be explored noting that the final implementation will be in accordance with assessed risks and costs.

Contemporary technologies now make network security (encryption) readily available at a cost but a necessary option for future WOG networks.

**AUDIT CRITERIA 1 - ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

**Reliability** - *Section 1.3 - Are the current networks reliable?* Notes that TFS maintains Ambulance Tasmania's network under contract, which has in remote areas, been problematic particularly during the fire season when increased TFS traffic trended to congest the channels.

**Recommendation 2**

**We recommend that TFS and Ambulance Tasmania work together to resolve problems around congestion, particularly during the fire season.**

While there has been no specific issues raised by Ambulance Tasmania around congestion Ambulance Tasmania have recognised that increases in radio traffic in some growth areas have the potential to impact on services and are implementing planned network extensions.

**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

**Reliability** – *Section 1.3 – Are the current networks reliable?* finds that while there is no evidence to suggest that the network was unreliable, there are no reliability statistics available and standards have not been set.

**Recommendation 3**

We recommend that:

- TFS, Ambulance Tasmania, Forestry/Parks and SES set reliability standards and monitor against them.
- TFS, Ambulance Tasmania, Forestry/Parks and SES establish a register to record service outages and complaints regarding their networks.
- All service and complaint issues are resolved within pre-set targets.

TFS has network monitoring in place 24/7 and is proactive in network manage issues. We work within best effort response and maintain availability of technical support 24/7. The network has built in diversity which allows for work arounds with generally no loss of service availability.

We recognise a need to maintain statistics so that we can report externally against reliability and availability and these will be included in our next update of the Unit Business Plans

**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

**Interoperability** – *Section 1.5 – Are the current networks interoperable? Does a suitable fraud management strategy exist?* finds that the Police Network operating at 800MHz has no direct interoperability with other networks.

**Recommendation 4**

**We recommend that until the outcome of the WoG project is complete (and interoperability is achieved), emergency services should investigate and implement methods for further improving interoperability.**

This has been achieved in several ways recently.

50 VHF terminals were purchased to provide off network/on network interoperability between Police and other entities using VHF radio communications. Tasmania Fire Service provided the profile developed for their radios to ensure compatibility.

In May 2013 Tasmania Police issued SES with 55 portable radios operating on the TMRN to enable communications between SES and Tasmania Police.

In 2014, as part of the TasGRN project, new equipment (known as an Interoperability Gateway) was installed into the TMRN, as well as additional equipment installed into the TFS and Ambulance radio networks to allow their connection to the TMRN used by Police and SES.

The solution represents a further step towards greater interoperability and is an improvement over existing interoperability arrangements where Tasmania Police holds a stock of Tasmania Fire Service radios for communication purposes.

The installation of Interoperability Gateway equipment connecting the radio networks used by police and emergency services allowing them to be patched together when required, has been completed and tested.

The Interoperability Gateway Project commenced in September 2014 and the Interoperability Gateway became operational on 19 February 2015.

While the technical solutions for interoperable communications have been implemented there is a risk to “command and control” and operational effectiveness for all agencies unless properly utilised. This risk has been mitigated by the development of business rules at an operational level.

The Tasmania Fire Service has always had interoperability with partner agencies, Forestry and Parks in dealing with fire incidents. This interoperability also included Ambulance Tasmania, local government and timber companies. This was established under the state disaster radio plan.

The TasGRN project will further enhance interoperability between police, emergency services and other users by having all users on a single WOG network.

**AUDIT CRITERIA 1 – ARE EXISTING RADIO NETWORKS PERFORMING EFFECTIVELY?  
(CONT.)**

**Cost Effectiveness** – *Section 1.6 – Were the networks cost effective?* finds that there is unnecessary duplication of management and infrastructure across the existing networks.

**Recommendation 5**

**We recommend that duplication of infrastructure be costed and taken into account when considering how best to proceed with the WoG network.**

The Tasmania Fire Service shares site infrastructure with Police, Forestry, Parks, Ambulance, SES and local government. The TMRN currently utilises infrastructure provided by a number of parties including the electricity supply industry and Tasmania Police.

Tasmania Fire Service and Tasmania Police are in the process of integrating the Communications Services facilities and management. This includes identifying sites that are no longer required or where we can leverage off each other to improve services but reduce unnecessary duplication.

The TMRN Project Unit is currently working with TFS and Ambulance Tasmania to consolidate infrastructure at a number of sites which is a further step towards the reduction of not only infrastructure but also radio equipment.

Work will continue to identify opportunities for infrastructure and/or equipment sharing between the TMRN, Tasmania Fire Services and Ambulance Tasmania network where such opportunities arise prior to the Whole of Government Network implementation. DPEM is mindful that the network design of the Whole of Government solution needs to be developed and agreed and that there is no over-investment in site sharing at sites which may not form part of the Whole of Government network design.

**AUDIT CRITERIA 3 – IS THE WoG NETWORK PROJECT EFFECTIVE?****Recommendation 8**

**We recommend that stakeholders involved with the WoG radio project re-engage positively to ensure a solution to the current impasse is achieved in the best interests of the stakeholders and the state as a whole.**

Following the successful implementation of the interoperability gateway in February this year to allow communications between all Tasmanian emergency services using existing networks, work is continuing on the Tasmanian Government Radio Network project.

The TasGRN project will replace the current arrangements, whereby users operate on different radio networks, by delivering a whole of government radio network for use by emergency services, as well as other government radio users, by 2020.

To date, work on the TasGRN project has been undertaken by the same unit that manages the Trunk Mobile Radio Network (TMRN) used by Tasmania Police.

Following a review of the requirements to implement a complex project such as the Interoperability Gateway and the TasGRN project, the TasGRN Steering Committee decided to separate the TasGRN project from the TMRN unit, establishing a new project team to focus entirely on the future whole of government network.

The TMRN Unit will give priority to securing a new service contract for the TMRN and ongoing management of the TMRN and transition to the new whole of government network in due course. The TMRN is absolutely mission critical to Police operations and will need to continue to operate until the new WOG network is in place.

#### **AUDIT CRITERIA 3 – IS THE WoG NETWORK PROJECT EFFECTIVE? (CONT.)**

##### **Recommendation 9**

**We recommend that the WoG project's objectives should include meeting entity requirements and the consultant be asked to re-evaluate the revised set of objective.**

A Review of the TasGRN Business Case was completed in February 2015. The TasGRN Steering Committee accepted all of the recommendations of the report and has decided to separate the TasGRN Project from the TMRN Project Unit to ensure that a new project team is focussed entirely on the future Whole of Government network.

#### **AUDIT CRITERIA 3 – IS THE WoG NETWORK PROJECT EFFECTIVE? (CONT.)**

##### **Recommendation 10**

**We recommend that the project team become independent from any of the entities involved in the WoG network**

DPEM is committed to the Whole of Government concept and considers that the TasGRN Project is best placed to remain within DPEM to ensure that Tasmania Police and the Emergency Services remain committed to implementing a network solution that meets the needs of the Emergency Services into the future.



**AUDIT CRITERIA 3 - IS THE WoG NETWORK PROJECT EFFECTIVE? (CONT.)**

**Recommendation 11**

**We recommend that the Government considers the establishment of a separate unit to implement and operate a WoG network if existing stakeholders fail to make significant progress toward an agreed WoG solution.**

The Business Case review found that additional resourcing would be required to ensure that TasGRN project delivered on its objectives. The TasGRN Steering Committee has accepted the findings of the Business Case review and decided to establish a new project team to focus solely on the whole of government radio project. Project funds are available to ensure that the new project team is appropriately resourced.

The scope and objectives of the TasGRN project include examining options for how the new whole of government network will be managed.





## **APPENDIX 2 – HANSARD TRANSCRIPT OF EVIDENCE**



THE PARLIAMENTARY STANDING COMMITTEE OF PUBLIC ACCOUNTS  
MET IN COMMITTEE ROOM, PARLIAMENTARY HOUSE, ON FRIDAY,  
21 AUGUST 2015

---

AUDITOR-GENERAL'S REPORT REVIEW HEARING - GOVERNMENT RADIO  
COMMUNICATIONS

Mr DOMINIC MORGAN, CHIEF EXECUTIVE, AND Mr ANDREW O'BRIEN,  
MANAGER TECHNICAL SERVICES, AMBULANCE TASMANIA; Mr SCOTT  
TILYARD, DEPUTY COMMISSIONER, TASMANIA POLICE; Mr GAVIN FREEMAN,  
ACTING CHIEF OFFICER, AND Mr SCOTT WILSON-HAFFENDEN, DIRECTOR,  
INFORMATION SERVICES AND COMMUNICATIONS TECHNOLOGY, TASMANIA  
FIRE SERVICE; Mr MARK BRYCE, DIRECTOR OPERATIONS, PARKS AND  
WILDLIFE SERVICE; Mr NIGEL FOSS, GENERAL MANAGER OPERATIONS,  
FORESTRY TASMANIA, WERE CALLED, MADE THE STATUTORY  
DECLARATION AND WERE EXAMINED.

**CHAIR** (Mr Dean) - Welcome. We have two apologies for today - Sarah Courtney and Scott Bacon were unable to be here.

This is a formal hearing; the proceedings are being recorded. It will be for public knowledge. The public are able to come here today if they wish. The press are able to come in as well. It is an open process.

In giving evidence, whilst you are here you have parliamentary privilege. However, once you leave this room you no longer have parliamentary privilege. If at any stage during the hearing you feel there is evidence you should give this committee that is confidential, then you would need to address that to the committee. The committee would then make a determination on whether we should receive that evidence. That can be taken in camera in certain circumstances.

This inquiry is a follow-up to the report of the Auditor-General. It was a 2013-14 report as most of you would be aware - Government Radio Communications - and we are following up on the recommendations as made by the Auditor-General at that time. At the end of this process this committee we will produce a report for Parliament. .

Is there any overall comment that any of you would like to make?

**Mr TILYARD** - To put it in context, Tasmania Police operates on the trunk mobile radio network - a digital cable network. We also operate on that network with the Tasmanian electricity supply industry - Hydro and TasNetworks. It is also used to some extent by the State Emergency Service. So in terms of responding to the recommendations and the questionnaire we were sent, we weren't required to respond to all of the recommendations because some of them didn't relate to Tasmania Police.

**Mr MORGAN** - It is probably worth clarifying and giving a bit of context about where the Ambulance Tasmania network fits in with Tasmanian Fire Service. I don't think it is a

relationship that is particularly well understood. How it works in Tasmania is that we own an infrastructure, but we ask TFS and pay a managed fee for TFS to manage that service for us so. We don't have in-house expertise per se on the equipment, but we work very closely together to ensure that both agencies have the interoperability in that process.

**Mr WILSON-HAFFENDEN** - At the time of the audit review, TFS and Tasmania Police - the Department of Police and Emergency Management - operated under separate corporate structures. Since that time in the process of integrating the corporate structure, hence the network managers, or the TFS network - the Police network and the government radio network - project are now all becoming consolidated under my management. One of the things that has done is provided some greater clarity in the capacity to work together in some of those infrastructure issues.

**CHAIR** - This has gone on for such a long time and it was happening when I was in the job, and I left in about 2002-03. In about 2006 the whole-of-government project team was set up to look at this issue to consider where it was going, where it should be going, to try to pick up the efficiencies, et cetera, that were needed within this process. It would seem that very little has occurred since 2006. It is about 11 years on and, with the greatest respect to all of you, we haven't progressed very far. I think that is the concern and the frustration that came out in the Auditor-General's Report, hence the reason we are going down the path in support of the Auditor-General's Report.

**Ms FORREST** - Before we move into the specific recommendations, I don't know whether Mr Tilyard wants to provide a bit of an overview of the whole of government approach. It is recommendation 8 and you may want to do it there, but that is one of the things that when we looked at the responses from the questionnaires we provided individually, it was clear there is a degree of collaboration. That's why you're all here across the table at once as opposed to calling you individually. Is now the time to have a bit of an overview of where you've got to, as opposed to leaving it until recommendation 8 or one of the others?

**Mr TILYARD** - I am quite happy to address that now because that is the crux of the matter, where we're going with the whole-of-government approach. You are right, this has been on the agenda for a long time. The people at the table here, including myself, have only been directly involved for the last few years. You might recall quite a number of years ago a lot of the work that was done was to settle a litigation between the users and the provider at the time. That was ultimately resolved, or part of the resolution to that was settled by the Crown acquiring the network from the provider. The Crown now owns the TMRN network - that is the trunk mobile radio network - that we in TESI and SS are using. There was a lot of work settling that litigation in acquiring the network. What happened thereafter was - and I think we reached a stalemate on whole-of-government radio - there was a focus on what the technical solution was going to be. That concerned the various entities because we have different business requirements with radio. The network we operate on now, the TMRN, operates in the 800 megahertz frequency range. We used to operate on 70 megahertz analogue, as the other users do now, but it was changed and we transitioned to what became the digital capable network.

One of the reasons we are in the 800 megahertz range in digital is there are some benefits of digital over analogue. The high frequency ranges also allow for better building penetration, for example, which is very important to us and to ambulance in particular because we do a lot of work, and our front line people spend a lot of time inside buildings. As opposed to the fire

service and the fire and park rangers, and certainly TFS do work inside buildings but a lot of their work and their bushfire work is out in the bush.

The lower frequency bands such as 70 megahertz have advantages in better coverage, and the smoke penetration, foliage penetration, analogue signals will cope a little better with the topography to mark the terrain. It will bend around hills, there will be digitals very much, if you can see it, and digital can see it. Analogue and the report covers off on some of this from the Auditor-General. With digital you will have coverage and bang, you have lost coverage, there is that real line. Analogue is more of a transition, the voice quality will not be so good but you can still understand what people are saying. There are distinct differences between the two.

There is a real concern because of some of the things happening nationally. COAG has a desire for radio interoperability. ACMA was in the process of reserving frequency band within the 400 megahertz range for government users, primarily emergency service organisations. Setting that aside and saying, no one else can use this other than emergency services, one of the benefits of that is, not only does that provide you with enhanced interoperability if most people are using the same frequency range. It also gives some sense of confidence to government and other people investing that you can spend money with networks and equipment that operates in that frequency range because you are not going to have to change it.

We are seeing a process now where even in Tasmania we are going to have to change because we are operating in the 800 megahertz range, but the 800 megahertz range is what the Commonwealth level is going to be used now for mobile broadband and that is the separate issue so potentially that could impact on our future use of the 800 megahertz range. We want to go to 400 for the reasons I have said, we are happy to go for the 400 provided we can get the coverage that we need but for the other entities that might be an issue for them.

The focus very much in the past has been, and we have had advice from consultants about this that the recommended position is that everyone should go to the 400 megahertz range. That is what has caused a lot of the issues. We are at the point now as a steering committee where we are not focused so much on the technical solution and that everybody must be using the same frequency range. We are more interested in meeting the business needs of the various entities. If we end up being able to do that and being able to afford to do that with one frequency range, then that is great. If not, the solution might be one network, one whole of government network that operates on dual frequencies, 400 megahertz and another frequency range. Maybe the users operate with on the TRMN and seamlessly transition between the two depending on what parts of the states they are in at the time.

That has been a significant impasse that we have now moved beyond. I do not want to speak for some of the other people here who are on the steering committee with me so they will be able to speak from their own perspective. The hiatus that really bogged this down for years, we have moved beyond that now and we are not as locked into a view that everybody must use this one particular frequency. It is more a case of everyone has their legitimate business requirements and primarily they have to be met. That is the position, so in that sense we are moving forward.

**CHAIR** - On that point how does the - I am trying to think of a mainland one that would be similar to ours, maybe the territory. How do they operate?

**Mr TILYARD** - There are various arrangements for around the country and one of the issues we have in Tasmania is that we have the most challenging topography of all. Most of the jurisdictions, and they are at different stages of doing things on the network. They do operate on more than one frequency. In the major centres it is primarily 400 MHz digital but in some of the rural areas they are still operating on different frequency bands. It is mainly the fire agencies that are using different bandwidths. Most of them have moved off 70 MHz to 160 MHz now and there are valid reasons for doing that. I will let the fire and ambulance speak about the 70 MHz networks but they need to move off 70 MHz anyway because that the point essentially where there are [inaudible] suppliers still making 70 MHz [inaudible] although you can still source it. There are lots of issues now with white noise associated with that frequency band, another reason why they want to move off it.

There are differences in all the jurisdictions and quite a lot of money being spent in some of them. I know Queensland, in the lead up to G20, spend a significant amount of money putting in a new network up there in the 400 MHz range.

**CHAIR** - So it is fair to say we are locked in at this stage as to the direction that you believe should be taken - the whole of government network - and that you are moving down that path. Is that it?

**Mr TILYARD** - Yes, everyone is committed to being part of the whole of government network. It is just going to be a case of what it is going to look like and how it is going to be managed. We have a program of work to get us there by 2020, which is the target for us.

**CHAIR** - That is the time, 2020?

**Mr TILYARD** - Yes. The ACMAR arrangements want to see this transition into the 400 MHz range by 2018, but Tasmania being a regional area, then 2020 is the date for us.

**CHAIR** - Are there any over-arching questions that members might have at this stage?

**Mrs TAYLOR** - Why is it slower for us?

**Mr TILYARD** - It is typical. We have a regional area and they appreciate the fact that some of the significant investment requires -

**Mrs TAYLOR** - So it is money we are talking about?

**Mr TILYARD** - Radio networks are not cheap.

**Mrs TAYLOR** - I know, I understand. But you are emergency services and we are a regional area so it is really important that we resource that appropriately.

**Mrs RYLAH** - I would like to go back to one of the comments and get some background on the Auditor-General's report, where he says 'the reliability measures don't take into account force majeure'. I would have thought a force majeure is the prime time that you guys need to have reliable networks. Can you give me some background on why your reliability measures don't take into account force majeure?

**Mr TILYARD** - It is a commercial matter, and whilst I can't give you the technical details around it, I think any provider of services like that - they are loath to commit to doing things that are outside of their control as well. So if there was a major occurrence that realistically they couldn't supply the service - like if we had an earthquake that took down half of our towers - then it is hard to hold them accountable for something that is largely outside of their control as well.

**Mrs RYLAH** - A supplementary - to me the issue then is the risk management plans that sit around force majeure and that isn't covered in the Auditor-General's report because it doesn't go there. I would like some understanding of what those risk management plans are for the different agencies.

**CHAIR** - That might come out in the recommendations. Their plans are covered off in one of the recommendations so it might be better if we start on the recommendations now and come to that.

**Mrs RYLAH** - I would just like a simple, 'Do we have sufficient plans?' and a simple answer.

**Mr TILYARD** - Normally the issue that we have is there will be a problem on a particular tower. It will lose power, or there will be some technical issue on particular towers. It is very rare that you will have several towers go down at one time. Occasionally, we do lose the service for whatever reason on a particular tower. But we do have arrangements where there is coverage from other towers because of the way it was set up initially to provide radio communications in the area. In some cases, there might be small pockets where you might not have any. You manage around that.

The arrangements are such that we can get the communications up and running again very quickly if we have to. If you look at the reliability statistics included in the Auditor-General's report, we are above the threshold all the time for reliability of the network, so it is not a major issue.

**Mrs RYLAH** - But do we have the risk management plans in place?

**Mr TILYARD** - One of the issues the Auditor-General legitimately raised is that there needs to be better documenting of the arrangements. The arrangements are there and they work well, but having them written down in a consolidated form is a weakness that needs to be addressed.

**Mr WILSON-HAFFENDEN** - Noting considerable time has passed, one of the key things when the department took ownership of the network was around putting in multiple switching paths. One of the great exposures previously was it was single path, so as soon as one link went down, effectively the whole network could be cut off. Even to providing some redundancy in there, one of those key measures we have undertaken was to put in multiple switching paths to reduce some of the risk associated with that.

**Mr MORGAN** - The benefits of the interoperability gateway we installed earlier this year means, for example, if the police network was to catastrophically go down, we still have an ability over the TFS or the AT network to deploy using radio. An important aspect of the risk management approach is this aspect of interoperability. I think in the end it was

approximately \$600 000, and we have the interim interoperability gateway set up between the agencies. In effect, as we stand today, we are running three networks across the state and they can all talk. If there was a force majeure that happened to the Police TMRN, there is an ability for us to at least communicate with police in that situation. The other important thing is that even though there is great convergence of technology between radio and telecommunications - for example, mobile phone networks - we have actively sought to keep those things apart. You could run a radio network on a mobile phone network, but we don't do that because it's a secondary level of redundancy for the services. For example, all our ambulances carry secondary mobile phones. If they were to go into an area where they didn't have radio coverage, the chances are they are going to have mobile phone coverage, or vice versa. There are multiple layers to the risk management approach.

**Mr WILSON-HAFFENDEN** - We have a number of portable repeater towers. We routinely deploy those during operations, but they can also be used should a tower go out. They can be put there for the repeater towers.

**Mr TILYARD** - The interoperability gateway came on line in February this year. That is work that was done as part of the whole-of-government radio project, and was the primary focus over the last 12 months. It shows we are working together in delivering things as part of the whole-of-government project as well. One of the recommendations that came out through the Auditor-General's Report - and it was one of the recommendations in the bushfire inquiry report from 2013 - was this issue of radio interoperability. Whilst a whole-of-government network will take us to a whole other level, we now have the means to connect our frontline people to each other as required in the field.

We are at a point now within Police where - because we have mobile data which is delivered through the 3G telecommunications network - if our entire radio network went down, we can still communicate with all our people through the mobile tablet devices they have. The radio room can communicate messages to them and we haven't had that capability before. There are other fallback positions, too. We have arrangements around use of mobile phones and other things. These arrangements are all in place just in case, but we have a very reliable network that is even more robust since we finished the most recent upgrade by replacing the switches and other elements that Scott mentioned.

**CHAIR** - Do Forestry and Parks have any comment to make on that?

**Mr BRYCE** - There is a reasonable amount of redundancy in the system - 70 MHz covers a wider area. If one of the towers, for one reason or another, mainly through weather events, is taken out, we can get portable repeaters in. There is automatic reporting when faults occur at each of the towers and base stations. We can get the portable repeaters to cover those gaps until we can get something fixed.

**Mr FOSS** - We work very closely with Parks. We share infrastructure. I really cannot add much to what Mark said there, but the amount of non-operable time, if we do happen to have a weather event that takes out a transmitter, it is a matter of hours. If there is a major event, in terms of risk management we do not have the documentation. If we have a fire and we know there is going to be a lot of activity, we will take a portable transmitter to the site in the event that there is a breakdown but again, the documentation is there so you can capture that.



**Mr BRYCE** - I should say in terms of the mobile network, out on the west coast and the more remote sites we just do not have the mobile access. Satellite communication is variable too. It is probably at this stage unless you can actually take emergency vehicles with you for personal safety, then the radio network is an important aspect of that for our staff.

**Mrs RYLAH** - There is a new satellite going up at the end of this month, I understand for the southern stage.

**Mr TILYARD** - I think one of the issues with the satellite is that they are what they call 'low-orbiting satellites', so they are fairly low on the horizon for Tasmania. It is not as if they are directly overhead.

**Mrs RYLAH** - So hills still get in the way.

**Mr TILYARD** - I am not a technical person but even if you had a 100 per cent satellite network, people would think that gives you 100 per cent coverage, 100 per cent of the time, but it will not. Because of that topography, there are still valleys and areas where the satellite signal -

**Ms FORREST** - If you go up the Gordon River or something like that and you have the hills on each side and you are just in the shadow -

**Mr TILYARD** - You just won't get it, yes. That is right.

**Mr BRYCE** - Even in those sorts of situations, you can move around and you will find that that frequency wave will bounce, so if you just move 10 or 20 metres, all of a sudden you get communications. Then you move 10 metres, 20 metres and it is not there. The coverage, as seen in the Auditor-General's report, is pretty extensive in the west.

**Mr TILYARD** - We put out the coverage maps so that our people know where they probably will have coverage and where they do not. You find that the people who work out in the field will know that if they cannot get anyone here, if they drive up to the next bend in the road, they will get someone. There is that level of knowledge on the ground. They will manage those risks around that.

**Ms FORREST** - Just before we move on, Mr Tilyard, Adriana asked about resourcing and that [inaudible] being given an extra two years. Can you just inform the committee about the financial resourcing of this? Is it all state Government funding? Is there some Federal Government funding? Has it been asked for?

**Mr TILYARD** - It has been asked for. It is state Government funding. There are obviously costs associated with operating our current networks which can be absorbed into the whole-of-government network eventually, but clearly we need to keep operating our network until it transitions to the new one. There has been money set aside. There is money this year and there is money identified across the forward Estimates for this project.

What the total cost will be we do not know yet because we still have to do the work of gathering the business requirements and then looking at what the technical solutions are and what they are going to cost us. At the moment it is really funding that has been identified across the forward Estimates to make sure that this work can be done. When we get to the

point of going out to tender and out to the market and seeing what it is going to cost us to implement the solution and then deciding on the options, that is when we will have a much clearer picture of what the actual cost is going to be.

**Ms FORREST** - Is there any capacity to ask for Federal Government assistance here for this? It is not cheap, I am sure it is not. Is that a consideration or -

**Mr TILYARD** - I do not think there is any avenue that we can actually seek -

**Mrs TAYLOR** - It is not an operation that we talked about, such as infrastructure upgrade or -

**Mr TILYARD** - The one part that we do substantially own are the towers. Some are owned and some are leased. What we do know with the new network is that we are going to need additional towers, we are just not sure yet precisely how many.

Between us at the moment, the town we are in has 67 towers and I think the other networks have slightly less. Some of them unfortunately are located even on the same hill - with this rationalisation of the resources - and there are a couple of areas where there are reasons why you need two towers, strangely enough, but we want to rationalise the resources so it all becomes part of one network.

**CHAIR** - At one stage Hydro would have fitted in there somewhere?

**Mr TILYARD** - They still are - TasNetworks - part of the cost of operating the network is money to TasNetworks to use some of their towers. There is a mix of different towers around the state. It is about bringing all this together. Again, this has been one of the reasons why the project has been difficult in some ways and that is that the users see their towers as theirs - 'These are our towers, what are you trying to do with our network?' We are moving beyond that; these are essentially public assets and government assets so let's talk about it as one network, not as 'these are my towers, those are your towers'. We have made progress past that.

**Mr WILSON-HAFFENDEN** - It is important to recognise that there are two components. One is the trunk mobile radio network as it stands at the moment, which is effectively now funded through contributions through the department with state government funding but also contributions from the other users being the electricity supply industry.

That funding goes in and it is collected to manage the existing network. Then the development of the whole-of-government radio network is what we are seeking funding through the state Government for. On that point, there is a management group which sits across that trunk mobile radio network, and we deal with those issues around the infrastructure and the capacity to leverage off and share some of that infrastructure.

Even as I mentioned earlier, with the greater alignment between Tasmania Fire Service and Tasmania Police, we are actively now starting to develop those plans to consolidate and remove some of that duplication in the infrastructure. That is a good step towards us getting towards that whole-of-government network.

**CHAIR** - Is it right to say then that at this moment funding is not holding up progress?

**Mr TILYARD** - That is correct. We have the funding that we need at this particular stage of the project to do the work that needs to be done. We have funding this year - \$2 million - and that will allow us to do the work that we need to do over the next 12 months, and there has been funding identified across the forward Estimates. We are phasing that according to the work that needs to be done in those brackets.

**CHAIR** - We will move into the first recommendation of the Auditor-General and that was the recommendation that Tasmania Police, TFS, Ambulance Tasmania and SES investigate ways of providing secure and confidential radio communications. We have pretty well covered some of these issues.

Is there anything you want to add in relation to that? We have the answers provided to the questions that were set out under these points. Is there anything you would like to add or any questions that members may have?

**Mr MORGAN** - We are doing some additional work in this space, even beyond the description that we gave. Some of the things that we do to improve the security of the network is all our vehicles use statusing - little codes and data packages that are sent over the radio network that are only decrypted at the other end to the computer dispatch system.

So the general public, although they can hear analog radio, digital encrypted is the preferred solution, certainly for police and ambulance. These data bundles only let the end users know rather than transmitting 'We have arrived at Royal Hobart Hospital, we're at this address', or whatever.

The other thing that we are doing is, we are in the process of rolling out what we call in-vehicle information systems. It is a system not dissimilar to Tas Pol's in terms of secure data, patient identifying information and patient information about their conditions are now securely able to be transferred over the mobile data network rather than the radio. The rollout will commence shortly and my understanding is that it will be done by the end of this financial year. They are another couple of layers of things we are doing to improve security until we get the encrypting up.

**CHAIR** - As we go through, it might be helpful if people have questions about any service. Are there any questions?

**Ms FORREST** - This relates to the comments made in both responses about the encryption. Encryption is obviously an expensive component of doing it in an appropriate way, and that an additional encrypted network is the only guaranteed solution to this technology feature. Police have said that encryption is the only secure radio method available. It is not available in the current network configurations - that may have changed a bit - and the despatch console cannot operate in encrypted mode and all radios will need to be upgraded to gain security.

Further on it says that contemporary technologies now make network security readily available at a cost, but are a necessary option for future whole-of-government networks. Do we know what that cost is? It is easy if you have levelled encryption in terms of patient information and data, but I am confused about where we have got to with this, which seems to be an essential part of it. It seems to be costly, but I am not sure where you have got to.

**Mr TILYARD** - The short answer to the question of what digitally encryption is going to cost us is that we do not quite know yet. It is expensive. It is functionality that we want a new whole-of-government network to have for those users that need it, so that is probably going to equate to those users who want to pay for that functionality. At the moment, the TIA Marine is a digital-capable network. It was not designed as a digital network; it has been upgraded to a digital network over a number of years with two major upgrade projects.

We do not operate it on a day-to-day basis at the moment in digital mode, apart from in the Launceston area. We have digital chat channels available and we can establish digital channels in basically any part of the state with specific operations. Digital is more difficult to monitor than analogue, but it can be monitored. Encrypted digital basically cannot; that is a whole different level of security [inaudible]. We hope is that the new network will have digital encryption capability, but it does come at a significant cost.

We actually looked at digitally encrypting some of our existing radios for one of our specialist units. I think it was quite a few thousand dollars per radio. We operate about 1 700 handsets so you can imagine the sort of costs entailed - and that is just doing it to the radios and I understand that does not give full digital encryption across the network. I think some radio stations operate in a digital fashion. There is certainly the functionality that we want, but it is expensive.

**Ms FORREST** - In terms of breaches of confidential information, like patient details or someone the police are dealing with or someone trapped in a fire or whatever it might be, have there been incidences of that occurring that would make it imperative that we have this level of cover?

**Mr TILYARD** - I am not aware of a security breach of that nature. I am sure that there are people out there who are scanning our transmissions, so I am sure that they are hearing some personal information. That has always been the case. It is the case in other jurisdictions too. Not all of them are operating on fully digital networks.

**Ms FORREST** - I have an example of that where a relative knew about the death of a young person before the family did.

**Mr TILYARD** - Our biggest is problem is Facebook.

**Ms FORREST** - This was not Facebook; it was going back a while.

**Mr TILYARD** - It can happen.

**Ms FORREST** - It can be quite significant.

**Mr TILYARD** - It can happen. Not everyone is out there trying to scan police, but certain people do because they have an interest; other people are criminals and they want to do it. There are people out there scanning and personal information is transmitted over our radio networks even though there is, in some cases, less of that these days through the statusing type stuff, because we do some of that too. Before we had the automatic vehicle location - AVL - automatic statusing that happens now, that would have happened over the radio.

Personal information does get passed. I am not aware of any case or specific issues around that at the moment, but it could happen.

**Ms FORREST** - With Facebook, isn't it that people are witnessing the scene as opposed to scanning the police radio frequency?

**Mr TILYARD** - Yes, usually. Someone hears something and they let the relatives know before the police have had time to pass on the death message. There is no way we can get around that. We're seeing it more and more, but for death messages we want to do it in person. It's almost as if we have to do it on Facebook first and then knock on the door, which we won't do.

**Ms FORREST** - I understand the challenge there.

**Mr TILYARD** - It's a huge challenge.

**CHAIR** - It's all the social media.

**Mr TILYARD** - It is. These days people generally know everything you're going to tell them before you get to them.

**Mrs TAYLOR** - My question is not at all related to your radio communications, but I have to ask it some time today. Are ambulances not provided with GPS?

**Mr MORGAN** - That is part of the in-vehicle information system. There are GPS at the moment - and correct me on the detail - but they don't poll frequently enough and they have to be manually polled. They are not currently automatically displayed on geostationary mapping. The whole in-vehicle information system project captures a lot of features for us, including enhanced duress alerts for our paramedics, which does include GPS. Using a common operating platform provided by DPIPWE we can literally see the ambulances moving around on the scene.

We can see where instances of the incident are occurring; we can see where all our defibrillators are around the state so we can make judgments in real-time due to spatial mapping of whether we're better to deploy community resources, fire resources, police resources - in fact, we deployed Parks and Wildlife last Friday to a cardiac arrest.

For us, this sort of technology will be rolled out before the end of the financial year. The power it delivers to the community is quite phenomenal. The fact we could even have a conversation 12 months ago about turning our police, fire, SES, Parks or any number of organisations, it wouldn't have been heard of.

**Ms FORREST** - Did you say all your defibrillators? Does that include ones in businesses et cetera? Do you know where every defibrillator is in Tasmania?

**Mr MORGAN** - Yes. We currently have 550 defibrillators registered with the Early Access to Defibrillation Program. To put this into perspective, Tasmania now has a defibrillator for one in every 910 people. The next closest jurisdiction in this country is Victoria, with one to three - that is, we have three times as many as the next closest jurisdiction and we're streets

ahead of everywhere else. It is this technology and the geospatial mapping and the ability to locate crews and devices and incidents. The technology we're all talking about here is -

**Ms FORREST** - The paramedics put themselves in danger going into some circumstances.

**Mr MORGAN** - Correct.

**Ms FORREST** - They put themselves into danger going into volatile situations. The police may be there but they can be in trouble too.

**Mr MORGAN** - There is no doubt about that. That is a feature of the life of a paramedic. One of the things I am particularly interested in coming out of this future program of works is that the technology will allow us, with the in-vehicle information system, to directly download vital information that a dispatcher is told, but entered into a database and it appears on the paramedic's screen. Any information the organisation has is presented to the paramedic. That takes all these points of failure about 'What if an individual were to forget to pass on vital information?' - clearly we have a responsibility to ensure that doesn't happen. These sorts of technologies that we are talking about here will go a long way for that.

**Ms FORREST** - Say an ambulance was called to a private residence for an alleged cardiac arrest, and got there and it was something very different. There are no police there at that time because they don't attend that sort of event. Do you have the capacity to communicate quickly with the other services to get some help for that officer?

**Mr MORGAN** - Yes. The technology we're talking about, every paramedic crew has a portable radio that has a duress device. This one of the things that most fascinates police and ourselves - the ability to have duress devices that will work within buildings and will penetrate out. At the risk of getting into a level of detail - I am not technical either - but basically a portable radio puts out approximately five watts of power, whereas a base station radio in a vehicle is up to 25 watts. They are significantly less strong in their signal strength. By using a digital system that has great building penetration, we are very optimistic that we will be able to enhance the security and safety of paramedics by going to this type of -

**Mrs TAYLOR** - I haven't received an answer to my question. My question was, do ambulances have GPSs?

**Mr MORGAN** - Some.

**Mrs TAYLOR** - It arose out of a personal incident. About a year ago there was a medical emergency at my house. I called an ambulance and the ambulance - we are 20 minutes maximum from the ambulance headquarters in Goodwood Road. It took about three quarters of an hour and two phone calls from the ambulance to ask where we were. Having given the address, tourists get to our place with an ordinary GPS and the ambulance guy said -

**Mr MORGAN** - Do you mean GPS mapping?

**Mrs TAYLOR** - I mean a GPS like everybody has in a car. I was astounded that the ambulance couldn't log in where the address was and come to the address. Their problem was they could not find us.

**Mr MORGAN** - All of that is part of the in-vehicle information system program, so literally they have a screen about this size that directly from the computer-aided dispatch, down drops the already verified address, and it brings up on the screen the route for the paramedic to drive to your house.

**Mrs TAYLOR** - Yes. So we now have those in all our ambulances?

**Mr MORGAN** - No. That is some. We have completed that trial. That will be rolled out before the end of the financial year.

**Mrs TAYLOR** - This financial year?

**Mr MORGAN** - Yes. We are fully funded for that.

**Mrs TAYLOR** - I would have thought it was standard equipment.

**Mr MORGAN** - No.

**Ms FORREST** - You can put it in your iPhone.

**Mrs TAYLOR** - You could.

**CHAIR** - A similar situation happened at Dilston where I live which you would be aware of it. I think ambulances made some changes as a result of that, where they missed a turn to get the right turn and a chap had had a heart attack, and he died before the ambulance arrived. But it would have happened anyway. I think that was the evidence that was provided. It wasn't keeping up with road structure changes and so on. I think that was one of the issues with the mapping. The road had changed since the update of the systems. The ambulance had the wrong directions to go -

**Mr MORGAN** - I think there is a couple of important points to make about this. The utilisation of manual maps is the current standard for emergency services.

**Mrs TAYLOR** - That is what they did. They were trying to use a street map to find us.

**Mr MORGAN** - Yes. That is the normal and appropriate way to do this. All the maps are current in that regard, and we counsel our staff extensively, GPS mapping is an advisory tool. You should never over-rely on it over and above common sense.

**Mrs TAYLOR** - It sends all of us up the wrong country road occasionally.

**Mr MORGAN** - It does. That is the important thing. The other point to make is that these devices are only as good as the information provided. In an emergency situation some people believe - and I do not know the individual circumstances of either of these case - they are being very clear in their instructions and that can be problematic.

**Mrs TAYLOR** - I was going to add that the beauty of living in the bush is that we now have a road identification system where if you say, '29 Funslow Road', it means you are 290 metres up Funslow Road. When we did that innovation a couple of decades ago it was fantastic.

**CHAIR** - Before I go to Joan, time is an issue I wanted to talk about. I think we are programmed - advice given to allow our guest - I think it was 12 o'clock cut-off time for us. So I would like to wrap up at least by 11.45 a.m. We might need a five minute comfort break shortly.

We have a lot of recommendations to cover so I ask that we keep it to the point if we possibly can. We will go to Joan for ambulance.

**Mrs TAYLOR** - I don't have any questions.

**Ms FORREST** - Following up from Adriana's question, your third comment and response to recommendation one, Dominic, says that this system that you are referring to will be rolled out at the conclusion of this year coming. Is that on track?

**Mr MORGAN** - That is the one that I am now saying is this financial year. It became complicated because the vendor, which is a multi-national, was bought out by another company and they were unable to provide the hardware. They wanted to provide us with a new piece of hardware and I have insisted that they retrial it from scratch.

**Ms FORREST** - So you are expecting it by the end of this financial year?

**Mr MORGAN** - This financial year, yes.

**Mr TILYARD** - I mentioned that we are using digital despatch in Launceston. We are finalising the evaluation of that and we hope to be rolling out and deal with despatch in the Hobart area shortly. That won't give us digital despatch in all parts of the state but it will give us digital despatch in those major centres and we also will hopefully get it on the north-west coast. We do have a digital capacity, statewide, if we need secure communication.

**Mr FREEMAN** - Our existing analog network is not secure. It was never designed to be secure and I have to say upfront that probably part of the sticking point you mentioned, Mr Chair, in 2006 when this project started, my organisation resisted this. I am sure they had very good reasons at the time to do that and one of them was about the cost involved with a secure network. I assure the committee that our thinking shifted completely away from the network and we recognise that it is a necessary component of the project going forward.

**CHAIR** - That is good, thanks for that, Gavin. Parks and forest on recommendation one?

**Ms FORREST** - Recommendation one doesn't apply to them.

**Mr MORGAN** - We were not required but it crops up in recommendation three in terms of reliability.

**CHAIR** - We can now go to recommendation two. Recommendation two was that we recommend that TFS and Ambulance Tasmania work together to resolve problems around congestion, particularly during the fire season. Could the TFS and ambulance address that side of it?



**Mr MORGAN** - It was a proposal that we already generated. We had quite detailed network specifications done by a consultant to assist us. The issue was, we have our own network and then in the more rural and remote areas - pretty remote areas - we would rely on a shared channel with TFS.

In the general course of business because there are such low volumes, it is fine, but there were some concerns that were raised by our staff about congestion during the bushfire season so we have progressed down that path.

I am happy to table a schematic of what is currently being put in place. We understand this work will occur during the spring season. The TFS technicians will be installing additional base stations in these rural and remote areas which will give us independent radio channel extension to the east coast and the north-west which addresses that.

**CHAIR** - Gavin, did you want to add anything further?

**Mr FREEMAN** - No, nothing to add.

**CHAIR** - You made comment that the installation is currently in progress and will be complete by the next fire season so you are on target. It is all scheduled to be the case. Any questions in relation to this recommendation?

**Mrs TAYLOR** - A general question - it has been only two years since Dunalley - the situation won't happen again in terms of people being able to contact each other, et cetera?

**Mr TILYARD** - We now have the capability for those frontline people to talk directly to each other but the process for that is basically our radio room and in FireCom, the TFS radio room, liaise and they both flick the switch and it allows that capability. We don't have it switched on all the time because we don't need it. It has been tested and built into our exercise program now - our regular emergency management exercises. We do not believe it is needed as yet. The last two fire seasons have been not so bad, certainly by comparison with 2013, but it is there and tested and ready to go.

**Mrs TAYLOR** - We might have it tested this year because we are told there is a severe El Nino happening and we are overdue in Tasmania for a huge bushfire, statistically speaking, if you look at the history of huge fires. One of these years we are going to have it and this may well be the year, so I presume you all have that in mind.

**Mr FREEMAN** - The ability for emergency services to be able to talk to each other on radios is important, but it is only one very small component of interoperability. The work we all do at the state level, through the State Emergency Management Committee, the planning and processes we go through, has improved so much over the last five or six years. That is the important part of all this, and we need to recognise that. The radio is an important part, but it is not all there is.

**Mr TILYARD** - There is joint training, joint protocols, joint response arrangements, et cetera.

**Ms FORREST** - You said that is in place and has been checked so you can switch it on when you need to, so is there a risk management plan to check that on regular occasions?

**Mr TILYARD** - Yes, that was one of the issues we identified when we were developing the project: it is not being used all the time, so how do you know when you flick the switch that it is going to work? Yes, there are those arrangements to make sure.

**Ms FORREST** - How often is that checked?

**Mr TILYARD** - I would have to check as to what they documented for the testing regime. I do not know exactly how frequently it is.

**Ms FORREST** - But it is relatively frequently, though?

**Mr TILYARD** - Yes, it is frequently enough so we can be confident in it.

**Mrs RYLAH** - Can we have that information provided to the committee?

**Mr TILYARD** - Yes.

**CHAIR** - You are saying you have to test those systems and I suppose there are state exercises that take place to do this?

**Mr TILYARD** - There are exercises. It has been built into our exercise program to test the interoperability gateway as part of the exercise.

**CHAIR** - The public can be assured things would be better in another situation similar to Dunalley?

**Mr TILYARD** - Yes.

**CHAIR** - We will move on to recommendation 3:

TFS, Ambulance Tasmania, Forestry, Parks and SES set reliability standards and monitor against them. TFS, Ambulance Tasmania, Forestry, Parks and SES establish a register to record service outages and complaints regarding their networks. All service and complaint issues are resolved within three set targets.

**Mr BRYCE** - We agree with all those recommendations. The current network meets our operational needs and that is one of the main reasons we have not gone to that extent in setting those reliability standards. Also, we are not dealing with life and death situations to the same degree as ambulance or police.

**Mrs TAYLOR** - You do in fire situations, though.

**Mr BRYCE** - Yes. During the fire season we are often involved in evacuating visitors and bushwalkers from fires, particularly in remoter areas. If the network has problems our staff, through operational means, find out very quickly and respond. We are able to respond fairly quickly to those sorts of things.

**Mrs TAYLOR** - Do you record service outages and complaints?

**Mr BRYCE** - Yes, we do, but we can do more.

**Ms FORREST** - In your response to the question you said you recognise a need to maintain statistics you can externally report against reliability and availability, and these will be included in the next update of the unit business plan. Has that been done, have you updated your unit business plans this year?

**Mr BRYCE** - Yes. The extent of our support of this system is we have one technical officer in Parks who usually does this. He maintains a register. We will be reporting on those faults.

**Ms FORREST** - Do you report them in your annual report, or where do you report them?

**Mr BRYCE** - They are reported in our work health and safety systems. They have corrective action reports. They get logged in there. The responses to those reports are then logged as well.

**Ms FORREST** - Is there any public reporting? The annual report, obviously.

**Mr BRYCE** - No.

**Mrs RYLAH** - That is part of the recommendation.

**Ms FORREST** - Yes, to report externally. Is there any plan then to include some of this information in your annual report, or some other publicly reported document?

**Mr BRYCE** - No, but I do not see there would be a problem with doing that.

**Ms FORREST** - That is part of the recommendation.

**CHAIR** - Just on the outages, I think you have referred to two or three issues across the whole network per year, mostly due to severe weather conditions. That is the time you would most want to use the system, in severe weather conditions?

**Mr BRYCE** - Lightning strikes, high winds, or snow, ice build-up on those facilities.

**Ms FORREST** - Sorry, that was the wrong department. That was not your response, I am sorry.

**CHAIR** - Yes, I was wondering where you were taking that from.

**Ms FORREST** - That was police.

**CHAIR** - We will go to police and fire service on recommendation 3. Is there anything you would like to add there, are you meeting the recommendations that have been -

**Mr FREEMAN** - From a fire perspective we are, but we can do better. We envisage going forward with the whole-of-government radio network project, which will improve every part of the business case. In terms of monitoring, we are proactive in managing our network issues. We have 24/7 tech support available. They respond quite quickly as required. The recording of the outages at the moment relies on the worksheets and the fault reporting they

do. We are working with our business units to make sure we can collate it in a better way. It is there but it is not readily available, and we do not report it publicly at this point.

**CHAIR** - Recommendation 3 relates to SES as well, now under your umbrella. They fit into your system.

**Mr FREEMAN** - Anything we are doing with fire, SES will [inaudible].

**Mrs RYLAH** - I was going to ask whether it is your intention to report it externally, so in your annual report?

**Mrs TAYLOR** - That would be great if you can all do it together in this new system. It would automatically logged, would it not? Then it would be automatically reported.

**Mr FREEMAN** - To be honest, it has not been a consideration to report in the annual report, whether that is the most appropriate place. It may well be, but with the business case there may be some sort of annual report on the GRN. I am not sure what that is going to look like. That might be an appropriate place to put that.

**Mr WILSON-HAFFENDEN** - We have previously run separate communication units, which supported the TFS network, a separate communication unit, which supported the police network, then a separate trunked mobile radio network. We are consolidating those into a single business unit plan, which will then start to establish some of these key performance indicators.

At the moment, a lot of the support to the trunked mobile radio network is contracted out. As part of that contract management you have certain standards and certain service targets, which people have to report against. Traditionally, an internally managed system, such as we have through the TFS, is a more responsive and less well-documented system. The integration of those two units will start to bring some of that into a common reporting standard. We are in the process of establishing those business plans at the moment. Once we get to that level of maturity, certainly, I think it would be in our best interest to report that publicly.

**Mr TILYARD** - Just on that issue, I was not sure that the recommendation went so far as to say it had to be recorded publicly.

**Mrs TAYLOR** - The issue for me is not necessarily about publicly reporting, but it is reporting to the Government. We never want to be in the position that Minister Petrusma was in the other day of saying, 'I didn't know', when the minister needs to know. That's what I am asking for. Will there be, or is there now, a common method so that the reporting of whatever happens is available to the Government that is the funding agency?

**Mr TILYARD** - Please don't take my query as being opposed to being transparent because I am quite happy for whatever recording and the fact we're in a better position than the other users because ours is a manual service and we have standards and regular reporting that is paid for as part of the service. I was just seeking to clarify the understanding of the Auditor-General's recommendation around the public reporting aspect. If we have issues with our network, issues that are likely to impact on service delivery in particular, we certainly let our minister's office know.

**Mr WILSON-HAFFENDEN** - The reference in that response around reporting externally draws from the TFS example where it is very much an internalised reporting mechanism at the moment. What we want to be able to do is ensure that first of all the chief officer is aware of that and then the various members.

**Mrs RYLAH** - I think it's very important that the community is aware of the confidence they can have. It is about building confidence. I don't think we need to show them it is  $x$  per cent, but we to show whether it is reliable or whether there is work being done to improve the situation. That is a very important part.

**Mrs TAYLOR** - Reporting externally to the public has its risks though. If you say, 'We had three outages', the media is like to get hold of it. So you need to be a bit careful.

**Mrs RYLAH** - That was further to my point, in the sense of being that we need to have an indication of reliability, not a statistic.

**Mr MORGAN** - Ours is ditto on TFS because they can bat on our behalf. [inaudible] managed by TFS.

**CHAIR** - The couple of outages of late have been talked about within the ambulance service. What is behind that?

**Mr MORGAN** - The short version is that we have two uninterrupted power supply - UPS - units. These are very large devices ranging between 400 kilowatts and 700 kilowatts. It is in virtually a brand-new centre with comparatively new equipment. This particular unit had a net failure which did what it was meant to do, which was trip circuit breakers. That led to a power outage and there were some issues around the response to that in the first instance, which has subsequently been corrected. There was a decision made to replace the entire pair of UPS devices, in consultation with the manufacturer. The manufacturer offered to do that at their expense. The planning is going forward and we received those devices in Tasmania but, unfortunately, the twin failed prior to that work being able to be undertaken. The advantage was that we had those devices then on site and so we were able to rapidly swap out the failed UPS device and replace it with a brand-new one, a next-generation device. We are assured by the manufacturer they have had no issues with these devices. The following day the manufacturer agreed to fly in their technicians from Melbourne to assist us to swap out the second device. This was a remarkable effort given all this was happening in a live environment. These things have to be moved around with forklifts. I am pleased to say that despite some of the operational issues we were confronted with with the first outage, they were corrected in the intervening weeks. The second outage, as much as we would not have wanted to have been tested as we were, demonstrated that those improvements that had been made worked well.

**CHAIR** - The public would be fairly comfortable now believing that things are pretty right?

**Mr MORGAN** - What I can say is that the two bits the technical advisers sent to us and that were the issue have now been replaced completely - bearing in mind this is highly sophisticated infrastructure, it has had a major [inaudible] to it. We have done a lot of them; mainly Andrew O'Brien and his colleagues have been working incredibly long hours. There are certain things; they have done thermal imaging testing of all of the major infrastructure

because that could be a key point of letting you know where the damage has occurred and whether there might be another failure. All of that testing has been done and has not revealed any new issues. Importantly, we have engaged a firm to assist us to do an interim review of all of these devices to pick up whether there are any other potential single points of failure that date back to construction. We are not aware of any at this stage but we will continue to improve the robustness of these systems.

**CHAIR** - Any other questions on any of these? We can go to recommendation 4 - 'recommend that until the outcome of the whole-of-government project is complete and interoperability is achieved, emergency services should investigate and implement methods for further improving interoperability.' That is across all services. Is there any comment you would like to make there?

**Mr MORGAN** - It was important to note that, as we said in our response, ambulance and fire service and Parks and SES have actually always had interoperability because of the way their networks were constructed. It is fair to say that the interoperability gateway closed that loop by bringing all of the agency services and five partners into full interoperability.

**CHAIR** - I notice in your answer you have said that in February 2015 the interim interoperability gateway was established with Tasmania Police.

**Mr MORGAN** - Yes, we had a device in our in our server room, the fire service do and the police do - that was what the Deputy Commissioner was referring to before about being able to flick a switch and being able to talk to a police officer or firefighter.

**CHAIR** - We will go across to the other emergency services.

**Mr TILYARD** - I think we have covered the gateway itself. In addition to that, there is a lower level of interoperability as we actually do share some radios in key parts around the state. Some of our police stations have TFS radios, which means we can also talk to ambulance and any other entities on those if we had to. They are available all the time; that does not require anyone to throw a switch, we just talk on exactly the same channels and the same frequencies. There is that lower level of interoperability too on a daily basis.

**Mrs RYLAH** - Is that the VHF terminals?

**Mr TILYARD** - Yes, just the handsets by which we can talk on the same channels.

**CHAIR** - We will go to recommendations 5 - 'We recommend that duplication in infrastructure be costed and taken into account when considering how best to proceed with the whole-of-government network.' I will just open it up - any comment on this area?

**Mr TILYARD** - As we touched on earlier, this is exactly what we are doing. None of us want the duplication in the network, it is about rationalising the towers. We know we are going to need additional towers on additional sites anyway so it will all be part of the one whole-of-government network.

**Ms FORREST** - Did those clarify that ambulance, in your report, Dominic, that memorandums of understanding have been created? Are they being done?

**Mr MORGAN** - We have drafts of ours and really the MOU relates to the interim arrangements. It was something the TFS sent us, it actually identified prior to all of this anyway that we needed to formalise this. You can imagine, 15 years ago these things were dealt with on the basis that it seemed like a good idea at the time. Mike Brown and I had extensive conversations about how it would be better to have it sorted out and documented in the future. Did we see the draft? We have had an exchange of drafts so it has progressed and now it is a case of pinning down these specifics.

The end point will be I think the model for the Tas GRN in terms of conceptually being managed as an entity for government, has landed quite well and the steering committee have some views that we will consider about strengthening that up as we make formal decisions. Not that I think it was an impasse but once we move beyond thinking about it in terms of departments, because we are not in the Department of Police and Emergency Management, and start thinking about it from end-users point of view, being the community, it is a very simple answer how you manage these things. All of the agencies are committed to a management model that would make that work.

**Ms FORREST** - When the new system comes online will it require new memorandums of understanding?

**Mr TILYARD** - Yes, it will.

**Ms FORREST** - So that will be done at a later time?

**Mr TILYARD** - Yes, essentially there will be a service level agreement. There will be an agreement as to what we require the network to deliver to us and this will be documented for each of the users.

**CHAIR** - The final project - the whole of government network - will there be a coming together of the communication areas that will operate from a single building with all organisations playing a part?

**Mr FREEMAN** - Do you mean receipt and despatch centres?

**CHAIR** - Yes.

**Mr TILYARD** - That is out of scope in terms of the radio project and, at this stage, out of scope in terms of the other major project that we are running which the emergency services call the computer-aided despatch project. That is the CAD system which is separate from the radio network.

**CHAIR** - Yes.

**Mr TILYARD** - If you are alluding to how we manage this thing once it is implemented then, yes, there will be a different approach. There will be a need for someone somewhere, probably a unit within Government although there are jurisdictions that have created separate little entities to manage their radio networks. There will be a centralised management area responsible for managing the network and then we, as users, engage with that management unit.

Where that sits at the moment in terms of, for example, is it within Government or is it within a particular Government department? That is not as yet decided. Through the work that we have done recently with our consultants, what we have decided on systemically is that they are decisions that need to be made sooner rather than later. We need a clear picture of what this is going to look like and how it is going to be managed in five years' time.

It is pretty much decided now, as opposed to waiting until the last minute, to make those sort of decisions because then we know what we are working towards. The plan at this stage is to have a centralised unit that manages the entire network so each of the entities do not have their own little sections managing it like we do now and how that fits with where our technical people sit we don't know exactly yet because we want a managed service but to the extent to which the service provider does certain things and some of our own people will do certain things as is the case now. Even with our managed network we get to draw the line exactly who does what and some of it is done depending on cost and those sorts of things.

**CHAIR** - That is a major issue for the project to look at that.

**Mr TILYARD** - Yes, it is something that we are going to be addressing over the next 12 months. We will reach a point where we have a position on that to recommend to Government as an early stage of the project, not at a later stage. How are we going to manage the final product now, not in three or four years' time.

**Mr MORGAN** - I think it is fair to say we don't see this governance as being particularly contentious for us. We are not at the point of documenting a decision of the steering committee but in all of our conversations to date, we are in reasonable accord as to a direction.

**CHAIR** - That was going to be my next question, is there that reasonable position across all organisations? That is the common position of all in relation to that end?

**Mr TILYARD** - It is, and in the final arrangements the users will have the ability to influence things. There may still be some sort of across agency management group as part of those arrangements so we will have the opportunity to input into key decisions that will affect our particular entities. Essentially the management, itself, will be managed by a separate entity.

**Mrs TAYLOR** - Who does the project team report to and is there a date for when you are supposed to report by?

**Mr TILYARD** - The project team reports to the project steering committee and several of us are on that project steering committee.

**Mrs TAYLOR** - Who does the project steering committee report to?

**Mr TILYARD** - Essentially, through our head of agency to our minister.

**Mrs TAYLOR** - Individual heads of agencies.

**Mr TILYARD** - It is usually through Police and Emergency Management, because that is the agency that has been given the responsibility to chair the project steering committee. I



know that Dom lets his head of agency know what is happening, and DPAC and the Treasury are on the steering committee.

**Mrs TAYLOR** - Is there a date when you are supposed to -

**Mr TILYARD** - There is not a specific date, but we have regular steering committee meetings. We have one coming up this Monday. One of the things that we do do is we send briefing notes through the minister's office on a regular basis to let him know what is happening. One of the things that we are working on with our consultants at the moment has been that we need to refine our project plan to some extent. Part of that will be some tighter reporting timelines.

**Mrs TAYLOR** - You have this plan between now and 2020. So there would need to be, one imagines -

**Mr TILYARD** - We have a project plan that we have been working to, but one of the things that we did, particularly when the auditor general's report came out, we engaged some consultants to review our business case, the Government's arrangements and our resourcing for the project to make sure they are right, and to revisit the scope and objective, which is something the auditor general makes comments on, and we will probably discuss it shortly. We thought it important to revisit that. That will lead to a revised business case and budget with the refinements we need to make to it.

**CHAIR** - Who is on the project? It is part of the steering committee and it is -

**Mr TILYARD** - It is in a slight state of flux at the moment, again because of the recommendations that came out of the auditor general's report because the project team that up until now has been running the project has been the TMRN project unit. They have been more or less doing both, managing the existing TMRN, and working on a whole of government project. That created a range of issues. As a result, we have followed the recommendations of the auditor general and also consultants that we involved to provide advice on this issue. That is to separate out the whole of government work from the TMRN work.

One of the issues around that is the TMRN is seen as the police network, even though it has other Government users on it. There was this perception that the police were running this thing because it's the police network or the police project unit. That was not helping when it came to stakeholders so we are separating out the two. Whilst we have a person at the moment who heads up the project management unit, we have now the new arrangements that Scott spoke to recently that did not exist at this time last year. He now sits across the entire DPM, including the fire, in terms of IT and information management. The TMRN project manager reports to him. We are going to bring in a separate person to act in a project management role for the whole of government radio project. That person's work, particularly over the next couple of years, is going to be more about managing the specialist consultants who are going to be out engaging and developing the business needs, rather than the people on the project unit trying to engage the stakeholders.

**CHAIR** - The reason I asked that question is that it came up previously and it was discussed with me. If I might say, there were some concerns within that project team. There were feelings of one organisation wanting to take control - all of this nonsense, in my view. It was

creating some angst and it was one of the causes for this project slowing down and some difficulties arising. Can we be assured now that project team is pretty much together and that they are working strongly with the steering committee to move this forward?

**Mr TILYARD** - The project team is focussing primarily now on the TMRN work because there is significant work, particularly in terms of engaging their new service provider, because the current service provider's contract expires very shortly and we are going to have to tender in the market to get a new service provider. They are focusing primarily on that. We are compiling a brand-new project team now. Some members might come across from the TMRN into the whole-of-government project, but we are actually getting some new people. Funding is available for this to get new people involved in the whole-of-government project.

**CHAIR** - Who is chairing the project?

**Mr TILYARD** - There is no chair of the project team, as such. At the moment, because of the way we've had to transition out of the arrangements, Scott and I have been managing it over the last five or six months. The reason I can't be too specific is because we've got a steering committee meeting on Monday where we are putting to them a revised governance proposal, so I can't pre-empt what the steering committee might decide on Monday. We have a clear way forward as to how we want to set the governance arrangements up now.

**CHAIR** - So the meeting on Monday will sort out some of these issues. It may well be this committee would want to come back to you or to write to you to find out some of the determinations of what happens on Monday.

**Mrs RYLAH** - My first question is about this interoperability. We have heard that you're all on the steering committee, but is Parks and Forestry on that committee?

**Mr TILYARD** - No, TFS represents the interests of Parks and Forestry on the steering committee.

**Mrs RYLAH** - Is reporting being done to State Growth and Resources ministers in regard to the progress on the interoperability issues you are doing with whole of government?

**Mr TILYARD** - Certainly all the agencies are aware of the interoperability arrangements because they were written to when the gateway came online and were made aware of its availability. Outside of that, there is not regular reporting from the steering committee to the other agencies at this stage. They aren't directly involved.

**Mrs RYLAH** - My concern there is that it is clearly a policy and a direction we're taking in getting a whole lot more people into national parks. I think the understanding - the interoperability - of Parks and Forestry networks is important. We have these tourists who know nothing about where to go or what to do should something happen. I think that is a key element and I would like to encourage that information-sharing.

**Mr FREEMAN** - We had longstanding protocols between Fire, Parks and Forestry relating to fire management and emergency management more broadly. We have what we call a 'MAC' - a multi-agency coordination group - which is also a longstanding group that meets very regularly. Its members discuss all manner of issues, including issues around the radio

project, which then are then fed to me on the steering committee. That's the mechanism at this point in time. I'm sure if it doesn't work for the two land management agencies, they will soon let us know. These are fairly robust governance arrangements that have been tried and tested over 15 years or so.

**Mr TILYARD** - As far as the whole-of-government project is concerned, Forestry Tasmania and Parks and Wildlife are identified as core radio users for the whole-of-government network, just as police, fire, ambulance and SES are. They're in there as core users. They have the same status as we do.

**Mrs RYLAH** - On a slightly different subject, I would like to ask Forestry a question. You mention here that you're dealing with Norske Skog and their radio network. Are you dealing with Forico and New Forests? They are now major land managers.

**Mr FOSS** - Yes, they are. They use our infrastructure and have transmitters on those. We can't talk directly to them, but, having said that, we have had little need to for quite some time for emergency management. They have [inaudible] had the firefighting capacity and the like, so our engagement with them is through the mobile phone network. We have made our transmitters and towers available for them to attach their transmitters to.

**Mrs RYLAH** - Did I just hear correctly that they don't have firefighting capacity?

**Mr FOSS** - It has been minimal the last few years, but I understand they are rebuilding some capacity in that area.

**CHAIR** - I think Nigel has additional information or clarification.

**Mr FOSS** - Yes, a point of correction on the question asked relating to us having the ability to talk with other forest companies, specifically Forico. I checked that during the suspension and we actually can speak with them via radio.

**CHAIR** - Thank you, Nigel. We will go onto recommendation 6. We recommend that network managers develop and document strategic plans for the management of their radio networks. Any comments?

**Mr TILYARD** - We were not specifically asked to comment on those recommendations in the questionnaire, but I will comment anyway because the Auditor-General did say that he felt that we needed to do some work in that area as well. In the process of doing that, one of the key areas of work that the steering committee identified needs to happen - and certainly this was the advice from our consultants - is that we need to do some better end-of-life assessments for our existing networks.

We will be engaging someone to do that. Coming out of that process we will obviously clarify the strategic directions in terms of maintaining those networks. We need them until they are replaced by the whole-of-government network, but we also need that to incorporate contingency in a worse case scenario. For example, if something goes wrong and we cannot get a whole-of-government network by 2020 or if it is going to be six months later or something, we have to look at how we extend that end-of-life for a just-in-case scenario.

We are going to do some additional work across all of the networks to better assess end-of-life and that will inform those strategic plans. That is not to say, of course, that we do not already have plans to replace the equipment, because we are doing that regularly. Things do need replacement or components do fail, and we do have stockpiles that are ready to address those issues, so that obviously does happen.

**Mr FREEMAN** - We manage over a five-year budget cycle so we were lacking clearly in strategic plan for radio network. One of the big advantages - or many of the big advantages or one of them - is corporate services integration across the wider department. Scott might want to comment a little more on that.

**Mr WILLIAM-HAFFENDEN** - Yes, cross-corporate planning forces a high-level budget; it probably also endorses some laziness in terms of all that funding is available and secured, and therefore we just manage on it. More a responsive basis, so we have implemented a greater business planning process across the agency. Now one of the necessities out of this is, rather than, say, TFS working on single set of infrastructure, how does that link into a future combined set of infrastructure?

Before making a decision around replacement of a tower, the consideration now is starting to document what other policing/testing infrastructure is available. We treat that as a whole-of-government project. The documentation has been lacking in the past and that is what we're coming up to speed on at the moment.

**Mr MORGAN** - We had a strategic radio communications plan but I note that we have advised the committee that the risk assessment has been completed. I have asked to see the documentation, which at this stage I am yet to be provided with, so I want to put a caveat on that. I would like to confirm to the committee that the risk assessment has been completed. We have the strategic communications plan but I would like to satisfy myself that that is in existence.

**Mr BRYCE** - We have recognised we need to address this and we don't see many problems with being able to do that over the course of this financial year. Forestry Tasmania has put a draft together and are working on that.

**Mrs RYLAH** - Would that be 2015-16?

**Mr FOSS** - The discussion is that if we have a joint strategic plan between Parks and FT and, as Mark said, we're well under way with the draft at the moment. I expect we would have something in place by the end of this financial year.

**Mrs TAYLOR** - Chair, what we're doing is following up on the recommendations but where you guys are saying you're working on something and expect to have it by the end of the financial year or by a certain time, it would be very helpful if you would supply that to us so we can be satisfied that we don't have to call you back in 12 months. Is that a fair thing to ask?

**CHAIR** - I think it can occur. In this instance the committee would be wanting to put the report together before that time but we would follow up on our reports at a later stage.

**Ms FORREST** - Not necessarily.

**Mrs TAYLOR** - I don't want to have to do it again next year. It would be nice to have you report back that it has been done or not done, as the case may be, so we can satisfy ourselves.

**CHAIR** - Maybe we can flag that, that when the report is done if you can provide a copy of it to this committee.

**Ms FORREST** - I know there is potential within FT, particularly some resourcing issues, and Parks. The Auditor-General's report was out in 2013-14 and we're now in 2015-16 financial year - and you recognised there was a need for it - is there any reason for the delay in not getting it done in the previous financial year?

**Mr FOSS** - No real reason. We all saw the need, just the resources to progress it.

**Mrs TAYLOR** - And that's the point of my question, that if we hadn't followed up now you wouldn't be now telling us, 'We didn't get it done but there's no reason why we can't do it this financial year'. I need to be satisfied from being on this committee that it is being done. I don't want to have to call you back in a year and ask if you've done it.

**CHAIR** - So you are reasonably satisfied the report will be completed this financial year and in place?

**Mr FOSS** - Very confident, yes.

**Mr WILSON-HAFFENDEN** - In relation to that matter, and one of the issues from it was part of the business priorities for Police last financial year but we held off progressing that because of the integration so we could develop a consolidated plan. It is part of our business priorities again this year but it's a departmental priority rather than -

**CHAIR** - My position with forestry and parks also relates to the police and we would like to see those plans. We will include that in the correspondence to all of you.

**Mrs RYLAH** - Chair, do you want to see the plans or do we just want confirmation that the plans are in place?

**CHAIR** - I think it would be helpful if the plans are provided to us. They are not an expansive document - they shouldn't be.

**Ms FORREST** - When the strategic plan is done will it be provided to the minister?

**Mr FOSS** - It has to go through our internal processes first, GMT and the board. I imagine we will take it to the minister but that will be a decision for the chairman.

**Mrs TAYLOR** - Or at least the head of agency will have it.

**Mr FOSS** - Yes.

**Ms FORREST** - Will it be publicly available?

**Mr FOSS** - I can't confirm that. I don't know.

**Ms FORREST** - We may need a copy in confirmation then directly.

**Mr FOSS** - Yes.

**CHAIR** - It can be provided to this committee in confidence until such time that it was published. At least the committee would then have it. The committee will decide on that after anyway. We will make a decision but we will include that in correspondence, I think.

We will go to recommendation seven, reduced business cases for all major upgrades. Any issues or comments?

**Mr TILYARD** - There wasn't when we had to address it because we have done business cases for our major upgrades.

**Ms FORREST** - If you don't have major projects -

**Mr FREEMAN** - We haven't any major upgrades.

**CHAIR** - No major upgrades? That is the same, I think, across the board at the present time.

**Ms FORREST** - I guess the question is if there is a planned major upgrade that you would prepare a business case? Is that the expectation that you have with ambulance, forestry and parks?

**Mr FREEMAN** - Yes.

**Mrs TAYLOR** - If we read the background to the recommendation from the Auditor-General, it says:

He was looking for robust and persuasive business cases and Tasmania Police had implemented two major improvements and we found business cases for each upgrade. No business cases for upgrades to any of the other existing networks were provided despite each of these networks having had upgraded projects in recent years. An example we noted was a .6 million upgrade for TFS in 2012.

That is why he has recommended that network managers produce business cases for all major upgrades.

**Mr WILSON-HAFFENDEN** - In the past 18 months we have developed more stringent policy on the allocation of funding. The position given was, 'This is internally funded within our corporate plans therefore we can just do it' - it is not like we need to go to Government to get that money.

There has been changed in our governance arrangements now so that whilst funding might be made available within the corporate plan, it is not released to that business unit for that purpose without the business case to support it and that now goes through the chief officer.

**Mrs TAYLOR** - That is what he is recommending. If you are now doing that, that is good.

**Ms FORREST** - Is that the same with ambulance?

**Mr MORGAN** - In terms of business cases?

**Ms FORREST** - Yes.

**Mr MORGAN** - Yes, we are required, and always have been required, to apply for Treasury's instructions around surplus admissions and part of that is the business case. The network expansion we are doing at the moment is not a tender, it is below the thresholds.

**Ms FORREST** - Is that a requirement in Parks?

**Mr BRYCE** - Yes, there are major infrastructure upgrades but it has been fairly minor over the years.

**Ms FORREST** - Mark, what is classified as major within Parks?

**Mr BRYCE** - You are talking about \$100 000-plus and that sort of thing. We are talking about \$10 000 a year, \$20 000 a year, because we have to do something this year with one of the helicopter pads which will probably be about \$20 000, \$15 000.

**CHAIR** - We will move onto recommendation 8. We have covered this line position with the deputy commissioner.

We recommend that stakeholders involved with the whole of government radio project re-engage publicly to ensure a solution to the current impasse is achieved in the best interests of the stakeholders and the state as a whole.

I think we have covered that point unless there are any comments or any questions that our members might have in relation to this?

**Mrs TAYLOR** - I have a little comment. You notice that we are always very careful to say 'whole-of-government' rather than use the acronym.

*Laughter.*

**CHAIR** - Yes, you are right, I thought about that a couple of times.

**Mr WILSON-HAFFENDEN** - We are optimistically moving to TASGRN.

*Laughter.*

**CHAIR** - We will move to recommendation 9:

We recommend that the whole of Government project's objectives should include meeting entity requirements and a consultant be asked to re-evaluate the revised set of objectives.

**Mr TILYARD** - We have addressed that. We engaged different consultants as part of that. As a steering committee, we have now drafted a new set of objectives that does specifically address that issue of meeting [inaudible]. That is the main focus, whereas it was not adequately incorporated before. That was the main criticism the Auditor-General had. They saw that as the key point too. It was adequately picked up in the previous objectives. Now in the new set, it does.

**Mr BRYCE** - That change is welcome. We are after similar coverage to what I had previously. As you can see in the Auditor-General's report, the differences between the 400 MHz frequency coverage, compared to our existing - we are talking about the difference there - and cost effective. The report highlighted about \$200 000 cost for us to maintain our network. We were concerned about the future cost of this system. If those things can be addressed, it would be great.

We have about 36 sites existing. Whether that is currently correct, the report highlighted we need probably 102 sites to have a similar coverage. That may be a concern. Some of those sites are in remote national parks and the World Heritage Area. It seems like development can occur to assist management, but we need to be mindful of that issue in getting this coverage under a different frequency.

**CHAIR** - Any questions - no other comment -

**Mr TILYARD** - I agree. We do not know at this stage. It is too early to say exactly how many sites we will require. Certainly some earlier work done by consultants that we were using at that time indicated it was around 100.

On the issue of coverage - there are some maps you would have seen in the Auditor-General's report. They show the 70 MHz analog networks have quite an extensive coverage between them.

For the 70 MHz networks, my understanding is that vehicles have a greater capacity to receive and send signals than a handheld radio. The coverage maps for the TMRN are based on handheld radios, not vehicles. If it went to vehicle, the coverage would be greater, not to the extent of what the 70 MHz coverage is, but ours is to handheld radio as opposed to vehicle.

**CHAIR** - Any questions on this point?

**Mrs RYLAH** - In the response from Ambulance Tas you said that there is a workshop scheduled for 16 April 2015. Can you give me some outcomes, or is that what Scott has just already discussed?

**Mr TILYARD** - That was a strategic planning session that we had with our consultants.

**Mrs RYLAH** - That was where you decided on the business?

**Mr TILYARD** - Yes, that was where we worked through what we see the objectives as being, and subsequent to that in June they have provided the steering committee with a report that includes recommended new objectives and revised scope for the project. The steering committee has endorsed that. We are further discussing that at Monday's meeting.



**Mrs RYLAH** - Excellent.

**Mr FREEMAN** - That process has actually completely negated the impasse that was mentioned in a previous recommendation, so it was a good process.

**Mrs TAYLOR** In the Auditor-General's report, he identified a number of problems which made it unlikely the project would succeed. Let us check that you have overcome all of those. Inadequate objectives - you have sorted that one. You now clearly know where you are going. Coverage for the proposed network - work in progress, but you are working on that. Indeterminant and significant cost - you still are not quite clear about how much it is all going to cost, but you do have money.

**Mr TILYARD** - We do have funding to do the things we need to do now, yes.

**Mrs TAYLOR** - You do have a determined cost for the project you are going to have to do this financial year, and you have funding to do that. The last thing is perceptions about organisational placement for the project team. You are telling us you are not sure where that is going to sit, but you will know soon.

**Mr TILYARD** - That is more, where does the entity that manages the network when it comes online. The Auditor-General expressed concerns. This gets back to when the TMRN project unit was doing it, this was the perception around it being seen as a police-led project and how that was creating a few barriers.

The report said, 'Perhaps have a project team somewhere else that does not directly involve any of the entities.' As a steering committee, we do not feel that is necessary now. None of the entities involved have that concern. We have passed the sticking points and we feel that the current Government's arrangements will deliver on the project's objectives. That is not such an issue now, although we are separating out the two. It is not the TMRN project doing the work. It is a separate whole-of-government project team.

**Mrs TAYLOR** - That is good. It is important that you do not necessarily have to follow the recommendations of the Auditor-General. You have to have good reason why you are not or why you are doing something different.

**Mr TILYARD** - The other thing we did as a steering committee - because I am trying to be independent as Chair, I do not want to represent Tasmania Police on the steering committee - I have brought on another senior officer to represent the interests of Tasmania Police on the steering committee, so I can be as objective in the Chair role as I can possibly be.

**Mr MORGAN** - To that point, every member of the steering committee spoke to the fact that we did not think that was necessary, because none of us believe the Chair was conflicted at all. We have agreed with it and we do have that representative, but I do not think any of us had any concerns about the Chair.

**CHAIR** - Thank you Dominic. Moving on, I think 10 is covered and they recommend that the project team become independent for many of the entities involved in the whole-of-government network or [inaudible] that is the situation.

**Mr TILYARD** - It is the situation, as best as we can. As the project progresses, the plan is to bring representatives from each of the entities onto the project team, as we have done with the other major project we are running, the CAD project. We have a representative from the services on the team so there is that ownership, because they are all involved in it.

**CHAIR** - The only concern was the project team. I asked, and you were not able to provide me with who it was. Who is the Chair? Who controls the project team? Surely there must be somebody there.

**Ms FORREST** - [inaudible] report to us after the meeting.

**CHAIR** - It needs to happen.

**Mr TILYARD** - It does need to happen and one of the recommendations from our consultants is that we all have a separate and new project manager. Scott has been working on a statement of duties around that. We have not appointed someone yet but we want to do that as soon as we possibly can, have someone in there in that capacity.

**CHAIR** - My observation is that it ought to be somebody independent. This is an observation I make because I am aware of other project teams where the project manager or team was a police officer. I do not want to go into any more detail about that, but there was a lot of concern about the way it was going, leaning towards the police. There ought to be consideration to an independent person.

**Mr TILYARD** - There is no intention at this stage to have a police officer or a member of any of the operational arms as a project manager. It will be a person of the right skills for sure. A person with a proven ability to manage consultants because the experts are going to be people who are going to be doing a lot of the work. It's that coordination of consultants and the management of them that will be a key skill set for the person we bring onboard.

**CHAIR** - You are right. That is the important thing - the skills sets. We will move on to recommendation 11:

We recommend that the Government considers the establishment of a separate unit to implement and operate whole-of-government network if existing stakeholders fail to make significant progress toward an agreed whole-of-government solution.

**Mr TILYARD** - In terms of operating the network going forward, that is actually what we intend to do - have a separate entity that does that. Depending on the decisions that are made, it might sit within a department - it could be the DPP or it might be in another department. It could sit within a department somewhere, just like TMD sits within the Department of Premier and Cabinet. We all support the need for a separate entity to run the whole-of-government radio network. It's just a case of where it is physically going to be and what the arrangements are.

**Mrs RYLAH** - Do you believe it is adequately resourced your the budget funding? One of the agencies commented about adequate resourcing.

**Mr TILYARD** - One of the things we engaged the new consultants for was to give us advice on the project's resourcing issues to ensure its objectives, and they have done that. We have

funding available now. We actually need to bring some people with particular skill sets onboard. We will be going out to the market very soon, or as soon as we get the steering committee's endorsement, to bring onboard the other consultants we now need to progress the work around developing and documenting the business requirements and starting the further end-of-life assessments [inaudible] and other bodies of work that need to be done. Adequate resourcing and funding are available for it. We specifically reviewed that recently.

**Mr BRYCE** - I am not sure of the extent of the changes recommended for the Parks and Forestry network. The capital investment in getting the new towers or equipment in place is probably not our major concern. Funding could be made available for that, but it is probably ongoing - the maintenance costs associated with any new system. We've raised concerns about it in the past, but it seems it is being addressed through this project.

**Ms FORREST** - The maintenance and upgrade?

**Mr BRYCE** - Yes, the ongoing maintenance and contribution to maintain the system.

**Mrs RYLAH** - Is access to towers and things like your concern?

**Mr BRYCE** - No. There may be some environmental problems with access to new sites and existing sites. Some of them are leased and licensed by a number of users, but usually there is no problem in adding additional facilities where they are in place. I don't think that should be our problem. Our ability to fund maintenance of any new system or upgraded system internally is a concern.

**Mr TILYARD** - That is a valid point. There are obviously costs for all the entities now in their operation of radio networks. The network we operate is a more sophisticated network and there are additional costs. The cost for the other entities using the 70 MHz networks and managing themselves are not as high. The whole-of-government radio network as an entity in itself will be a more sophisticated network because of more functionality and a whole range of other benefits over and above what people have now, including us on the TIA Marine. It is more expensive and the costs of the ongoing maintenance of it will be factored in, but they will be, for all of us, more than they are today. That is the nature of the beast. If you want good, contemporary networks to support your service delivery and keep your people safe, you have to be prepared to invest more money in it. That's the reality.

**Mrs RYLAH** - You indicated from your consultant's report that your site numbers are currently sitting at 36 but the consultant indicated 102. That is a massive increase in size.

**Mr BRYCE** - I am only going off what is in the Auditor-General's report. I am not sure whether there has been any new information.

**Mr TILYARD** - The assessment of 102 sites was work done by the consultants who were dealing with it earlier. They looked at what it would take if everyone was using 400 MHz. Really, we could not say if it was definitely 102, but the work that they did was something in the order of 102 sites. The work to date has been built around the fact that the TIA Marine network, which has the most sites - the 67 - would form the core of the new whole-of-government network.

So you have got these 67 tower sites around the state. We could probably rationalise some of them with other services. In addition, you will need another 30, roughly, in different locations. It was not just the sites for Parks and Wildlife or Forestry Tasmania. It is an extra 30 on top of the towers already out there, for all of us. I could not sit here now and say it will be an extra 30 - maybe it will be 20, maybe it will be 50. I do not know. It just depends on when they actually get in, look at the options and the technical solutions, and then decide, 'Well, if that is the way we are going, these are the number of sites and this is where the additional ones need to be.'

**Mrs TAYLOR** - I have some overarching questions that are not particularly about this project, although they relate to it. Feel free to not answer them if you don't want to, but I am looking at process here. I think you would agree that in May 2014 when the Auditor-General put this report out, he was pretty critical of the progress. He said there had been little progress in implementing a whole-of-government network, a lack of strategic planning, blah, blah. Do you think that the assessment was fair?

**Mr TILYARD** - I think it was fair if you look at the timeframes over which this project has -

**Mrs TAYLOR** - He said in the last eight years.

**Mr TILYARD** - Exactly. It has got to be a fair comment. Eight years is a long time in anybody's book. There are been reasons why things slowed down and were put on hold. There were budget pressures, which means things that you would like to happen sooner have to be deferred and all those sorts of things. I think it is a fair comment. No-one is disagreeing with that. I think we have seen, particularly over the last year or 18 months, a significant shift in people's -

**Mrs TAYLOR** - Sure. I am talking about process here. In terms of the Auditor-General, are we any use? Is the Auditor-General doing auditing any use? First, was it there? Secondly, did this report actually stir you into greater action, or was that already happening and needn't have happened?

**Ms FORREST** - Or the Government in terms of resourcing?

**Mrs TAYLOR** - Or the Government in terms of resourcing? Did this report help?

**Mr TILYARD** - It did help. There was certainly work that the steering committee was doing because we had reached that impasse around too much of a focus on the technical solution. It certainly helped us in terms of engaging some new consultants to come in with a fresh set of eyes to have a look at the issue as well.

The other thing that helped was obviously the bushfire inquiry report, particularly around the issue of interoperability. That was very high on people's agenda. We were able to achieve that amazingly quickly. A lot of work around that was done within a few months. Suddenly we were able to address that concern as part of the whole-of-government project within a short timeframe, and with a high level of buy-in and engagement from all the agencies.

We all realised this was important - 'Let's do it.' Even with that project, as successful as it was and as quickly as it came about, there were issues we all had to address. While you are

doing this, the people you rely on to actually do the work on this stuff with the service provider are busy doing other things. You have to sort of get them to realise this is important too. We had a few challenges to make sure everything lined up and got done. We got through it and our people got onboard. I think it has actually helped in terms of the integration we are doing now within DPEM - actually having our people working together more. They will go out - the fire radio technicians will jump in the car with the police radio technician and they will head out to someone's tower, be it police or be it fire or be it somewhere else, and they work together. We were not seeing that until the last year or two.

**Mr MORGAN** - From my point of view, the biggest thing that changed is that our predecessors could not really see how they were ever ultimately going to reconcile, down to the firefighter, the paramedic and police officer in the field, having better than what they currently had to date. From a technological solution - with the benefit of hindsight - our predecessors would have been sitting there going, 'We are potentially heading down a path where we have something brand new and nobody has anything as good as it used to be'. I think the technology is the biggest thing that has freed us from that thinking. All of the conversations now seem to be that this is entirely achievable, that we will be able to meet end-user needs, in which case, as a steering committee, quite rightly, we don't need to focus on that any more.

There are very clever technicians out there who are giving us lots of new advice about what can be achieved and so that has allowed the steering committee to step right away from that debate about the end solution and the technical detail, and say what it is that we are trying to meet and then someone else will be able to do that. Our predecessors probably didn't have the benefit of that in the past.

**Ms FORREST** - Perhaps that is an issue of evolving technology too, isn't it? Had they rushed ahead, they might have ended up with a not-so-good solution - you may end up with a fizzer, but that is always going to be the case. Technology advances so quickly.

**Mrs TAYLOR** - Next year the technology is going to be different. I am still about process here, but has the Public Accounts Committee calling you in, sending you the questionnaire and asking you to come and report to us and have this discussion today been useful for you? Obviously you have made significant progress that you have reported to us today since May 2014. I am very pleased to hear that.

Have we needed to do this? Would you have done what you are doing now? You have made commitments today, for instance, about we will do this within this financial year and those kind of things. Is this process useful?

**Mr TILYARD** - It is useful as far as I am concerned because we have made significant progress particularly in terms of greater collaboration, not driven by the fact that the Public Accounts Committee is here. We all need to be accountable for how we are spending public money. At the end of the day, we want this project to deliver the best possible radio network that it can to serve the community and provide a safe working environment for our frontline people in particular, but at a cost that the public and the Government can afford.

There has to be that balance. We don't have unlimited funds. If we had unlimited funds, it would be amazing what sort of a network that you can get because these days, technologically, almost anything is possible. The technology exists now to get on your

mobile phone and talk on our radio network. All this technological stuff is there, even today, so I don't even know what it is going to be like in five years' time.

There has to be a compromise and a prioritisation. It is about the best we can afford and the people of Tasmania can afford giving competing priorities. But we are confident that we can certainly - and we don't want to end up like, as Dom said, where you have a brand-new great network that doesn't work as well as what you had before. It could happen, you know, and that is what we want to avoid.

**Mrs TAYLOR** - It is not quite what my question related to. Would you have done that and be doing all this without us having sent you the questionnaire or asked you to come in?

**Mr TILYARD** - We would be, but I guess processes like this do keep up the focus, don't they? It is another forum where we have to come along and justify what we are doing and how we are spending public money, so I think that is a good thing.

**Ms FORREST** - It also helps the Parliament because we are reporting the Parliament, not just the PAC. PAC will report to Parliament and so that Parliament is being informed as well so there is an ongoing check on that to parliamentary members as well.

It has been very beneficial hearing what the challenges were, particularly. Some of it is in the report and everything like that and your responses, but not to the level of detail you get in this sort of quorum.

**Mrs TAYLOR** - My question, Chair, relates to the fact that I don't want to waste their time and I don't want to waste our time. If there has been a useful process -

**CHAIR** - I think we all realise that this is a huge matter to be fixed and sorted. It has been going on for 20-something years that I am aware of. It was happening when I was there - about the shared networks, how it should happen and who we should share with and so on. It is good to know that 2020 is the year that has now been set to try to bring this to a position of having a communication system in this state that is suitable for all and will return the services expected of it.

That is wonderful so let's hope that we can stick by that. Thank you very much for being here today and thank you very much for the way in which you have answered our questions. It is very important for us to have the information to put this report together as has been identified to the Parliament and we would hope to be doing that at our very first convenience.

I am not quite sure when that will be but we will be working pretty hard on this to get it done as soon as we can. As for those further documents, we will write to the departments as we need to to get that further information.

Thank you all very much for your time.

**Mr TILYARD** - Thank you.

**THE WITNESSES WITHDREW.**