Accountability measures for decision-making for the delivery of major infrastructure, contracting of public services and/or the privatisation of public assets in NSW

Hearing – 25 March 2024

Supplementary questions

QUESTION 1

Timeline delay

How does NSW Ambulance monitor and report on the impacts of the Critical Communications Enhancement Program (CCEP) delayed delivery?

ANSWER

NSW Ambulance has several pathways for monitoring and reporting on the impacts of delayed delivery of the CCEP which include:

External forums

- Monthly CCEP Projects Control Group (PCG) meeting – Technical and operational delivery of the program
- Monthly Program Steering Committee (PSC) meeting – Program oversight and financial updates
- Monthly NSW Telco Authority/Ambulance Customer Accounts Management Meeting
- Monthly Executive Customer Forum (ECF) – Executive coordination and escalation

Internal forums

- Monthly Executive Leadership Team (ELT) meeting – Updates
- Monthly Executive Project Oversight Committee (EPOC) – Status report
- Quarterly Audit and Risk Committee (ARC)– Status report

QUESTION 2

ESO costs

How has the delivery of the CCEP project to date impacted NSW Ambulance's costs including:

a. whether any costs savings have been achieved to date

b. whether any costs have increased

c. for any Stay Safe and Keep Operational costs excluded from the above figures, please specify the amount excluded and an explanation for their exclusion.

ANSWER

a) NSW Ambulance has saved about $115,000 from Business as Usual (BAU) funding from decommissioning 16 NSW Ambulance Private Mobile Radio (PMR) sites due to the CCEP expansion of the Public Safety Network (PSN). The savings relate to radio site licences, site power, spectrum licence cancellations and ad-hoc or preventative maintenance activities.

b) The PSN operates on a cost-recovery basis. The Emergency Services Organisations (ESOs) are charged a fee based on the total projected costs incurred by the NSW Telco Authority. The original core user fee charges are included in Table 1.

Table 1 – Original core user fees.

($m)	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28
Charge per ESO	11.4	20.8	28.0	32.7	35.5	29.9*	30.4	31.0	31.4

** The charge per ESO in 2024-25 reduces when a fifth ESO (NSW Police) is planned to migrate to the PSN.*

The core user fees have since been revised. FY23 and FY24 are $1.0 million and $1.9 million higher than what was originally proposed (Table 2).

Table 2 – Revised core user fees.

($m)	FY21	FY22	FY23	FY24
Charge per ESO	20.8	28.0	33.7*	37.4#

NSW Telco Authority advised that the key drivers of cost increases include:

- 24% increase in the number of sites resulting in additional operational costs
- digital and technology transformation to improve operational efficiency
- capability uplift in commercial, innovation, safety, risk, and asset management.

c) Stay Safe and Keep Operational Funding (SSKO) is not included in the above figures. There are no savings or increased costs within SSKO.

QUESTION 3

Encryption and interoperability

Page 3 of the Auditor-General's report to Parliament, Management of the Critical Communications Enhancement Program, notes there is a risk that radio interoperability between Emergency Service Organisations (ESOs) will not be maximised because the NSW Telco Authority has not settled with ESOs how encryption will be used across the enhanced Public Safety Network (PSN). If this risk is realised, how would this impact your operations?

ANSWER

The PSN has been configured to support encryption for all users. Encryption is managed by the agency devices, not the network. Implementation of encryption is done at the discretion of, and cost to, each agency based on their organisational needs.

Common channels on the PSN provide interoperability by enabling ESOs to communicate with each other on joint operations.

If encryption was available, best practice, including compliance with privacy of information legislation, would be for NSW Ambulance to not pass on any identifying patient or health care information through a non-encrypted channel, or an encrypted channel that was also being used by other ESOs. However, NSW Ambulance paramedics do not typically provide this information to other ESOs so it is unlikely that this would have any impact on NSW Ambulance operations.

The most likely impact on NSW Ambulance would be continued unauthorised access to confidential patient information that periodically is transmitted over the current radio network. Apart from community members being aware of sensitive information, the information is continuously monitored by media outlets and reported. This is a significant privacy issue for the agency. However, even without encryption, the authentication of devices within the PSN will be an improvement over the security of information currently transmitted through the NSW Ambulance PMR network.

QUESTION 4

Encryption and interoperability

Appendix One of Management of the Critical Communications Enhancement Program notes that the NSW Telco Authority is leading a 'Radio Authentication and Encryption project' to overcome the challenge of delivering encryption and interoperability. How satisfied is NSW Ambulance with the progress of this project?

ANSWER

NSW Ambulance has been an active participant in the NSW Telco Authority's 'Radio Authentication and Encryption projects'. NSW Ambulance is satisfied with the progress of these projects to date.

QUESTION 5

Encryption and interoperability

What are circumstances which NSW Ambulance would be concerned about or desire encryption and interoperability?

ANSWER

There are several circumstances where encryption would be of benefit to NSW Ambulance, including the transmission of patient healthcare information, information that has significant media interest, and staff safety information.

NSW Ambulance currently passes critical patient healthcare information (for example, injuries) to hospitals via non-encrypted radio to enable them to prepare appropriate medical staff and resources on the arrival of the patient. This information can be overheard by radio scanners and cloned devices. This results in detailed patient health care information being reported by the media. During COVID-19, these reports were used by the media to comment on the status and impact of COVID-19 on hospital and ambulance resources.

Occasionally, information about a case (address and incident details) will need to be transmitted on the radio. NSW Ambulance will also provide necessary scene updates to the control centre, managers, and other attending crews via radio. These reports are important to preparing staff who are about to attend and ensuring appropriate resources are provided for the incident. However, this information transmitted on radio also means the media can listen to the reports on scanners and cloned devices. An example is a report by a paramedic that resulted in media attending the scene of an incident and filming, breaching patient privacy and interrupting clinical treatment.

Additionally, transmitting paramedic or security information is also a risk without an encrypted network. Due to privacy concerns, paramedics are concerned about providing full names, phone numbers, their current location or access information over the network. An example reported by a paramedic is when the radio was used to organise meeting locations at a gaol, and the concern that this would be used by associates of inmates to intercept the ambulance and patient on the way to the hospital.

Interoperability capability exists on the PSN which has common channels that ESOs can use to communicate. These channels are already in use and are highly valuable. The channels allow for ESOs to provide updates across agencies during multiagency responses. This includes information on the number of people involved, clarity on location and access information, if hazards are present and what resources are needed. Receiving this information in a timely way prevents delays and improves responder safety. This is most useful during floods, bushfires and mass casualty situations.

QUESTION 6

In building coverage

Page 3 of the Auditor-General's report noted that there is no mechanism to ensure adequacy of future in-building coverage for the PSN in new or refurbished buildings, particularly in the private sector, after the CCEP concludes. How important is in-building coverage for NSW Ambulance's operations?

ANSWER

In-building coverage is important to NSW Ambulance as many incidents are indoors. Reports from staff on reception issues recorded in the Incident Management System (IMS) are typically either due to remoteness or due to staff being indoors.

The impact of these communication difficulties reported by staff were primarily that they caused delays that impacted patient care and risked staff safety. For example, a paramedic needing to leave another paramedic alone to go outside and radio for clinical back up, reducing the number of clinicians providing care for a period of time, delaying the request for back up and leaving both paramedics alone. Other examples included times in which paramedics feared for their safety, but were unable to immediately call for assistance or activate duress until they got outside or back in their ambulance.

NSW Ambulance regularly meets with the NSW Telco Authority and progressing the agency requirements for In-Building Coverage for the PSN.

NSW Telco Authority has committed funding to support designing and installing In Building Coverage for the PSN in existing infrastructure, including in hospitals, shopping centres, police and fire stations, tunnels, railway stations and places of mass gathering. The prioritisation of funding and associated sites has been agreed with emergency services organisations.

In addition, NSW Telco Authority has developed the Digital Connectivity Principles Policy which establishes obligations to ensure that all new NSW Government-funded infrastructure, including major upgrade and renewal projects, include up-front consideration, planning and funding for the appropriate digital connectivity infrastructure to meet customers' needs now and into the future.

The Digital Connectivity Principles became effective on 1 March 2024 and applies to all new NSW Government funded infrastructure worth over $10 million.

The 5 principles aim to ensure government-funded infrastructure is built with the necessary connectivity infrastructure at the outset. This means major infrastructure projects such as hospitals, schools, office buildings, railway stations and tunnels will be built with supporting digital plumbing as 'pipes and pits', conduit, risers and fibre to support digital connectivity.

Principle 2 will support the PSN being available in critical locations, being areas of mass congregation or critical infrastructure. The PSN In-Building Coverage systems may be necessary where macro coverage is insufficient.

In implementing this principle, NSW Telco Authority has advised on the development of guidance materials and tools to help builders of infrastructure in meeting their obligations with respect to in-building coverage for public safety communications.

The implementation of the principles is the first step in addressing in-building coverage via a regulatory response. Further work is underway to explore whether the principles should be applied more broadly to other sectors, including private sector construction and, if so, whether a regulatory intervention is warranted.

QUESTION 7

In building coverage

If a new or refurbished buildings did not have in-building coverage, how would this affect a NSW Ambulance operation within or around that building?

ANSWER

It is likely that the building would have limited reception and depending on its size may also have limited reception in its surrounds. The impact to NSW Ambulance is outlined in the response to Question 6.

QUESTION 8

In building coverage

How can risks from of a lack of in-building coverage be addressed or prevented?

ANSWER

The density of the PSN network design provides greater in-building coverage results in comparison with the NSW Ambulance PMR networks. However, it is difficult and cost prohibitive to prevent all in-building coverage issues across the state. Instead, improvements have been made that target high frequency locations for ESOs, such as hospitals, shopping centres and train stations.

New and emerging technologies can also be used such as combined hybrid vehicle and portable devices that utilise radio frequencies, cellular and satellite technologies. These technologies could enable seamless communication using whichever transmission method has the strongest signal strength.

QUESTION 9

On-going governance arrangements

Page 6 of the Auditor-General's report noted that ESOs will decommission their own radio communication networks and migrate entirely to the PSN. We understand that this means ESOs will depend entirely on the NSW Telco Authority to provide their primary mission critical communications. Do you have any concerns regarding governance arrangements after your radio networks are decommissioned and your agency completes its migration to the PSN?

ANSWER

NSW Ambulance is currently dependent on the PSN across the Greater Metropolitan Area including Wollongong, Newcastle, Blue Mountains and the Central West of NSW. There are no immediate concerns in relation to the current or proposed governance arrangements for the PSN.

In other areas, NSW Ambulance is operating aged, end-of-life radio systems. NSW Ambulance supports the migration onto the PSN at the earliest opportunity.

QUESTION 10

On-going governance arrangements

From NSW Ambulance's experience, what is being done to ensure appropriate governance arrangements for the Public Safety Network are in place after the CCEP is delivered?

ANSWER

NSW Ambulance is comfortable that the appropriate arrangements for PSN governance are in place for agencies post CCEP delivery. The CCEP is a larger expansion of the current PSN footprint and NSW Ambulance already participate in the below meetings to ensure operational performance goals are managed:

- Monthly SDG meeting – Agency operational network governance
- Monthly NSW Telco Authority/Ambulance Customer Accounts Management Meeting

- Monthly ECF – Executive coordination and escalation
- Procurement SCM0053 (formally ITS2573) Scheme Management Committee (SMC) Meetings.

QUESTION 11

Other

Page 2 of Submission 6 - Amalgamotion Pty Ltd, notes that a self-service portal linked to the CCEP project schedule database allows stakeholders to access project data at any point in time. How does NSW Ambulance interact with this portal and what has its experience been like to date?

ANSWER

NSW Ambulance has been provided access to the Operational Readiness Dashboard through the portal to gain access to site delivery status and forecast delivery schedules. NSW Ambulance accesses the portal fortnightly to check the status of forecasted schedules by site. While NSW Ambulance is aware that the portal has experienced unplanned outage issues, this has not impacted NSW Ambulance. There have been times where the site schedules were not up to date. When this occurred, it was raised with the NSW Telco Authority and addressed accordingly.

QUESTION 12

Other

The Auditor-General made several recommendations to the NSW Telco Authority as outlined on page 8 of the report, Management of the Critical Communications Enhancement Program. Is NSW Ambulance comfortable that these recommendations are being addressed?

ANSWER

NSW Ambulance is aware of the Auditor-Generals recommendations. NSW Ambulance is comfortable that the NSW Telco Authority has either completed or is in the process of addressing each recommendation.

However, some recommendations will not be achievable by the recommendation date. An example of this is Recommendation 6(b) 'by June 2024, require that authentication-capable terminals be authenticated'.

NSW Ambulance has completed authentication testing with the assistance of NSW Telco Authority and will complete authentication of about 7,500 radio terminals using Link Layer Authentication by January 2025.