OUR VISION

The NSW Government will be a leader in commissioning seamless communication and information services, ensuring safety, efficiency and value are delivered to the community.
Acknowledgements
We would like to acknowledge the collaborative efforts of NSW Government agencies in developing this long-term strategy. In particular, we acknowledge the contribution of our public safety and law enforcement agencies: the NSW Police Force, Ambulance Service of NSW, Fire and Rescue NSW, NSW State Emergency Service and the Rural Fire Service of NSW.

Disclaimer
Although every reasonable effort has been made to ensure that this publication is correct at the time of printing, the NSW Government does not warrant or represent that this document is free from errors or omissions, or that it is exhaustive. The NSW Government does not warrant or accept liability in relation to the quality and accuracy of this publication.

Copyright Notice
The NSW Government is committed to promoting the availability of information. We welcome the reproduction, distribution, or display of the material that appears in the Operational Communications Strategy for non-commercial, in-house or personal use without the need for formal permission or charge. Under these circumstances, you must attribute the NSW Government as the owner of this publication. All other rights are reserved.

To copy, reproduce, alter, store or transmit the material appearing in the Operational Communications Strategy for any other purpose, please request formal permission from the NSW Government by emailing telco.authority@finance.nsw.gov.au

Any inquiries relating to this publication may be addressed to the NSW Telco Authority by emailing telco.authority@finance.nsw.gov.au

Edition 1 | 2015

For more information, contact:
New South Wales Telco Authority
Level 18, McKell Building
2-24 Rawson Place
Sydney NSW 2000
Email: telco.authority@finance.nsw.gov.au
CONTENTS

EXECUTIVE SUMMARY .................................................................................................................. 06

CURRENT STATE OF OPERATIONS ............................................................................................... 08

FORGING THE FUTURE: 2015-2025 .............................................................................................. 09
  Industry and Government Partnership ....................................................................................... 09
  Seamless Communications ....................................................................................................... 09
  A Competitive and Engaged Marketplace ................................................................................ 10
  Information Anytime, Anywhere .............................................................................................. 10

STRATEGIC INITIATIVES ............................................................................................................... 11
  1. One Integrated Portfolio ....................................................................................................... 11
  2. Shape a Competitive Market ................................................................................................. 12
  3. Evolved Critical Communications Capability ..................................................................... 13
  4. Information Enabled ............................................................................................................ 14

ENABLERS FOR FORGING THE FUTURE OPERATIONAL COMMUNICATIONS 15
  Strategic Commissioning .......................................................................................................... 15
  Access to Critical Spectrum .................................................................................................... 15
  Focused Sector Capability ........................................................................................................ 15
  Supporting Legislation ............................................................................................................. 16
  Sustainable Funding ................................................................................................................ 16

THE NEW OPERATING MODEL .................................................................................................. 17
  A 'Building Blocks' Approach .................................................................................................. 18
  Operating Model Principles ..................................................................................................... 19

THE PROPOSED GOVERNANCE MODEL ..................................................................................... 20
  NSW Government ..................................................................................................................... 21
  NSW Telco Authority Board ..................................................................................................... 21
  NSW Telco Authority ............................................................................................................... 21
  Commissioners’ Advisory Council ............................................................................................ 21
  Strategy and Investment Forum ............................................................................................... 21
  Technology Planning and Review Group .................................................................................. 22
  Industry Advisory Forum ......................................................................................................... 22
  Change and Continuous Improvement Forums ....................................................................... 22
  IPMO, User and Service Delivery Forums ............................................................................... 22

TIMELINE ...................................................................................................................................... 23
  Phase 1: 2015-2019 ................................................................................................................... 23
  Phase 2: 2017-2022 ................................................................................................................... 23
  Phase 3: 2019-2025 ................................................................................................................... 23

APPENDIX 1 - IMPLEMENTATION PLAN ..................................................................................... 24
The NSW Government is looking towards the future. Our NSW Making it Happen plan and NSW Government ICT Strategy have both set ambitious targets to transform our state and how we, as a government, operate. This strategy marks the next step in how we improve the way we deliver technology to our frontline personnel, ensuring NSW is ready to deal with major emergencies and natural disasters.

The future of operational communications, the technology relied upon by our emergency services and law enforcement officers along with thousands of other essential service providers across government, promises exciting new tools that will change how Government provides services to the community. As we move towards more widely distributed and reliable mobile broadband communication systems, there are more opportunities for our frontline workers to communicate across agencies, access critical information in the field and respond with more agility.

The shared vision for the future is one where seamless communications are offered to agencies anytime, anywhere. Communication channels are no longer a series of independent networks, the service is more extensive, available on a range of devices and interoperable between agencies.

Delivering these new services will require significant reform of the sector. This strategy sets out how we will unite the disparate networks that currently exist and use effective partnerships drawing on the best that industry has to offer to meet our needs. We will utilise our investment in smarter ways to deliver better, more cost effective services to our personnel and the community of NSW.

This is an ambitious strategy, with an anticipated ten year view spanning into new technologies that hold great promise but are not yet ready to meet the rigorous demands placed on them by public safety agencies. There will be significant moments during the strategy’s lifespan when we must assess whether the new environment is ready to provide the mission-critical services we demand. This strategy is not a static document, marking a single moment in time. It provides the foundation for immediate benefits and it will need to be continually examined and evolved as the sector, technologies and markets evolve.

The Hon. Dominic Perrottet MP
Minister for Finance, Services and Property
Operational communications services are essential tools used by agencies across the government sector. They are used extensively by emergency services and law enforcement agencies to coordinate responses to incidents and for day to day operations. As recent significant natural disasters have shown, communications are essential to ensure that Government can effectively respond and reduce the risks to the community, property and infrastructure posed by these events.

In NSW, agencies have historically built, owned and operated their own dedicated operational communications networks. By coordinating our efforts and applying scarce resources in the most effective way, we can achieve more for our frontline workers and the NSW community. By creating one integrated portfolio, we will be in a position to shape the market, evolve our critical communications capabilities and create a truly information enabled sector.

The NSW Government has developed this whole of government strategy for operational communications services to set the direction for infrastructure and service provision across government. The service delivery model blends private and public sector ownership and service delivery. The private sector has a wealth of expertise, assets and resources that can be further leveraged by government. We can learn much from their experience and collaborate more closely to ensure we get the best services, the best value and the best results for NSW.

Rod Gilmour
Chairperson, NSW Telco Authority
EXECUTIVE SUMMARY

The NSW Government Operational Communications Strategy 2015 outlines a new approach to the planning, delivery and management of radio and related communications services for the government sector.

This strategy ensures that our frontline personnel are enabled by technology to deliver the essential services that the people of NSW require. Public safety agencies will continue to do what they do best, protect communities. Our essential service providers will continue to deliver the services we all rely on. The communication services they use to do this will be streamlined and improved, while ensuring that the NSW Government gains better value from its investments.

We will no longer have independent radio networks owned and operated by various government agencies. Instead, we will harness the expertise that exists across agencies and make better use of the resources of private industry in order to provide reliable, secure and innovative solutions to our frontline personnel.

This strategy aims to maximise benefits that the sector can realise from greater use of shared infrastructure, services and platforms, while providing appropriate flexibility for agencies to develop solutions and services that are unique and specific, such as SCADA systems for monitoring and control of remote equipment. It also aims to get the best value out of these assets by seeking industry expertise to utilise spare capacity effectively and generate a return for the NSW community.

This strategy is delivered at a time of unprecedented technological change in the telecommunications sector. The strategy acknowledges this environment and sets out a series of shorter term activities that deliver immediate results and creates a foundation for the future. It builds on the planned and coordinated approach to investment in these critical services to ensure that our capabilities can continue to evolve in line with technology, allowing frontline workers to best meet the needs of the NSW community.

It is the product of sector-wide collaboration undertaken over the last three years and will enable the government to transform from an individual, ‘build and operate’ approach to a more flexible and innovative service delivery model.

“...to maximise benefits that the sector can realise from greater use of shared infrastructure, services and platforms...”

---

1 Supervisory Control And Data Acquisition.
FOUR KEY INITIATIVES UNDERPIN THIS TRANSFORMATION:

1. **One Integrated Portfolio**: remove duplication and fragmentation by managing assets, resources and services as a single, integrated, efficient portfolio.

2. **Shape a Competitive Market**: drive an effective and mature service market that meets sector requirements.

3. **Evolved Critical Communications Capability**: develop a resilient and secure communications capability for the sector that supports existing mission-critical voice and new video and data based services.

4. **Information Enabled**: create a shared intelligence capability that enables public safety agencies to access targeted, timely and relevant information from a variety of government, community and industry sources.

THE STRATEGIC BENEFITS TO NSW ARE:

- **A simpler, integrated operational communications capability that is more reliable**, provides coverage in more areas, allows communication across agencies and is less expensive to operate.

- **Significantly reduce the cost of delivering land mobile radio services** to public safety agencies over the next ten years.

- **Improved safety and service to the public** by equipping field operatives and frontline staff with real-time information.

- **Improved safety to frontline staff and community volunteers** through better, more robust mobile communications.

- **More opportunities for industry to engage with government** for supply and operation of critical communications, providing innovation, jobs and economic growth to NSW.

- **Releasing value from existing assets** through sale of excess capacity and duplicate infrastructure.

- **A leaner, more agile and responsive operating model** for government to manage operational communications.

- **Lower risk and improved decision-making** for government through greater visibility of operational results.

- **Reduced government reliance on asset ownership** and a focus on strategic commissioning to support contestability and market testing of existing services.

- **Creation of a foundation and platform for further innovation** that all agencies in the sector can use to improve services to the public.

STRATEGIC ALIGNMENT WITH NSW MAKING IT HAPPEN:

The strategy aligns with and supports the following four state priorities from *NSW Making it Happen*:

1. **Strong budget and economy**: the strategy will deliver an improved cost profile and will result in more effective management of the portfolio.

2. **Building infrastructure**: through refreshing and optimising the government’s operational communications infrastructure we will selectively invest in infrastructure improvements.

3. **Better services**: improved critical communications and information services will greatly enhance the service that can be provided to the community by our agencies’ frontline and support teams.

4. **Safer communities**: improved mission-critical services to support our frontline teams and volunteers as they protect our communities and natural environment during incidents.
CURRENT STATE OF OPERATIONS

Operational communication services are relied upon by our frontline workers to respond effectively to the needs of the community in times of crisis and to deliver the services we all rely on. Historically agencies have had to act as network builders, owners and operators to meet their needs; constructing non-integrated and independent radio networks. In some areas these radio networks have overlapping coverage, while in others a lack of coverage hampers response by field personnel.

This independent approach results in duplicated expenditure and excess capacity in many network components, the value of which cannot be extracted. Although in recent years cooperation and sharing across agencies has improved, more work needs to be done. A coordinated approach with increased sharing across the sector will reduce the duplication of effort, assets and resources and support a more consistent approach to management and planning.

Agencies independently have a wealth of information that, if more readily collated and shared, would support delivering better services to the community. Beyond agency information, there is also a wealth of data from other sources that cannot currently be accessed by field operatives quickly and effectively. Private industry has substantial experience and expertise that can be used to provide solutions to these issues.

Ensuring value for the community through the use of private industry can be achieved where competition exists. Opportunities and competition for some technologies and services will be developed. Appropriate market solutions are becoming more readily available, however, in many rural and remote areas where there is little or no consumer base, commercial services are currently limited. Government agencies are engaged by the market individually, which often results in reduced opportunities for government to realise competitive terms and the benefits of economic scale.

The technology relied upon for operational communications is also in a state of rapid change. Wearable technology and machine-to-machine communications are extending our capacity to collect and transfer information. There are exciting opportunities for these new technologies to be harnessed by government to reduce and fight crime, predict and respond better to natural disasters and assist to treat critically ill people more effectively. Future opportunities are expected to be significant, however some technologies are in their early days for use in mission-critical scenarios.

The public has embraced broadband enabled smartphones, engages enthusiastically with social media and has ready access to a wealth of information in real time. The community’s increasing digital engagement is now changing expectations around how government will interact with the public. Individuals are often first on the scene and are vital sources and consumers of information during incidents and emergencies.

…the technology relied upon for operational communications is in a state of rapid change.
The future state of operational communications in NSW is defined by a new operating model, seamless and robust communications services, a competitive market place and the availability of information.

**INDUSTRY AND GOVERNMENT PARTNERSHIP**

The new operating model defines close interaction between the NSW Telco Authority, industry and NSW government agencies in the protection of the community and delivery of essential services. In the future state, the NSW Telco Authority will focus on planning and governance of an integrated portfolio of assets and services on behalf of government. Agencies will be transformed from being builders, owners and operators of communications infrastructure to being consumers of services, better able to specify what they need. Industry will play an important role in the provision of services to government, ensuring that the right services are available when required by agency staff. Industry experts will be encouraged to provide information and advice on national and international trends regarding technology development and offerings.

**SEAMLESS COMMUNICATIONS**

The vision for the future is one where seamless, robust communication is offered to agencies anytime, anywhere.

Communication services will be delivered through a single, integrated environment rather than a series of independent agency specific networks. This platform will not only support the delivery of existing, critical services such as voice between agency staff, but will also allow for information to be exchanged and shared through high-speed applications such as video and data. Importantly, it will be highly robust, ensuring that agency staff remain connected at all times.

The future communications service will also be available at more locations than ever before. As radio networks are rationalised, optimised and integrated, coverage is significantly increased. This shared network footprint is further expanded as the environment is integrated with commercial networks for non-mission-critical needs and then augmented further to allow for a robust, mission-critical mobile broadband capability to be efficiently commissioned. New and emerging technologies allowing for rapid and mobile deployments of enhanced capability will be incorporated into the suite of tools to be leveraged.

The communications services will be centrally monitored with a consistent approach to field-based maintenance and applied across all government assets, allowing public safety agencies to focus on their core business of protecting the community and delivering essential services.

In terms of technology, this platform will no longer be based on bespoke solutions but rather will utilise standards-based, commoditised technology, readily available in the market place. This will ensure that new technology will only be adopted once it has been proven, which will secure availability of a range of user devices at the lowest cost. With industry participation, end devices may also be managed as a fleet, reducing the overall need for holding duplicate sets of spares across multiple agencies.

Interoperability will be a key feature of the future state communications environment. Public safety agencies and essential services providers will be able to communicate freely on the evolved platform. Personnel from outside the state, who are responding to emergencies within NSW, will also be able to use their existing devices, allowing seamless roaming between jurisdictional networks and faster incident response.
A COMPETITIVE AND ENGAGED MARKETPLACE

With its collective buying power, strategic relationships and enduring capability, the government will be able to influence the market and commission highly contestable services when required by agency users. Strategic assets will be leveraged to ensure that the NSW government continues to be able to access competitive services from the market.

We will proactively engage with industry partners to collaborate, innovate and solve problems, including sharing collective roadmaps and strategies.

INFORMATION ANYTIME, ANYWHERE

Seamless communications services will enable field staff to access new types of rich information anywhere, at any time. Agencies will access a common information platform and applications, allowing intelligence to be shared with field or support teams rapidly and reliably. Building on the foundation of better information sharing as outlined in the NSW Government’s ICT Strategy – Open Data, priority critical information from one agency may be used by other agencies in response to an incident or in the delivery of essential services.

Members of the NSW public will be active participants in the information ecosystem, engaging with the government sector via mobile, social media and digital channels. Agencies will be able to tap into a rich range of information and data sets provided by the public, industry and other agencies. The strategy will focus on better services as outlined in NSW Making it Happen and the ICT Strategy of Open Government, increasing customer-focus services and better information sharing.

Agencies will be better informed while delivering their core services to the public. They will utilise solutions, applications and information to continually innovate and improve their services to the public.
The NSW Government will obtain better value from its investments and provide more agile and responsive services to the community through these key initiatives:

1. One Integrated Portfolio
2. Shape a Competitive Market
3. Evolved Critical Communications Capability
4. Information Enabled

### 1. ONE INTEGRATED PORTFOLIO

The first initiative ensures the management of assets, resources and services as a single, integrated, efficient portfolio in order to reduce duplication and wasted investment.

We will:

- Manage one portfolio, under the direction of the NSW Telco Authority.
- Invest in the optimised portfolio to improve services, realise savings and create a platform for services based on mobile broadband.
- Manage the state’s critical spectrum assets strategically to provide greater flexibility in planning for and meeting demand, and to unlock greater value.
- Establish a robust collaborative framework for planning and prioritising the services required.
- Reduce government reliance on asset ownership and promote effective commissioning of services where savings can be made.
- Divest surplus assets and market excess capacity in retained assets in partnership with Industry.

### RESULTS:

- Improved coverage, capacity and reliability of shared and interoperable radio service.
- Agencies are equipped to focus on their core business: protecting the public from crime or disasters and delivering essential services.
- Reduced liability and risk associated with ageing asset portfolio.
- Decreased total asset holdings as radio-communications assets are rationalised and divested.
- Increased revenue generated from excess capacity.
- Unnecessary capital expense is avoided and operating costs are reduced.
- A centre of expertise within government with the skills and resources needed to commission effective and efficient operational communications services to NSW Government user agencies.
2. SHAPE A COMPETITIVE MARKET

We will drive an effective and mature service market that meets sector requirements.

In shaping a competitive market we will:

- Promote the use of open technologies, standards and interfaces to increase competition and market diversity.
- Increase the use of readily available commodity services and equipment rather than bespoke arrangements.
- Retain key strategic capabilities and assets within government.
- Collectively plan and document government requirements to allow industry to more effectively plan for service delivery.
- Apply the NSW Government’s strategic commissioning\(^2\) approach to accessing services.
- Create a single point of contact with the market for the commissioning of services.
- Implement an industry engagement framework which encourages better collaboration and innovation between government and industry.
- Develop and foster partnerships with small and medium enterprise partners including seeking innovative solutions that fit our unique service requirements.

### RESULTS:

- Better value for money is obtained.
- Reduced cost of equipment and services offered to Government by the private sector.
- Enhanced private sector participation and engagement in providing services to government, particularly from small and medium enterprise.
- Reduced lead times for government agencies to access services and new technologies.
- Improved quality and timeliness of services provided to government.
- Enhanced responsiveness from the market to provide innovative solutions to government.
- Greater contestability achieved in the provision of equipment and services.
- More opportunities for industry to engage with government for supply and operation of critical communications, providing jobs and economic growth to NSW.

---

\(^2\) Strategic commissioning is a system of working out the services the community needs, and then designing the best service delivery system for these, whether government provides the service or the market. Principles that underpin strategic commissioning are strong service outcomes for the community, value for money and allocation of risk.
### KEY ACTIONS

<table>
<thead>
<tr>
<th>DELIVERING (INDICATIVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 FY15/16</td>
</tr>
<tr>
<td>Q2 FY15/16</td>
</tr>
<tr>
<td>Q2 FY15/16</td>
</tr>
<tr>
<td>Q4 FY15/16</td>
</tr>
<tr>
<td>Q4 FY15/16</td>
</tr>
</tbody>
</table>

### 3. EVOLVED CRITICAL COMMUNICATIONS CAPABILITY

We will develop a resilient and secure communications capability for the sector that supports mission-critical services for voice, video and data.

To develop an advanced and evolved critical communications capability, we will:

- Enable frontline personnel to use a range of services and technologies to access video, voice and data.
- Adopt and publish new standards for assets, technology and architecture.
- Interconnect networks and services across the sector into a unified critical communications platform.
- Advocate with the Commonwealth for spectrum to support current and future services.
- Define and develop a broadband service capability.
- Identify and transition existing narrowband services to a broadband service capability.

#### RESULTS:

- Highly reliable and resilient mobile broadband capability is available to frontline personnel in government agencies.
- Reduced risk to public safety and essential service personnel.
- Retire expensive, dedicated legacy services.
- Agencies are able to re-examine the way they deliver services leading to better community outcomes.
- More efficient coordination and deployment of resources.

<table>
<thead>
<tr>
<th>KEY ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance mission-critical services through optimisation (Stage 1)</td>
</tr>
<tr>
<td>Introduce broadband and expand mission-critical data (Stage 1)</td>
</tr>
<tr>
<td>Identify and transition appropriate services from land mobile radio to broadband (Stage 1)</td>
</tr>
<tr>
<td>Decommission/Divest non-strategic assets (Stage 1)</td>
</tr>
<tr>
<td>Decommission Mobile Data Radio Network</td>
</tr>
</tbody>
</table>

Led by: NSW Telco Authority

Led by: NSW Telco Authority
4. INFORMATION ENABLED

We will create a shared intelligence capability that enables public safety agencies to access targeted, timely and secure information from a variety of government, community and industry sources.

To enable agencies with information, so that members of frontline staff are connected and aware, we will:

- Create a framework to gather operational information from many sources (other agencies, public, and networked devices) and make it available to the people who need it.
- Develop a sector information and application roadmap for sharing operational intelligence.
- Harness new sources of information and provide to operatives in the field as intelligence.

RESULTS:
- Reduced risk to public safety personnel.
- Better decision-making.
- More effective coordination and deployment of resources.
- Pre-emptive action possible, reducing likelihood and consequence of impacts on the community.

<table>
<thead>
<tr>
<th>KEY ACTIONS</th>
<th>DELIVERING (INDICATIVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop sector information and application roadmap</td>
<td>Q4 FY15/16</td>
</tr>
<tr>
<td>Establish information sharing framework, priority data sets, sharing procedures and publish datasets to the public where appropriate</td>
<td>Q4 FY15/16</td>
</tr>
<tr>
<td>Seek industry partners to create a prioritised suite of applications</td>
<td>FY16/17</td>
</tr>
<tr>
<td>Agree common standards for platforms, connectivity, devices, user accessibility, security and privacy</td>
<td>Q4 FY15/16</td>
</tr>
<tr>
<td>Develop skills and capabilities in sector to harvest information by engaging with the private sector</td>
<td>FY16/17</td>
</tr>
</tbody>
</table>

Led by: Agencies

The initial three-year implementation plan for the strategy, including the initiatives above, is provided in Appendix 1.
ENABLERS FOR FORGING THE FUTURE OPERATIONAL COMMUNICATIONS

Five key enablers and capabilities have been identified to deliver the strategic initiatives that will provide better service, better value and more agile government.

1. Strategic commissioning
2. Critical spectrum
3. Focused sector capability
4. Supporting legislation
5. Sustainable funding

<table>
<thead>
<tr>
<th>ENABLERS/CAPABILITIES</th>
<th>STRATEGIC INITIATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic commissioning</td>
<td>1. One integrated portfolio</td>
</tr>
<tr>
<td>Critical spectrum</td>
<td>2. Shape a competitive market</td>
</tr>
<tr>
<td>Supporting legislation</td>
<td>3. Evolved critical communication</td>
</tr>
<tr>
<td>Focused sector capability</td>
<td>4. Information enabled</td>
</tr>
<tr>
<td>Sustainable funding</td>
<td>5. Sustainable funding</td>
</tr>
</tbody>
</table>

These enablers will support delivering the strategy in the following way:

**STRATEGIC COMMISSIONING**

To shape the market and drive better service outcomes, the full capabilities of the public, private and community sectors will be used to encourage contestability and innovation.

We will pursue open, contestable and diverse delivery models and systems, making the best use of available resources both now and in the long term. We will seek to source services from markets where there is strong competition, innovation and a superior service offering and retaining the capability to intervene where the market fails to deliver a robust, economical solution.

**ACCESS TO CRITICAL SPECTRUM**

Radiofrequency spectrum is critical to the provision of new services such as broadband video and data and enables delivery of efficiencies and value to the public.

The outcomes of the Public Safety Mobile Broadband inquiry, currently being undertaken by the Commonwealth, will be critical in terms of government’s access to spectrum, the market dynamics we will face and what strategic commissioning alternatives will be available to the NSW Government.

**FOCUSED SECTOR CAPABILITY**

The sector has developed a wealth of operational communications expertise within multiple agencies. However, as this expertise resides within individual agencies, it not easily accessed to help tackle the new challenges of rapid technology change and support a more integrated approach.

To bring about the transformation called for in the strategy, a new focus and approach is needed. Rather than sector-wide improvement in all capabilities across agencies, the strategy calls for greater focus and specialisation, and augmentation with industry expertise. The strategy will get the right expertise in the right areas, creating centres of excellence.
SUPPORTING LEGISLATION

A legislative environment that reflects the strategic direction determined by the NSW Government and outlines roles and responsibilities is required to ensure successful delivery of the strategy.

Future legislation will support the following:

• The role of the NSW Telco Authority Board is to advise government on the development and evolution of the whole of government strategy and governing the NSW Telco Authority to ensure its delivery.

• Defining and confirming the role of the NSW Telco Authority to lead delivery of the strategy for NSW Government.

• Allowing for NSW Government operational communications assets to be managed as an integrated portfolio, including vesting in some cases.

• Allowing the NSW Telco Authority to release value in the spare capacity of strategic assets.

In order to support the transformation required, existing legislation will be considered.

SUSTAINABLE FUNDING

The strategy calls for making the best use of industry expertise, through strategic commissioning of services, as well as with measured investment in strategic infrastructure and technology. The integrated approach provides opportunities for considerable avoided cost over the current model. This will change the historic approach of agencies requesting agency-specific capital allocations for these investments.

“...To shape the market and drive better service outcomes, the full capabilities of the public, private and community sectors will be used to encourage contestability and innovation...”
Implementing this strategy requires a new operating model to be developed based on a close partnership between agencies (which require and utilise services), the NSW Telco Authority (representing government and providing sector-wide governance), and private industry (contributing highly cost effective services and expertise).

Private industry acts at all levels of the operating model, providing advice, services and management, which will result in a better approach and will foster competition over the longer term. The operating model includes retaining government capability in critical strategic areas to ensure that the government can continue to commission highly contestable services.

The operating model is a three-way partnership with a strong service focus, integrated management and industry expertise.
A ‘BUILDING BLOCKS’ APPROACH

The operating model requires a combination of several components which form the essential ‘building blocks’ to provide operational communication services across NSW. Each component requires engagement and participation from agencies, strong support from industry and leadership provided by the NSW Telco Authority.

**Strategy, Policy and Governance:** the overall management of the integrated portfolio of operational communications assets, investment decisions, strategy, technology and architecture standards, service portfolio, portfolio risk, supplier/partner management, commercial governance, financial funding and pricing for the sector. This function will be led by the NSW Telco Authority with supporting advice provided by industry partners.

**Agency Service Strategy:** the creation of the strategy for delivering services to the community. Agencies will continue to lead their individual service strategy and prioritise their requirements to the NSW Telco Authority.

**Integrated Program Management Office (IPMO):**
The NSW Telco Authority will host and manage an IPMO that delivers the major operational communications projects and programs for the sector. This function will initially be used to plan and deliver radio network rationalisation and drive short term value, laying the foundation for future services. The IPMO will ensure that networks and services are delivered according to established standards and will promote contestability in the market.

Agencies will be directly involved in the IPMO in terms of:

- Deployment of agency staff as subject matter experts into the IPMO for key projects
- Optimisation planning to transform current environments into a single integrated platform
- Assistance in change management to support the new delivery model.

The private sector will be engaged in the IPMO to provide expertise in program and project management, as well as large scale cellular network implementation.

---

**LEADERSHIP**

- **Industry:** Advice
- **Telco Authority:** Strategy, Policy, Governance
- **Agencies:** Service Strategy

---

**INTEGRATED PROGRAM MANAGEMENT OFFICE**

- **Network Services Delivery**
- **Asset management**
- **Capacity marketing**

- **Core Services to the community**

---

**OPERATIONAL SERVICES**
Network Service Delivery: private industry will be leveraged to provide most of these services effectively and efficiently:

• Supplier management
• End user terminal fleet management
• Management of assets and properties that support operational communications
• Marketing of excess capacity

OPERATING MODEL PRINCIPLES

• Throughout implementation, services must continue to meet the mission-critical requirements of agencies that serve the public.
• Where a strong competitive market already exists, private industry will be leveraged to provide operational communications services effectively and efficiently. Where competition is not as strong, we will foster and develop markets for these services.
• While a service sourcing approach is favoured, in cases where the market is not able to provide services that are fit for purpose and represent value, the NSW Government will retain the option to use its enduring capability to selectively procure strategic assets.

Where strategic government assets are retained, industry expertise can be used to operate and manage assets on behalf of the NSW Government. This operating model promotes contestability as well as flexibility to adapt as markets and technologies evolve. It also provides an opportunity for emerging suppliers to progressively build their capability to offer services to the NSW Government. This approach provides incentives to suppliers to keep service levels high, whilst promoting competitive and effective services.

"The operating model requires engagement and participation from agencies, strong support from industry and leadership provided by the NSW Telco Authority."
THE PROPOSED GOVERNANCE MODEL

The governance framework is based on a partnership between agencies, the NSW Telco Authority and industry.

At its core, the governance framework will ensure that the strategy delivers mission critical operational communication services while achieving value for money through optimal service delivery models. The framework enables decision makers and key stakeholders to have confidence in the delivery of the strategy. The various governance forums have been designed to provide:

- Advice to decision makers and planners on the direction of the sector, technology, procurement and service improvement
- Assistance to key stakeholders in implementing the strategy, its reform program and its investment and commissioning activities
- Assurance to the NSW Telco Authority Board, NSW Telco Authority clients and the operational communications sector generally that the strategy is being implemented correctly, that service levels are being maintained and that value for money is being achieved.

Key decision-making bodies to support the governance model include the following:
NSW GOVERNMENT

The NSW Government sets the overall policy and strategic direction for NSW. The Minister for Finance, Services and Property is the lead Minister for NSW Telco Authority activities. Through the Expenditure Review Committee and Cabinet, the NSW Government considers new proposals with financial implications and monitors the overall financial performance of agencies. NSW Treasury manages the Gateway Review System which seeks to improve discipline and achieve better service results for major projects and proposals.

NSW TELCO AUTHORITY BOARD

Reporting to the Minister for Finance, Services and Property, the NSW Telco Authority Board drives the delivery of the strategy and advises government on its evolution. The Board includes independent members drawn from both private sector and government backgrounds, as well as members with expertise in service delivery for key user agencies. The Board’s role is to:

• Maintain a high-level strategic oversight of investment and performance across government.
• Set policy requirements in support of the strategy.
• Monitor the progress and outcomes of key strategic projects such as infrastructure optimisation and public safety mobile broadband.
• Identify and champion initiatives for maximising community value through effective partnerships and through innovative approaches to leveraging the expertise of the private sector.
• Balance the requirement to take a long-term and planned approach to significant investments with the rapid pace of technological change, ensuring NSW is always well positioned to benefit from new services that enable agencies to better meet the needs of the NSW community.

NSW TELCO AUTHORITY

The Board is supported by the NSW Telco Authority. The NSW Telco Authority is responsible for advising on the development and evolution of the NSW Government’s strategy and leading its delivery. The NSW Telco Authority reports directly to the Board and the Minister for Finance, Services and Property on delivery of key milestones, decision points and government actions required to support the delivery of the strategy. It will:

• Act as the custodian of the NSW Government’s portfolio of operational communication assets, resources, services and service provider arrangements.
• Engage with Industry to commission services and govern commercial agreements to ensure contracted standards are met.
• Govern the program of work through the Integrated Program Management Office, ensuring delivery of all major projects on time, within budget, with all projected benefits and scope intact.
• Monitor and report on the performance of the portfolio against targets and benchmarks, including those set out in this strategy.

COMMISSIONERS’ ADVISORY COUNCIL

A key advisory body to the NSW Telco Authority Board comprised of the Commissioners (Chief Executives) of the core public safety agencies (NSW Police, Fire and Rescue NSW, NSW Rural Fire Service, NSW State Emergency Service and the Ambulance Service of NSW), who by the nature of their business, operational needs and the size and complexity of their organisations will be the main determiners of operational communications design, delivery and service levels. The Council will be chaired by the Chairperson of the NSW Telco Authority.

STRATEGY AND INVESTMENT FORUM

The Strategy and Investment Forum provides advice to the NSW Telco Authority on agency requirements, operational communications investment priorities and the performance requirements for the services provided to the sector by Industry. The forum would recommend spending proposals to the NSW Telco Authority Board for inclusion in the budget.

Members will include:

• Senior leaders (Deputy Commissioner/Secretary level) from key user agencies (with strong representation from public safety agencies and essential services agencies)
• The NSW Telco Authority
• Representatives from NSW Treasury and the Services and Digital Innovation Division from the Department of Finance, Services and Innovation.
TECHNOLOGY PLANNING AND REVIEW GROUP
The Technology Planning and Review Group’s focus is to provide technical advice to the Strategy and Investment Forum, including appropriate technology architectures and solutions, and to examine the operation and performance of existing networks, infrastructure and services. The forum also sets technology standards, guidelines, policy and assurance to ensure services delivered align.

Members will include a mixture of public safety agencies, essential services providers, larger operational communications users and smaller agencies.

INDUSTRY ADVISORY FORUM
The Industry Advisory Forum provides advice to the Strategy and Investment Forum regarding relevant industry trends and developments that can inform the sector strategy, such as matters relating to operational communications, telecommunications, devices, information and applications management, spectrum, and solutions.

Members may include representatives from professional associations such as the Australian Radio Communications Industry Association (ARClA), the Australian Mobile Telecommunications Association (AMTA), independent advisors or other industry partners.

CHANGE AND CONTINUOUS IMPROVEMENT FORUMS
The Change and Continuous Improvement Forums provide support for the implementation of the strategy as managed by the Integrated Program Management Office. These forums reflect changes resulting from implementation of the strategy back into their organisation, ensuring the success of programs and projects with change elements.

The Change and Continuous Improvement Forums will consist of representatives from those agencies most impacted by the organisational and operational changes that result from implementation of the strategy. Members of the Forums will report into their respective agencies but will have a close relationship with the Integrated Program Management Office.

IPMO, USER AND SERVICE DELIVERY FORUMS
These groups provide governance over the delivery of much of the work under the strategy. They work at an operational level and ensure that the Telco Authority, industry partners and agencies are able to gain a level of assurance that programs and activities are being delivered as required and that service requirements are able to be met and improved.
TIMELINE

Ultimately the evolution of the strategy will be influenced by how technologies, markets and agency delivery models change over time. Initially, it is anticipated that the strategy has three overlapping time periods, reflecting the changing landscape in terms of operating model, service delivery and technology.

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
</table>

In each period, the strategy delivers improved service, value to the community and evolves to a more agile service delivery model for government.

**PHASE 1: 2015-2019**
During this period, the sector transitions to a new operating model, with the NSW Telco Authority taking up the role of managing the Integrated Portfolio of operational communications. In this phase, the portfolio of network assets is rationalised, optimised and integrated to provide better coverage and better level of service to all agencies through the more judicious application of investment. Key strategic assets are earmarked, excess assets are divested and spare capacity is exploited to maximise value. Interoperability is achieved for interstate mission-critical voice services and work begins with agencies defining their high-priority requirements for information and applications on a shared platform. This period lays the foundation for the next two phases.

**PHASE 2: 2017-2022**
With redundant network elements removed, strategic assets available and disparate network services integrated, the foundation is ready for a transition to broadband services. Agencies are provided with access to mission-critical data services allowing them to re-examine the service models they rely on in their interactions with the community. New capabilities are interconnected with existing voice services, providing a pathway for migration from traditional radio-based services to a combined voice and data platform in the metro areas.

**PHASE 3: 2019-2025**
The operational communications capability is a balance of strategic government network assets and services sourced from the market. Interoperability is achieved for mission-critical data and video services. A shared information platform has been created and agencies are reaping the benefits of mission-critical voice, data and video, using an array of applications, allowing agile service delivery. Savings and better service have been achieved through an integrated approach.
## APPENDIX 1 - IMPLEMENTATION PLAN

### ESTABLISH FOUNDATION

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>ACTIVITIES</th>
<th>FY15/16</th>
<th>FY16/17</th>
<th>FY17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Enhance the supportive legislative and policy framework</td>
<td>Conduct a review of the NSW Government Telecommunications Act 1991 to support implementation of the strategy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish a sustainable funding and service pricing model</td>
<td>Develop a sustainable funding model to support delivery of the strategy and the new sector operating model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhance sector-wide governance</td>
<td>Establish an enhanced stakeholder governance framework that provides for strong participation from agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish a dedicated industry advisory forum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish a strategy planning and delivery framework and capability</td>
<td>Establish a strategic planning and reporting framework to provide assurance over the delivery of strategy activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish an integrated program management office (IPMO) involving agency and industry participation to drive the delivery of sector-wide projects and programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create and implement Service Planning Framework</td>
<td>Establish and implement a process for identifying, prioritising and communicating emerging services required by NSW Government agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ONE INTEGRATED PORTFOLIO

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>ACTIVITIES</th>
<th>FY15/16</th>
<th>FY16/17</th>
<th>FY17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Establish and optimise an integrated portfolio</td>
<td>Commission a sector-wide portfolio management capability and supporting framework (including assets, services, resources and contractual arrangements)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implement the Greater Metropolitan Area rationalisation program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implement the Regional rationalisation program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish and implement a program to divest surplus assets identified through the rationalisation programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish a framework to market excess capacity achieved as a result of the rationalisation programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan and manage spectrum</td>
<td>Introduce enhanced management arrangements for all NSW Government spectrum assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seek access to the spectrum required to realise the benefits of an evolved critical communications network</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support sector-wide transformation</td>
<td>Establish a sector-wide change management framework to support the change associated with implementation of the strategy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduce a program to develop sector-wide skills and capabilities to support strategy implementation and the new sector operating model</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Evolved Critical Communications Capability

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>ACTIVITIES</th>
<th>FY15/16</th>
<th>FY16/17</th>
<th>FY17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure that front-line staff continue to have access to mission-critical services</td>
<td>Maintain and enhance existing land mobile radio voice and data capabilities</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Improve existing communications services</td>
<td>Improve the catalogue of existing services by increasing coverage, availability and choice of user devices for stakeholder agencies</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Promote and facilitate arrangements to improve the resilience of carrier services</td>
<td>Partner with telecommunications carriers to improve the resilience of commercial networks</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Introduce mission-critical broadband capability</td>
<td>Enhance the technology services roadmap, focusing on broadband services</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Transition from land mobile radio to Broadband</td>
<td>Develop the capacity for agencies to access and utilise effective video and data services via existing business-grade services</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Decommission legacy services</td>
<td>Commission a broadband service capability for mission critical applications</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
</tbody>
</table>

### Information Enabled

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>ACTIVITIES</th>
<th>FY15/16</th>
<th>FY16/17</th>
<th>FY17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop information/application capability roadmap for the sector</td>
<td>Identify information sources used by agencies to improve services for the community</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Coordinate sharing of information</td>
<td>Establish a framework for the secure sharing of appropriate information with public safety agencies</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Coordinate the establishment and use of applications</td>
<td>Commission platforms and systems for sharing information and applications</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Develop skills and capabilities in the sector to harvest information</td>
<td>Develop a prioritised suite of applications for informing front-line staff</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
</tbody>
</table>

### SHAPE a Competitive Market

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>ACTIVITIES</th>
<th>FY15/16</th>
<th>FY16/17</th>
<th>FY17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead engagement with the market</td>
<td>Promote a coordinated approach to category planning</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Adopt strategic commissioning approach</td>
<td>Enhance the ITS2573 pre-qualification procurement scheme to support future requirements</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td></td>
<td>Promote opportunities for increasing contestability in services and suppliers</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Retain strategic capability to ensure long-term competition and contestability</td>
<td>Identify key strategic resources, knowledge, expertise and assets to be retained to promote contestability</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Adopt an industry engagement framework</td>
<td>Create a structured plan that sets out goals, principles and criteria for selecting and working with strategic partners as well as developing small to medium enterprises</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
</tbody>
</table>
OPERATIONAL COMMUNICATIONS STRATEGY

For more information, contact:
New South Wales Telco Authority
Level 18, McKell Building
2-24 Rawson Place
Sydney NSW 2000
Email: telco.authority@finance.nsw.gov.au