



# PUBLIC SAFETY THE TELSTRA BLUEPRINT

IT'S HOW  
WE CONNECT



# PUBLIC SAFETY ORGANISATIONS: KEEPING PEOPLE AND COMMUNITIES SAFE

## NATURAL DISASTERS. TERRORISM. BORDER SECURITY. HOW CAN PUBLIC SAFETY ORGANISATIONS PROTECT PEOPLE IN TODAY'S ENVIRONMENT?

The recent run of disasters, from Queensland flooding to Victoria's bushfires, has highlighted the growing need for cost-effective public safety solutions. Faced with limited resources, disparate systems, specialised data and security needs, Emergency Services Organisations need efficient ways to improve community preparedness, responsiveness, situational awareness and officer safety.

### TELSTRA PUBLIC SAFETY BLUEPRINT

To address these mounting challenges, we have designed the Public Safety Blueprint – a highly resilient ICT infrastructure connecting public safety organisations with effective collaboration and communication between response teams, vehicles, equipment, communication centres, allied agencies and the community.

The following pages show how this blueprint can help you achieve richer and more resilient communications, greater visibility, automated processes and features such as early warning systems. And how deploying a range of solutions that public safety organisations can help make officers more informed and responsive – while reducing the cost of maintaining reliable communications.

### A VISION FOR YOUR FUTURE

One size does not fit all, so Telstra public safety experts work closely with you to help solve your specific challenges. We can work with you to establish a roadmap to progressively automate processes, extend capabilities and improve situational awareness, responsiveness and officer and citizen safety. Together

with our industry-leading partners, Accenture, Cisco, Microsoft and M2M technology companies, we continually develop and rigorously test public safety communications solutions in our Innovation Centres to deliver mature, proven, reliable technologies. For example, our Emergency Alert System has been internationally recognised, winning Project of the Year at the 2012 World Communications Awards.

### THE RIGHT NETWORK MATTERS

To connect response teams, vehicles, allied agencies and the community, the Telstra Next IP® network is designed to 99.999% reliability, with expert monitoring 24/7/365. It features Application Assured Networking™ which lets you track the performance of your applications, helping you predict costs and plan for growth.

The Telstra Next IP® network also provides interoperability with the Next G® network, government and private radio and satellite networks. This brings you the benefits of extensive coverage and the ability to roam across networks using cost-efficient solutions.

### PROVEN COMMITMENT

Telstra has a long association with the emergency services, providing the national Triple Zero service, as well as our Emergency Alert System (EAS), which provided automated community warnings during the Queensland floods and Cyclone Yasi. We also manage the Victorian State Mobile Radio Network, and other radio networks in Australia. We also offer a comprehensive portfolio of solutions – from our Vehicle Access Network (VAN) which provides police and ambulance with

unprecedented in-vehicle communications, through to our contact centre solutions, which connect communications centres with the community. Not only do we have the experience and expertise to support various environments, we also play an instrumental role in recovery efforts with the largest technical field force in Australia.

### CLOUD CAPABILITIES

By choosing Telstra Cloud you gain access to world-class infrastructure, software, applications and services across Australia's largest communications network, providing superior reach and coverage for public safety organisations' communications and services. Many of our smart technologies – such as the Telstra Emergency Alert System developed for the Victorian Government – are designed specifically for public safety organisations.

Telstra's cloud capabilities include a 400-strong information security team, network-based firewalls and remote access security, so your data stays safe and highly secure. If you need extra privacy for sensitive data, we offer private clouds with ISO27001 security accreditation. We store all your data in an Australian data centre, so it remains fully auditable under Australian jurisdiction, ensuring compliance with governance and privacy requirements.

You can scale software, servers and storage to meet changing requirements – and you pay only for what you use, freeing capital to invest in improving operations. Integration and migration specialists from Telstra and Accenture work with you to help pinpoint the best solution and deploy it seamlessly.

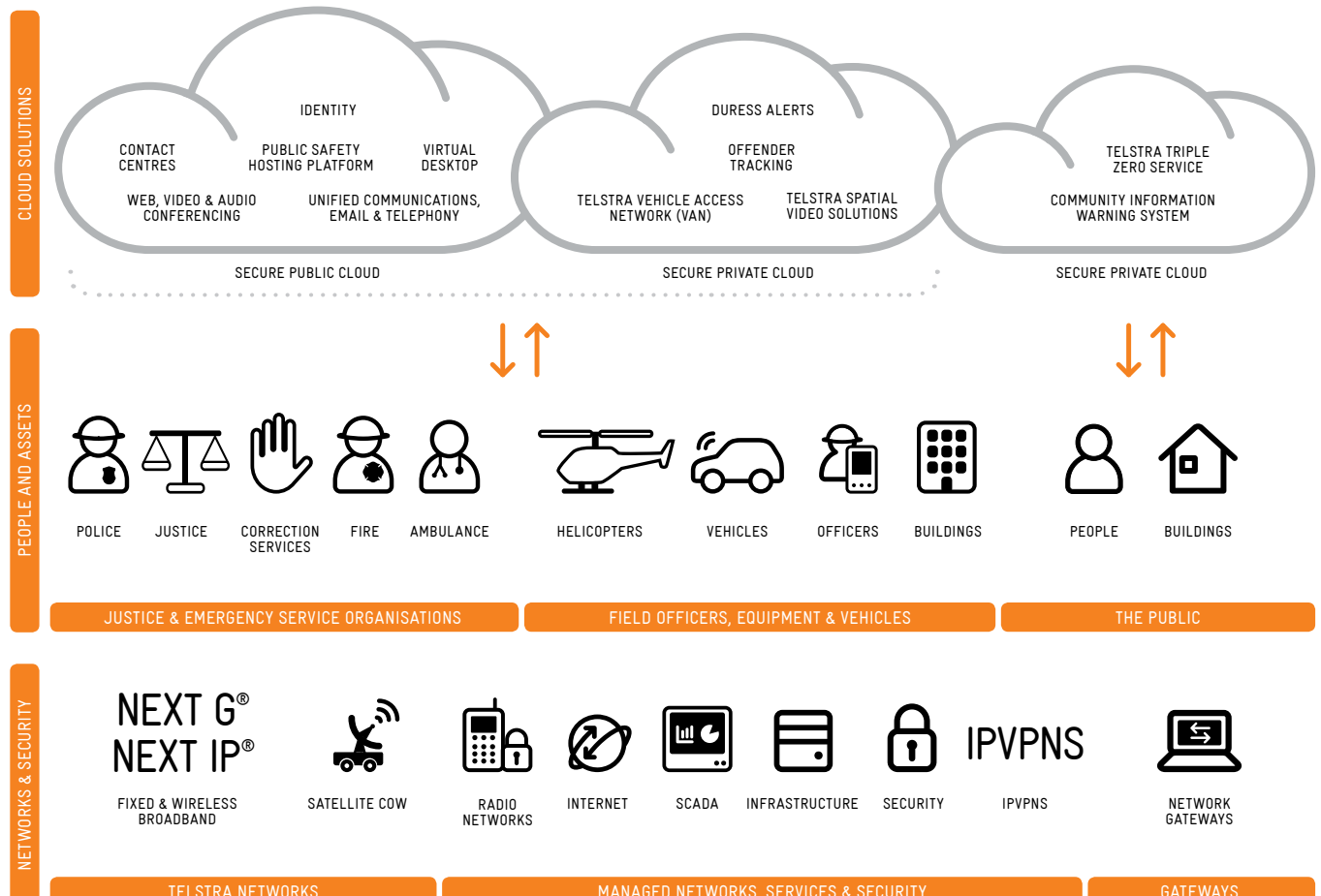
# THE TELSTRA PUBLIC SAFETY BLUEPRINT

## CONNECTING YOU AND YOUR TEAM

The Telstra Public Safety Blueprint provides a unique communication capability for your organisation. It connects officers, facilities, equipment and the public with cloud-based ICT solutions – from Early Warning Systems to Telstra Spatial Video Solutions and the Telstra VAN, providing workers with wireless services. And it securely delivers these communications across high-speed networks that interoperate across satellite, radio, wireless and fixed broadband to provide the widest coverage with the greatest reliability during emergencies.

The result is an environment that helps teams collaborate efficiently and coordinate an effective response.

Telstra public safety experts can work with you to tailor a roadmap to developing a more connected, robust and secure communications platform – one that provides you with cost-efficient managed options and the flexibility to add future innovations without capital investment in networks and solutions.



## SUPPORTING EMERGENCY SERVICES ORGANISATIONS

This illustration demonstrates how Telstra can aid and enhance communications in a situation where there is an act of arson at a petroleum factory.



### Fast initial response

When a refinery worker reports a suspected arson, Telstra's Triple Zero service rapidly refers the call to the appropriate Emergency Communications Centre. Here, fire service personnel notify police and ambulance to coordinate a multi-agency response.



### A complete operating picture

Using a smartphone, the safety officer at the refinery can video call, as well as transmit photos and critical data, to help incident commanders make accurate decisions. As he talks, a storage tank explosion adds to the emergency.



### Accurate unfolding footage

A helicopter streams high-quality video directly to field teams, response partners and the control centre. With visibility impaired by smoke on the ground, this invaluable information helps keep emergency personnel safe and informed.



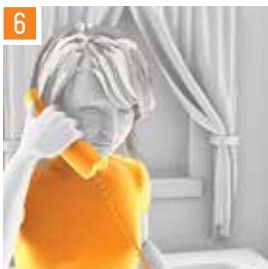
### Rapid containment measures

With public utility companies connected to the same network, ESOs can rapidly instruct them to cut power to the refinery to prevent dangerous secondary electrical fires.



### Prompt expert advice

Firefighters containing the blaze need advice on LPG from a chemical expert. The Incident Control Centre (ICC) arranges for a direct call to the smartphone of the unit's fire officer. He's able to rapidly confirm their approach and proceed without delay.



### Comprehensive citizen warning

To protect citizens from toxic fume inhalation, the ICC invokes their Telstra Emergency Alert system, which automatically contacts citizens in the affected area via phone in their homes and via SMS alert to mobiles, instructing them how to evacuate.



### Calm, efficient evacuation

Telstra VAN provides traffic and situational data to forward response units and police vehicles, enabling them to better respond to the incident.



### Rapid triage

As casualties are transported to hospital, ambulance officers enter patient data and transmit it to the hospital. This saves valuable time and double entry, and helps ensure that information is consistent and legible.



### Effective suspect apprehension

Hours later officers in a rural town are able to apprehend a suspect using information provided across the Telstra Next IP® network.

# PROTECTING LIVES, PROPERTY AND SECURITY

## THE PUBLIC SAFETY BLUEPRINT PROVIDES A SITUATIONAL AWARENESS AND COLLABORATION SOLUTION

### 1. UNIFY YOUR NETWORKS

The cornerstone of the Public Safety Blueprint is the Telstra Next IP® network. It provides extensive core connectivity plus interoperability between diverse public and private networks – radio, wireless, wired and satellite. This enables your field officers to roam across Next G®, satellite and private radio networks to significantly extend their communication coverage.

With secure gateways connecting this interoperable network to your systems, your emergency teams can collaborate and share information securely across multiple devices.

The Telstra Next IP® network also features Application Assured Networking™, which provides network-centric assurance for your applications. It gives you visibility to make informed decisions and optimise the network to help ensure the delivery of critical applications such as video, as well as mission-critical data, optimising the end-user experience.

Telstra machine-to-machine solutions enable you to add sensors to your network. These can transmit temperature, wind speed and other data, automatically triggering bushfire or flood warnings. For example, Telstra Spatial Video cameras and software can be connected to lookout towers to communicate critical information about a fire's whereabouts.

Telstra's managed service takes end-to-end responsibility for designing, building, operating and maintaining a highly available radio network designed to provide modern front-line communications for a predictable fee.

### 2. ACCESS POWERFUL INDUSTRY SOLUTIONS

Integrated into this network are a suite of Telstra and partner solutions that simplify day-to-day agency operations and help improve the safety and efficiency of front line officers and protect the public during crises.

#### Collaboration and Communication

Telstra IP telephony, unified communications, audio, video and web conferencing can bring together distributed teams in regular strategic planning sessions or in a crisis. With video delivered to and from mobile phones, vehicles, helicopters and field teams, Operation Centres can obtain detailed situational awareness.

#### Mobility

Telstra can provide field staff with mobile handsets that amplify their communication capabilities across the Next G® network. To support communications in remote locations, Telstra's satellite technology can deliver a portable voice and data phone service with a coverage area that is virtually Australia-wide.

Telstra mobile solutions also support Duress Alerting where officers covertly press a key or combination on their mobiles or radios to send a Duress Alert to a pre-set destination.

#### Fleet Management

Telstra's fleet management solutions make it easy to track vehicles via GPS satellites and the Next G® network, improving efficiency and officer safety, and reducing operational costs. Telstra VAN lets you deliver video, voice and patient or suspect data to consoles in helicopters, police cars and ambulances. VAN provides connections over multiple pathways, including the Next G® network, Telstra Managed Network and Government Radio Networks (GRNs).

### Citizen Information and Warning

The Telstra Emergency Alert System sends automated, targeted communications to people in danger zones. Calls can be sent to individual premises and mobiles defined by geographical area. Automated calls can also issue instructions or direct people to a website, public radio service or 1800 number for updates.

### Offender Tracking

Telstra can also integrate wristwatch-like electronic monitoring devices that monitor offenders 24/7 by triggering alerts when they approach excluded zones.

### 3. STREAMLINE YOUR ICT IN THE CLOUD

Many of the solutions in the Telstra Public Safety Blueprint are available as affordable cloud services, enabling you to deliver them in the field, at home, in the office or anywhere there's an Internet connection. Telstra Cloud services include:

1. Infrastructure as a Service (IaaS) – scalable computing power and highly secure data storage with compliant archiving and retrieval in our enterprise-grade data centres.
2. Software as a Service (SaaS) – the latest business software from Microsoft, SAP and others, specialised public safety applications (described in section 2), unified communications, video and web conferencing.
3. Hosted Contact Centres – quickly set up a Web Contact Centre in response to a crisis and let Telstra manage it for you. Our solutions enable agents to respond using multi-channel communications – phone, email, text, live web chat and web call-back – ideal in emergencies.

By choosing Telstra Cloud services you are spared ongoing capital investment and continual technology updates. Plus you benefit from innovative solutions with a predictable pay-for-use model.





# THE TELSTRA ADVANTAGE

## WORK WITH TELSTRA EXPERTS WHO KNOW PUBLIC SAFETY COMMUNICATIONS NEEDS INSIDE OUT

Whether you need to extend coverage and reach, improve connections to partner organisations, or provide the latest video, data and in-vehicle communications, Telstra has the networks, facilities, solutions and expertise you need.

### IMPROVE RELIABILITY, COVERAGE AND CAPABILITIES

We have a proven track record of designing, building, owning and managing mission-critical radio networks.

Our deep engineering expertise enables us to take the best of Telstra's networks and solutions and integrate them with your radio network to provide the capabilities you need. We can also add voice, data, video and roaming across public and private networks, through Telstra VAN. And we can enable your network to interoperate with others – from satellite to private radio networks to extend your coverage.

We can overlay all of this with a suite of sophisticated public safety solutions to improve officer and citizen safety, situational awareness and collaboration.

### STAY AT THE LEADING EDGE

By choosing Telstra managed services, your core networks are monitored and designed to 99.999% availability with sub-second failover and recovery for your mission-critical services. And with our growing portfolio of public safety cloud services, you don't have to risk your own investment to keep your network and operations at the leading edge.

### WORK WITH A COMMUNITY- FOCUSED PARTNER

Telstra has a strong history of restoring services during unforeseen events and providing generous community support such as the customer relief, free call and diversion packages donated during the Victorian bushfires and Queensland floods.

### ENJOY WORLD-CLASS CUSTOMER SERVICE

Delivered by accredited professionals using best practice methodologies, your service is backed by one of Australia's largest and most qualified field and technical workforces. We have 2,500 communication technicians, over 700 maintenance technicians and 1,600 field technicians Australia-wide, enabling us to manage your solutions across the complete ICT life cycle.

Our customer service standards specify what you can expect from us. They're so exacting we've earned the prestigious International Customer Service Standard certification at the highest level.

### HELP REDUCE RISK IN YOUR COMMUNICATIONS SOLUTIONS

Telstra provides a dedicated enterprise account management team fully supported by public safety experts. They are experienced in today's challenges, as well as the latest solutions from Telstra and our partners. They'll work with you to tailor a roadmap and then rigorously scope, define and design the network and/or solutions you require, helping to achieve your goals on time, and within budget.

And with Telstra, your organisation is in safe hands. We have one of the lowest risk profiles in the Australian telecommunications market. And we're one of the few organisations that has selected IP products and associated security processes certified to ISO 27001 and the AS/NZS 13000:2009 Risk Management Standard.



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