Networks & Operations

Our network underpins Telstra's global operations, including our products, services and overall customer experience. The digital world is transforming the way we live. We are empowered to learn in new ways, to communicate differently, and take greater control of our health, finances and learning. Our reliable network and technology capabilities keep millions of consumers and businesses connected every day.

Over the next five years we expect to see a continued increase in network traffic as video, virtual reality, Artificial Intelligence (AI), connected machines, and even drone technologies place unprecedented demands on our network. Our mobile footprint stretches out to more than 2.5 million square kilometres, vastly more than any other mobile network in Australia, and coverage extends to 99.5% of the Australian population.

A critical component to operating Telstra's network is the Global Operations Centre (GOC). The GOC is a state-of-the-art showcase of technological leadership and superior capabilities in managing large scale networks, which monitors and manages Telstra's network and supports our products and services 24 hours a day, seven days a week.

The GOC manages the network by monitoring national and world events that may create demands on the network. It can quickly identify and even anticipate, service incidents before customers are even aware of them. The GOC also takes the lead in emergencies to quickly respond critical services to affected communities, including working in close collaboration with emergency services organisations.

Telstra has a world class Security Operations team whose purpose is to ensure Telstra works tirelessly to keep our customers' data safe and our networks secure. Our team has operational capabilities available 24 hours per day, 7 days a week, providing advice and assistance, incident management, threat intelligence, vulnerability management, security assessment, security analytics, discovery and research and development. These capabilities work cohesively to delivery an unwavering focus on the privacy and security of our customers and Telstra.

The phases through which we plan, build and operate our network include:

• Network design and planning – we identify new areas for connectivity, upgrade existing services and identify locations for our network infrastructure.
• Procurement – we procure IT and network equipment from suppliers to maintain our network. We also purchase spectrum, the radio transmission frequencies used to carry data on our mobile network.
• Installation – we install a range of equipment to operate our network, including mobile phone towers, nodes, exchanges and network cables.
• Operation and maintenance – we operate and maintain our network facilities and equipment including the operation of our exchange buildings as well as maintaining remote equipment and facilities.
• Innovation – we are constantly innovating to offer the latest network features and capabilities for our customers and have achieved a history of world firsts in doing so.

The phases through which we plan, build and operate our network include:

Key material issues

• Climate change
• Health, safety and wellbeing
• Mobile phones, base stations and health (EME)
• Network investment and innovation
• Network resilience and reliability
• Regulatory change

Key stakeholders

• Customers
• Employees
• Government
• Investors
• Local communities

For more information on Telstra's approach please refer to the following sections of the Bigger Picture 2020 Sustainability Report:

• Sustainability at Telstra
  – About Telstra
• Responsible Business
  – Mobile phones, base stations and health (EME)
  – Protecting our customers' data and privacy
• Digital Futures
  – Networks
  – Regional and remote communities
• Environmental Solutions
  – Climate change and energy