Nauru

One of the world's smallest island nations has seen mobile access soar after the deployment of a network by a large mobile group. This remote Pacific nation — over 300 kilometres from its closest neighbour — is a wireless testbed with mobile broadband and low-latency satellite connectivity.

Mobile services: Given that there are just over 10 000 Nauruans living on one island, there is a sole operator, DIGICEL, part of the Irish-owned mobile group, with considerable experience of operating in small island States throughout the Caribbean and Pacific. DIGICEL launched GSM service in 2009 and its seven base stations cover practically the entire 21 square kilometre island. In 2011, 90 per cent of households had a mobile phone.[325] 3G was introduced in August 2014 and LTE was launched in late 2016.

Fixed services: Nauru Telecom, as a government monopoly, provided telecommunication services until 2009. It experienced technical and financial problems, and in June 2009 DIGICEL was awarded a licence with two-year exclusivity. The fixed landline network has largely fallen into a state of disrepair, and apart from the Government, most people on the island use mobile for voice communications. Similarly, there is only limited fixed broadband Internet access, which is offered mainly to government departments and businesses. Fixed wireless Internet access is available using WiMAX. In addition to DIGICEL, CENPAC operates an Internet cafe, manages Nauru's country code top level domain name (.NR) and has deployed a six kilometre fibre-optic backbone for government use on the west side of the island. CENPAC also competes with DIGICEL in the business Internet market. Nauru relies on satellite links for international Internet capacity. In 2015, it connected to the O3b low-latency, high-bandwidth network. Data usage has increased such that international bandwidth has grown over 100 per cent, requiring three satellite upgrades. The Asian Development Bank is supporting a project for an undersea fibre-optic cable that will link Nauru with the Federated States of Micronesia and Kiribati.

Government policy: The Ministry of Telecommunications is responsible for sector oversight and government ICT deployment. The Regulatory Directorate of the Department of Telecommunications is responsible for sector regulation. The *National Sustainable Development Strategy 2005 – 2025* sets out the goals for the ICT sector, the two main short-term milestones being: i) every household / business has access to a prepaid telephone system based on wireless technology; and ii) district / household level Internet connectivity and fixed line systems are properly maintained for the public service.

Key indicators for Nauru (2017)		Asia & Pacific	World
Fixed-telephone sub. per 100 inhab.	...	9.5	13.0
Mobile-cellular sub. per 100 inhab.	*88.0*	104.0	103.6
Active mobile-broadband sub. per 100 inhab.	*35.2*	60.3	61.9
3G coverage (% of population)	*98.0*	91.3	87.9
LTE/WiMAX coverage (% of population)	*30.0*	86.9	76.3
Individuals using the Internet (%)	*57.0*	44.3	48.6
Households with a computer (%)	...	38.9	47.1
Households with Internet access (%)	...	49.0	54.7
International bandwidth per Internet user (kbit/s)	...	61.7	76.6
Fixed-broadband sub. per 100 inhab.	...	13.0	13.6
Fixed-broadband sub. by speed tiers, % distribution			
-256 kbit/s to 2 Mbit/s	...	2.4	4.2
-2 to 10 Mbit/s	...	7.6	13.2
-equal to or above 10 Mbit/s	...	90.0	82.6

Note: Data in italics are ITU estimates. Source: ITU (as of June 2018).

Conclusion: Mobile communications took off following the issue of a licence to DIGICEL, which leveraged its group expertise to install a GSM network quickly and, later on, a 3G network. The remote island nation has also successfully deployed the latest generation of fast satellite technology to support broadband networks. The country is now looking forward to connection to an undersea fibre-optic cable.