10 M

Cloud Computing

Data Centers

Hybrid cloud

Data fabric

Security

infrastructure

Graph databases

Internet of Things

Wireless networks

Smart electronics

Sensors and actuators

Smart meters and grids

Cyber Resilience/Cyber

2022

OVERALL STRATEGIES

Facilities and Services

- Upgrade data centers and cloud computing infrastructures
- Upgrading of wireless communication plans using latest mobile and wireless network technology and fiber optic technology as a continuation of NBP
- Partnership between PhilSA and DICT in codeveloping and applying advancements in satellite communication bands to wireless network upgrades
- Establishment of a 5G ecosystem innovation center

Human Resources

 Training of 10 blockchain developers to lead government applications of blockchain implementation

R&D Technologies

- Partner with 3 LGUs on IOT and blockchain implementations
 - Deployment of wireless mobile communication networks
 - Deployment of sensor networks
 - Building blockchain foundation
 - Establishment of cybersecurity and cyber resilience protocols

S&T Policies

 Complete roll-out of National Broadband Plan (NBP), National Cybersecurity Plan, and other connectivity initiatives (in partnership with other government agencies)

R&D SOLUTIONS

25M

5G/6G Technology

Orthogonal frequency-division multiplexing (OFDM)
5G new radio (NR) air interface
Bandwidth technologies (sub-6 GHz and mmWave)
Fiber Optic Technology



2023

10 M

Blockchain Applications Public/private chains Cross-ledger/Cross-cloud Token compatibilities Smart contracts

25M

Orbital angular momentum multiplexing (nanophotonics) Radio over fiber upgrades Satellite Communication Bands



K-, Ka-bands)

Establishment of a

5G/6G ecosystem

innovation center

new technologies for use

of higher bandwidths (Ku-,

Development of

2026

2025

MILESTONES

Developed Application of 5G/6G/7G technology to different areas Cybersecurity and cyber resilience solutions to address complex cyber threats

100 M 100M

Development of a single core (nanocore) wireless mobile communication service



2028

VISION

Provision of enabling technologies for applications b eneficial to society.

M

2027

Processors Applicationspecific integrated
circuit (for
blockchain, deep neural
network, etc.)
Developed
new technologies
using higher
bandwidths
Application of
5G/6G/7G technology
to different areas

OVERALL OUTCOME

Locally-developed products and services intended for widerange of applications