DIGITAL GOVERNMENT DELIVERY
GOVERNMENT PRIVATE NETWORK(GPN)
SECURE CONNECTIVITY INTO GOVERNMENT AGENCIES

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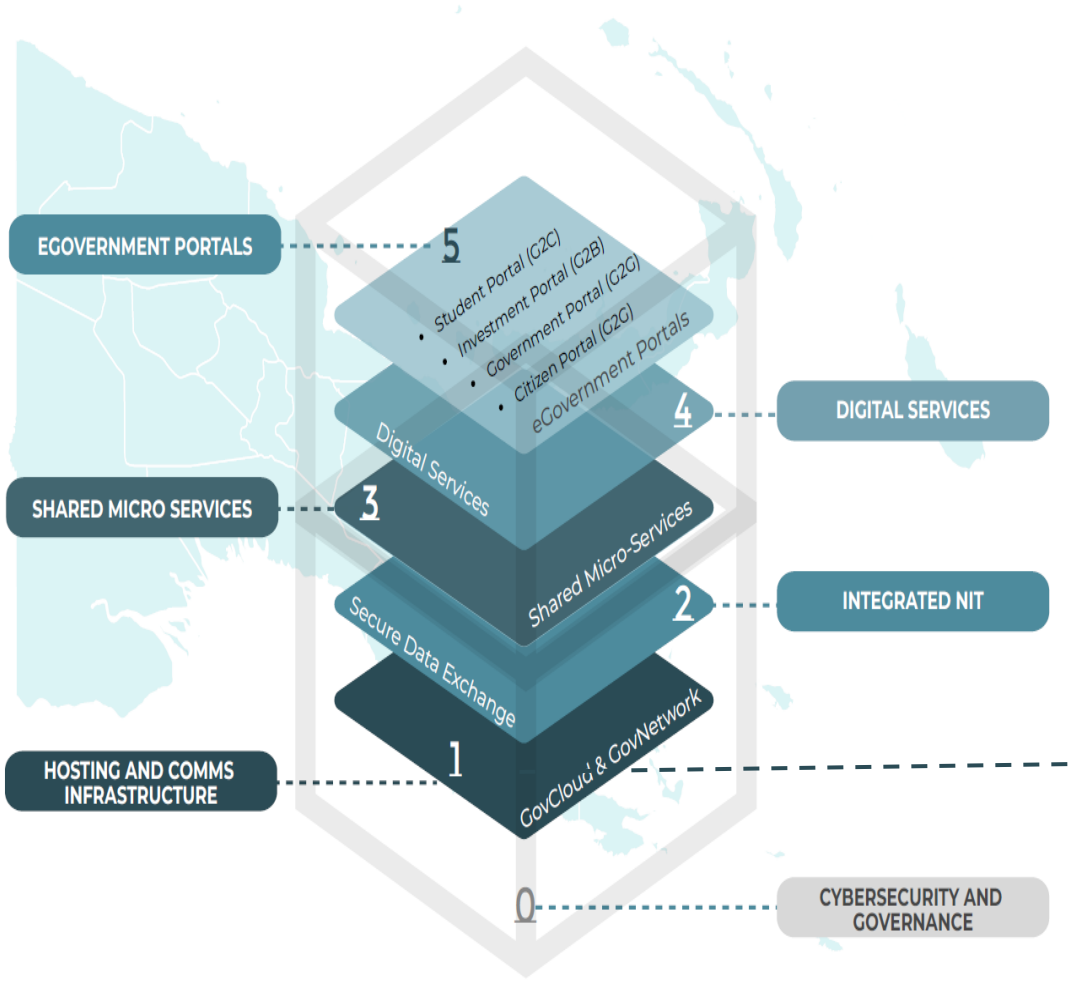
Digital Government Infrastructure & Delivery

OUTLINE

- Government Private Network(GPN) Delivery Model
- Overview of the GPN
- Partnership Arrangement
- Deployment sites as pilot(GPN)
- Other Digital Services

A. DELIVERY MODEL FOR GPN – FROM THE CORE, DISTRIBUTION & ACCESS



DIGITAL SERVICES

INTEGRATED NIT

CYBERSECURITY AND GOVERNANCE

INVESTMENT	DELIVERY PARTNER AND TECHNOLOGY
INTERNET	DataCo (CS2, PPC1, O3B)
CORE	GPN (Dataco to support)
DISTRIBUTION	DataCo NTN
	Telikom HCN
ACCESS	GPN, UAS , TELIKOM, DATACO + Mobile Operators (Digicel, Vodafon, Telikom)
	Satellite Providers

B. GOVERNMENT PRIVATE NETWORK OVERVIEW

The government private network comprises of 2 key digital infrastructure components

1)Data Centre platform

- Hybrid cloud development – On-prem + Off-prem hosting environment to support delivery of government digital services across whole of government.

2) Network platform

- Underlay or Core Network - It is the Central Network Infrastructure that will connect various government agencies or sectors enabling seamless sharing of data/information securely. This will ride on dataco's robust fiber infrastructure

- Overlay Network or Software Define Network (SDN) – Leveraging off on ISPs or mobile operator's transport network to carry government digital services to the edge(government bodies)

C. PARTNERSHIP ARRANGMENT

The MOU between **DICT** and **DATACO** now paves way for the establishment and realization of the government private network i.e.; the underlay + overlay network component and the hybrid cloud infrastructure implementation leveraging off government investment through Dataco's existing state of the art infrastructure.

To deliver digital services effectively to whole of government, partnership is key.

* HYBRID CLOUD

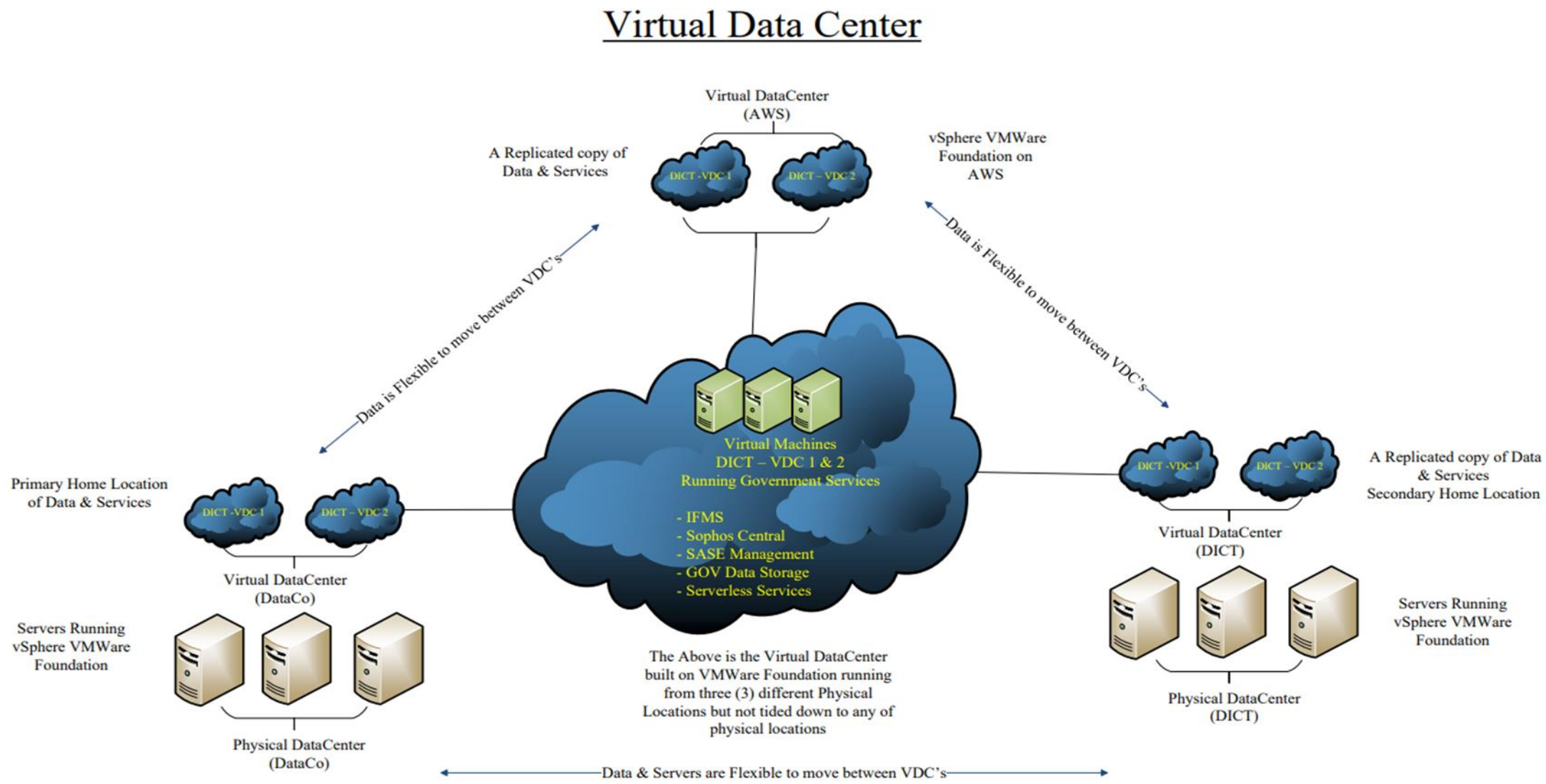
- DICT IS WORKING CLOSELY WITH DATACO IN RELATION TO ESTABLISHING A HYBRID CLOUD TO SUPPORT DIGITAL TRANSFORMATION ACROSS WHOLE OF GOVERNMENT

The rationale behind having an hybrid cloud;

1) Allow government agencies to keep sensitive data local within PNG (on-premise) while utilize the govt cloud for less sensitive workloads ensuring compliance to data security & privacy.
2) Hybrid cloud establishment shall now drive the development of scalable and responsive citizen service ensuring access to government services by our citizen is seamless & secured.
3) The approach supports digital transformation agenda providing platform for integration of emerging technologies such as AI, IoT, Machine Learning etc., enhancing government services. Generally improving efficiency and innovation.

* JOURNEY OF CLOUD ADOPTION & IMPLEMENATION

* HYBRID CLOUD ARCHITECTURE



* UNDERLAY OR CORE NETWORK FOR GOVERNMENT

Securely Connects Agencies

Uses encryption and access controls to securely connect government agencies for information sharing.

Robust Infrastructure

Built on a high capacity fiber optic backbone network to ensure high availability.

Shared Services Model

Enables agencies or key government sectors to share IT infrastructure, applications, and data while maintaining security.

Supports All Levels of Government

Connects National, Provincial and later into Districts

Interoperability

Allows disparate systems to exchange information seamlessly.

* UNDERLAY NETWORK IMPLEMENTATION TIMELINE

Q4 2023

Joint assessment between DICT & Dataco – Pom & Madang DC & DR completed

Q1 2024

All sector requirement gathering national, sub-national. DTO to provide feedback on all these information.

Q2 2024

Hybrid cloud to be completed by Quarter 2, 2024 through joint-effort(DICT & Dataco). Re-architecture on the GPN underlay base on Dataco infrastructure establishment (Metro P2P & NTN connectivity) to commence.

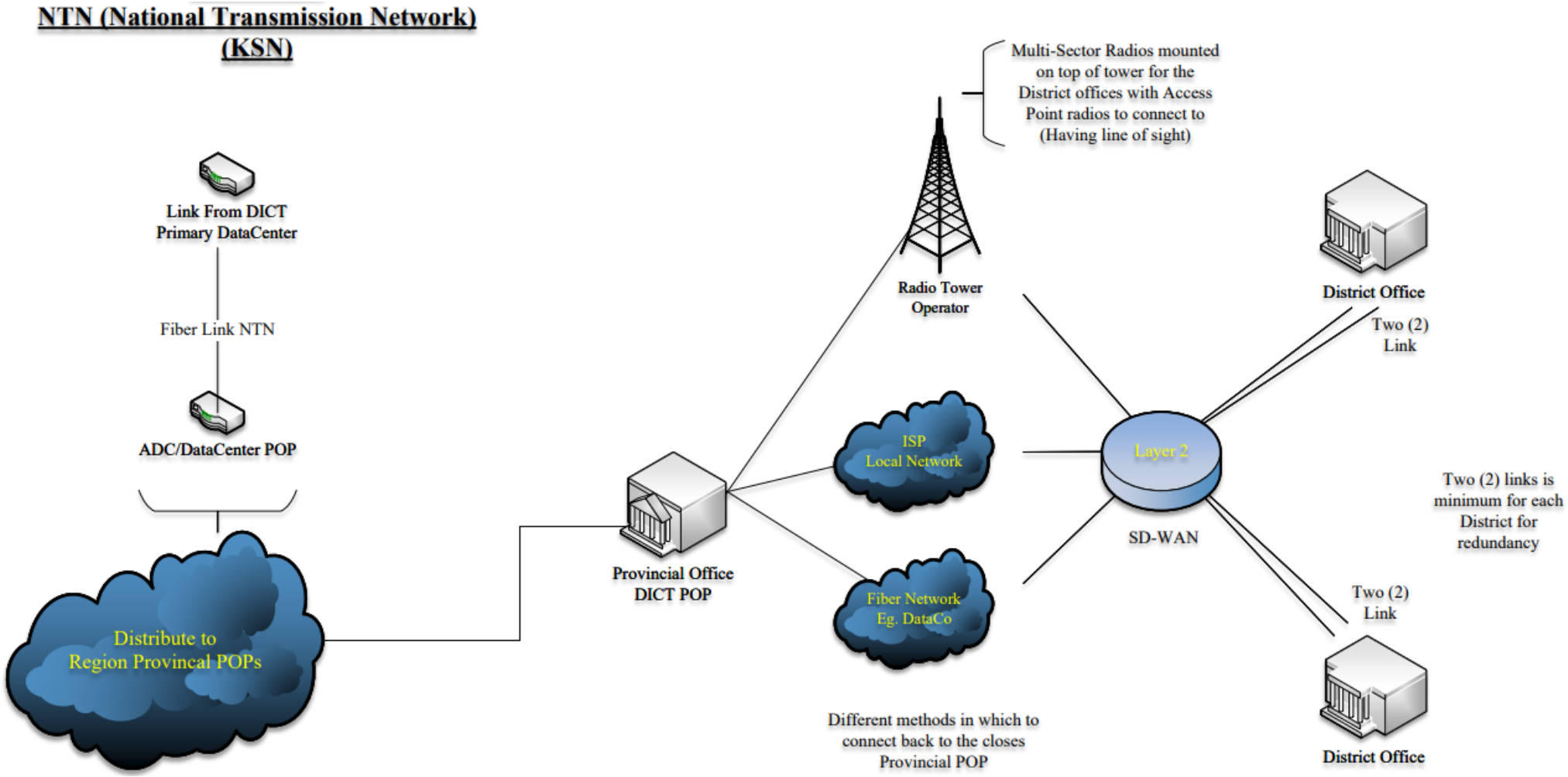
Q3 2024

Implementation Planning

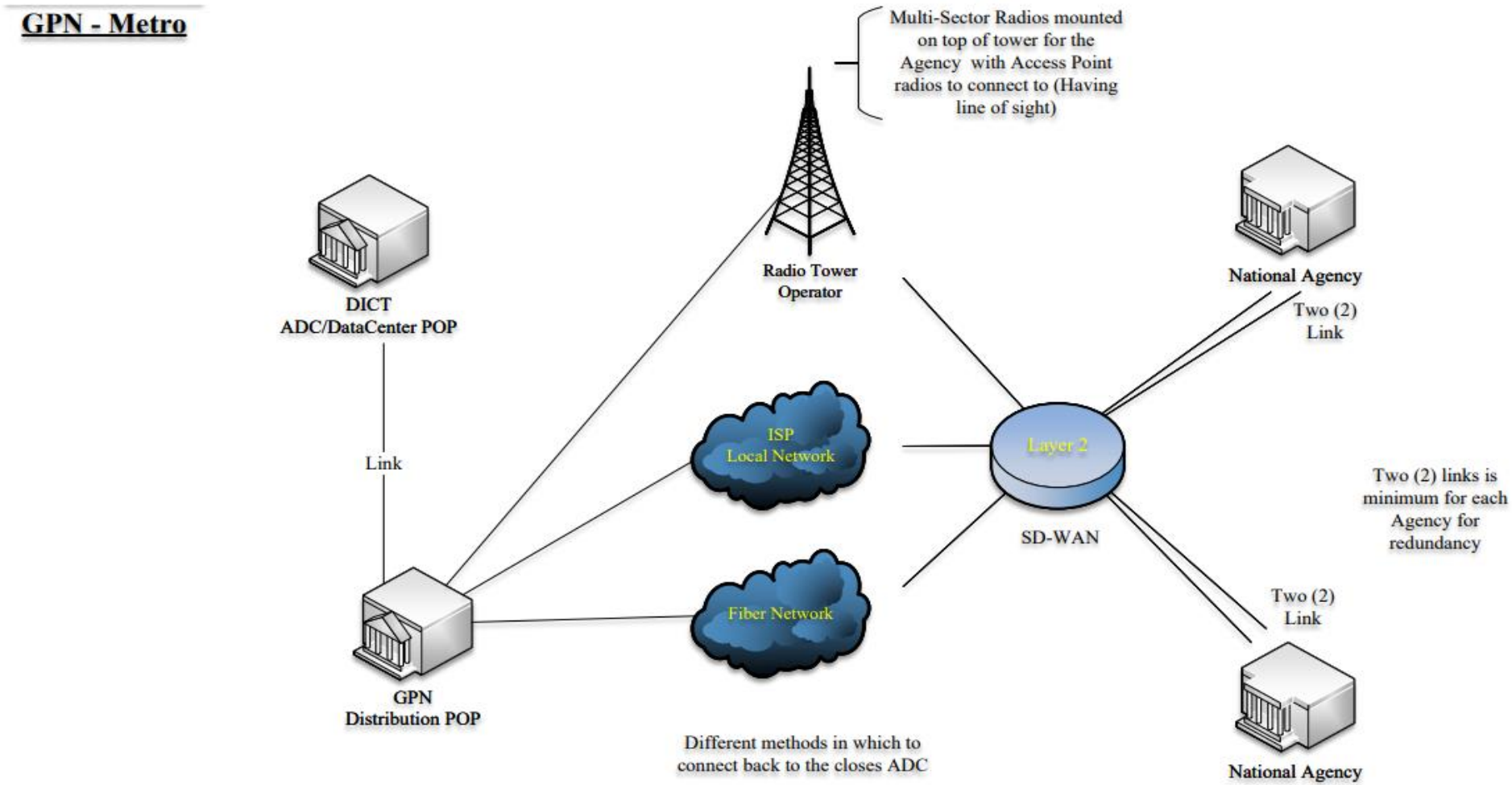
Q4 2024

Execute Implementation phase by phase connecting government agencies

* UNDERLAY NETWORK CONNECTIVITY TO SUB-NATIONAL(PROVINCE & DISTRICTS)



* UNDERLAY NETWORK CONNECTIVITY TO NATIONAL AGENCIES VIA METRO P2P



* OVERLAY NETWORK FOR GOVERMENT

The first approach for the government private network will be through the overlay network which is Software Define Network which will incorporate the Secure Access Service Edge **(GoPNG-SASE)** Model

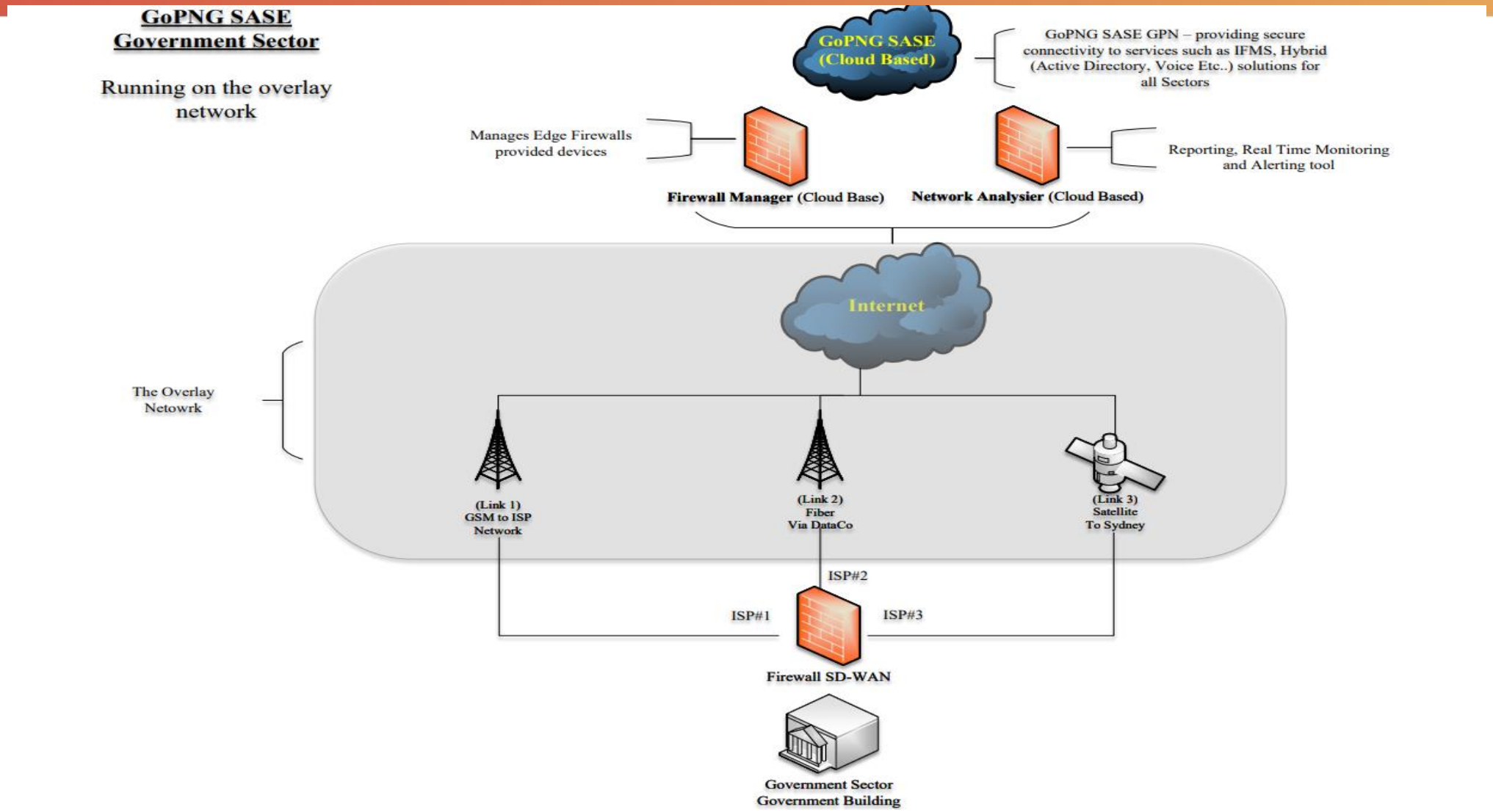
- GoPNG-SASE will now be implemented by DICT as the overlay network component of the government private network.
- It will support government agencies with key benefits such as enable security of your application or services, improve productivity and save cost.
- GoPNG-SASE will leverage on existing ISPs connecting into government agencies without interruption to internal network.

D. DEPLOYMENT SITES – PILOT AGENCIES

Below shows the government agencies that will be part of the GPN overlay network deployment

LEVELS OF GOVERNMENT	SITES TO BE COVERED	TIMELINE
DISTRICT	TELEFOMIN DISTRICT	QTR 4, 2023
PROVINCIAL	EAST NEW BRITAIN MOROBE WESTERN HIGHLANDS & CENTRAL	QTR 1, 2024
NATIONAL	DEPARTMENT OF ICT DEPARTMENT OF JUSTICE & ATTORNEY GENERAL DEPARTMENT OF PERSONNEL MANAGEMENT DEPARTMENT OF PRIME MINISTER & NEC DEPARTMENT OF NATIONAL PLANNING & MONITORING DEPARTMENT OF FINANCE DEPARTMENT OF PROVINCIAL & LOCAL LEVEL GOVT DEPARTMENT OF TREASURY	QTR 1, 2024

* OVERLAY NETWORK ARCHITECTURE – GoPNG SASE



E. OTHER SERVICES

- **Microsoft 365 Deployment**

- AD services(Authentication)

-Emails

- Video Conferencing

- Share Drives

- Device Security Management

- Client Device Automated backup

- **Infrastructure Assessment & Audits + Recommendations**(In compliance to Industry Standards such as ISO27001 and NISIT Cyber Security Framework)

- Servers & Storage

- Network Infra

- Device Security

- UPS

- Digital PABX or Voice Systems

- Internet Service Provider Links

- **Toll Free service for whole of Government**(2G, 3G & 4G broadband coverage)

For support on the above specific services contact the following lead engineers;

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THANKYOU