



Facebook and Connectivity: Connecting at Scale and Connecting the Unconnected

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- *2.8 billion monthly users
- *100+ billion messages/day
- *1+ million comments, posts,
status updates/minute

But...

GLOBAL ACCESS

57%

INDIVIDUALS CONNECTED
TO THE INTERNET

4G CONNECTIONS

43% TO 59%

PERCENTAGE OF 4G CONNECTIONS
WORLDWIDE BY 2025

Network Performance is At Risk

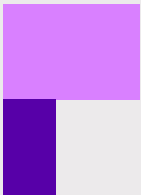
3.3 billion people in **developing** and **emerging** markets are at risk of degraded network performance by 2023

MARKET MATURITY

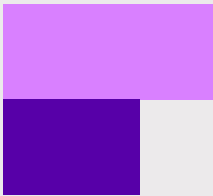
Projected 4G
Speeds
(mbps)

Global Population
Impacted

DEVELOPING



EMERGING



MATURE



2018 2023

Facebook and Connectivity

- Our business depends upon good, and getting better, connectivity everywhere
- Core, Edge, Access
- Production Network
- Partnering to connect the un- and under-connected
- Technology agnostic—what works best

Connecting Facebook

Facebook Infrastructure

Data Center

15 Campuses
(Dynamic Content)

Point of Presence (PoP)

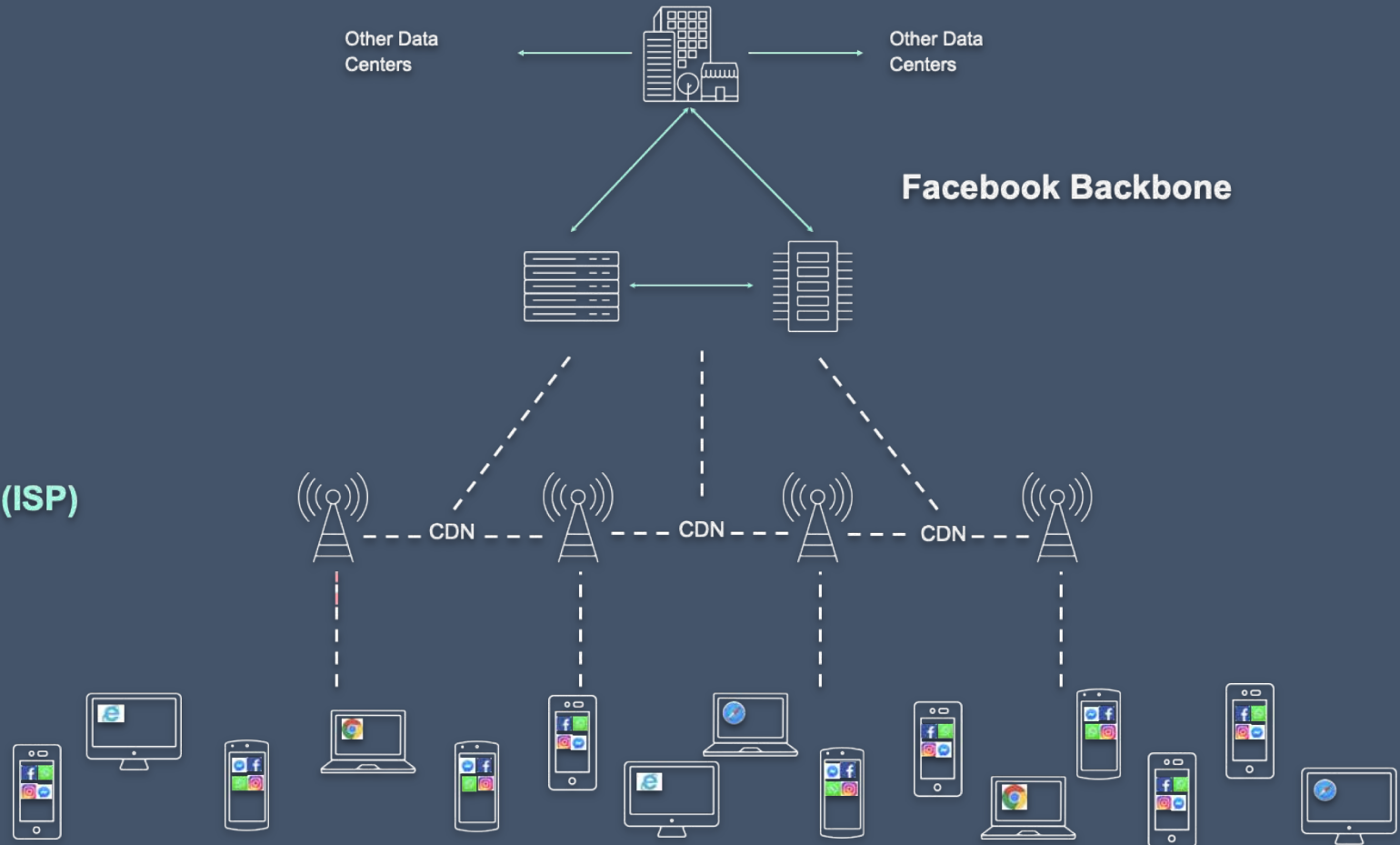
(Static Content)

Internet Service Provider (ISP)

(Static Content)

User Device

2.7b Monthly Active Users



Growing Connectivity--FBC Infrastructure

EXPRESS Wi-Fi

Providing fast, reliable, Wi-Fi when and where people need it.

TERRAGRAPH

Innovative, high-speed mmWave backhaul solutions for dense urban and suburban environments.

MAGMA

Open source mobile packet core designed to help operators extend the reach of their existing network.



Growing Connectivity—Open Transport Networks

Partnering to bring fiber connectivity to under connected communities worldwide.

Open Transport Networks work in Africa:

970+ km of new fiber installed

1.5m+ People connected



Telecom Infra Project (TIP)

Connectivity challenges in every environment



Ultra rural



Rural



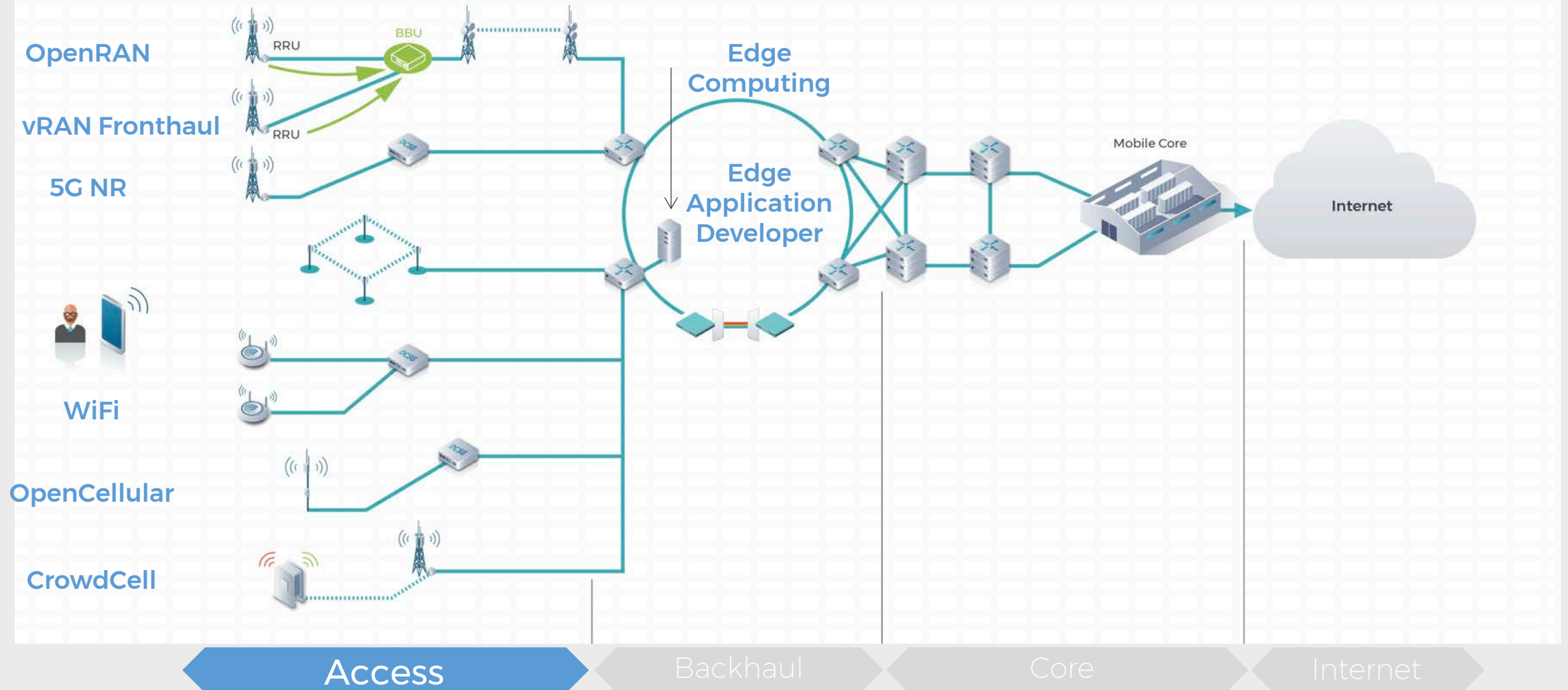
Suburban



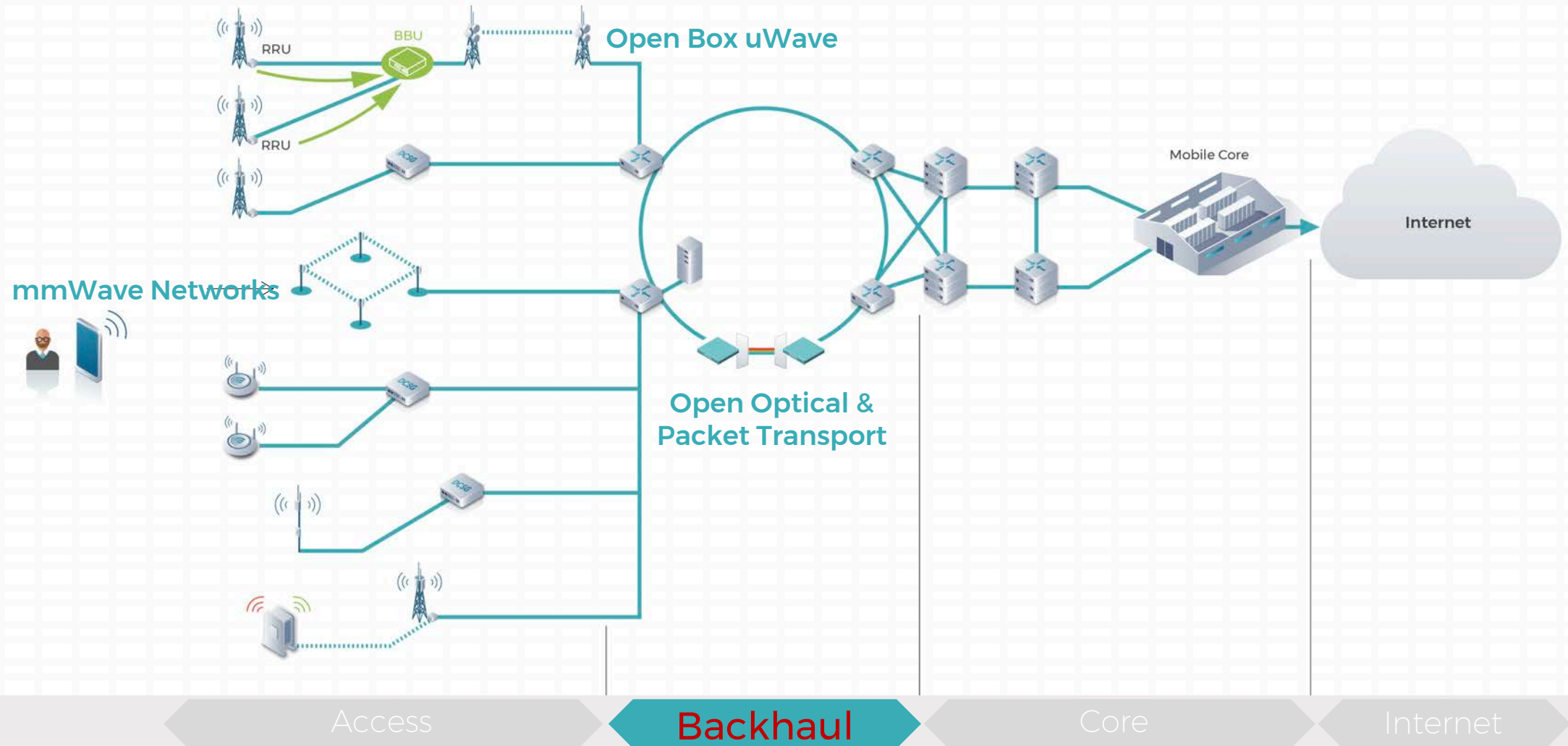
Dense urban



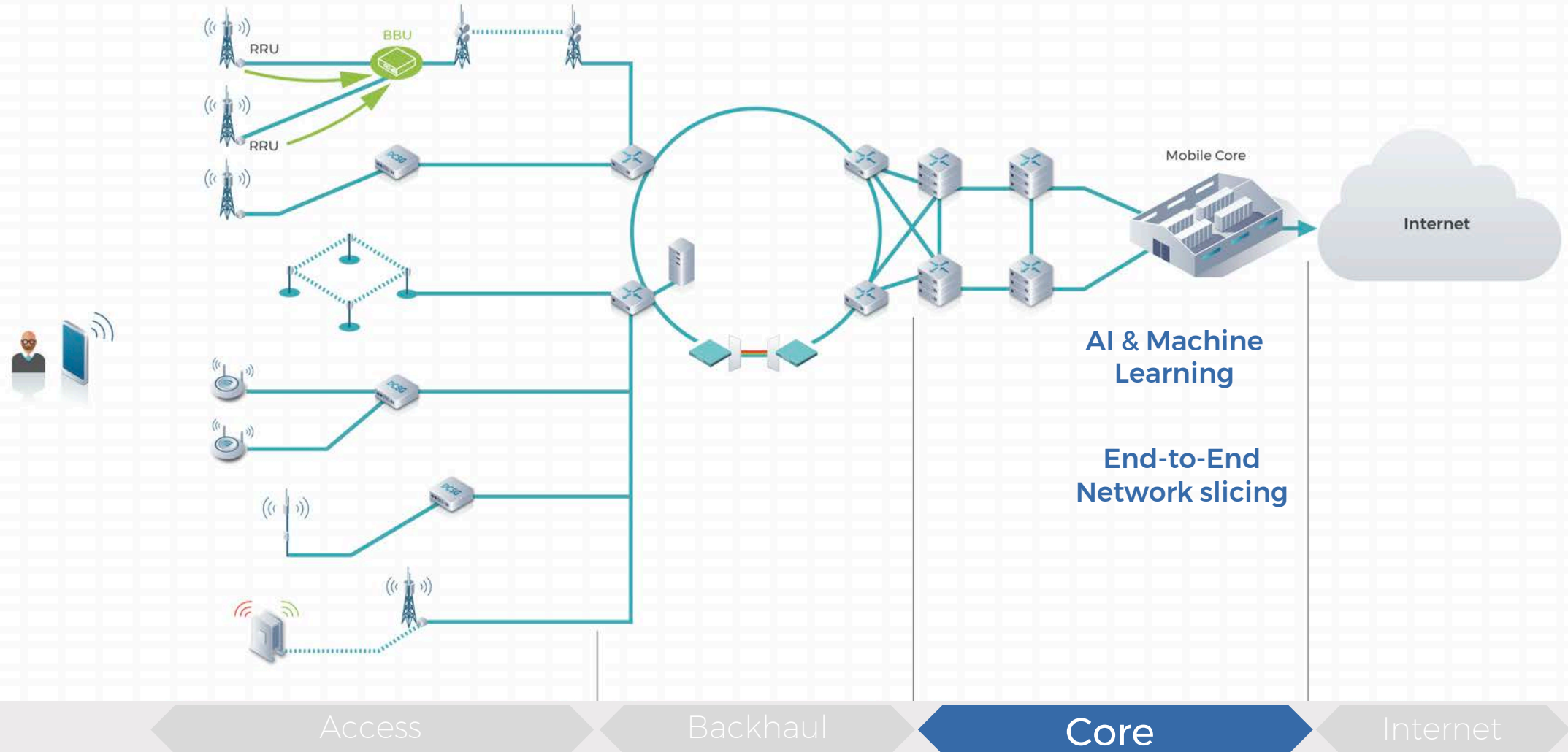
TIP Project Groups - Access



TIP Project Groups - Backhaul



TIP Project Groups - Core



The TIP Community



