



How Network Virtualization is Changing Fundamentals of Telecom Industry

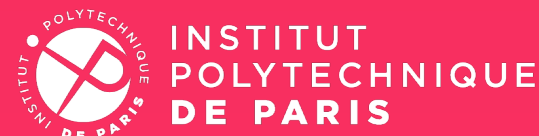
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Telecommunications industry trends:

- > **"Virtualisation" of network management**
- > **"Divesting" of physical resources**
- > **Implications for industry structure and regulation**

“Virtualisation” of network management

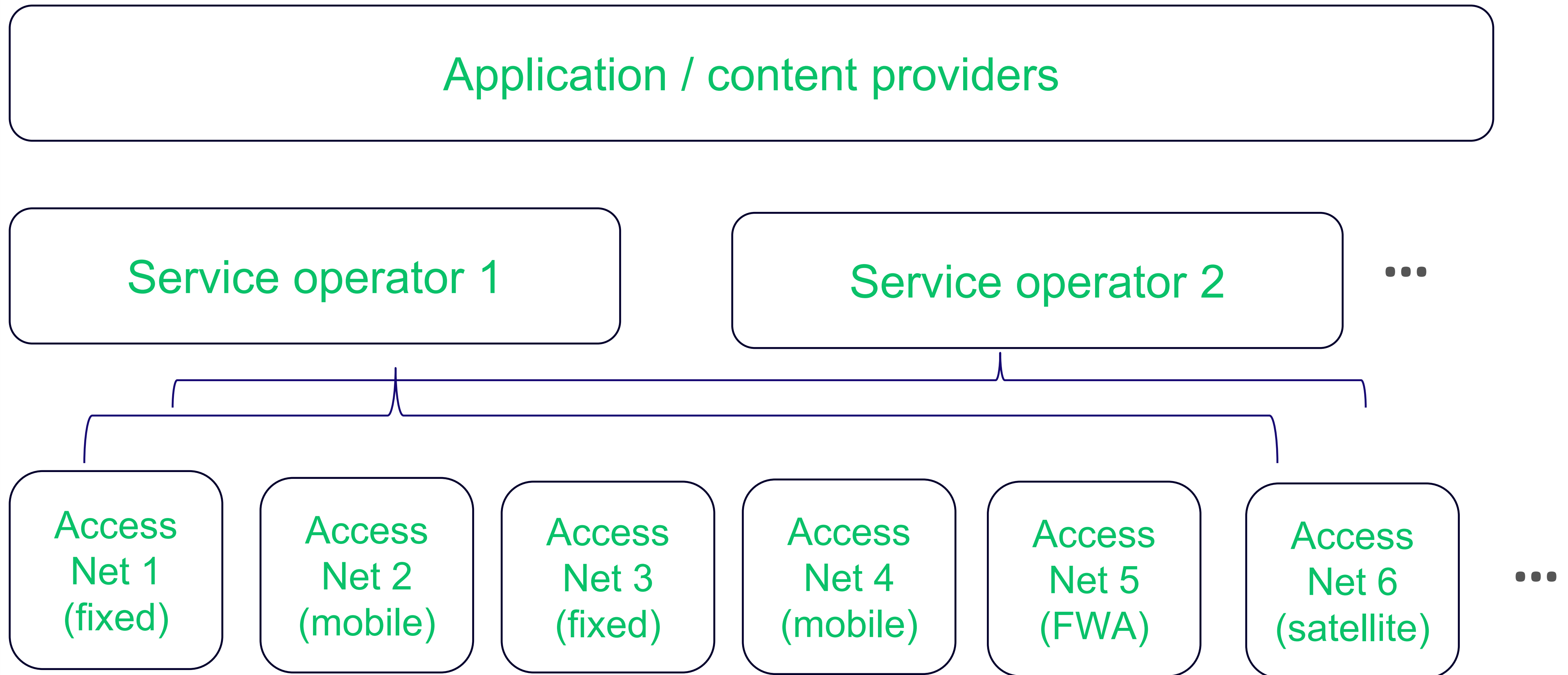
Virtual networks are a today’s reality: network “slicing”, Open Gateway (GSMA) interface, Open RAN, FlexRAN, ...

Network service differentiation relies increasingly on software, while hardware increasingly relies on more generic/standardised “boxes”

Network operations are moving to the cloud (public/private clouds): e.g. cloud RAN, core networks on cloud servers, edge clouds,...

Network functions are being “disaggregated”: separate functions can be managed independently from each other: access, core, customers, security, etc...

“Virtually consolidated” networks blur telco perimeters *(virtual “assembling” of access networks, both intra-country & across borders)*



Virtualisation of networks management

Virtualisation Advances in Networks Management
as Telecom Industry **Change accelerators**

From Telco to TechCo

Makes possible a horizontal / pan-continental market for **Access Connectivity** (fixed and mobile) **open to any telco service operators**

Network Operators are “spinning off” physical assets

- Facilitate infrastructure funding
- Alleviate the balance sheet

TowerCos, FibreCos, ... soon specialised AI/edge cloud players

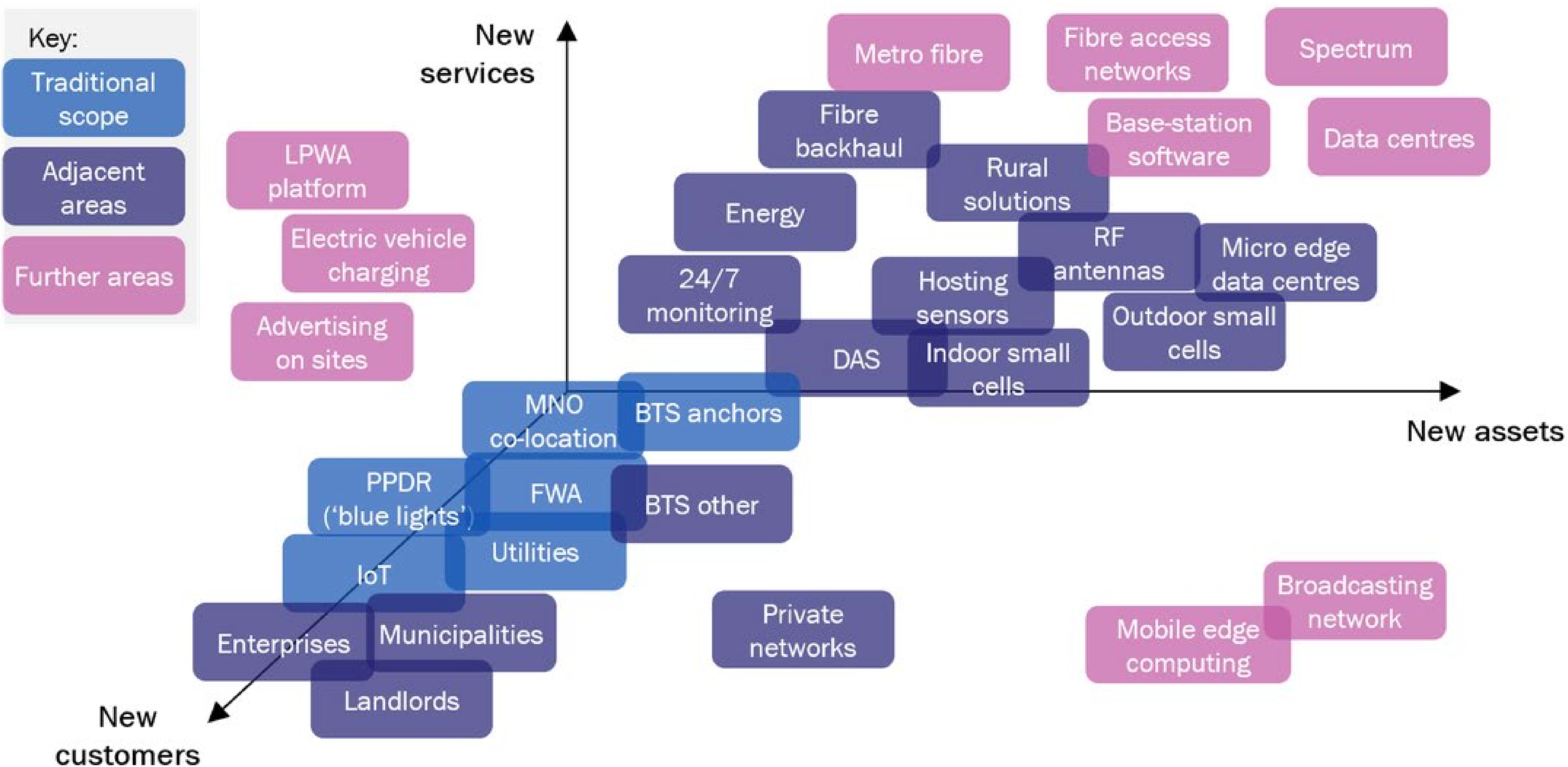
Europe, Canada. Australia, Paraguay

Potential industry structure transformation

Network Operators are “spinning off” physical assets

Access Regulation: Deregulate entities which elect not to be vertically integrated (to be defined...)
(i.e.. “delayered” telecom operators)

Figure 2: Towercos can grow in adjacent areas along three axes



Thank you!

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