

Whose network?  
What technology?  
Which spectrum?  
Which cloud?



# Neutral Host Networks

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**Disruptive Analysis**

*Don't Assume*



# Challenging areas for national-licensed MNOs & spectrum

**Indoor**

**Dense  
Metro**

**Industry**

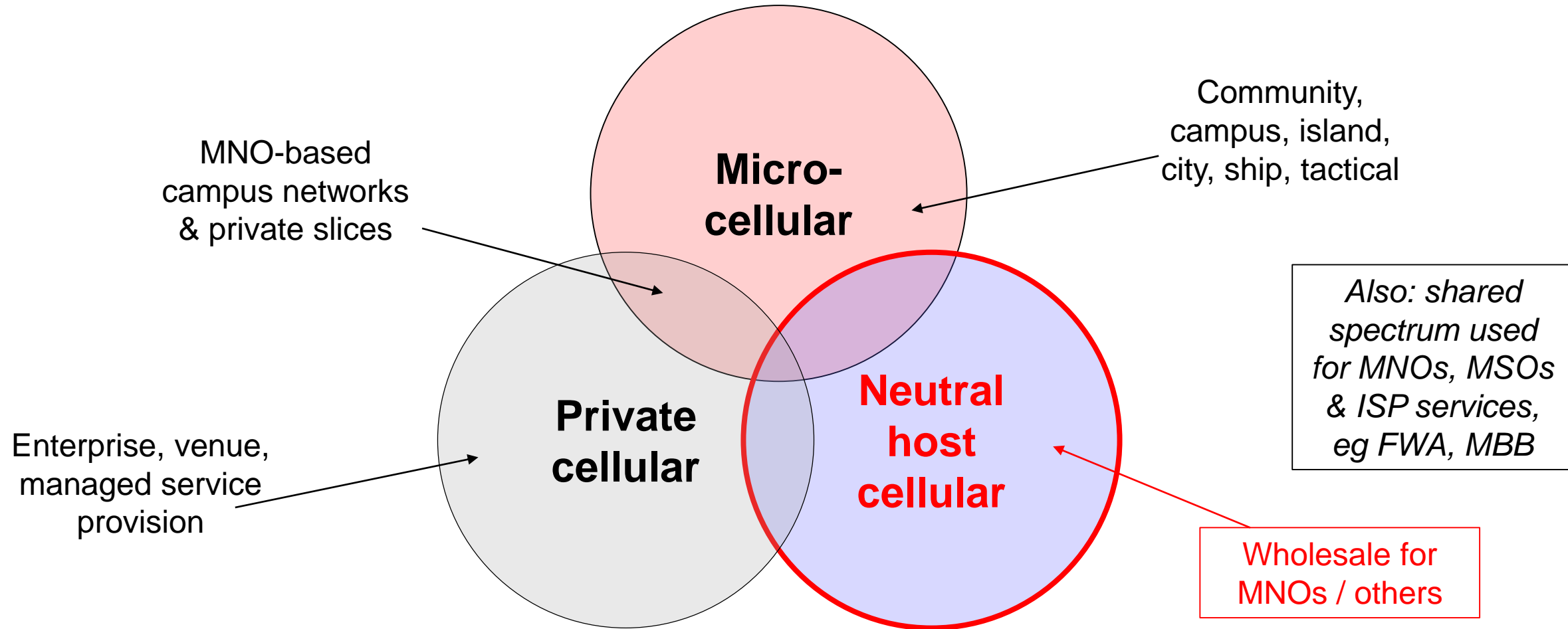
**Rural**

**Road /  
Rail**

**Islands  
& moun-  
tains**



# Various new forms of 4G & 5G network emerging





# Definition: What is / isn't a “Neutral Host”

- 3rd party providing wholesale, commercial mobile coverage solutions
  - Gives access to national MNOs / other CSPs networks & services, either paid/unpaid
  - NHN with own licensed / leased / shared spectrum
  - NHN without own spectrum (eg third party SP with multi-operator small cells running in MNOs' bands but with own RAN elements, or using unlicensed LTE-U / NR-U, Multefire etc)
  - Private network with additional NHN capability (eg industrial IoT + MNO access for phones)
- Excludes:
  - TowerCo and DAS models where the active components are provided by MNOs
  - Government/National wholesale (eg Mexico, Rwanda, maybe S Africa)
  - MNO network-sharing & national roaming
  - “Pure” private networks without PLMN access (eg industrial 4G/5G)
  - Telco-owned wholesale / hosted provision



# Multiple backgrounds to “neutral host” & sharing providers

Cellular  
DAS  
operators

Industry  
vertical  
managed  
services

Network  
equipment  
providers

Fixed /  
cable / fibre  
operators

Datacentre  
& cloud  
players

Venue  
owners

Property  
companies  
& investors

Street  
furniture  
owners

Community  
& municipal  
networks

Tower Co's