

# What is Infrastructure?

Specifically related to the Telecoms Industry

# Infrastructure: Definition from Dictionary

**Noun**: The basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise.

**Example**: *'the social and economic infrastructure of a country'*

**Source**: Oxford Dictionary



The screenshot shows the Oxford Dictionary entry for 'infrastructure'. At the top, the 'LEXICO' logo is displayed, powered by OXFORD. A search bar contains the word 'infrastructure'. Below the search bar, the entry is titled 'infrastructure' with a speaker icon and social media icons for Facebook, Twitter, and LinkedIn. The word is categorized as a 'NOUN'. The definition is: 'The basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise.' An example sentence is provided: *'the social and economic infrastructure of a country'*. There are buttons for '+ More example sentences' and '+ Synonyms'. The 'Origin' section states: 'Early 20th century from French (see [infra-](#), [structure](#)).' The 'Pronunciation' section shows the word 'infrastructure' with the phonetic transcription /'ɪnfɹəstrʌktʃə/ and a speaker icon.

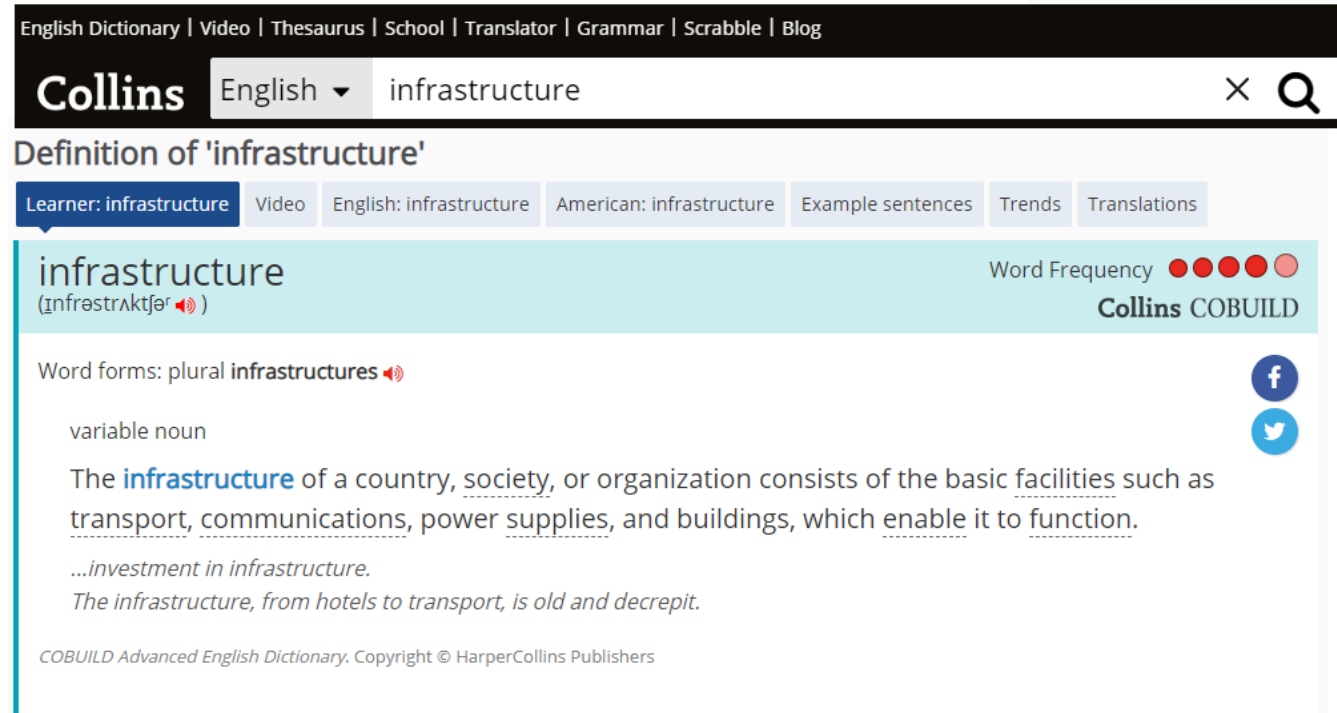
# Infrastructure: Definition from Dictionary

**Noun**: The infrastructure of a country, society, or organization consists of the basic facilities such as transport, communications, power supplies, and buildings, which enable it to function.

**Example**:

- *...investment in infrastructure.*
- *The infrastructure, from hotels to transport, is old and decrepit.*

**Source**: Collins Dictionary



English Dictionary | Video | Thesaurus | School | Translator | Grammar | Scrabble | Blog

**Collins** English infrastructure

Definition of 'infrastructure'

Learner: infrastructure Video English: infrastructure American: infrastructure Example sentences Trends Translations

**infrastructure**  
(ɪnfɪˈstrʌktʃə)

Word Frequency ●●●●●

Collins COBUILD

Word forms: plural **infrastructures**

variable noun

The **infrastructure** of a country, society, or organization consists of the basic facilities such as transport, communications, power supplies, and buildings, which enable it to function.

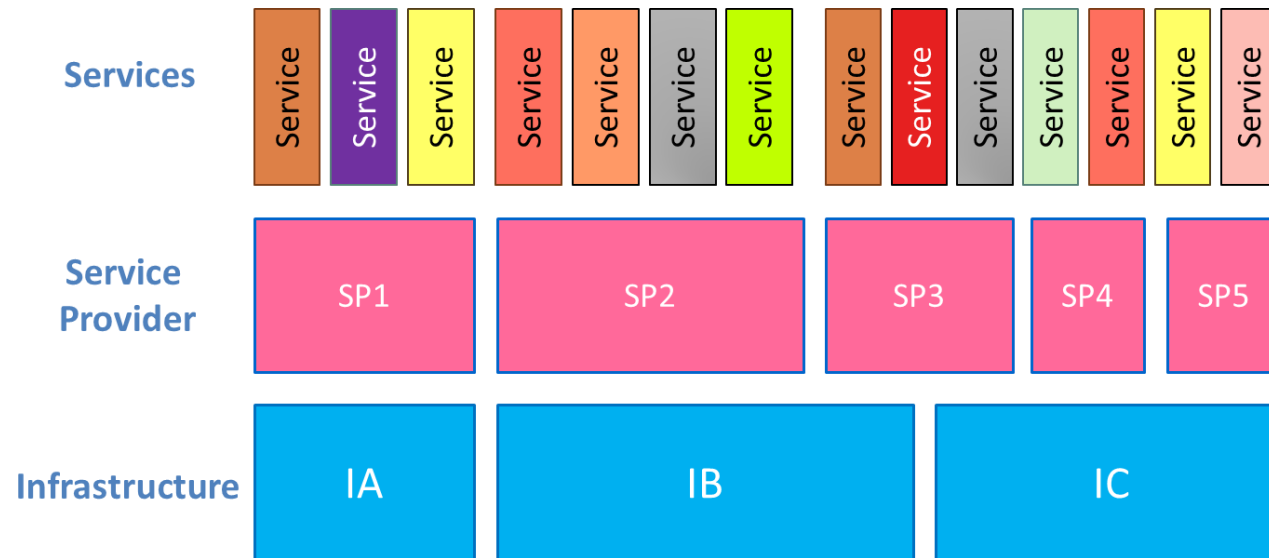
*...investment in infrastructure.*

*The infrastructure, from hotels to transport, is old and decrepit.*

COBUILD Advanced English Dictionary. Copyright © HarperCollins Publishers

# Infrastructure in a Telecoms Network

- In a simple Telecom network, the infrastructure would consist of all the physical (hardware and software) components that can be used by the mobile operator/service provider to provide services.



- Another way to describe an Infrastructure is that it is a physical network that can be used by Service Providers to provide Services

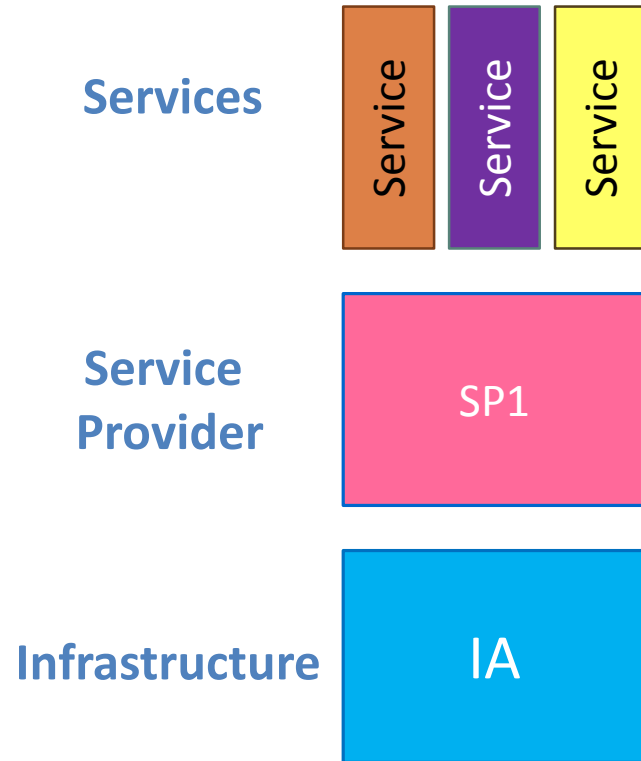
# 'Service Provider' vs 'Mobile Operator'

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- Service Providers are also known as Telecommunications service provider (TSP) or Communications service provider (CSP). Basically, they refer to someone who provides services.
- A common example would be Internet Service Providers or ISP who provides internet via cable or ADSL or Fiber, etc.
- Cable TV Providers, providing TV and other broadcast content were originally referred to as Cable Service Providers.
- Mobile Network Operators are also referred to as mobile service provider (MSP) or wireless service provider (WSP).

# Scenario 1: A Simple Mobile Network

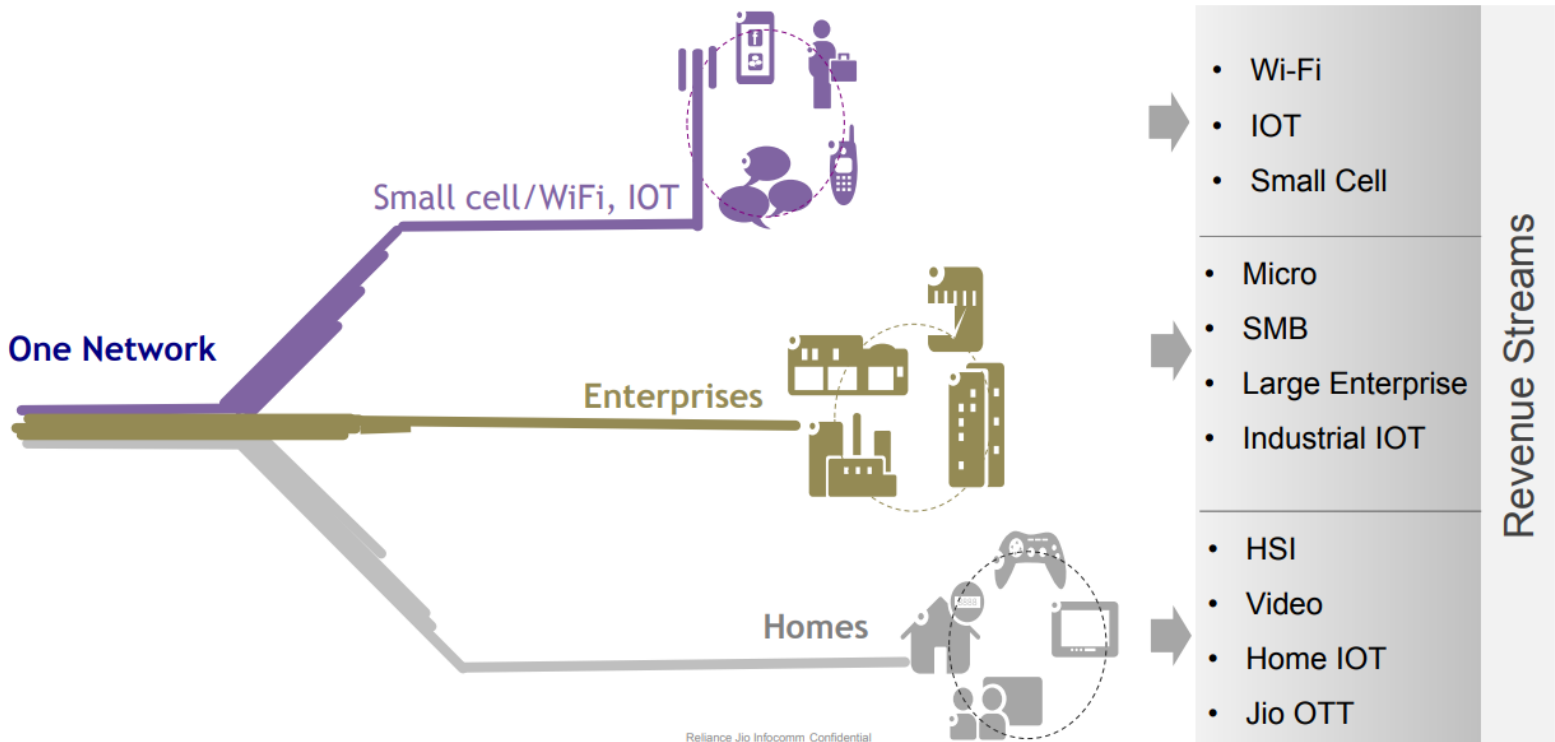
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- Here Mobile Network SP1 is using Infrastructure from IA to provide services.

# Scenario 1 Example: Reliance Jio

## Fiber : One network



Source



# JIO GIGA FIBER

*All we know about the much-anticipated service*

**What is it?**  
A Fiber to the Home (FTTH) broadband service. At present, the fiber cable reaches **only till the main building** and copper cable is used for the last connections which affects the internet speed

**Why the hype.**  
Marks Reliance Industries' **foray into broadband market**

**A game changer?**  
Expected to **disrupt the segment** of home broadband services

**To be launched**  
Across **1100 cities**

**"Gone are the days of Mbps, now it will be about Gbps"**  
-Isha Ambani

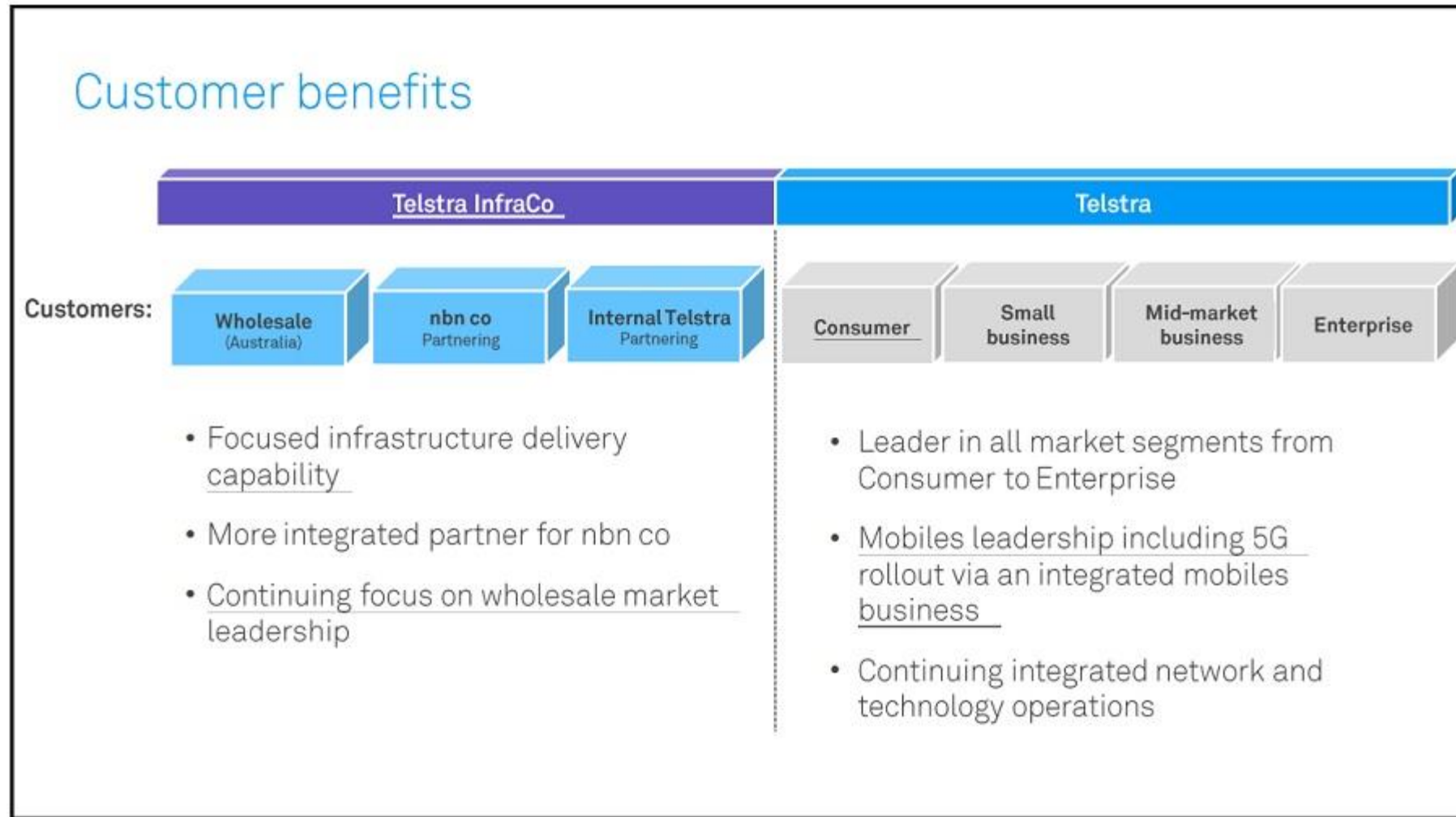
**WILL PROVIDE 5 DIFFERENT SERVICES**

- Home automation
- Home surveillance
- Landline
- Cable TV
- Broadband

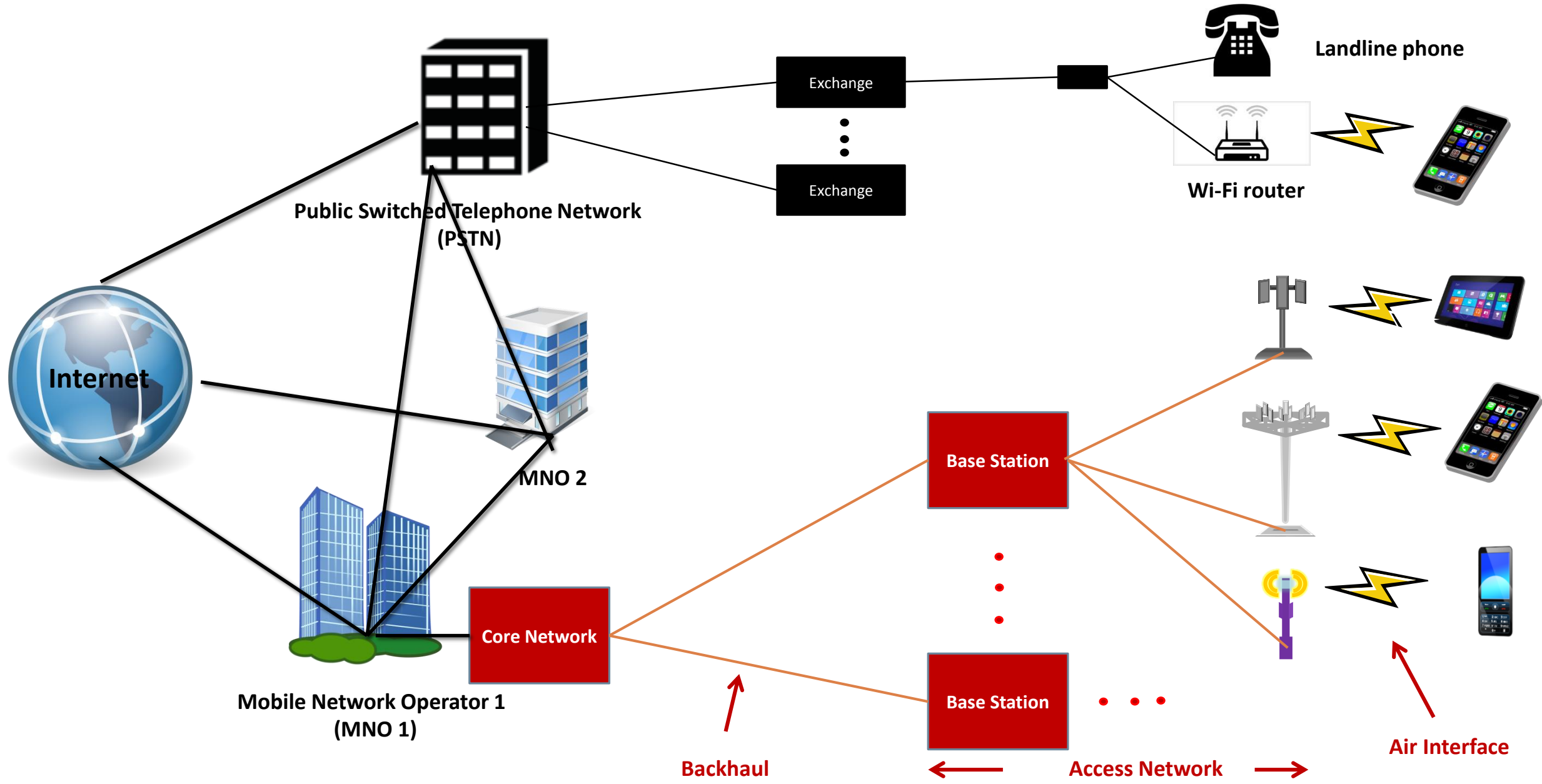
NEWS creative

Source

# Scenario 1 Example: Telstra

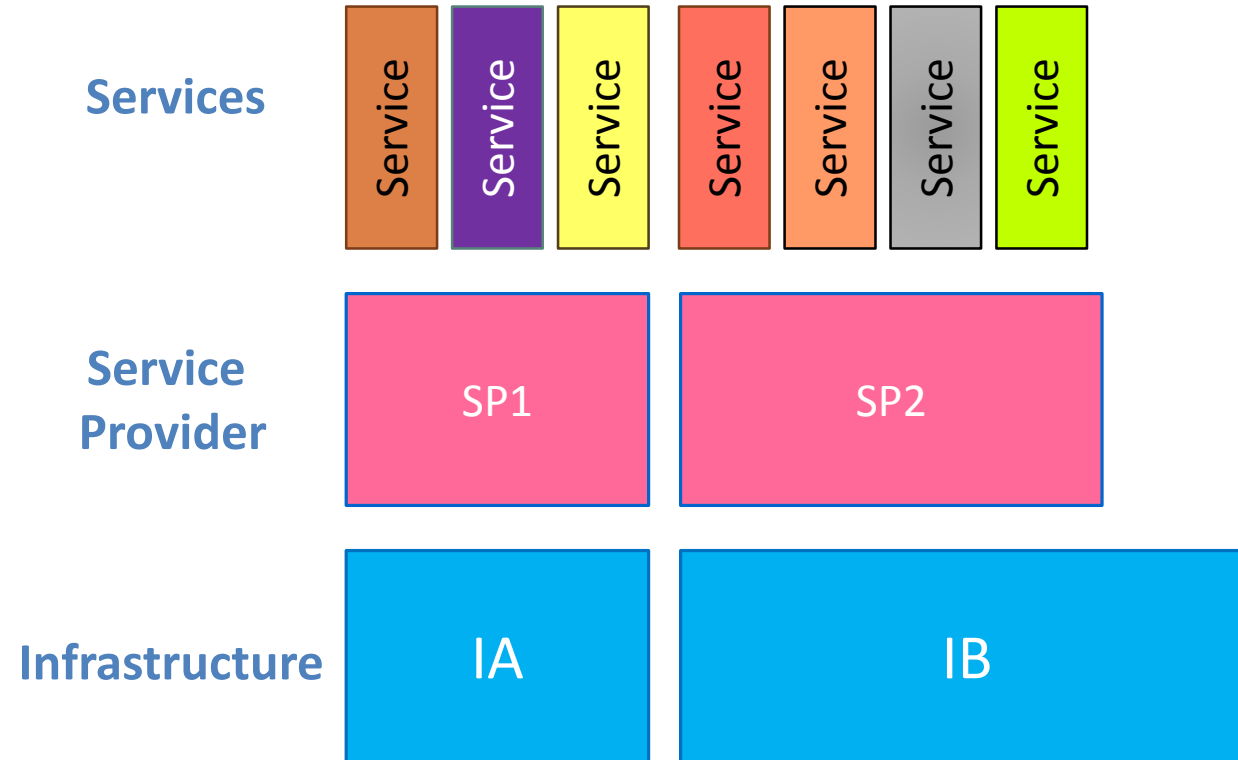


For further details, see: Telstra [Announcement](#) and/or [Business Insider](#)

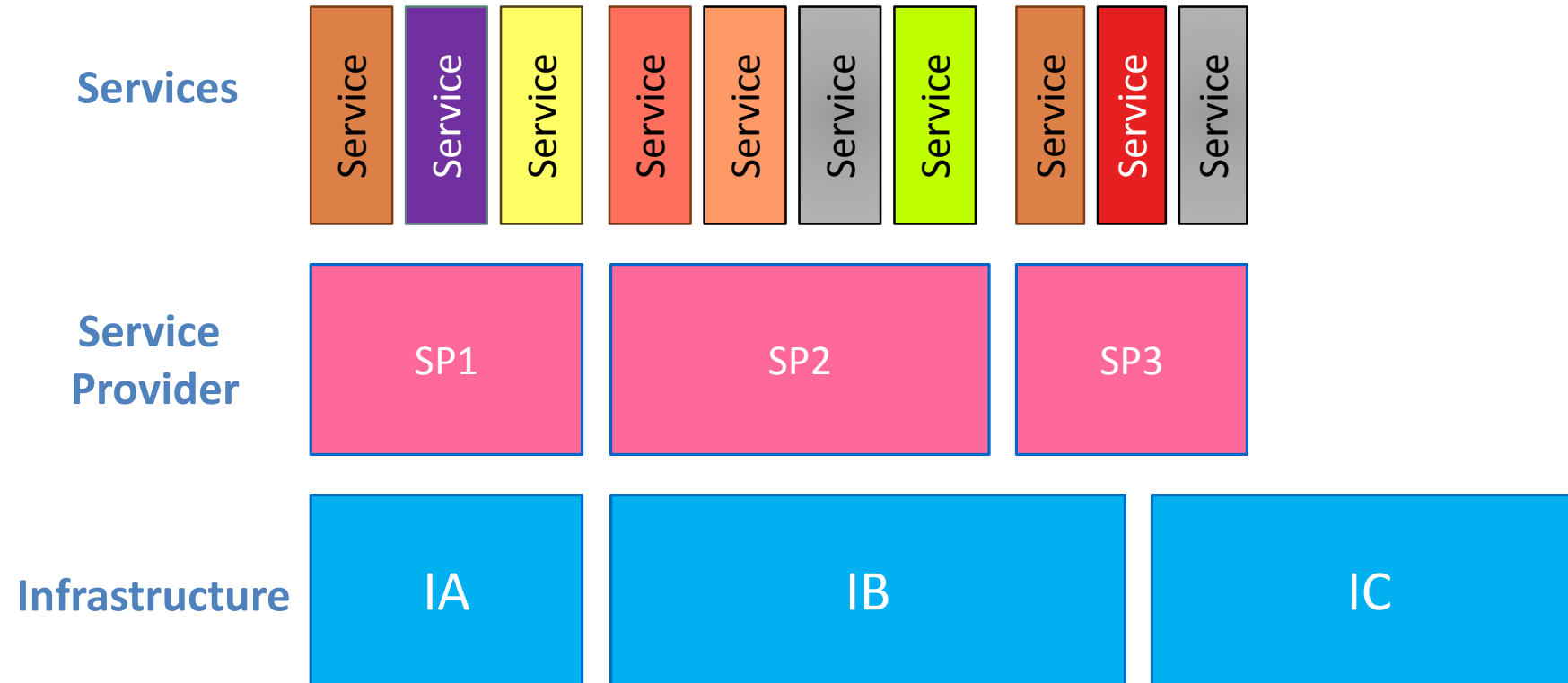


# Scenario 2: Same as Scenario 1

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# Scenario 3: Infrastructure from multiple providers



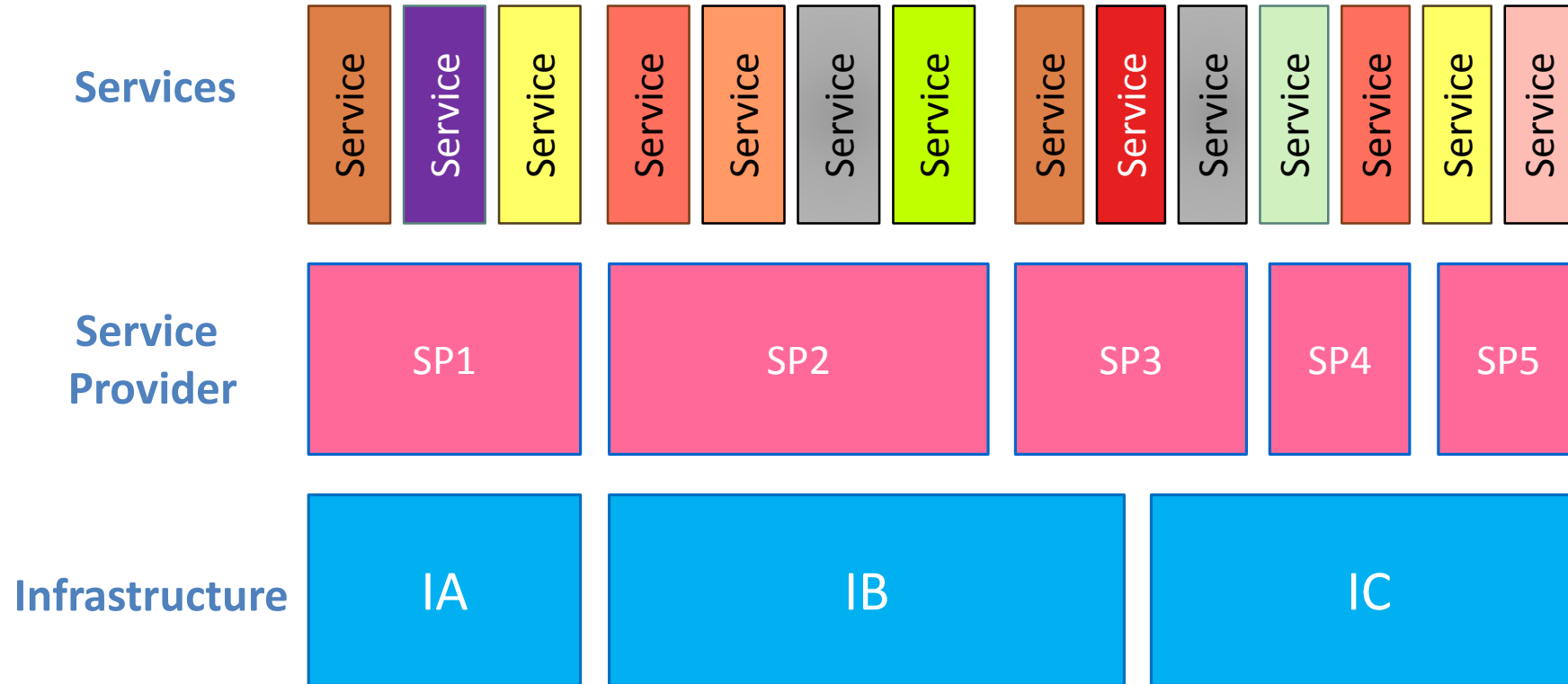
- Here SP3 is using Infrastructure from multiple companies like IB and IC.

# Scenario 3 Example: AT&T, USA

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- US Operators have to partner with multiple tower companies (infrastructure providers) due to the large geography and different rules for different states / counties
- AT&T has been working with multiple partners for example:
  - Tillman Infrastructure
  - Crown Castle
  - Cityswitch
- More details on [FierceWireless](#) & [ReThink](#)

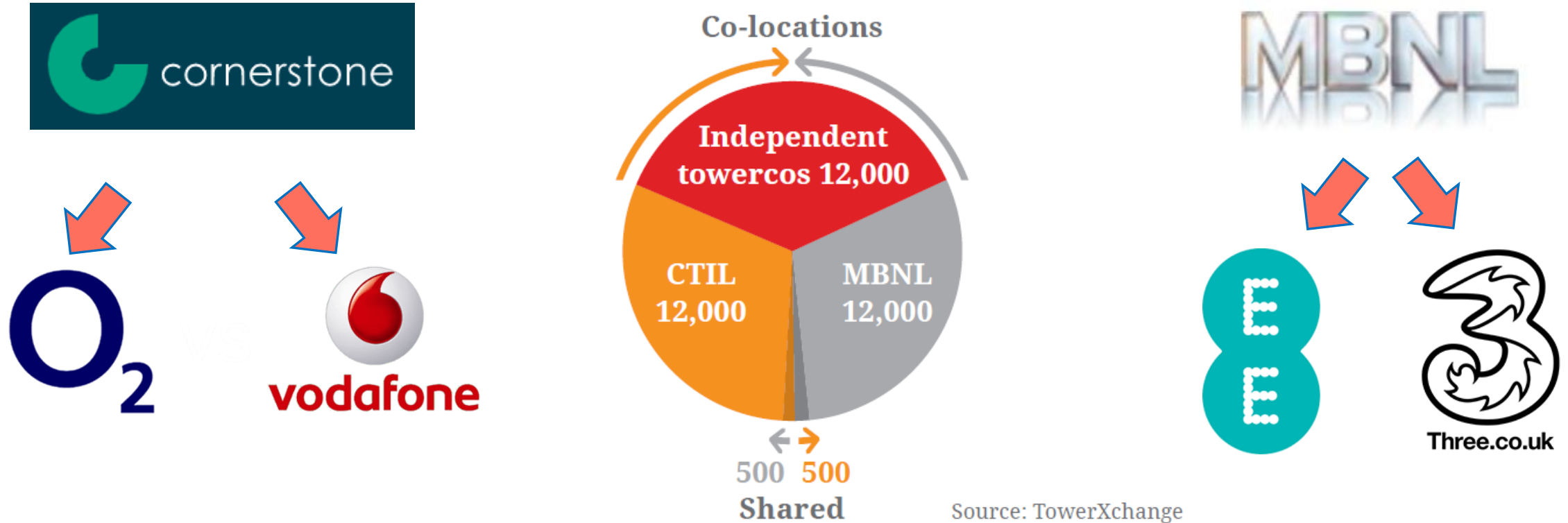
# Scenario 4: Multiple SP, Same Infrastructure



- Here SP4 and SP5 use the infrastructure provided by the same Infrastructure company (IC)

# Scenario 4 Example: CTIL & MBNL

Who owns/operates the UK's 36,000 active cell sites?



# Thank You

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