

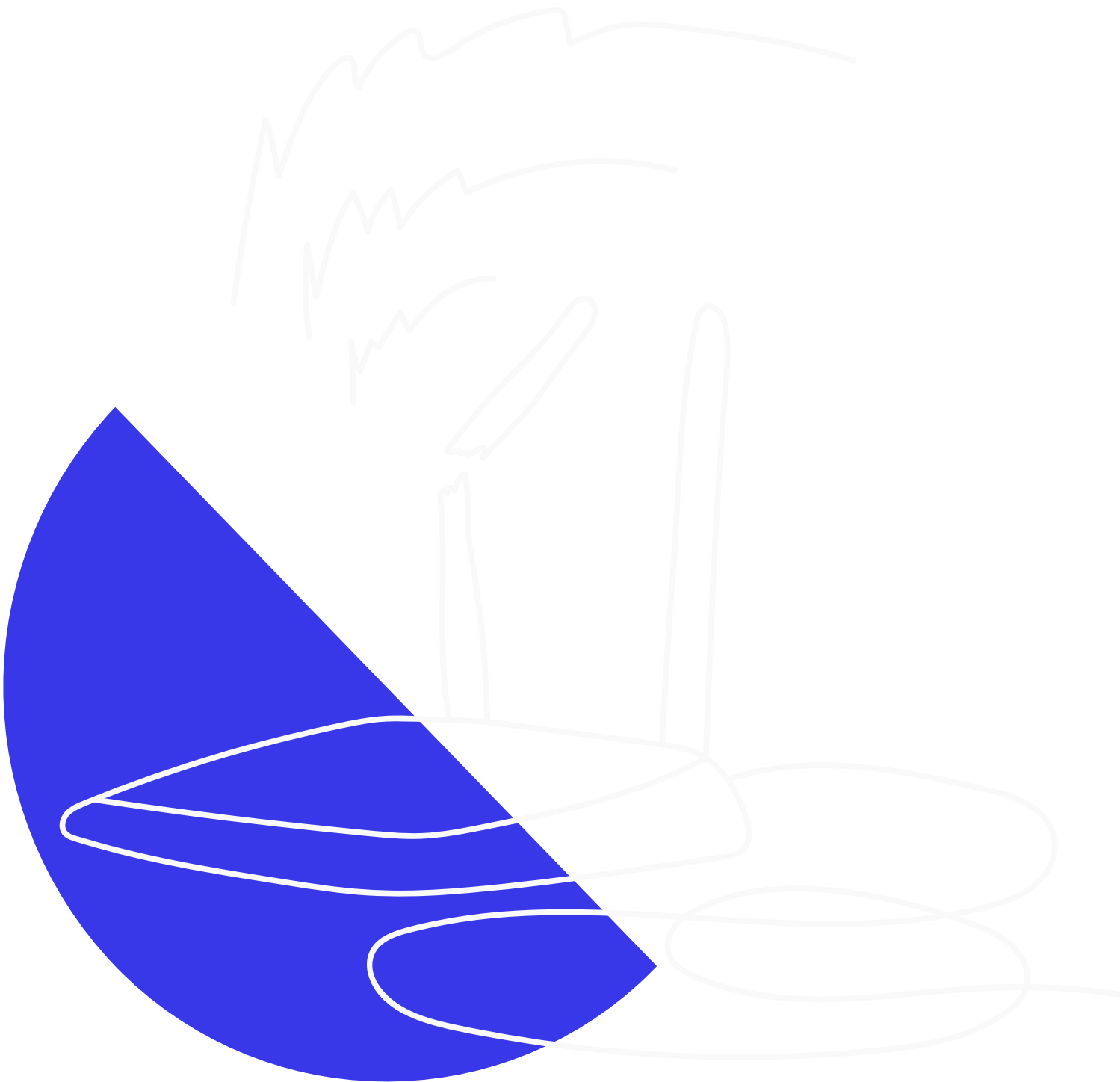


## LEOs, GEOs and MEOs: Learn the Pros and Cons of Each

### Description

# LEOs, GEOs and MEOs: Learn the Pros and Cons of Each

Technology in the connectivity space is evolving at a rapid pace, and it can be hard to keep up. Different satellite technologies like LEOs, GEOs and MEOs, for example, are better used in certain circumstances than others. Let's explore the satellite options below.



## • Satellite terminology explained



- - 1Low Earth Orbit (LEO) satellites
  
  
  
  
  
  
  
  
  
  
  - 2Geostationary Earth Orbit/Geosynchronous Equatorial Orbit (GEO) satellites
  
  
  
  
  
  
  
  
  
  
  - 3Medium Earth Orbit (MEO) satellites

## • Compare your options

	LEO Satellites	GEO Satellites	MEO Satellites
<b>Altitude</b>	160-2,000 kilometres	35,786 kilometres	2,000-35,786 kilometres
<b>Round-trip latency</b>	Low (around 20-50 ms)	High (around 500 ms)	Moderate (around 100-150 ms)
<b>Coverage</b>	Regional coverage with constellation	Regional coverage (spot beam)	Regional coverage
<b>Constellation Size (number of satellites clustered together)</b>	Large (hundreds to thousands)	Small (typically fewer than 10)	Moderate (tens to hundreds)
<b>Deployment Cost</b>	High	Moderate to high	Moderate to high
<b>Data Transfer Rates</b>	High	High	High
<b>Reliability</b>	Dependent on constellation management	Generally reliable	Generally reliable
<b>Better for phone or internet</b>	Suitable for both	Suitable primarily for internet	Suitable for both

**Advantages**

- Low latency
- High data transfer rates
- Less susceptibility to atmospheric interference
- Wide coverage
- Stable signal strength
- Fewer satellites required
- Balanced latency and coverage
- Relatively lower deployment cost
- Improved latency compared to GEO

**Disadvantages**

- High deployment cost
- Need for large constellation for continuous coverage
- Potential for signal interference
- High latency
- Limited coverage area
- Signal degradation at higher latitudes
- Higher latency than LEO
- Less global coverage than LEO
- Higher deployment cost than LEO

## • Other popular articles

- - News  
November 4, 2024

### **Telstra 3G shutdown is now complete**

- - News  
October 25, 2024

### **Phones using the 3G network to call triple zero will be disconnected on 28 October 2024**

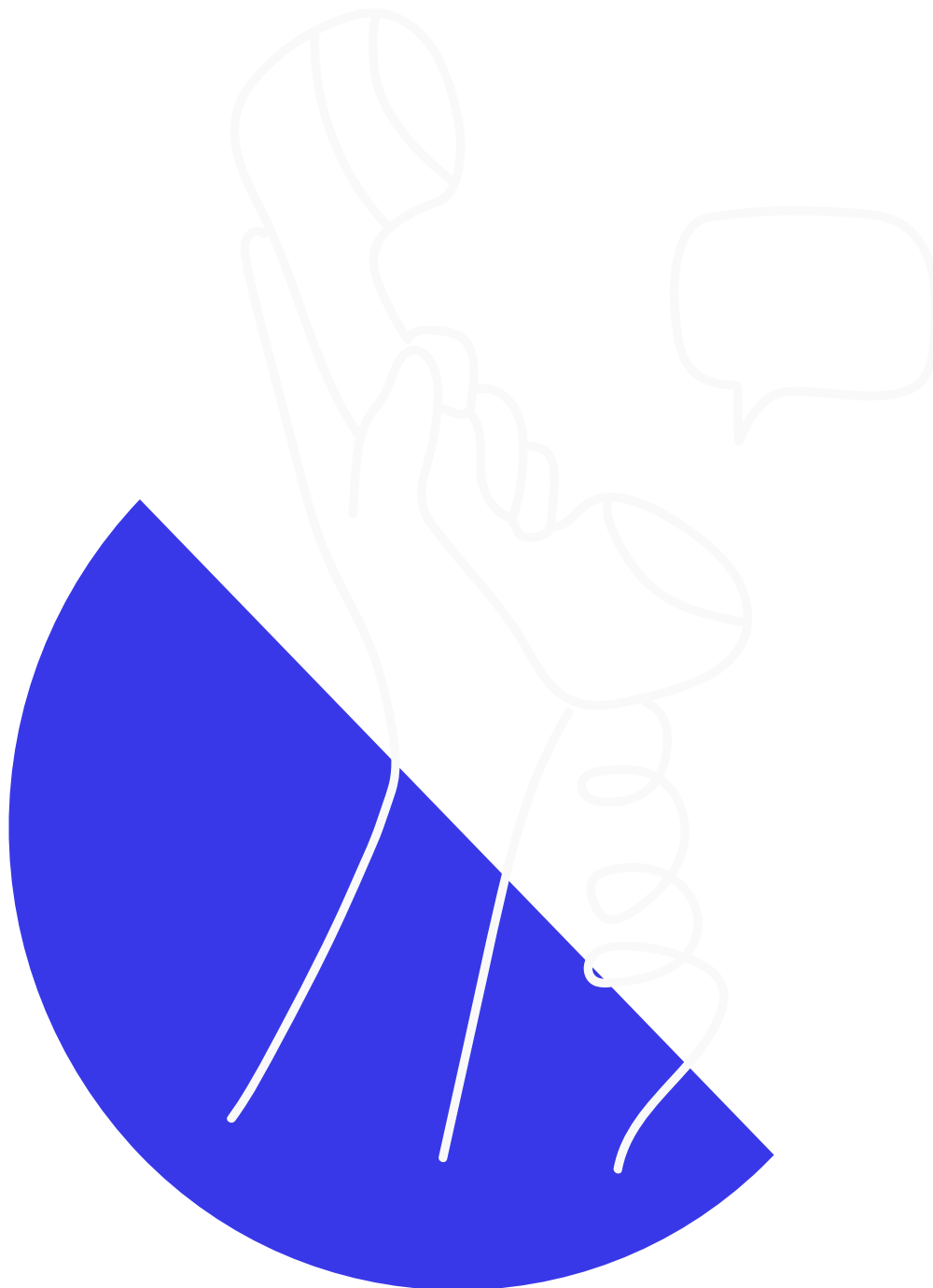
- - News  
October 25, 2024

### **NBN Co accelerating higher speed tiers in September 2025**

- - Guides  
October 17, 2024

### **Connectivity definitions**

- [Back to resources](#)



## Didn't find the answers you were after?

Chat to us on our hotline with one of our team members and let's get the conversation started. If we don't answer, we'll get back to you in no time at all.



[1300 081 029](tel:1300081029)

## Category

1. Guides

## Date

03/09/2025

## Date Created

12/03/2024