



Implementation of 5G in Malaysia

Initial 5G Deployment Strategy

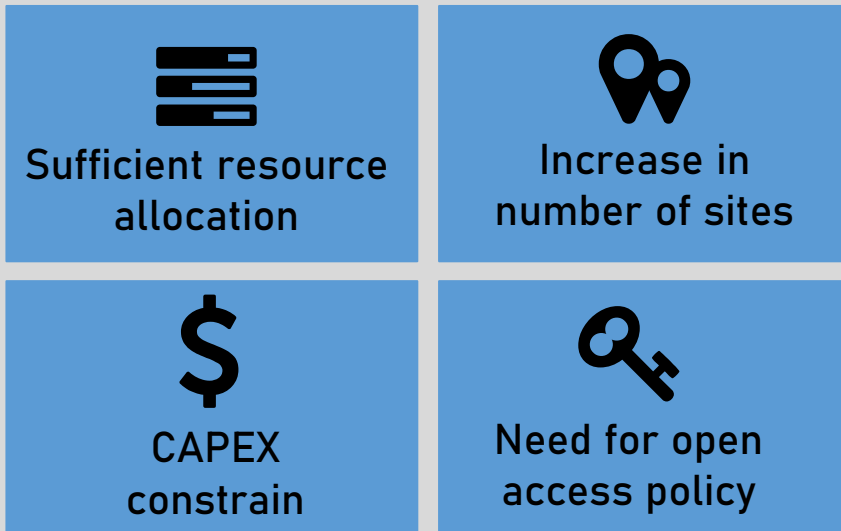


National 5G Task Force

Formed in 2018 to study and recommend 5G deployment strategy, covering 4 main scopes:

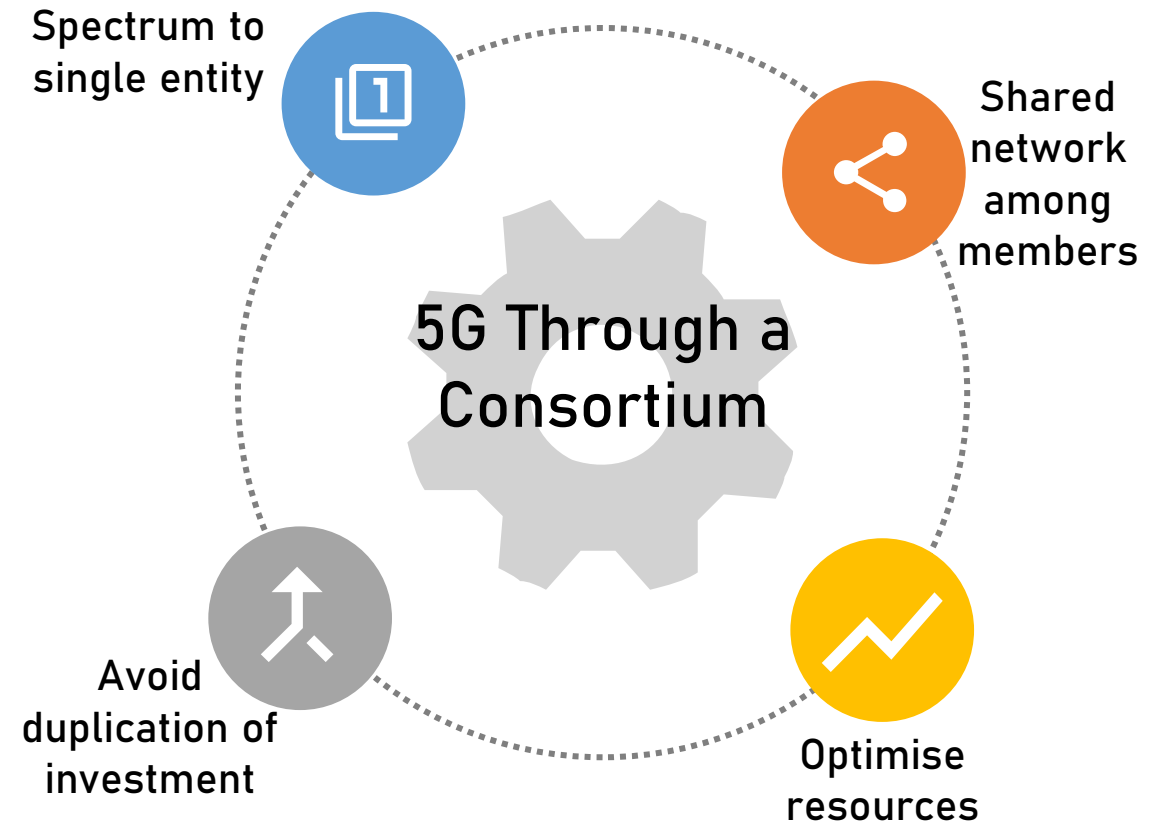
- i. Business case
- ii. Spectrum
- iii. Infrastructure
- iv. Regulatory

Among the key rollout challenges identified:



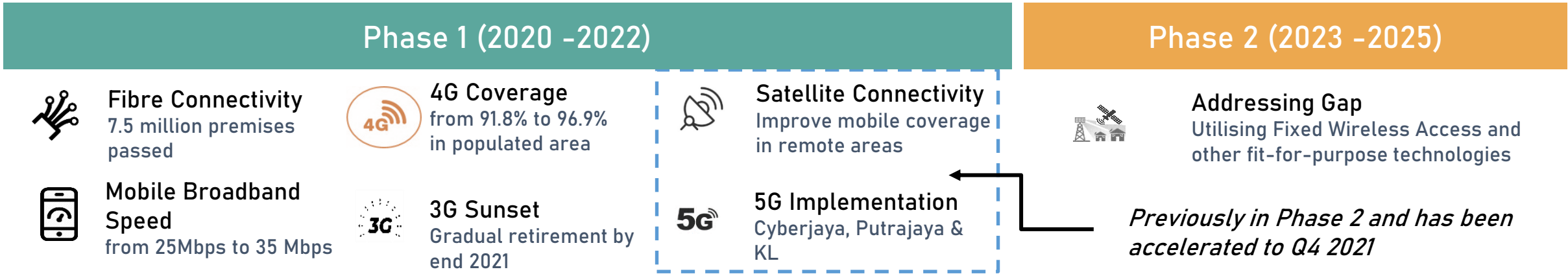
Report on Spectrum for Mobile Broadband Allocation

In 2019, the consortium approach was proposed for 5G spectrum award mechanism to address the challenges identified by the Task Force.



National Digital Connectivity Plan

Overcoming Covid-19 pandemic impact



Dependency on digital services elevated during the Covid-19 Movement Control Order, led to the formulation of Jendela plan

| | |
|---|--|
| Internet traffic increased ...70% | Usage moved to residential area ...70% |
| Internet speed reduced ...40% | Complaints increased ...70% |

Target by 2025
(12th Malaysia Plan)



| | | |
|--------------------------------|--|---|
| 9Mil Premises passed | 100Mbps speed by adopting 5G | 100% 4G coverage in populated areas |
|--------------------------------|--|---|

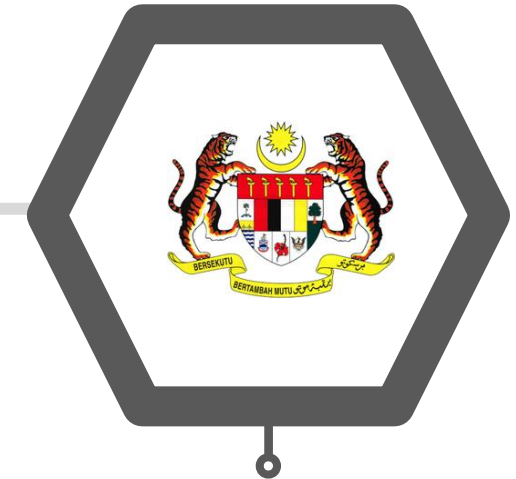
MyDigital and 5G Deployment Strategy



- ❖ Malaysia's Digital Economy Blueprint (MyDigital) announced in Feb 2021
- ❖ To transform Malaysia into a digitally-driven, high income nation and regional leader in digital economy
- ❖ 5G as one of MyDigital's key enabler
- ❖ Competitiveness criteria for investors



- ❖ In March 2021, it was agreed that 5G is to be implemented by a Special Purpose Vehicle, Digital Nasional Berhad (DNB) as a licensee under the Communications and Multimedia Act 1998 to :
 - ❖ bridge the digital divide and to improve state of connectivity
 - ❖ avoid duplication of infrastructure
 - ❖ optimise use of scarce resources
 - ❖ promote service-based competition
 - ❖ Single neutral party an evolution of consortium approach



- ❖ In March 2022, the Government of Malaysia decided to maintain SWN approach via DNB
- ❖ The Government also agreed to open up equity in DNB to other interested telecommunications providers to allow active private sector participation in the SWN

5G Single Wholesale Network (SWN)








DNB deploys and operates 5G SWN based on the following key principles:

-  Cost recovery
-  Supply-led model
-  Open, fair and equal access
-  Infra sharing deployment
-  Joint planning with MNOs
-  No single point of failure
-  Secure by design



DNB appointed Ericsson as strategic partner to design and build the national 5G network and ecosystem through open tender

Advantages and Impact of SWN

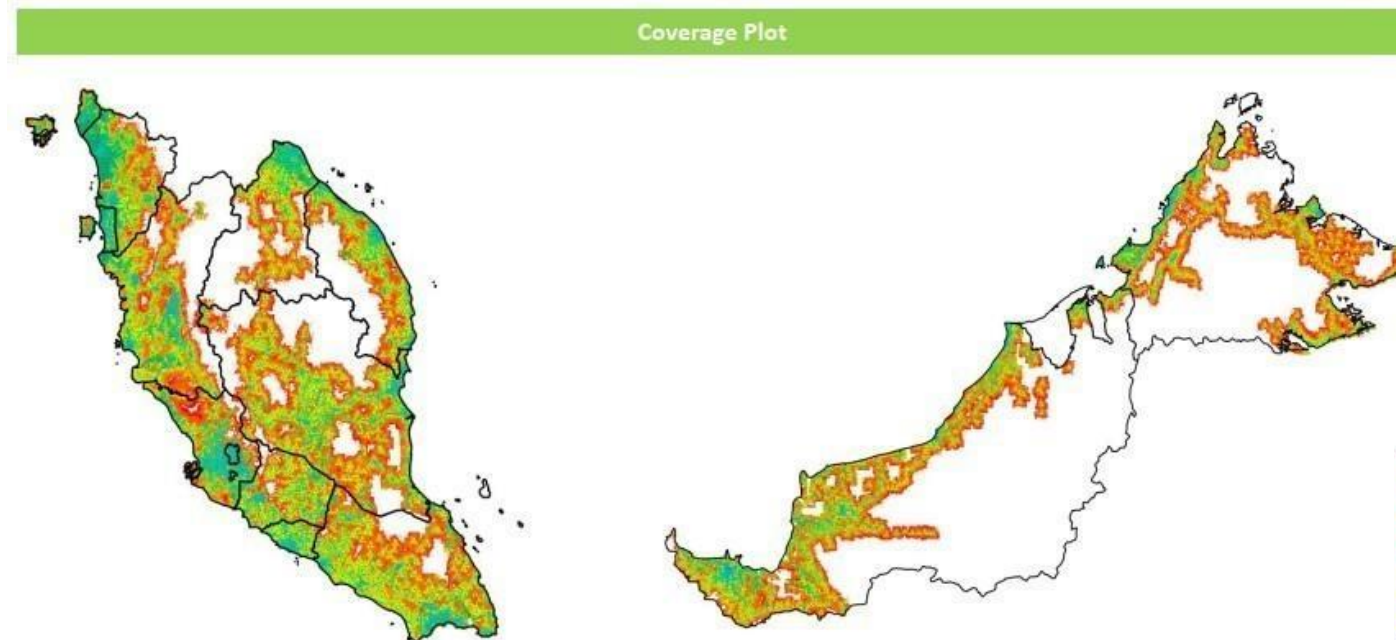
-  Accelerated 5G rollout, commitment 80% coverage in populated areas by 2024
-  Avoids duplication of infrastructure and investment
-  Maximise spectrum allocation to better guarantee quality of service, 100Mbps at cell edge
-  Remove the need for MNOs to invest heavily in 5G networks
-  Shift towards service-based competition to benefit consumers and users

DNB's SWN 5G Rollout Plan and Progress



| Year | Target Coverage in Populated Areas | |
|-----------|------------------------------------|---|
| 2021 | 5.8% | ✓ |
| 2022 | 36% | |
| 2023-2024 | 80% | |
| 2025-2029 | 90% | |

- 5G wholesale network services available beginning 15 December 2021, less than 4 months from first rollout
- Network available at selected cities/states; Putrajaya, Kuala Lumpur, Selangor, Johor, Negeri Sembilan, Melaka, Pulau Pinang, Perak, Sabah & Sarawak.
- As of 4 July 2022, a total of 1,506 sites have been put on-air



Forecasted 5G Coverage Map (2028)

Thank You