



MINISTRY OF INFORMATION AND COMMUNICATIONS
OF THE SOCIALIST REPUBLIC OF VIETNAM
AUTHORITY OF RADIO FREQUENCY MANAGEMENT

Viet Nam update on spectrum plan

Aug 2017, Philippines

Outline

- 1. Viet Nam mobile market at a glance**
2. Launching 4G services
3. 700 & 800 MHz band plan
4. View on frequency bands for 5G & IoT

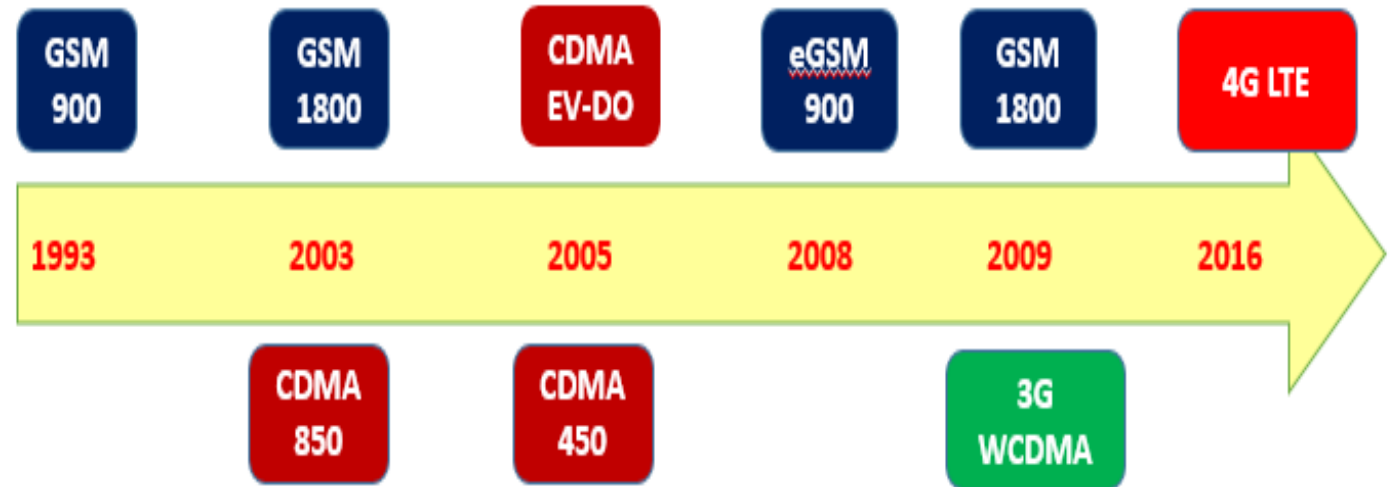
Viet Nam mobile market at a glance



121.6 mil mobile subs
(Jan 2017)

**Mobile coverage (by
population): 97%**

**5 operators: 3 big
operators get 90%
market**



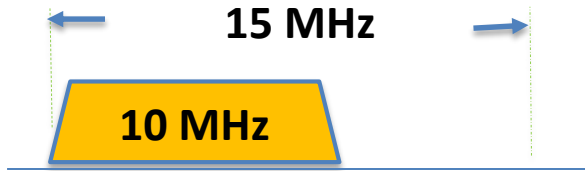
History of mobile networks in Viet Nam

Outline

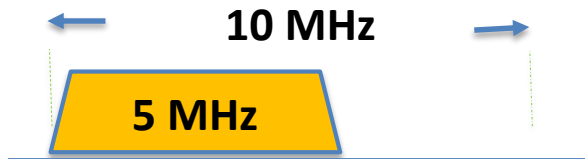
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Launching 4G services

1800 MHz: LTE



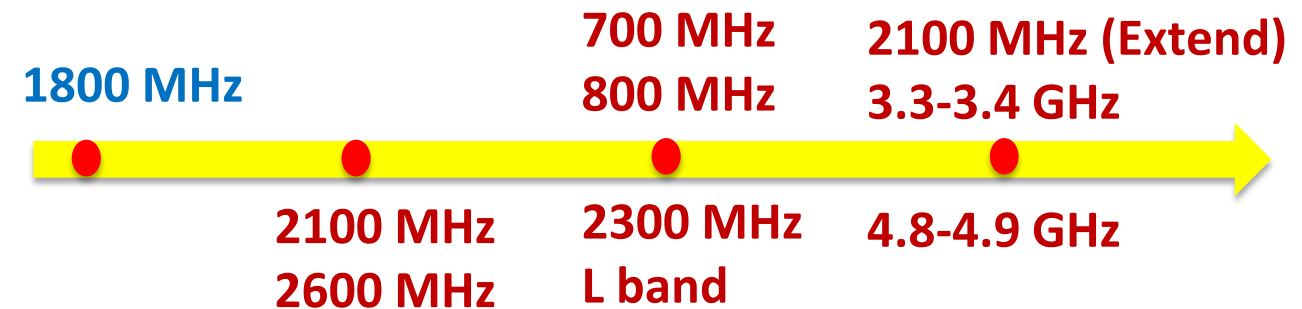
2100 MHz: LTE



- **Commercial services (2016)**
- **>36.000 eNodeB launched**
- **4G Coverage: 95% (by population)**
- **DL Speed: 60-75 Mbps**

- **Trial tests on-going (2016-2017)**
- **DL speed: 27-30 Mbps**

Frequency bands for LTE



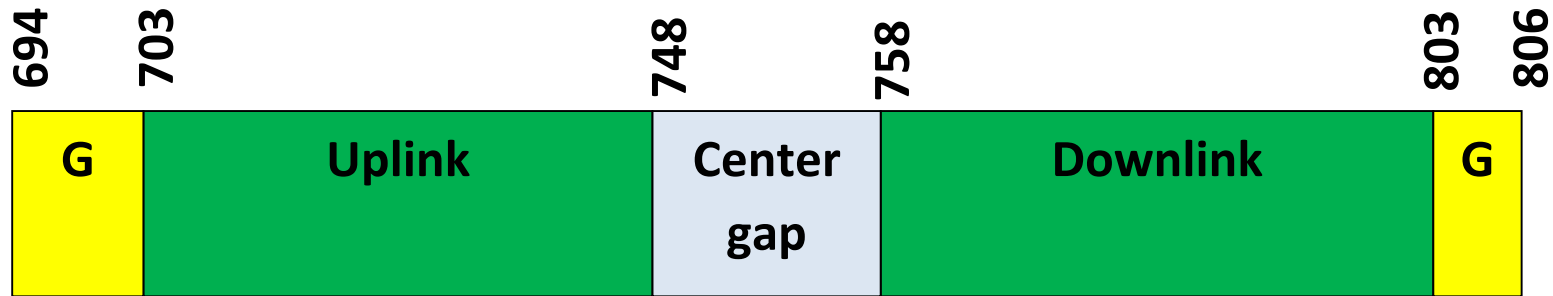
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Digital dividend for IMT

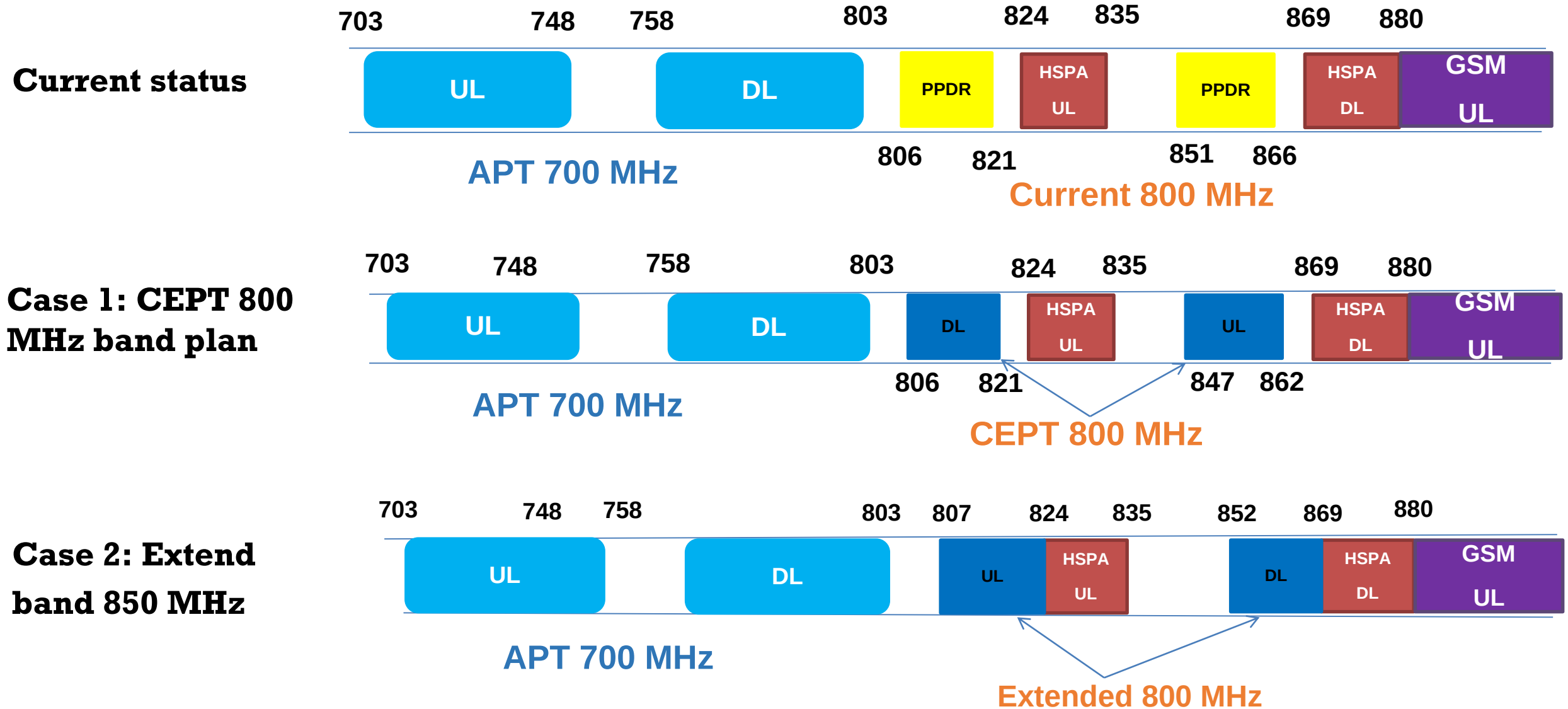
700 MHz band plans

- **Support APT700 FDD full duplex (2x45 MHz)**



- Largest amount spectrum of 700 MHz band for IMT
- Harmonize with other Asean countries
- Being expected to approve 700 MHz band plan in 2018

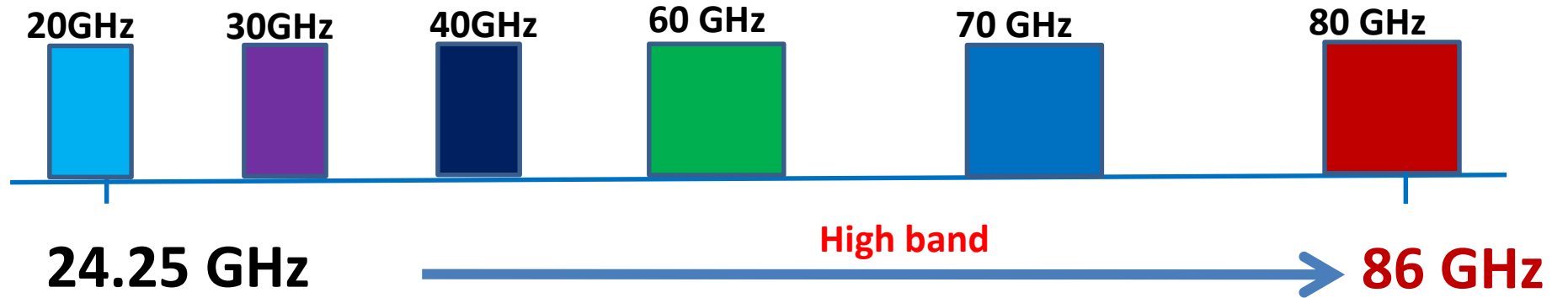
800/850 MHz band plan



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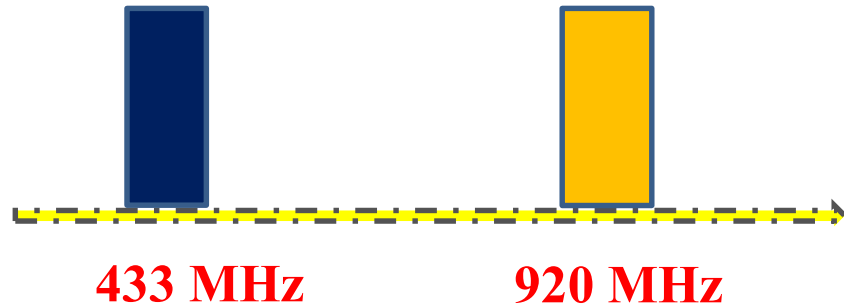
Views on spectrum for 5G



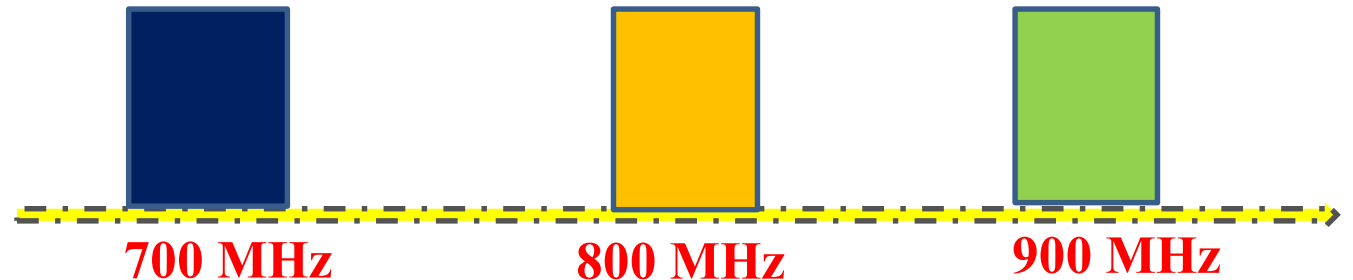
Viet Nam's view:

- Support bands achieving harmonization & to be easy to re-farm
- **26 GHz:**
 - ✓ Candidate band for 5G
 - ✓ Not to be used for Automotive radar (short range)

Views on spectrum for IoT



Unlicensed bands



IMT bands

- **IoT will use both Unlicensed & Licensed spectrum**
- **Regional cooperation is a key to promote spectrum harmonization for IoT**

Thank you for your attention !