

**MAKING SPECTRUM AVAILABLE FOR 5G**  
**« Feedback from France »**  
**3.4-3.8 GHz, 26 GHz, 700 MHz, 1.5 GHz**

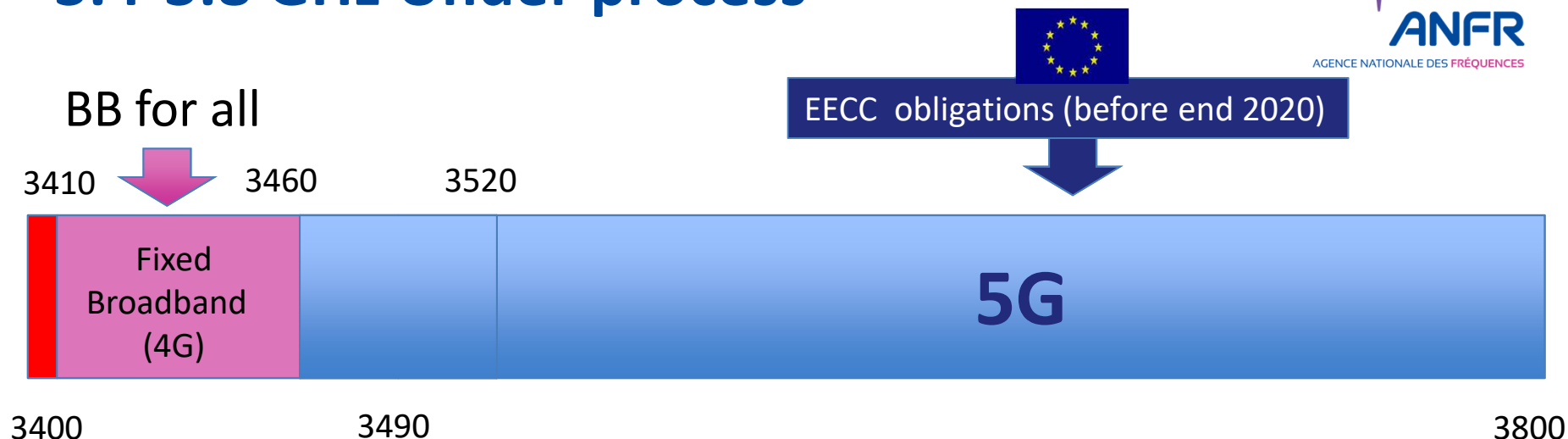
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*Deputy Director*  
*Spectrum Planning & International Affairs*  
*11-12 October 2018*  
*ITU - "Towards 5G enabled Gigabit Society"*

To manage a public resource as spectrum “wholesalers”  
.. but not only...

<p><b>International Negotiation</b> « Spectrum Diplomacy »</p>	<p><b>Management of national Rights</b> « Spectrum Notary »</p>	<p><b>Interference management, surveillance</b> « Spectrum Police »</p>
<p><b>Coexistence between users</b> « Trusted third party »</p>	<p><b>Public Exposure to Electromagnetic fields</b> « Trusted third party »</p>	<p><b>Refarming</b> « Spectrum refarming fund »</p>
<p><b>Roland-Garros, Tour de France, Ryder Cup</b> « Major Events »</p>	<p><b>Innovation</b> Hackathon &amp; Open Data</p>	<p><b>Maritime Amateurs</b> « Exam center »</p>



## 3.4-3.8 GHz Under process



National Frequency Allocation Table (NFAT) ✓

FS (GVT) on-going refarming (to be finalised March 2020) ✓

Thanks to the ANFR Spectrum Refarming Fund (SRF)

Fixed broadband (4G) : Supporting Broadband for all (up to 2026)

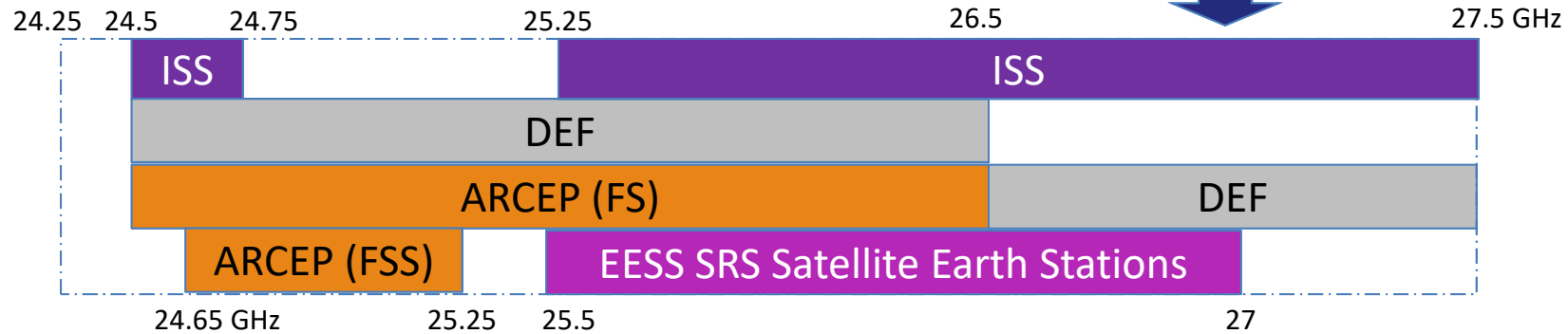
Satellite Earth Stations : “phasing out” (expiry of current authorizations) below 3800 MHz, migration above 3800 MHz

WLL: defragmentation ?

# 26 GHz Under preparation



EECC obligations (before end 2020) : at least 1GHz



Existing and future earth stations to be shared with ✓

Higher spectrum means easier sharing (see [ANFR study 09/18](#))

National process : location of satellite earth stations / short term plan ?

FSS : national demand ?

DEF (26.5-27.5 GHz) : 1 GHz no usage ✓

Fixed Service (FS) to be migrated or shared with ?

NFAT (under process) : update in a short time frame ✓

Spectrum Refarming Fund ? to accelerate migration DEF (FS) ?

# 700 MHz 4G (but ready for 5G !)

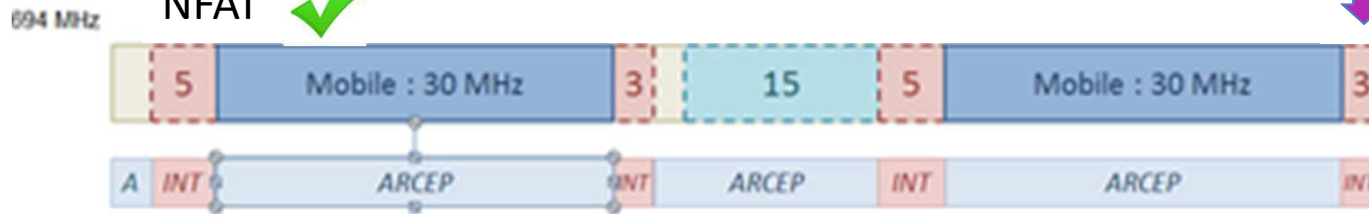


Mobile & PPDR Frequency arrangements ✓

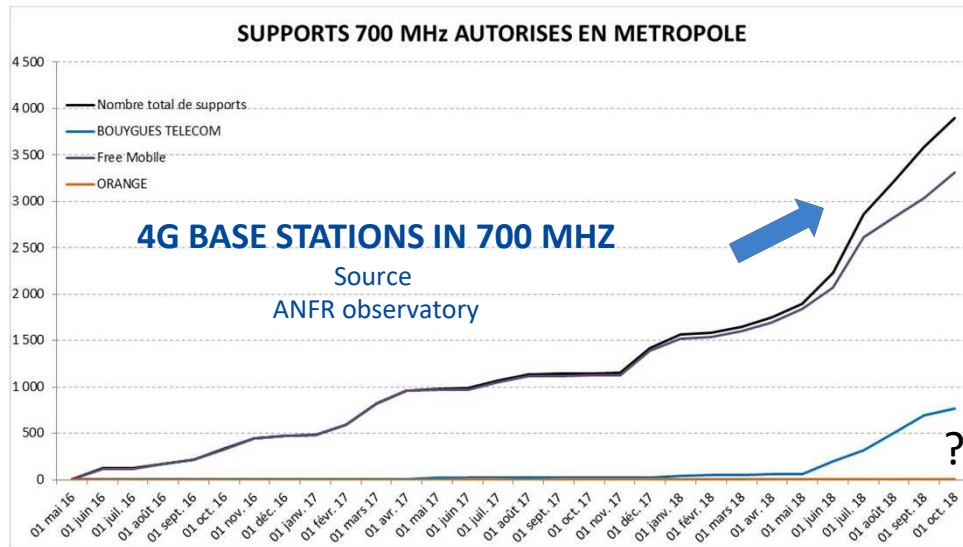
End of the migration **DVB-T** below 694 MHz : June 2019

NFAT ✓

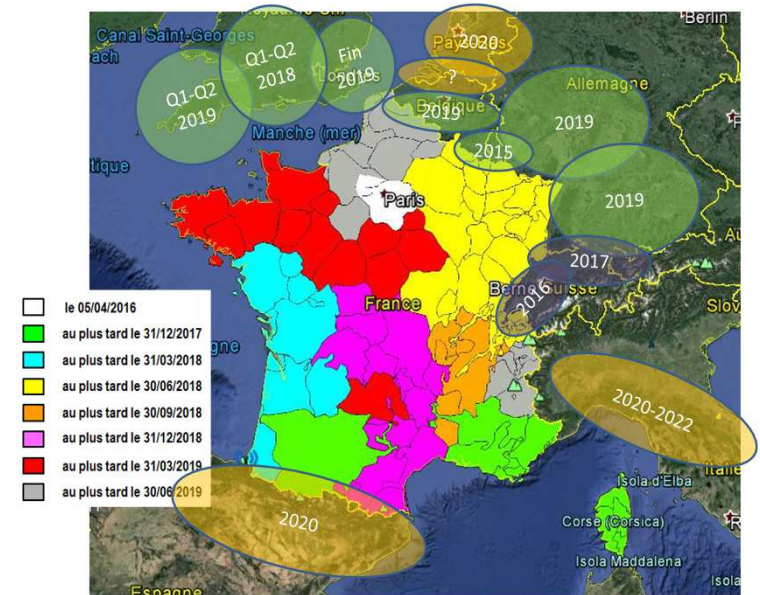
PPDR  
↓  
(2x5 MHz)&(2x3 MHz)



End 2015: Award process for the 2x30 MHz  
4 authorisations ✓



2 mobile operators targeting 5G ?



**DVB-T Migration** (thanks to SRF ! ) ✓

An on-going phases approach ✓

Cross-border coordination agreements ✓


# 1.5 GHz An ambitious reorganisation

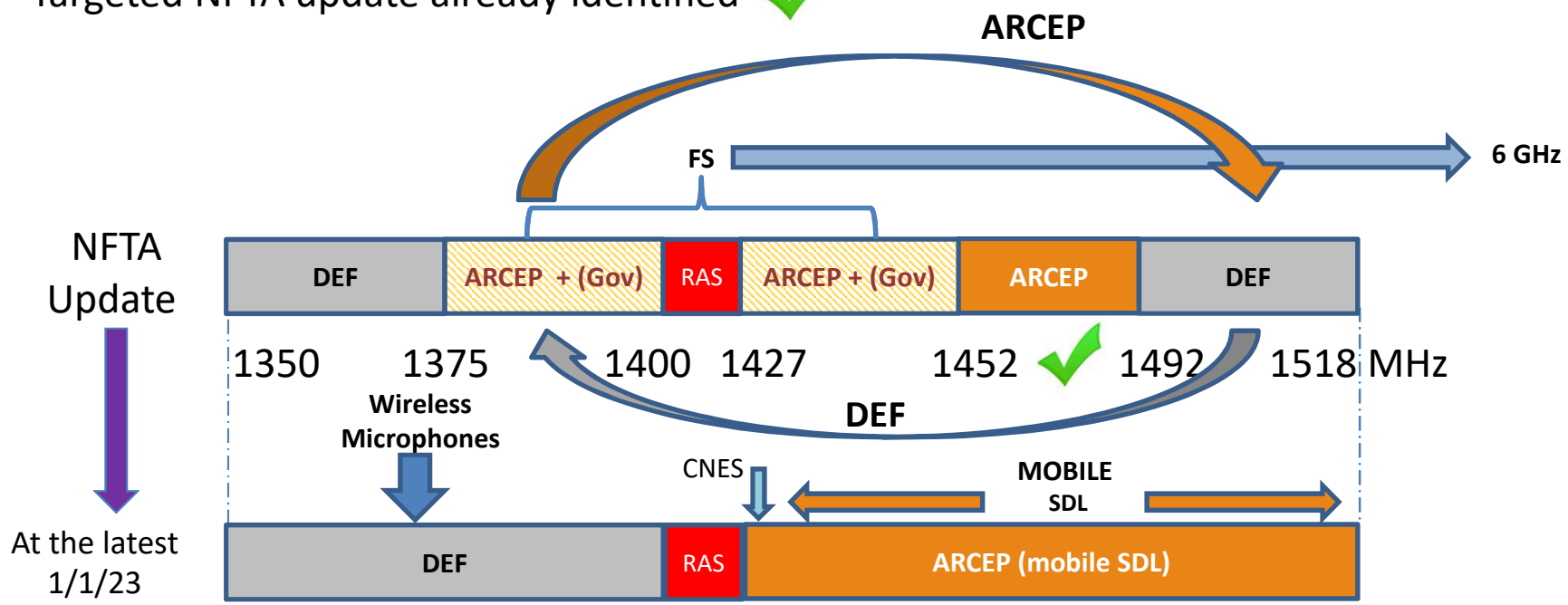
Implementation of EC DEC 1.5 GHz in NFAT 

An ambitious on-going reorganisation in order to make available 90 MHz for 5G

To migrate current FS (1375-1400 MHz/1427-1452 MHz) to FS 6 GHz band : migration plan ?

To define national conditions for the usage of wireless microphones in 1350/1375/1400 MHz

Targeted NFTA update already identified 



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