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I am truly worried !!!

When 2020 comes we might end up having no harmonised spectrum above 6 GHz at all

Why ?

The process we have chosen to harmonise spectrum for 5G might be broken !

- Spectrum harmonisation through IMT identification in ITU-R
- The process for identifying more frequency bands for 4G at WRC 15 has not delivered substantial results
- The start of the work on defining an WRC 19 agenda item about frequencies for 5G for haven't been encouraging

The basic problem

- There is plenty of spectrum above 6 GHz that could be used for 5G in most countries
- The problem is that every country would come up with a different list of frequency bands

Spectrum harmonisation through IMT identification

The problem with this process is that it promotes a minimum solution

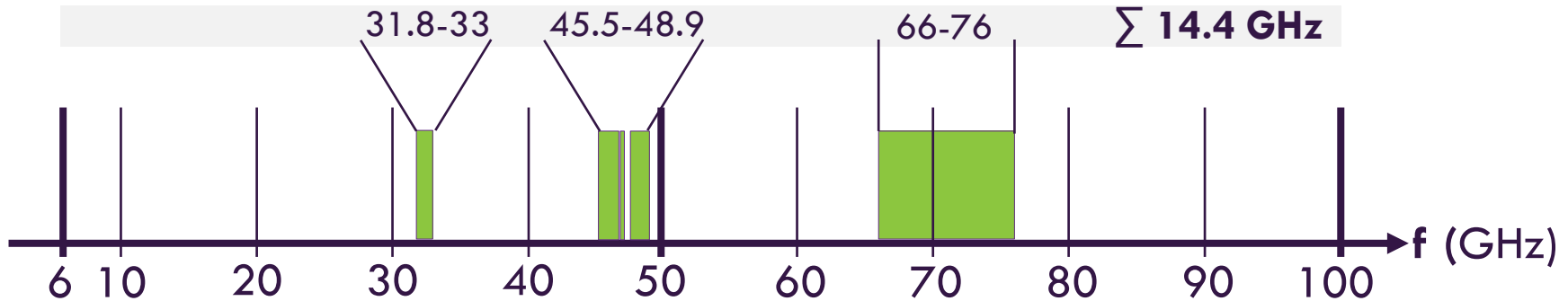
Promotes the minimum solution ?

Step 1: Countries submit their easy to access bands to the regional preparation process

Step 2: Regionally you try to find the bands that everyone can live with, discarding the rest

Step 3: At WRC15 we will then try to find the subset from the regional proposals that all can live with, discarding the rest ...

Common proposed bands across regions

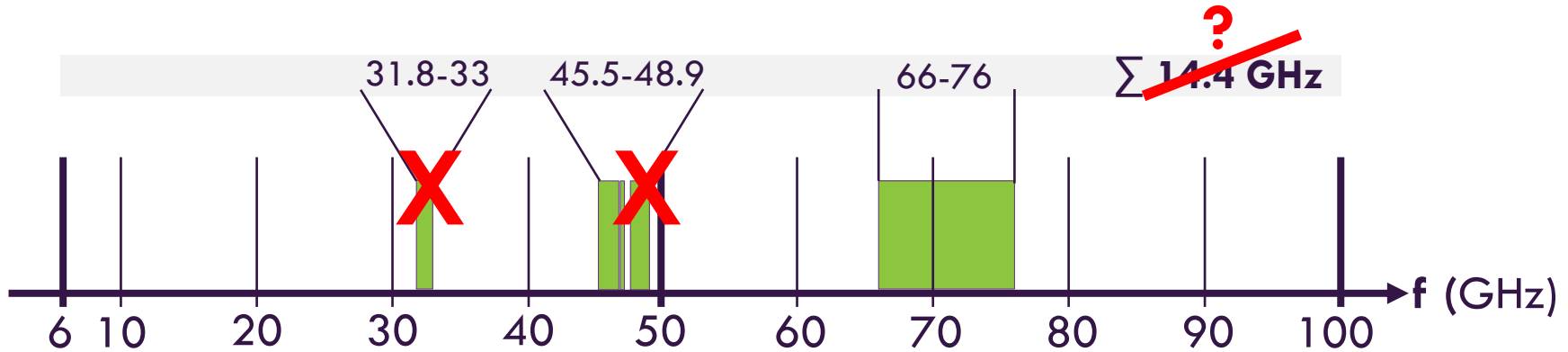


Promotes the minimum solution ?

Step 4: In studies in-between WRC15 and 19, the incumbent users (real or perceived) will try to show that coexistence is impossible so that the remaining bands can be discarded

Step 5: If there is still bands left at WRC 19 do a political compromise

Result of WRC 19 ?



The god thing

- With no harmonised “exclusive” bands, secondary/dynamic sharing becomes even more important
- DySPAN would be secured for many years to come.

Spatial aspects of 5G use above 6 GHz

- The combined area coverage in the 2.6 GHz band in Sweden is 1 %, 5 years after the launch of the first network.
- What will the area coverage be in 35 or 70 GHz band in 2025/2030 ?
- There will be plenty of sharing opportunities for other uses/users and huge room for innovation in licensing