

5G implementation challenges

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TDF Contribution

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TDF welcomes the opportunity given by RSPG to comments its draft Opinion on 5G Implementation challenges.

Defragmentation of the 3.4-3.8GHz frequency band

TDF share the view that sufficiently large contiguous blocks of spectrum are necessary to allow the delivery of high throughput multi-Gb/s 5G services i.e. enhanced mobile broadband. 80 to 100MHz seem necessary to reach such a target according to the last publications.

Regarding defragmentation and the potential phase out of incumbent ECS using the band, RSPG members should consider that part of spectrum has been recently allocated to FWA in certain countries as France(3510-3560MHz). Those networks will cover areas where current fixed broadband networks don't provide sufficient bitrate. These situations can be transitional until fiber has been deployed or according to the authorization last until July 2026. In addition, there are some cases where those networks were launched on public initiative and consequently the fast refarming cannot be the rule: compatibility studies or forward-looking planning options represent better approaches according to TDF.

Connectivity for vertical industries

5G has been presented as the solution to provide communication services to the various needs that verticals requirements may represent. Nevertheless, a one size fits all networks shall not represent the universal solution, as even with the various possibilities given by 5G (network slicing for example), vertical stakeholders may have different requirements than those mobile operators can answer. Those specific requirements (commercial, operational, security or regulatory) may be better served by dedicated networks.

TDF would consequently propose that specific spectrum would be dedicated to verticals; the 3.4-3.8GHz spectrum bandwidth allows such a scheme with for example 80/100 MHz per mobile operators respectively for countries with 4 or 3 mobile operators, while the last piece of spectrum is reserved for verticals.

Verticals could already benefit from dedicated spectrum in other frequency bands (PMR in 2.6GHz band, or spectrum dedicated to transport for example), but it would be beneficial to reserve them this part of the 3,5 GHz spectrum which would come to be added to other parts of dedicated spectrum and put them in a situation to offer a more global and successful service.

Making the link with the previous part on defragmentation, one solution in countries like France would be to allocate the spectrum currently used for FWA to 5G Verticals after July, 2026. Such a proposal would also allow verticals to take advantage from the economies of scale and ecosystem availability in the EU 5G core band.



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