Qeios

Peer Review

Review of: "Upper Mid-Band Spectrum for 6G: Vision, Opportunity and Challenges"

Jean Schwoerer[1]

1. Orange (France), Paris, France

It is a nice, synthetic, and fairly accurate overview of the possibility for 6G to take advantage of future FR3 bands.

That being said, it could be further improved by also taking into consideration some more practical aspects such as:

- Energy efficiency of some RF elements (PA, for example) on both the UE and BS sides, especially in the upper area of FR3. Too inefficient a PA can perfectly undermine the advantage offered by it.
- Technical issues with stacking too many antenna elements in a similar antenna aperture. Yes, it allows going higher in frequency while compensating for the added path loss by higher antenna gain. But it still needs to be realistic from a technical perspective (thermal constraints, EIRP limitations, limited computing and/or midhaul resources, for example).

New contributions to the state of the art seem limited, but the completeness of the overview (apart from the few mentioned points) clearly warrants publishing.

Declarations

Potential competing interests: No potential competing interests to declare.

doi.org/10.32388/WQJJP6