



Technological evolution, looming geopolitics

Embarking on 6G standards definition

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could slow down the adoption of new technologies.

2. Spectrum:

The history of spectrum allocation in Europe hints at several challenges. For example, spectrum licensing has often been a lengthy and expensive process, creating uncertainty for European operators. In contrast to China, European states consider spectrum licensing to be an important source of income. This mindset should change. Instead, European states have an interest in quick and cheap allocation of spectrum so that operators have enough resources for fast and innovative deployment.

Another example is the lack of harmonisation of spectrum and licensing across the EU. Coexistence of the FR3 band would pose technological challenges, not only but particularly in border areas. At worst, the unavailability of spectrum and thus the inability to communicate could be disastrous in case of war, as there would be no network close to national borders.

3. Ubiquitous coverage:

A final example is the need for many European states to shift priority from commercially viable deployment of wireless infrastructure to the premise of digital inclusion not only of urban, but also of rural regions. To this end, 6G satellite infrastructure will be particularly crucial. A 6G enabling satellite system will be geopolitically strategic. Europe would be well advised to increase its investment in and efforts to establish such infrastructure

in order to reduce its dependency on Starlink, as the EU cannot rely on its availability. It is arguable that the EU's growing R&D budgets in this domain might not result in an alternative network on reasonable terms. However, the speedy deployment of Starlink proves that truly impressive deployment is generally possible, and such infrastructure is too strategic to be neglected by the EU.



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