

FTTH Council Europe Policy Dialogue

“Paving the Way for a Sustainable and Future-Proof Connectivity in Europe”

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- Comments on the meaning of the two keywords in the topic of the event:
 - **Sustainable** connectivity means: 1) contributing to environmental sustainability by consuming less energy, 2) being financially sustainable in the long run and 3) being sustainable to the benefit of the end users by addressing social needs and producing value for most of the end users.
 - **Future** connectivity will not be only about higher speeds. Different qualities of service will be equally important including resilience, reliability, security, low latency, predictability, continuity etc. And these qualities will require a Software Defined Network and network slicing as in 5G.
- The telecom and overall ICT sector goal, is not ‘merely turning digital’. Future-relevant ICT needs to ride a twin – digital and green – transition wave. In EU digital transition goals are included in the Digital Decade Policy Programme and green transition objectives in the European Green Deal.
- As regards fixed connectivity the Digital Decade Policy Programme defines that all users in EU should have access to 1 Gbps links at fixed location by 2030. This is a technology neutral target however copper networks cannot achieve this level of performance. Furthermore from energy dissipation point of view copper networks are not efficient.
- Fiber networks offer several advantages such as higher speeds, lower latencies and smaller cost/speed ratios, as well as increased reliability and scalability. Fiber-based access networks are also the most technologically secure and in-the-field validated solution, with a clear technology roadmap towards 25Gbps, 50 Gbps and beyond. Fiber networks are also the most energy efficient networks we have because of the reduced role played by active equipment in them.
- Copper switch off is a priority not only because of the disadvantages of copper networks and the advantages of fiber networks but also because we need to avoid copper networks competing with FTTH/FTTB investments.
 - Two key conditions: a) Copper switch off should not bring negative impact on competition and b) subscribers should still have alternative options (at similar prices).
- The key challenge as regards copper switch off is the fast migration of subscribers to fiber networks i.e. moving from homes passed to homes connected (creating actual/end users connections). Challenges on the demand side appear to be greater if we consider the take up of FTTH services compared to the coverage of FTTH networks today in EU.
- Converting homes passed to homes connected is a huge challenge for buildings with no in building fiber cables. The key reasons for this are:

- civil engineering costs (and relevant complex admin procedures even when subsidies are used to address the cost challenges).
 - availability of personnel to install/deploy FTTH, and
 - subscriber reluctance - typically due to technician intervention in subscriber's space but also for pricing reasons
- An idea to address these challenges could be to promote FTTB (where fiber reaches the Building Entry Point) complemented by technologies that can deliver 1 Gbps speed for the end user using existing in building cables (such as coaxial, old telephony wires, powerline). This is still in line with the technology independent Digital Decade Policy Programme 1 Gbps fixed connectivity target.
- The FTTB approach can be also seen as a strategy for migrating subscribers from legacy networks to fiber networks in a simple/cost efficient way **as a first step**.
- Few years ago, FTTC/VDSL brought fiber closer to the end user (to the street cabinet i.e. in the neighborhood). Today FTTB can be considered as the natural next step ensuring a smooth transition towards fiber to the end user instead of a "jump" to FTTH or even to FTTR (Fiber to the Room). After migrating subscribers to fiber access through FTTB, FTTH and FTTR can be developed as next steps.