

Will copper switch-off come soon?

Economic analysis and operator experiences of decommissioning copper

Executive Summary

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Key questions and players

Will copper switch-off come soon? – Economic analysis and operator experiences of decommissioning copper

Synopsis

As deployments of ultra-high speed networks continue their progress, operators have to decide on the fate of their legacy copper networks. Literally, they must deal with their exit from the era of copper.

Aging copper-based infrastructure is increasingly costly to maintain, especially when the operator is confronted with customers' growing expectations for network performance and quality of service impacted by FTTP standards. Over the past couple of years, incumbents have started to announce their copper switch-off dates and implement the dismantling of their legacy networks.

However, NGA deployment plans are not going universally at the same pace, and although the migration to fibre is ongoing steadily, a significant proportion of broadband accesses still relies on ADSL.

Based on operators' first-hand experiences with copper switchoff initiatives in Europe, Asia and North America, this report aims at providing an in-depth view of how copper decommissioning initiatives take place, of what is at stake for the various parties and of how players are balancing the many diverse and sometimes countervailing interests at work behind the switch-off of legacy networks.

List of players

- AT&T
- China Mobile
- China Telecom
- China Unicom
- KPN
- Openreach
- Orange
- Portugal Telecom
- Swisscom
- Telecom Italia
- Telefónica
- Telenor
- Telstra
- Telia
- Verizon

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The copper switch-off is a complex investment for operators. It becomes profitable in the long run.

1



COPPER INCUMBENTS ARE AT DIFFERENT STAGES OF DECOMMISSIONING

- The pace of national NGA deployments is raising questions about the relevance of legacy networks – they incur high maintenance and operation costs for incumbents with less-performing services.
- The copper switch-off is following a four-step process including NGA network deployment, client migration, service termination and the dismantlement of components.
- Through FTTP deployments in particular, copper incumbents have been progressing on the first two phases and are now making announcements regarding the switch-off itself.

2



SWITCHING OFF COPPER IS NO EASY FEAT

- The deployment of alternative accesses is continuing in many countries, highly demanding in capex
- Moreover, the migration and decommissioning process requires significant commercial resources and technical knowledge over long time periods
- External obstacles such as regulatory reluctance and mandatory notification periods are slowing initiatives down

3



SHUTTING DOWN COPPER BECOMES PROFITABLE IN THE LONG RUN

- Copper decommissioning in itself requires significant technical and operational resources until the last customer has been migrated, which makes it a costly process in its first stages
- However, after migration has been completed (typically over a five- to seven-year range), operators reap significant rewards as switching off copper enables major savings at several levels and allows up to 60% decrease in opex when switching to fibre.



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