

Copper decommissioning: the final step on the road to fibre and the end of the (copper) line

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Fibre roll-out is almost complete in an increasing number of countries, which is making copper decommissioning a concrete economic and environmental opportunity. At the same time, many operators and regulators still have important details to finalise in order to enable this final step.

Analysys Mason's *Wireline decommissioning tracker* reports that four incumbent operators have decommissioned their copper networks (Jersey Telecom, NTT, Orange Côte d'Ivoire and Singtel), 13 have planned completion dates before the end of 2030 and another 12 have started the process but have not yet set a completion date.

From an economic perspective, copper decommissioning is supported by a convergence of interest between fibre operators, for whom it will imply a quicker migration to their networks, and the copper operators (generally the incumbent operators) who need to shut down a service line that will become loss-making as end customers churn to fibre, as their operating costs are fixed to a large extent. Operators also have an opportunity to realise the scrap value of the copper in the old cables.

Copper decommissioning is also a key step from an environmental perspective. A modern fibre access system generally consumes less power than its copper/DSL equivalent and can carry several orders of magnitude more data. Many of the potential energy savings on the access network can only be achieved when the legacy copper/DSL networks are switched off.

However, many prerequisites need to be in place before copper is decommissioned, including full coverage (or an acceptable proxy) and a decommissioning plan that limits competitive distortions.

The **full coverage** prerequisite aims to ensure that all clients of copper-based services (mass market, business, public sites ...) will find a suitable substitute based on fibre, cable, or, for a limited number of cases, fixed wireless access or satellite. The required minimum performance of this substitute access and/or the proportion of lines that can be delivered through fixed-wireless access or satellite (which typically have lower bandwidth, and sometimes inferior latency) are parameters that are typically determined by regulators and governments based on local techno-economic conditions. Mechanisms such as public subsidies or universal service funds can be used to increase the proportion of lines that have access to optimal performance. The size of the available subsidies and the required parameters of the full coverage prerequisite for decommissioning therefore need to be set consistently, which will constrain the copper decommissioning plan.

The prerequisite seeking to **limit competitive distortion** is likely to depend on the way access competition is organised in each country. It may include provisions to ensure that, when the incumbent operator provides fibre in some areas but not in some others the copper decommissioning process cannot be used to distort this competition. As an example, FTTH roll-out in the medium- and low-density areas of France (around 35 million dwellings) has a single local infrastructure operator in each area that is required to grant a non-discriminatory access to its network to all internet service providers (ISPs), either via a line rental model or via a co-investment model. The incumbent operator, Orange, is this infrastructure operator in medium- and low-density areas

representing around 19 million dwellings (less than 55%). ARCEP, the regulator, has determined that Orange's copper decommissioning plan needs to be based on objective criteria, so that the order of areas for copper decommissioning does not depend on whether Orange is the local infrastructure operator.

It is therefore important for operators, regulators and investors to fully understand the consequences of key parameters in copper decommissioning plans. This will allow them to avoid costly delays arising from unmet prerequisites, and avoid the possibility that copper decommissioning results in material harm to end users or competition.

Please contact Omar Bouhali to discuss how Analysys Mason can help operators, regulators and investors to analyse and optimise these copper decommissioning plans.