

Introduction

The FTTH Council Europe welcomes the opportunity to comment on the “Draft BEREC Progress Report on managing copper network switch-off”. Analysis commissioned by the FTTH Council suggest that FTTH/B availability in many European Member States will be close to 100% by 2030¹ and that the overall reach of FTTH will be approximately 90%. While forecasts are always subject to future events, just based on the state of FTTH deployment at September 2023, already 65% of European households were passed by FTTH with 10 Member States having more than 80% of their households passed². What is certain is that every one of those households need to migrate away from copper before the copper network can be shut down.

It is four years since the last report (BoR (21) 171) looking at the status of copper switch off and in that time, a lot of progress has been made in some areas and less in others. This report is an important data source to monitor the status of the transition in Europe today. However, the current report has the potential to do a lot more than deliver data, it could also identify best practices and promote measures that could be taken to manage the transition.

The FTTH Council has always taken a position that it would like to see an orderly transition to FTTH/B that is managed by, and supervised by, the NRA in cooperation with all stakeholders. More attention could be given to the different circumstances associated with copper switch off. For instance, where the fibre network is not provided by the legacy copper operator, is there a different approach compared to a situation where there is fibre network available from the copper network provider? Do legacy copper operators shut down when they do not have their own fibre network in place? This is not currently covered in the report.

There can be a view that NRAs have limited powers under Article 81 of the Code which simply requires SMP operators to notify an NRA in advance of network closure in a timely manner. The NRA then has to ensure that the decommissioning process includes a transparent timetable and conditions, including an appropriate notice period for transition. The NRA also has to establish the availability of alternative products to safeguard competition and the rights of end-users. These matters are addressed in the report. However, there are other areas in the EECC such as the regime for switching, set out in Article 106, which is intrinsically linked to the question of copper switch off (since every copper customer will need to switch to a fibre supplier which may or may not be the same operator). However, the question of

¹ <https://www.ftthcouncil.eu/committees/market-intelligence>

² <https://www.ftthcouncil.eu/resources/all-publications-and-assets/2043/european-ftth-b-market-panorama-2024>

switching/migration, the operational issues and processes (and Article 106 in general) is not mentioned once in the report. This looks like a gap that might usefully be addressed in the final version of this report.

Today, less than 40% of all FTTH sockets deployed in Europe are deployed by traditional incumbent operators. Entrant operators are a critical part of Europe's fibre story and Europe's fibre investment dynamic. The interplay between SMPO copper networks and entrant fibre networks is critical. This dynamic, and in particular, potential strategic behaviours by SMPOs in the face of competitive fibre network deployments is largely unaddressed in the report and would warrant the inclusion of guidance in the next iteration of the report.

Comments

General observations

The FTTH Council appreciates this report from BEREC, there is a lot of useful comparative data on progress made on decommissioning, on the treatment of migration costs and in a number of other areas.

First of all, the FTTH Council would appreciate a clarification on the definition of copper switch-off. The FTTH Council believes that where only part of the network is planned to be decommissioned, these should not be considered as switch-off plans. This is an important clarification to avoid the adoption of intermediate lock-in solutions, such as FTTC which do not positively contribute to the achievement of the Digital Decade targets.

Furthermore, we invite BEREC to reconsider the assessment that the proposal for setting a common date for the switch-off at EU level would be excessive. Indeed, the same data which emerges from the report shows that there is a very variable situation across Europe. This does not contribute to the harmonisation and the competitiveness of a single European market. On the contrary, BEREC should adopt a forward-looking approach, assessing the best practices on the market that can support the achievement of the Digital Decade targets including the switch-off of legacy networks in a harmonized manner. Nevertheless, even with an EU specific target for the switch-off, we do support the inclusion of specific safeguards to protect infrastructure competition and, above all, customers.

There is something incongruous when there is 'substantial progress on fibre roll out' whereas for copper switch off, there is 'some progress'. The general feeling in the report is of a lack of urgency around the need for copper switch off. The FTTH Council believes that there is a need for all stakeholders to do more, and actively facilitate copper switch off. While there are – at the moment - few legal instruments that can be invoked to accelerate switch off, there are a number that can facilitate and enable that switch off, these includes measures on transparency and important measures dealing with consumer switching. In addition, the data on coverage and take-up demonstrate that – even in presence of FTTH networks – the migration of customers is not favoured, hence the need for a planned switch-off policy and for intervention by NRAs.

Unfortunately, consumer switching (e.g. Article 106 EEC) is not mentioned in the report. This seems like a significant omission – in order to switch off the copper network, every existing consumer must migrate to either FTTH, FWA or some alternative infrastructure. The efficiency of the migration process is critical to making this transition and is also critical to the state of

competition post-migration, because it can be expected that migration where the copper operator is also providing the fibre connection will work well but that might not be the case where the fibre provider is a different operator. There are few enough legal imperatives that can be imposed to facilitate and accelerate migration but ensuring that the best possible consumer migration process is place is one of them.

In general, the report has a very narrow focus. It observes events in the market but has a very limited analysis and is not very proactive. There seems to be much more scope to make observations where switch off is working well or where it is not working well.

For instance, as noted in this report, the gigabit Recommendation introduces commercial closure step (though operators in certain Member States such as France had already adopted the practice). Meanwhile, some of the lead times (table 4) for MDF/Exchange closure seem excessively long, even recommending that the commercial switch-off could act as the start the clock running on notifications could help.

It could be helpful to set out the basic parameters at the start of the report. What constitutes switch off? For instance, is closing an MDF a (partial) switch off or does it require all copper to be retired? Is commercial switch off the start of a switch-off programme? There might usefully be a categorisation of the different forms or classifications of switch off. An introductory section could set out these and other parameters.

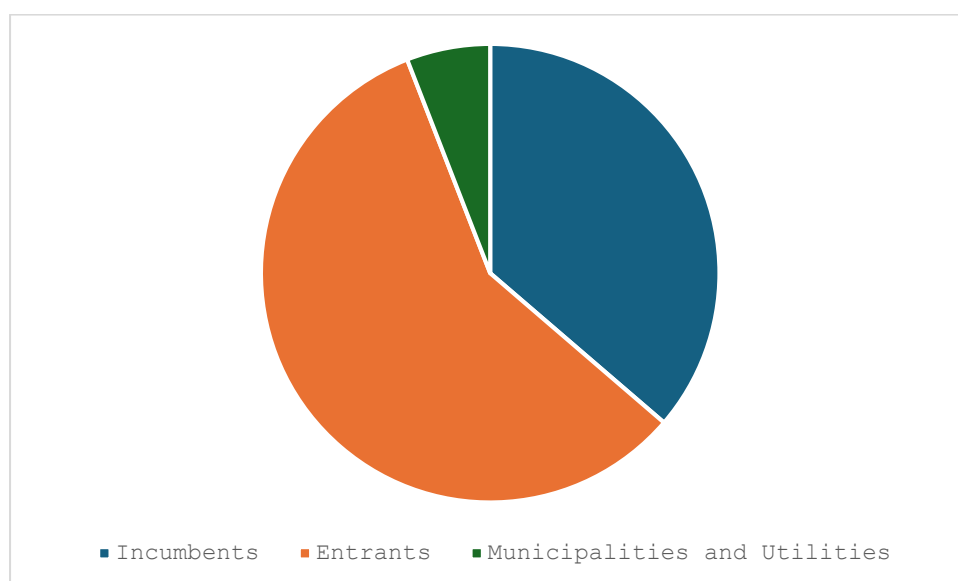
The section dealing with coverage thresholds is very useful in order to understand the indicators in different Member States that could permit switch off to be initiated. The role of regional or switch/exchange based analysis used in setting or triggering those coverage thresholds could also be useful.

Finally, the notice periods for closing MDFs and other offices set out in section 5.5 seem long and vary very significantly across the examples give. If the objective is to get to a quick copper switch off, having notice periods that can vary from 1 month to 5 years won't help. There seem to be big differences in the notice period required which is not clearly explained in the associated text.

Competitive analysis.

One of the critical issues in the context of moving from copper networks to fibre networks is the impact of that transition on the competitive market. There is virtually no consideration of alternative operators and how SMPOs behave when it is not the SMPO who has built the alternative fibre infrastructure. The distribution of sockets actually deployed in the EU is represented in the graph below, incumbent operators have less than 40% of sockets deployed and yet they are in a position to decide when, where and how, switch off will occur.

Figure 1: FTTH/B Sockets deployed 2023



The little contained in section 5.12 dealing with non-discrimination is not sufficient. Regulators in countries with more fibre deployed may see trends emerging. SMPOs make considerable profits from an asset that is largely depreciated and so a switch off decision is complex. Are SMPOs more likely to switch off their copper network where they have coverage, rather than where there is an alternative operator? How do obligations regarding non-discrimination (such as those in France) affect this dynamic? Are there observable differences in their behaviours?

Addressing switch-off issues where the SMPO has not invested in FTTH/B but alternative operators have is critical to a successful transition to fibre networks and reaping the economic, social and environmental benefits that this transition allows.

However, this critical issue is surprisingly overlooked in the report. Large amounts of capital are flowing into fibre networks, often by operators operating as Wholesale-Only, but not exclusively, and there is no incentive for legacy copper operators to be treated any differently to any other operator in the event of copper switch-off but the reverse is not true.

The data highlights the fact that in many parts of Europe there are fibre networks deployed, even with 100% coverage but there are areas where there is entrant FTTH/B but no equivalent investment by the incumbent operator. While the copper network may have been upgraded to VDSL or a variation thereon, there may be no move towards a VHCN deployment. If NRAs are not involved in the switch-off process, there is a risk that the decision by the SMPO to decommission the copper network becomes one of competitive strategy, when to act to its own maximum advantage and to its competitors greatest disadvantage.

The FTTH Council Europe would like to see the report from BEREC address the question of what competition considerations will be brought to the analysis of copper switch off in the presence of non-SMPO fibre networks.

This in turn gives rise to a large number of other issues that need to be addressed related to the competitive landscape.

Consumer Switching

While the FTTH Council welcomes the proposal in the BEREC Work Programme 2025 to address the issue of consumer switching (work item 3.2, 'BEREC report on switching and termination of contracts'), this issue is vital to an effective migration process from copper to fibre and the ultimate switch off of the copper network. Its importance should see it included in this report and recognised as an important area that NRAs can intervene to (a) facilitate and communicate on copper switch-off and (b) seek to minimise discriminatory switch-off processes.

An effective switching process which is gaining provider led can, if implemented effectively, allow customers to switch ISP in a seamless manner and with no (or minimum) disruption in a customer friendly way. The FTTH Council has seen examples of switching processes whereby the gaining provider can obtain confirmation of the customer details within 60 seconds and can have the implications of switching within a further 60 seconds (is the customer out of contract, what penalties might arise for early termination etc. etc.). However, the Council is also aware of very poor processes which are either (a) not consumer friendly (e.g. parallel billing periods) or (b) penalising on the gaining provider (fines if there is a delayed switch over). Delayed switch overs can be caused by multiple factors but one issue is the lack of a standardised process for the physical connection of a customer. A lack of standardisation can lead to smaller ISPs becoming isolated islands separate from the general retail market and switching processes.

These are areas where the FTTH Council believe BEREC could champion best practice across Europe.

Drawing linkages between these elements and the progress of copper switch off could point to future regulatory measures.

NRAs' involvement in switch-off process is essential to preserve competition

In this draft report it can seem as if BEREC sees the role of regulators in preserving competition in very narrow terms, not beyond the requirement to have transparent timetable and conditions, and the availability of alternative wholesale access products of comparable quality. Some NRAs have recognised the strategic choices that could be made by SMPOs

and the risks to competition that could arise and have imposed or are planning to impose non-discrimination obligations.

There is a risk that alternative fibre providers see the copper network switch-off process as a strategic choice by the SMP operator rather than one requested by the market. If the choice is made as a result of a strategic choice and not driven by the market, it may have negative effects on the level of competition, the level of investment and on the customer's experience. Certain services may not be supported over fibre (often related to the electrical power support for certain service offered by the copper network). A more gradual transition may be appropriate in certain circumstance when it avoids the risk of anti-competitive behaviour of the SMPO. The effects on the customers may also be mitigated if only voluntary migration is allowed. However, in these circumstance it is essential that all the pro-competitive provisions such as consumer switching are working effectively.

The FTTH Council Europe believes it is essential that the copper switch-off process is based on a discussion with all stakeholders involved, driven by NRAs. If the SMPOs were taking unilateral decisions about when and how to switch off their networks, it raises important questions about who bears the cost of the copper switch-off. End user equipment is also an important aspect of that cost and a subsidised transition by the incumbent could have a distortive effect on alternative operators' ability to attract consumers in that transition.

NRAs have a number of considerations that need to be balanced and the outcome of that balancing of pros and cons will need to happen on a case by case basis. However, the concern expressed here is that the report's scope is not broad enough to fully encompass both the reasons to shut down copper network (externalities do not seem to be considered) and also the potential costs of network shutdown (in terms of impacts on competition and consumers).

Recommendations

One important observation is the lack of recommendations coming from the BEREC report. With a full analysis BEREC could make recommendations where it sees good (and bad) outcome in the switch-off process. The lessons learned so far and conclusions could morph into something more substantial and operational that can be shared across Europe.

Copper switch-off is not only an issue in the presence of SMP

The perspective of the study could be broader and more forward-looking when it comes to its scope. The FTTH Council understands that the perspective is that the SMP network operator wishes to close its copper network and in that circumstance, what rules and obligations can be seen, and then how can Europe move to a more consistent approach. However, it may be

that the network owner is no longer SMP in a region or even in a Member State and yet, it is still important to envisage co-ordination and facilitation of the network shut down. The economic obligations and the rules that might apply to an SMPO might not be available, but ensuring a plan is in place and that there is transparency of the switch off process might still prove beneficial to all operators in the market. A transition plan might include provisions concerning the migration to an alternative service delivery method for consumers as well as concrete dates and milestones. This can be especially important because many end-users services can rely on power supply via the communications network, for example in lifts and security cameras where migration needs to be anticipated and planned.

The need for a migration plan is also necessary beyond the need of consumers and is important for third party access seekers regardless of whether the copper network operator is SMP in a given region or not. In the event that a SMP copper network operator is supplying third party operators access services, the move to fibre from copper may undermine the ability to supply the exact same services for some residue users. While contractual obligations may cover immediate business continuity issues, a co-ordinated and planned migration from copper to fibre will benefit all operators on the market, whether in the presence of SMP or not.

The FTTH Council Europe benchmark study with Cullen International

The FTTH Council Europe has commissioned Cullen International to build a tracker covering every Member State (plus the UK) and uses detailed data gathered from copper network operators which it is happy to make available to BEREC. There is also a large report available³ with details on each Member State.

The FTTH Council will also have a dedicated track on the first day of the FTTH Conference⁴ dealing with different aspect of copper network switch off, where it is hoped to identify and share best practices, from Europe and beyond. It is hoped that BEREC and its Members can participate.

³ <https://www.ftthcouncil.eu/resources/all-publications-and-assets/2317/copper-switch-off-tracker-decommissioning-copper-in-the-european-union-and-the-united-kingdom>

⁴ <https://ftthconference.eu/>

Copper switch-off tracker

Country	Active lines in the incumbent's network based on fibre*	Planning phase	Target date	Plan publicly available
Portugal	97%	closure started	-	
Sweden	95%	switch-off started	2026	✓
Spain	93%	switch-off started	2025	✓
Bulgaria	88%	-	-	
Lithuania	75%	-	-	
Luxembourg	73%	switch-off started	2030	
France	67%	closure started	2030	✓
Latvia	67%	-	-	
Denmark	65%	switch-off started	2030	✓
Estonia	64%	-	-	
Netherlands	49%	switch-off started	-	✓
Ireland	44%	-	-	
Poland	41%	-	-	
Malta	38%	-	-	
Croatia	20%	-	-	
Belgium	17%	switch-off started	-	✓
Italy	10%	-	-	
Germany	5%	-	-	
Czech Republic	5%	switch-off started	-	
Greece	4%	-	-	
Austria	information not available	-	-	
Cyprus	information not available	switch-off started	-	
Finland	information not available	switch-off started	2025	
Hungary	information not available	switch-off started	-	✓
Romania	information not available	switch-off started	-	
Slovakia	information not available	-	-	
Slovenia	information not available	-	-	
United Kingdom	information not available	closure started	-	✓



* Fraction of retail and wholesale services on the historical incumbent operator's network based on fibre (FTTH or FTTB).

Key

-	no copper switch-off plan publicly available
plan published	the incumbent operator has published a copper switch-off plan
closure started	no new orders accepted on copper in some areas, excludes pilot projects
switch-off started	copper network deactivated in some area, excludes pilot projects
switch-off completed	copper network deactivated in all areas

Conclusion

The FTTH Council Europe believes that there is a broad economic rationale and basis for managing copper switch off that goes beyond the market analysis procedure and while many measures are imposed as part of that mechanism, there are other elements that must be used.

A key issue is the interaction between legacy copper owners who have not invested sufficiently in a given geographic area where alternative operators have. If not managed properly and supervised by the NRA, the strategic decision of the SMPO in those circumstances is likely to impose significant costs on society for their own benefit.

Ensuring an efficient and effective switching process will be critically important to ensuring that anti-competitive strategic management of the switch off process does not distort the market in favour of the SMP operator.

Annex 1 Cullen Report (not for publication).