Anchor pricing in the context of the EECC Economic Replicability Test

Introduction

This paper forms part of a series in which we consider the European Commission's recommendation on the ex-ante economic replicability test (ERT)

In 2013, the European Commission issued a recommendation concerning aspects of broadband investment[1] ("2013 Recommendation"). This recommendation defined the ERT as one measure in a suite of non-discrimination obligations to be used by national regulatory authorities (NRAs) within the EU to safeguard competition.

The EC is currently updating the 2013 Recommendation so that it, amongst other things, aligns with the European Electronics Communications Code (EECC).

The ERT, as introduced in the 2013 Recommendation, provides a means of safeguarding against excessive pricing for access services, while allowing a degree of pricing flexibility; the EECC adopts a similar approach.

An ERT may not be required where wholesale price caps for fibre access services are in place. The EECC allows for the possibility that a wholesale fibre access product at a specific speed could be selected as an anchor for the prices of other speeds, allowing a degree of flexibility in pricing while maintaining a sufficient constraint.

This paper specifically addresses anchor pricing in the context of the EECC, reviews the extent of current use of anchor pricing within and outside the EU, and considers whether it is a viable alternative to price caps at all speeds, in the absence of an ERT.

Anchor pricing in the 2013 Recommendation

The 2013 Recommendation describes the use of cost-oriented wholesale prices as an anchor for NGA services. The proposed mechanism is that the combination of retail competition for copper services and a capped wholesale copper price acts as a constraint on the retail copper prices. The retail copper price, in turn, acts as a constraint on retail fibre prices, and this retail price, in combination with the ERT, acts as a constraint on the wholesale fibre prices. This is discussed in detail in our introductory paper[2].

[1] Commission Recommendation of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment(2013/466/EU)

[2] Please email gitas@gos-consulting.com to request a copy.

This approach relies on the ubiquitous deployment of regulated copper services as a price anchor; however once copper services are withdrawn, then it would be necessary to have some form of fibre price cap to act as a constraint, as recognised in the 2013 Recommendation:

"If the product offered by the SMP operator on the legacy access network is no longer able to exercise a demonstrable retail price constraint on the NGA product (for example in the event of a copper switch-off), it could in principle be replaced by an NGA-based product that is tailored to have the same product features. However, it is not envisaged that such an NGA-based anchor will be required in the immediate future or before 2020."[3]

Anchor pricing under the EECC

The EECC mentions a price anchor only once, as follows:[4]

More specifically, to prevent excessive prices in markets where there are undertakings designated as having significant market power, pricing flexibility should be accompanied by additional safeguards to protect competition and end-user interests, such as strict non-discrimination obligations, measures to ensure technical and economic replicability of downstream products, and a demonstrable retail price constraint resulting from infrastructure competition or a ***price anchor stemming from other regulated access products****, or both. [emphasis added]*

Although the EECC is not at all specific about the design or scope of such a price anchor, it is clear that an anchor-pricing approach, if that results in a demonstrable retail price constraint, is an acceptable means of providing such a constraint.

Why use anchor pricing?

Anchor pricing in telecoms regulation originated in the UK[5]; in a consultation on future broadband policy[6] Ofcom stated:

"Anchor products provide a high degree of flexibility for investors in new access networks, allowing the option to secure higher returns for new or higher performance services. This flexibility also provides operators with an ability to experiment with service offerings and tailor them to end customer needs.

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[3] European Commission. 11 September 2013. "Commission recommendation on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment - C(2013) 5761." para 56

[4] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L1972&from=EN para 193

[5] Anchor product regulation – retrospective and prospective: Brian Williamson October 2013 https://plumconsulting.co.uk/wpdm-package/plum-oct2013-anchor-product-regulation-retrospective-and-prospective-pdf/

[6] Ofcom. September 2007. "Future broadband - Policy approach to next generation access." http://stakeholders.ofcom.org.uk/binaries/consultations/nga/summary/future_broadband_nga.pdf

Such price differentiation is also welfare enhancing. Price differentiation…could in turn allow investments to take place that would, with a single price, not be possible. This is unlikely to be possible under a flat rate pricing system (such as cost based pricing).”

Under this rationale, Ofcom then implemented a regime where the copper products acted as a price anchor on the emerging FTTC products. This allowed investment incentives for mass FTTC rollout by the incumbent, and an ERT was then used in conjunction with copper price controls. From 2016, Ofcom abandoned the ERT and introduced a price control on a 40Mbps NGA anchor product, with pricing freedom for higher speeds.

So, it appears that Ofcom’s key rationale for adopting anchor pricing was to provide investment incentives to support fibre rollout, by allowing pricing freedom for products other than the anchor.

In theory, the anchor product approach balances the need to provide some protection for consumers and access seekers against the following objectives:

- Price differentiation, allowing investment decisions to be aligned with end user willingness to pay;
- Allowing investors to make efficient investment choices across a portfolio of options (eg, location, timing, technology).

The choice of anchor product would typically be made by a consideration of the chain of substitution from lower to higher speeds. If the chain of substitution is strong/weak at the level of the observed retail prices, then the anchor product will/will not constrain prices.

In addition, for an anchor to be an effective constraint, it should be chosen such that its speed covers a significant proportion of lines in the market, and that higher speed products are a lower proportion of lines. The flexibility allowed in the pricing of these higher speeds is considered important in providing investment incentives and scope for innovation and differentiation.

Limitations of anchor pricing

The effectiveness of anchor pricing for fibre access is dependent on the chain of substitution among the different product speeds, and the choice of the speed for the anchor product is critical. It is expected that this will change over time, such that a particular anchor speed can be expected to provide less of a constraint as average product speeds increase.

While anchor pricing of an individual speed may result in a price gradient across all speeds, it should be noted that this gradient will not necessarily correspond to the price gradient set by regulators. For purely copper-based technologies, involving a dedicated copper line per customer, the per-line cost for different speeds is virtually identical; for FTTC and FTTP, there is typically a mixture of dedicated and shared cables and this tends to result in a gradient where a higher proportion of the costs are often attributed to higher speed products. Under a price-cap approach, cost orientation is typically achieved either for each individual product or across a basket of all speeds. In the latter case, there is some degree of pricing freedom (although regulator may introduce sub-baskets to constrain particular

products of interest), but cost orientation is maintained on average. If anchor pricing is the only regulatory measure, on the other hand, then it may result in average prices above cost.

As with all price-cap methods, anchor pricing does not provide a price floor, and does not constrain an SMP operator from some types of anti-competitive behaviour such as predatory pricing, which could harm investment incentives. Other measures may be needed to address this.

Alternatives to anchor pricing

In the absence of price anchors provided by alternative infrastructure (such as copper or mobile networks), it remains necessary to provide a constraint on wholesale prices. If this is not achieved via a selected anchor product, then traditional price controls may be used, which can take two forms:

- Price controls may be set individually for all products within the SMP market, typically with a glide path to achieve cost orientation by the end of a defined period.
    - Allows no pricing flexibility between different product variants (eg, speeds);
    - Pricing gradient by speed very unlikely to reflect commercial optimum, and may result in misalignment with market-based retail prices;
    - Weak investment incentives; an ability to charge higher prices for higher speeds may be a key driver for investment in fibre networks, but gradients based on costs may inhibit this.
- Alternatively, price controls may be set for one or more baskets, each covering a variety of product variants:
    - Ensures overall cost orientation but allows flexibility within each basket;
    - Larger or smaller baskets can be used to constrain prices less or more tightly;
    - May not provide strong investment incentives.

A further approach involves the use of an overall revenue cap in addition to anchor prices, typically determined from a Regulated Asset Base (RAB) and a building block model. This has some similarities with traditional large-basket price controls, but may provide better investment incentives, as the revenue cap may be more flexible in allowing recovery of new investments, although this depends on the design of the model and the time period over which costs are forecast and recovered.

The pros and cons of each method are summarised in the table below. It should be noted that the pricing methods are not exclusive; for example, a broad revenue cap may be combined with anchor pricing on key individual products.

Method	Cost orientation	Consumer/access seeker protection	Pricing flexibility	Investment incentives
Price control (by product)	✓✓✓	✓✓✓	✓	✓
Price control (baskets)	✓✓	✓✓✓	✓✓	✓✓
Revenue cap (RAB)	✓✓	✓✓	✓✓	✓✓✓
Anchor pricing	✓	✓✓	✓✓✓	✓✓✓

Review of price controls/anchor pricing implementation in practice

Within EU

Although anchor pricing via price controls on copper products is evident in the EU, there is no apparent evidence that anchor pricing is currently used in any EU countries as a means of price control applied directly to fibre anchor products, nor that such an approach is planned; traditional controls on fibre products are however widely used. According to the latest BEREC survey of regulatory accounting practice[7], there is an increasing trend for NRAs to use cost orientation for wholesale FTTH and NGA services, sometimes in parallel with an ERT, yet for the six countries discussed in our introductory paper, the following table shows that only Italy has introduced price controls for FTTH, and the others are relying on an ERT from the copper anchor.

Country	Copper price control	VULA FTTH price control	ERT for FTTH
Austria	✓	x	✓
Ireland	✓	x	✓
Italy	✓	✓	✓
Slovenia	✓	x	✓
Spain	✓	x	✓
Sweden	✓	x	✓

[7] BEREC Report: Regulatory Accounting in Practice 2019, Annex 1 Table 1
https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/8907-berec-report-regulatory-accounting-in-practice-2019

It seems likely that price controls for FTTH, whether via anchor pricing or other methods, will become more prevalent as copper services are increasingly withdrawn.

Outside EU

In the **United Kingdom** (an EU member state until 2020), as discussed above, Ofcom introduced the concept of anchor pricing for access regulation in 2007. This resulted in the application of the principle to BT's VULA product, where an ERT was specified for FTTC, along with price controls on the anchor copper services. From 2016, the ERT was discontinued; the current regulation is based on a 40Mbps NGA anchor product with pricing freedom for other speeds. Ofcom is still consulting on the price controls for 2021-26, but its current proposal is to continue with a price cap (inflation-based) for the 40Mbps anchor for both FTTC and FTTH, and pricing freedom for higher speeds. A defined price premium is allowed for the FTTH anchor over the FTTC equivalent. Passive access products (duct and pole) are also mandated, under a cost-based price control.

In **New Zealand,** a 100Mbps fibre broadband anchor product was proposed in 2018. The fibre anchor price is based on the existing price of the service, with adjustments allowed for inflation. An overall revenue cap on regulated fibre services will in introduced at the start of 2022, based on estimated costs, as well as mandated passive fibre access on commercial terms.

So, the New Zealand approach differs from the UK, particularly from the start of 2022, in that it will include two key price regulation methods on the active FTTH products – the anchor price for 100Mbps and the overall revenue cap. Both of these controls were quite stringent when first proposed; the anchor speed is high (and so the price constraint would likely apply to the majority of FTTH lines with little effective pricing freedom for higher speeds) and the revenue cap was specific to fibre products, and hence not very flexible. It was noted[8] in 2017 that there are risks associated with such multiple regulation of the fibre price, and this could lead to low returns, blunted investment incentives and a slow rate of fibre uptake. However, the 2020 Chorus annual report[9] notes that over 60% of broadband connections are now fibre, and of these 100Mbps comprised 69% of fibre connections, with 1Gbps connections having increased strongly to 16%; this suggests that the proposed anchor speed may be appropriate to the evolving situation.

[8] Ensuring that anchor product regulation is effective; or how to avoid a regulatory Chimera by Brian Williamson, March 2017
https://www.mbie.govt.nz/dmsdocument/1125-chorus-attachment-report-from-brian-williamson-tar-post-2020-sub-pdf

[9] https://company.chorus.co.nz/reports

Conclusions

Anchor pricing provides a means of constraining the wholesale fibre prices charged by SMP operators, while allowing a degree of pricing freedom to maintain investment incentives and enable price differentiation.

Price controls on copper services have been used in conjunction with an ERT for NGA services in several countries in the EU, but there is no evidence yet of the use of a speed-based anchor for fibre-only services. It seems likely that anchor-pricing may be more widely considered as copper services are withdrawn, and a constraint on FTTH prices is needed.

Speed-based anchors are being used for fibre services in the UK and New Zealand, although the circumstances are different in each case. In the UK, the market has the potential to become competitive, with many infrastructure providers, and the anchor approach allows considerable pricing freedom for wholesale products above 40Mbps, and there are no other pricing measures apart from duct and pole access. In New Zealand the provision of fibre infrastructure is less likely to become competitive, and wholesale products are subject to additional constraints as well as anchor pricing.

The choice of speed of anchor product is important, as it determines the effectiveness of the price constraint, and the level of pricing freedom afforded. There is a balance to be struck and the appropriate speed may change over time.

There are important pricing issues which anchor pricing does not address, and additional measures may be needed to cover anti-competitive pricing by operators with market power.

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