

# The Economic Replicability Test in the EECC

## Introduction

In 2013, the European Commission (EC) issued a recommendation concerning aspects of broadband investment<sup>1</sup> (“2013 Recommendation”). This recommendation defined an ex-ante economic replicability test (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 2013 Recommendation notes that an NRA should be able to forbear directly regulating wholesale access prices of an operator with significant market power (SMP) that supplies services in vertically related upstream wholesale and downstream retail markets (SMP operator) provided that the full suite of non-discrimination obligations, including the ERT, are in place.

The purpose of the ERT is to thus to incentivise investment and increase pricing flexibility for incumbent whilst not compromising downstream competition.<sup>2</sup>

The EC is currently updating the 2013 Recommendation to create a new Access Recommendation that will, amongst other things, align with the European Electronics Commission Code (EECC).

In this paper we consider the key issues that will need to be addressed in the new recommendation.

To do this we:

- discuss the original purpose of the ERT,
- look at how NRAs have implemented it in practice and
- explain how it has been incorporated in the EECC.

From our analysis we identify five of the key issues concerning the ERT and its alternatives that we consider the EC should consider addressing in its Access Recommendation.

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<sup>1</sup> 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)

<sup>2</sup> See EECC, Recital (193)

## ERT definition in the 2013 Recommendation

The 2013 Recommendation states that an NRA should be able to forbear regulating wholesale access prices of a SMP operator, provided that the full suite of non-discrimination obligations are in place and there is a constraint on retail prices. These non-discrimination obligations are:<sup>3</sup>

1. The SMP operator supplies relevant wholesale services in accordance with Equivalence of Inputs (EOI) requirements, and
2. The relevant wholesale services enable the technical replicability of the broadband service supplied by the SMP operator in the retail market, and
3. The relevant wholesale services enable the economic replicability of the broadband service supplied by the SMP operator in the retail market as assessed *ex-ante* using the ERT

The retail price constraint is based on a retail broadband service that is either derived from:

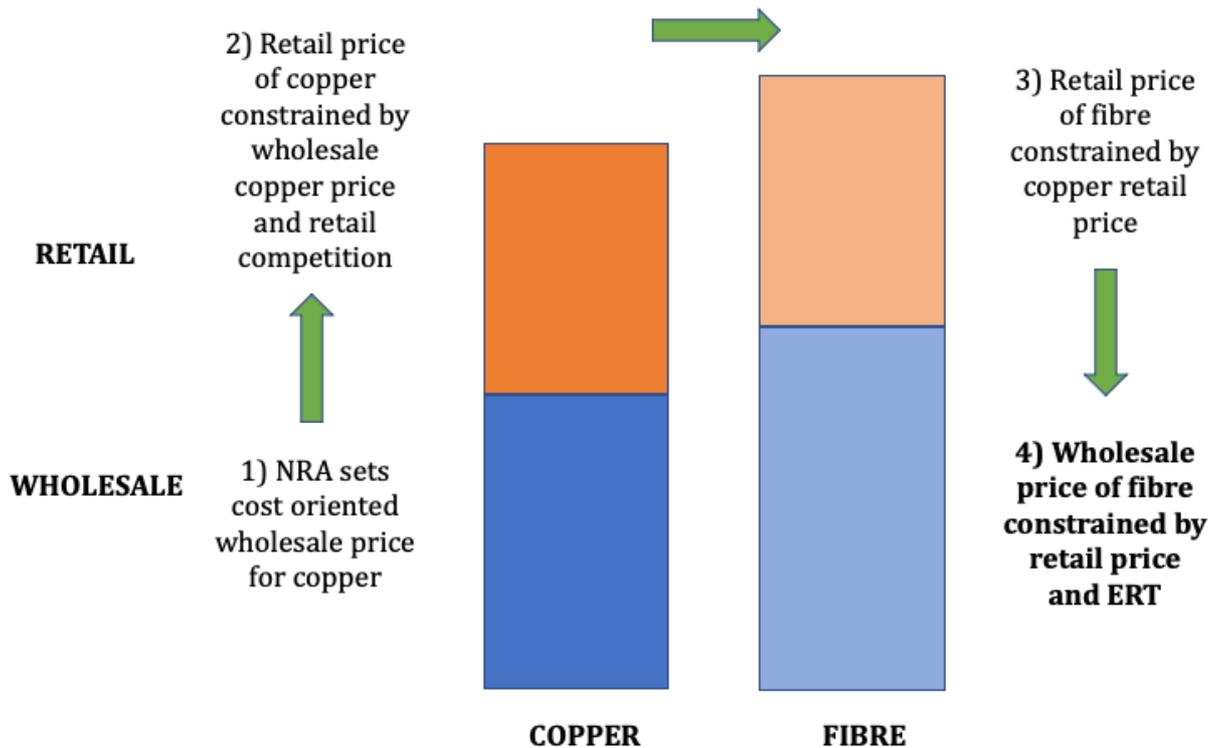
1. The SMP operator's copper-based wholesale service, provided that its access price is cost-oriented; or,
2. Competition from alternative infrastructure that is not supplied by the SMP operator.

If the SMP operator has implemented the EOI obligations, technical replicability is ensured, and, say, copper-based broadband provides a retail price constraint, then the ERT could be imposed as an alternative to a price control on wholesale fibre services.

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<sup>3</sup> 2013 Recommendation, paragraphs 48 and 49

This is illustrated in the following diagram:



The ERT assesses whether the margin between the retail price of the relevant fibre-based (FTTx) broadband products and the access price for the wholesale inputs supplied by the SMP operator is greater than the SMP operator's incremental downstream costs<sup>4</sup> and a reasonable percentage of common costs.<sup>5</sup> If the margin between the retail price and wholesale access price is greater than the cost of downstream inputs, then this suggests that it is economic for a retail operator to replicate the SMP operator's retail services using the SMP operator's fibre access service.

<sup>4</sup> In some circumstances, the NRA may choose to adjust these costs or substitute the costs of a competitor.

<sup>5</sup> 2013 Recommendation, paragraph 64 and Annex II

## Examples of ERT in practice in the EU

The approach recommended by the EC in 2013 was taken up by a number of member state NRAs. The mechanism for the ERT however varied considerably. Some examples are below.

### **Austria**

In Austria in 2017 the regulator imposed a price control on the wholesale copper broadband access services of A1 Telekom Austria, with a minimum retail-wholesale price differential on both copper and fibre (FTTC and FTTH) local access services. The values of the direct control and the price differentials were both quantified based upon bottom-up models commissioned by the regulator.

This is an ERT in the expected form, but unusual in that the price differentials in euro have been set in advance to cover the whole market review period.

### **Ireland**

In Ireland various ERTs are required for local access services (copper and fibre) provided by the incumbent, Eir. In urban areas the tests must be performed between wholesale local access (WLA)<sup>6</sup>, in which Eir has SMP, and retail broadband prices and also between WLA and wholesale central access (WCA)<sup>7</sup> prices. In rural areas, where Eir has been found to also have SMP in WCA, the tests are between WLA and WCA prices, and also between WCA and retail prices.

The constraint on retail prices is provided by copper (including FTTC) WLA for which the wholesale prices are fixed ex ante, based upon bottom-up models.

### **Italy**

In Italy, an ERT is required on both copper and fibre access services provided by TIM. The test is required to be performed between wholesale and retail prices for local access services and submitted to the regulator in advance of any price change, including special offers.

However, there are also cost-based price controls on both copper and fibre wholesale local access services, except in a number of “contestable municipalities” within the SMP area where TIM may in some circumstances depart from the fibre price control (but not the ERT requirement) provided that certain criteria are met. In these municipalities TIM faces wholesale competition, principally from OpenFiber, a “wholesale only” operator.

The city of Milan is considered to be a separate market from the rest of Italy and no SMP obligations are imposed there.

This example of an ERT is unusual in that it has been imposed in conjunction with an ex-ante cost-based price fixed for fibre services in the majority of the country. This suggests that the purpose of the ERT here may be as a safeguard on predation and margin squeeze, which the NRA explicitly recognises as risks rather than merely to control fibre prices.

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<sup>6</sup> Market 3a under 2014 EC recommendation on relevant telecoms markets susceptible to ex ante regulation

<sup>7</sup> Market 3b under 2014 EC recommendation

## **Slovenia**

In Slovenia, Telekom Slovenije, is required to perform an ERT between retail and wholesale prices for fibre (FTTH) and also FTTC services whenever there is a price change and report the results to the NRA. It must also report retail costs annually to the regulator if requested. The wholesale prices for full copper broadband services are set using a cost-based model.

This example is an ERT in the expected form, allowing the NRA to forego a direct price control on FTTH and FTTC services.

## **Spain**

In Spain there is a national price specified for on Telefonica's copper services and there is the requirement for it to offer fibre at a price limited by an ERT, except in 66 "Ultrafast Broadband (UFB) municipalities". In the UFB municipalities there is considered to be sufficient competition from at least two other fibre and/or cable networks such that price regulation on Telefonica's fibre services is not required.

Again, this is an ERT price constraint in the expected form, allowing the NRA to forego a direct price control on fibre services.

## **Sweden**

In Sweden, a direct cost-based price control on copper and ERT on fibre were imposed on the incumbent Telia in 2016 (which remains in force). The regulator must perform the ERT when "significant changes" occur such as changes in pricing, quality or product set. The next review has been delayed as the European Commission was not satisfied in the light of competitive developments that the finding of a single national market, notified in the draft decision in 2019, remained appropriate.

As for Spain and Slovenia, this is a use of the ERT in the context that we would expect from the 2013 Recommendation.

## Summary of examples of ERT in practice

The table below summarises the six examples above

	Copper (LLU) wholesale cost-based price control?	Fibre (FTTH) wholesale cost-based price control?	ERT on fibre broadband services?	Constraint on fibre retail prices
Austria	Yes	No	Yes	Copper broadband
Ireland	Yes	No	Yes, different tests in urban and rural areas	Copper broadband
Italy	Yes	Yes (in less competitive areas)	Yes, except Milan (no SMP)	Direct wholesale price control
Slovenia	Yes	No	Yes	Copper broadband
Spain	Yes	No	Yes but not required in more competitive areas	Copper broadband (in less competitive areas)
Sweden	Yes	No	Yes	Copper broadband

In all the examples above, therefore, except Italy, it is the incumbent's copper service retail price that constrains its fibre service retail price, and the ERT can then be used to constrain the fibre wholesale price, with the addition of a price cap on fibre wholesale services for some countries. In particular, in Italy, as there is a direct ex ante cost-based price set for fibre services, the purpose of the ERT appears to be to prevent predation and margin squeeze at a retail level.

None of the above examples demonstrate the alternative situation set out in the 2013 Recommendation i.e. a retail price constraint derived from infrastructure competition from an alternative operator. The dependence on cost control applied to copper services will have implications for the future use of the ERT once copper services are withdrawn.

Two other examples are also pertinent.

In the **United Kingdom**, BT had been required to perform an ERT on its FTTC services, but this was withdrawn in 2017 when a cost-based price cap was instead introduced directly on one bandwidth of the FTTC service, intended to act as an anchor price for all other bandwidths. This may perhaps be an example of an alternative approach that could be used in place of an ERT. We will discuss this further in another paper.

In **Czechia**, the incumbent CETIN is not subject to an ERT between retail and wholesale prices as its former downstream arm, O2 Czech Republic, is now considered by the NRA to be sufficiently separate such that it is independent (although the companies do still share a controlling shareholder). However, as in Ireland, an ERT between WLA and WCA fibre services is required. The need for an ERT between wholesale layers may be an issue that the EC should consider further.

(We note a further unusual aspect of the Czech example is that there is also no direct wholesale price control on copper broadband services, as here it is other infrastructure, in particular co-axial cable, that is considered to constrain retail prices. Nevertheless, the competition from cable operators is not considered so strong that CETIN has lost its SMP designation.)

## How does the ERT fit into the scheme of the EECC?

The EECC introduces pricing flexibility in order to promote investment and innovation in broadband services, that is:<sup>8</sup>

“Due to uncertainty regarding the rate of materialisation of demand for the provision of next-generation broadband services, it is important in order to promote efficient investment and innovation to allow those operators investing in new or upgraded networks a certain degree of pricing flexibility.”

At its most general, this flexibility is provided by three separate approaches to pricing access to wholesale services on next generation networks, which are in summary:<sup>9</sup>

1. Cost-based regulated access prices
2. Non-discrimination obligations instead of imposing regulated access prices
3. Other circumstances for not imposing regulated access prices

These approaches give NRAs significant discretion in the treatment of access prices, particularly the second and third approaches. The choice of approach will be relevant for addressing the withdrawal of copper. The discussion here now turns to a more detailed description of the second and third approaches.

### **Non-discrimination obligations instead of imposing regulated access prices**

The EECC describes the non-discrimination obligations to safeguard competition, including ERT:<sup>10</sup>

“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]

This statement covers competitive safeguards that are subject to the same, in principle, retail price constraints as those listed in the preceding section on the 2013 Recommendation. In particular, the ERT assesses the “economic replicability of downstream products”, and the regulated access price for copper-based wholesale service may be consistent with the price anchor stemming from other regulated access products.

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<sup>8</sup> EECC, recital paragraph 193.

<sup>9</sup> *ibid.*

<sup>10</sup> *ibid.*

This suggests that the 2013 Recommendation non-discrimination obligations, including the ERT, with the copper-based access as the "other regulated access product" are consistent with the EECC principles.

### **Other circumstances for not imposing regulated access prices**

The EECC gives NRAs additional pricing flexibility beyond regulating access prices and the ERT. It states:<sup>11</sup>

Those competitive safeguards do not prejudice the identification by national regulatory authorities of other circumstances under which it would be appropriate not to impose regulated access prices for certain wholesale inputs, such as where high price elasticity of end-user demand makes it unprofitable for the undertaking designated as having significant market power to charge prices appreciably above the competitive level or where lower population density reduces the incentives for the development of very high capacity networks and the national regulatory authority establishes that effective and non-discriminatory access is ensured through obligations imposed in accordance with this Directive.

In other words, this statement suggests that an NRA can select the non-discriminatory obligations if certain market conditions prevail, such as high price elasticity in the retail market or where there is lower population. That is, it is not bound to either include or exclude the ERT, or an updated variant, as a regulatory obligation so long as it establishes effective non-discriminatory access. This may mean that the NRA determines not to impose the ERT or any other remedies directly relevant to pricing, but instead requires wholesale access to be provided on an equivalence of inputs basis.

### **EECC Article 74**

The specific regulation is set out in Article 74 of the EECC, (price control and cost accounting obligations): "National regulatory authorities shall consider not imposing or maintaining obligations pursuant to this Article, where they establish that a demonstrable retail price constraint is present and that any obligations imposed in accordance with Articles 69 to 73 [Obligations of transparency, non-discrimination, accounting separation, access to civil infrastructure, access to, and use of, specific network elements and associated facilities], including, in particular, any economic replicability test imposed in accordance with Article 70 [Obligations of non-discrimination], ensures effective and non-discriminatory access."

The article does not refer to the other circumstances set out in the recital to the EECC where regulated access prices would not be imposed e.g. low population density. The Access Recommendation may perhaps need to provide clarification on this issue. It is unclear how the examples cited in the EECC recital are relevant to the non-imposition of price constraints on an SMP operator as high retail price elasticity may suggest that an SMP finding is not appropriate, while a low population density would imply that public subsidy may be needed, but as well as, not instead of, price constraints.

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<sup>11</sup> *ibid.*

## Conclusion

The ERT was introduced in the 2013 Recommendation as a means of allowing pricing flexibility for next generation access services, while ensuring safeguards against excessive pricing by an SMP operator are in place. It has been widely adopted by NRAs in the EU including the examples we have set out above.

The EECC in Article 74 carries this practice forward by requiring NRAs to consider not imposing cost-based price controls where an ERT, among other measures, is in place and retail prices are constrained.

Our review of the ERT in practice combined with the EECC provisions suggests that there are five issues in particular that the EC should consider in respect of the ERT when updating its guidance.

1. **Will the ERT be applicable once copper broadband is withdrawn** i.e. can fibre broadband retail prices of an SMP operator be constrained without direct constraints on the wholesale prices?
2. Does the ERT have a role in constraining prices between different levels of wholesale services (as used e.g. in Ireland and Czechia)?
3. **Does the ERT have a role in preventing margin squeeze** and/or predation even where direct wholesale price constraints are in place (e.g. as used in Italy)?
4. **Can anchor pricing be used as alternative to direct price constraints** for certain bandwidths for fibre broadband if the ERT is withdrawn (as in the UK)?
5. In exactly what circumstances would remedies other than ERT or direct price constraints be appropriate (to clarify the examples in the EECC recital)?

We will discuss certain of these issues further in future papers.

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