

Regulatory incentives for the deployment of VHCN (Very High Capacity Networks)

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The opinions expressed are solely my own.



Regulatory incentives for the deployment of VHCN

- The study seeks to provide guidance to the Commission in updating the NGA Recommendation (2010) and the Non-Discrimination and Costing Recommendation (2013).
- The study takes the EECC, which many Member States are still in the process of transposing, as a firm starting point.
- The study benefits from desk research, a Commission public consultation, numerous interviews, surveys of the NRAs and market players, and in-depth Member State case studies.
- It also benefits from a workshop with NRAs and another with market players, academics and experts.
- Authors are Visionary Analytics (Zilvinas Martinaitis, Audronė Sadauskaitė, Pijus Krūminas), Christian Hocepied (legal expert) and J. Scott Marcus (economics and policy expert).



The Recommendations should be updated

- Much has changed since the Recommendations were enacted in 2010 and 2013 in terms of
 - overall EU policy goals as regards the digitalisation of the EU as a whole;
 - the shift in focus embodied in the EECC itself in comparison to the previous Regulatory Framework for Electronic Communications (RFEC); and
 - changes that are already visible in electronic communications markets in the EU Member States, including changes that are visible since 2018 when the EECC was enacted.



Tension among general objectives of the EECC

- Art. 3 EECC establishes general objectives including:
 - ... promote connectivity and access to, and take-up of, very high capacity networks, including fixed, mobile and wireless networks, by all citizens and businesses of the Union; ...
 - ... promote competition in the provision of electronic communications networks and associated facilities, including efficient infrastructure-based competition, and in the provision of electronic communications services and associated services; ...
- The EECC does not establish a priority between them.
- The EECC reflects increased emphasis on investment, but not to the point where doing so impedes competition.



Regulatory incentives for the deployment of VHCN

- Price regulation and pricing flexibility
 - Non-discrimination
 - Access to civil engineering infrastructure
 - Migration from copper to fibre
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- It is not possible to cover all of the study's 49 distinct recommendations in full detail today.
 - We are skipping entirely the sections on cooperative arrangements and other structural arrangements, and on geographic differentiation.



PRICE REGULATION AND PRICING FLEXIBILITY



Price regulation and pricing flexibility

- Art. 74.1 EEEEC establishes pricing flexibility as the preferred approach when suitable conditions have been fulfilled.
 - *If* a lack of effective competition means that the undertaking concerned may sustain prices at an excessively high level, or may apply a price squeeze, to the detriment of end-users, price control obligations must be imposed;
 - *If however* (1) a demonstrable retail price constraint is present, and (2) obligations imposed including any ERT ensure effective and non-discriminatory access, *then* the default approach should be pricing flexibility [no price control obligations] combined with non-discrimination obligations.



Facilitating granting of pricing flexibility when justified

- The EECC makes clear that the granting of pricing flexibility is the preferred approach when justified, and is less restrictive than the NDCM.
- *We recommend that the successor recommendation require effective non-discrimination, rather than requiring equivalence of input (Eoi) as a prerequisite [to the granting of pricing flexibility] in all cases. ...*
- *The reference to the "copper anchor" [as a means of demonstrating a price constraint] should be updated to provide constructive guidance and criteria as to how a suitable anchor product should be identified. ...*



The Economic Replicability Test (ERT)

- The use of the Economic Replicability Test (ERT) as an enabler for pricing flexibility has been more limited in practice than might have been expected.
- The ERT has proven to be complex to implement in practice, and there are many questions as to how best to apply it.
- *[Define] principles on which to choose ERT flagship products [taking into account] national circumstances, including the degree of market power of the SMP operator, and the prevalence and nature of bundled offerings. ...*
- *Identify best practices on how to conduct the ERT when a flagship product is a bundle that includes unregulated elements. ...*
- *[Clarify the obligation to provide] information needed to allocate the price of a flagship retail bundle across regulated elements and any non-regulated elements of the retail bundle for purposes of the ERT ...*



The Economic Replicability Test (ERT)

- The Recommendations are inconsistent in their approach to scale adjustment and to the assumption of an *equally efficient competitor* versus a *reasonably efficient competitor*.
- *The successor recommendation should provide principles for determining the market share to be used in any scale adjustment to the scale of the SMP operator. ...*
- *The handling of long term discounts and volume discounts in the ERT requires a case by case analysis. In most cases, long term discounts and volume discounts to wholesale prices should be ignored when conducting the ERT. ...*
- *Permitting the NRA to initiate the ERT up to three months after the launch of the relevant retail product and completed within four months thereafter continues to be appropriate. ...*



The Economic Replicability Test (ERT)

- *Transparency continues to be important for the conduct of the ERT.*
 - A number of Member States have firms that are deploying substantial volumes of VHCN, usually over limited geographic areas (as for instance in Italy or Ireland), often on a wholesale-only basis.
 - *An SMP operator might have the incentive to set (geographically differentiated) prices of wholesale access services at a low level that makes the success of facilities-based wholesale VHCN competitors unlikely in certain areas.*
- ...



PRICE REGULATION



Pricing regulation

- *A successor recommendation should no longer provide a price band for wholesale access products.*
- The NDCM calls for the use of BU-LRIC modeling and current costs for new SMP CEI, but use of the regulatory accounting base and reflection of depreciation for reusable SMP CEI. We have recommended some fine tuning for reusable SMP CEI.



Pricing regulation: The NGA risk premium

- Where price regulation is in place, an NGA risk premium is permitted in order to promote VHCN deployment.
- In line with current practice, it should be separately tabulated from the legacy WACC, and added to the legacy WACC.



Pricing regulation: The NGA risk premium

- We are concerned that current NGA risk premium practices may not fully compensate SMP operators for the full risk that they incur, and may thus lead to under-investment in VHCN.
- Frequent downward revision of the risk premium after investments have been sunk, and after the risks and rewards are known, may encourage the NRA to reduce the NGA risk premium too soon and thus risks running counter to providing consistent incentives for investors.
- *A successor recommendation might acknowledge the permissibility of the use of a smoothing algorithm so as to reduce the risk to investors that the expectation of return on capital employed disappears too quickly. ...*



Pricing regulation: The NGA risk premium

- *The use of real options techniques in calculating the NGA/VHCN risk in order to quantify additional risk-based costs to which the SMP operator is subject, notably for relinquishing its implicit option to wait and see, may be appropriate in some circumstances. Real options are typically inappropriate however if the SMP operator is forced by competitive factors to deploy immediately, inasmuch as the option value of waiting in that case is negligible. ...*
- The use of real options is complex, but AGCOM's use provides a useful proof of concept.



NON-DISCRIMINATION



Non-discrimination

- *Equivalence of inputs (EoI) is in principle the surest way of achieving effective protection from discrimination; in practice, however, its advantages over EoO will vary considerably from one Member State to the next, and from one wholesale access product to the next. A well-crafted EoO regime, with good enforcement and suitable KPIs/SLAs/SLGs, can in many cases approach the effectiveness of an EoI regime. ...*
- *Commercial agreements between the SMP operator and alternative operators to offer additional wholesale access services with QoS beyond that covered by existing Reference Offers should not be prohibited. The SMP operator should be encouraged to meet reasonable requests for such services.*
- *[NRAs should] ensure that the SMP operator does not use information about the deployment plans of alternative operators for its own competitive advantage. ...*



Non-discrimination, KPIs, SLAs and SLGs

- In practice, KPIs, SLAs and SLGs play a crucial role here.
- *[NRAs could] consider enabling the SMP operator to offer comprehensive commitments in order to implement effective non-discrimination, subject to a consultation and approval process designed to seek consensus with alternative operators and overseen by the NRA. ...*
- *Penalties related to KPIs must be proportional, but should be large enough to be dissuasive. ...*
- *[Member States should] monitor any delays in payment of penalties so as to ensure that their dissuasive effect is not lost. ...*



ACCESS TO CIVIL ENGINEERING INFRASTRUCTURE (CEI)



Access to Civil Engineering Infrastructure (CEI)

- There are three main EU mechanisms for enabling network operators to access the civil infrastructure of other firms:
 - Regulated access to the CEI of the SMP operator (Art. 72 EECC);
 - Regulated symmetric access (Art. 61 EECC); and
 - Access to civil engineering of a range of different infrastructures under the Broadband Cost Reduction Directive (BCRD).
- Since the BCRD is separately under review, we have little to say about it here.



Access to Civil Engineering Infrastructure (CEI)

- There may be cases where it is appropriate to mandate access to further elements of the SMP operator's CEI, either under Art. 72/73 EECC or by defining a separate market for access to physical infrastructure as envisioned in the 2020 RRM.
- *... The SMP operator should not be allowed to refuse access solely because the access seeker intends to use the access to deploy VHCN based on technologies other than FTTH ...*
- *... where there is history of unsatisfactory responses by the SMP operator to reasonable requests [to undertake work, NRAs could] require SMP operators (1) to establish procedures for the certification of qualified workers or subcontractors authorised to make such interventions; and (2) to define the procedure to be followed for such interventions...*



MIGRATION FROM LEGACY INFRASTRUCTURE



Migration from legacy infrastructure

- *A successor recommendation should envision a shorter notice period than five years, and should allow for more differentiated treatment to reflect areas where a no-longer needed location serves alternative operators who purchase ULL, VULA, or bitstream. ... We suggest that the default notice period be set to two years ...*
- *In revising the notice period that the SMP operator must give prior to de-commissioning legacy facilities, the successor recommendation should envision commercial closure of an MDF (i.e. not accepting new orders for legacy wholesale services) prior to point in time at which the MDF is closed for all existing SMP services.*



Migration from legacy infrastructure

- *[Compelling] the SMP operator ... to shut down its copper network in order to accelerate migration to a fibre-based infrastructure ... would appear to be ill-advised. ...the SMP operator should be free to build or to decommission where it sees fit.*
- *The NRA [should however be permitted] to deregulate (or allow for an increase of) the wholesale price of legacy copper services as a transitory measure until the copper switch off takes place and when sufficient safeguards against abuse are present ...*
- *The successor recommendation could encourage NRAs to engage in the migration process by proactively promoting a multi-stakeholder process that seeks to ensure that alternative operators are well aware of the plans of the SMP operator and that stakeholders have ample opportunity to find solutions to the challenges of the migration that are in line with overall societal welfare ...*

