Assembly

A report for Openreach

Criteria for Geographic Deregulation in Wholesale Broadband

June 2025

About Assembly

Assembly provides independent custom and subscription-based information, analysis and opinion on regulatory, policy and legislative developments that affect communications markets and the wider digital economy.

For more information visit assemblyresearch.co.uk

About this study

Openreach asked Assembly to conduct research on the different approaches regulators in Europe have taken to identifying and deregulating geographic markets for wholesale broadband access. This report provides an overview of the approaches in 13 countries as well as in-depth case studies for five of them, including details on market definitions, competitive assessments and SMP designations and remedies.

Contents

List of figures and tables

International benchmarking

This section presents high level outcomes of the latest wholesale local access (WLA) market reviews in a range of European countries, plus the UK. It intends to enable a straightforward international comparison of regulatory decisions against the proposals contained within Ofcom's Telecoms Access Review (TAR) consultation document – see *Table 1*.

Table 1: International comparison of WLA market reviews[1]

Country	Latest decision	Review period	Geographic market segmentation	Operators with SMP	SMP remedies	Conditions for deregulation	Source
Austria	October 2022	N/A	Competitive Area 1 (434 municipalities) Area 2, which covers the 1,683 municipalities where there is insufficient infrastructure competition	N/A, previously A1 Telekom	N/A, A1 had to offer access to physical unbundling for new customers of unbundling partners (i.e. operators using A1's local network) for six months from the date of the decision and for existing customers of those partners for 24 months	Area competitive where: - A municipality has at least three independent broadband networks for at least 75% of premises (including data on planned deployments); - There is at least one fixed alternative to A1 for at least 75% of premises; and - A1's retail market share is below 50% Area 2 was not found to be competitive, although the TKK deregulated here too on the basis of A1's voluntary nationwide wholesale offers, investment plans and the private contracts it had signed with 19 access seekers covering the next	Link

[1] Italics denotes proposals rather than decisions

						five years at least	
Croatia	July 2023	Two years (HAKOM will update its geographic market definition, which will not be subject to consultation)	Low-capacity local access market: National in scope Non-competitive high-capacity local access sub-market: 500 geographic units, mostly in rural areas Competitive high-capacity local access sub-market: 72 geographic units, mostly in urban areas	Hrvatski Telekom in the low-capacity local access markets and non-competitive high-capacity local access sub-market No SMP elsewhere	Access, non-discrimination, transparency, price control In the competitive high-capacity local access sub-market, HAKOM withdrew all previously imposed regulatory obligations on Hrvatski Telekom with a 120-day notice period	Three cumulative criteria: - The presence of at least one alternative operator with its own VHCN; - The alternative operator with its own VHCN to reach at least 33% individual coverage at the level of users' units (i.e. premises); and - Hrvatski Telekom's market share (active lines) in the retail high-capacity market is below 50%	Link
Czech Republic	July 2023	Five years	Segment A: Competitive, 347 geographic units Segment B: Non-competitive, 42 units	CETIN, but only in 33 of the 42 units in Segment B No SMP elsewhere	Access (including colocation), transparency, non-discrimination, accounting separation, cost orientation with regard to prices, economic replicability test	Two criteria (of which one must have been met for at least the past three years): - Market share of CETIN was no more than 25%; or - The combined coverage of other licensed operators (OLOs) was more than 75% while at the same time CETIN's market share was no more than 50%	Link
Denmark	December	Five years	As part of a combined	Low-capacity: TDC	Remedies varied	Determination of an area	Link

	2021	(based on the relevant period for most commitments submitted to the DBA)	WLA/WCA review: Low-capacity infrastructure (copper and FWA) market: National in scope High-capacity infrastructure (fibre and coaxial cable) market: 21 geographic markets, based on the boundaries of electricity supply areas	High-capacity: 14 operators, of which seven were vertically integrated and seven were wholesale-only The EC expresses serious doubts about the designation of five smaller providers as having SMP given their limited market shares	depending on whether the SMP operator submitted commitments to the DBA or whether it was wholesale-only (and therefore not present in the retail market)	not being competitive appears to be based on: - The SMP operator's wholesale and retail market shares; - The wholesale market shares of the three largest competitors; - The extent of coaxial cable coverage; - The SMP operator's own coverage; and - The extent of parallel infrastructure	
Estonia	February 2025	2024-2029	Area A comprising 10 (urban) geographic units, representing 31% of the population (and 0.5% of the Estonian territory) Area B comprising 38 (some urban, mostly rural) geographic units, representing 69% of the population (and 99.5% of the territory) Tallinn itself divided into eight units, with regulation removed in four	Area: N/A Area B: Telia	For fibre, access, EOO, transparency, cost accounting and accounting separation, cost orientation based on top-down fully distributed historical costs All regulation on copper removed	Area competitive where: - Proportion of premises covered by at least two internet access networks is at least 40%; and - Telia's retail market share is below 50% Area A did not meet the three criteria test, although Area B did, with the ECPTRA identifying long-term structural, legal and regulatory barriers to entry, and Telia's position of economic power	Link

Hungary	*October 2024*	*N/A, the NMHH intended to propose remedies at a later date*	*The NMHH identified six geographic markets (1a, 1b, 1c, 2a, 2b, 2c) based on the two former concession areas of Magyar Telekom and 4iG*	*Having performed the three criteria test, the NMHH identified Magyar Telekom as having SMP in one market (1a) and 4iG as having SMP in another (2a)*	*In non-competitive areas, the NMHH proposed to maintain the full set of regulatory remedies imposed by its previous review until the market situation becomes more stable, citing:* *- The ongoing corporate structuring of 4iG resulting from recent mergers and acquisitions; and* *- The planned co-investments/commercial agreements, commitments and potential creation of wholesale-only operators, which could impact regulation*	*The main criteria considered by NMHH when reaching its conclusion on the geographic markets was the presence of alternative operators and their single and joint market shares*	Link
Ireland	January 2024	Five years	A national, copper-based Current Generation WLA (CG WLA) market A regional, fibre-based Intervention Area Next Generation WLA (IA NG WLA) market, reflecting the the National Broadband Plan (NBP) rollout	Eircom in the Commercial NG WLA market No SMP elsewhere. In CG WLA, ComReg pointed the declining number of lines, while in IA NG WLA, ComReg considered that the terms of the NBP Contract between NBI and the state are sufficiently robust to prevent SMP	In Commercial NG WLA, access, transparency, non-discrimination, regulatory governance, price control and cost accounting, accounting separation Regulation removed in CG WLA and IA NG WLA markets, subject to an 12-month sunset period	Three cumulative criteria: - At least three network operators capable of delivering VUA must be present, or reasonably forecast to be present within the lifetime of the market review period, at the Modified EA; - Individual network operator coverage at a	Link

			A regional, fibre-based Commercial Next Generation WLA (Commercial NG WLA) market	arising		Modified EA must be (or be reasonably forecast to be) at least 60%; and - At least 50% of premises in a Modified EA must be passed by at least three network operators	
Italy	April 2024	2024-2028	Market 1A: 14 municipalities, including Cagliari and Milan Market 1B: The remaining Italian territory (the "Rest of Italy"), which also includes 95 'contestable municipalities' in which significant competitive pressure on TIM has been encountered but not yet consolidated	Market 1A: N/A Market 1B: TIM (including FiberCop)	Market 1A: Fully competitive, obligations imposed on TIM removed Market 1B: Access, transparency, non-discrimination, price control, accounting separation, cost accounting In those contestable markets, regulation is lighter, with no cost orientation across various wholesale broadband products, including VULA	Area competitive where: - TIM's retail market share is below 30%; - TIM's wholesale market share is below 50%; - Fibre coverage by an alternative wholesale-only operator is above 80%; and - Fibre take-up is above 40% Thresholds are slightly less strict in the 95 areas witnessing emerging competition	Link
Netherlands	December 2023	Five years	I: Market covering the fibre footprints of KPN and Glaspoort II: Market covering the fibre networks of third	N/A, the ACM has not established a risk of SMP on any of the five markets, concluding that they are or will become sufficiently competitive during the	N/A, the ACM found no reason to further investigate the WLA market, but stated that it would review competition in the market on an annual	The ACM highlighted rapidly growing fibre coverage (driven by the investments of established operators and newer independent challengers),	Link

			parties in urban areas III: Market covering the fibre networks of third parties in rural areas IV: Market covering cable network footprints V: Market covering KPN's copper network footprint	review period	basis	which is expected to reach close to 100% within three years The regulator also called out the ability of operators to access the networks of KPN and Glaspoort (based on binding commitments) as being key to its analysis and subsequent determination	
Norway	*March 2025*	*N/A*	*Following the shutdown of Telenor's copper network, Nkom consulted in June 2023 on the identification of 22 regional markets for wholesale broadband* *Since then, most major providers have stated that they will voluntarily open up their fibre networks on a wholesale basis* *Nkom's latest consultation reflects the changing situation, proposing to deregulate wholesale broadband nationwide*	*In 12 of sub-markets, nine fibre providers, including Telenor, were considered to have "too much power"* *According to Nkom, the market is moving towards sustainable competition at a nearly national level, under the assumption that wholesale access to fibre networks is offered on fair and reasonable terms*	*N/A, current obligations on Telenor would be removed* *However, Nkom will in the future assess whether there may be grounds for defining certain geographic markets where competition and customer choice may be limited and there may be a need to designate operators with SMP and impose obligations*	*For voluntary access to be a real alternative to SMP regulation, Nkom considers it "absolutely crucial" that:* *- The regime is progressing well;* *- Access conditions are fair and reasonable; and* *- Marketplaces where access is offered are neutral, so that no player favours their own downstream business over external access seekers*	Link
Portugal	December	Five years	Based on Portugal's 3,092	Area A: N/A	In Area B where there is	Area competitive where:	Link

	2023		parishes: Area A: Competitive, 2,086 parishes Area B: Non-competitive, 1,006 parishes	Area B: Altice (MEO), but only in 407 parishes due to factors such as MEO's high and stable market share, barriers to entry and expansion by rivals No SMP in the remaining 599 parishes where ANACOM expected competition to emerge	no potential competition: Access, non-discrimination, transparency (including publication of a reference offer), fair and reasonable pricing, cost accounting, financial reporting	- There are three or four high-speed fixed networks; or - There are two high-speed fixed network operators with coverage over 90%; or - It is in a predominantly urban area; or - The retail market share of the leading operator is between 40-50% and has been falling since 2019, or the leading operator has a market share below 40%.	
Spain	October 2021	Five years	Market 1_1: 696 municipalities ('Zone 1', which accounts for 70% of the population) where there is competition Market 1_2: 7,435 non-competitive areas (i.e. 'Zone 2')	Telefónica in both markets	For PIA and LLU in both markets, access, transparency, non-discrimination, cost accounting, accounting separation, price controls In 1_2, Telefónica must also provide VULA and is subject to an economic replicability test	Area competitive where: - At least three NGA networks are present with an individual coverage exceeding 20%; and - Telefónica's share of the retail fixed broadband market is below 50%	Link
	December 2024	*N/A*	*N/A, the CNMC has proposed nationwide deregulation based on the widespread deployment of*	*N/A for WLA (and WCA), although Telefónica in respect of PIA*	*N/A, the CNMC has proposed full deregulation of WLA (and WCA)*	*The regulator highlighted four key developments behind its proposals:*	Link

			fibre networks, the entry and consolidation of new players and business models, and public subsidies		*PIA obligations (e.g. cost-oriented prices, transparency, non-discrimination) would remain*	*- Increases in fibre coverage (Telefónica has achieved close to 90% coverage in both Zones 1 and 2); - Telefónica's declining market shares at the wholesale and retail levels; - The entry of new operators, including MASORANGE, DIGI and wholesale-only players; and - Commercial agreements, which have increased the availability of high-capacity services for consumers and facilitated the development of wholesale competition*	
UK	*March 2025*	*2026-2031*	*Three geographic markets, or "Areas"* *Area 2, where there is, or there is likely to be potential for, material and sustainable competition (90% of UK premises)* *Area 3, where there is not, and there is unlikely to be potential for, material and*	*BT in Areas 2 and 3*	*Access, transparency, charge control, QoS, EOI, no geographic discounts (in Area 2)*	*Effective and sustainable competition* *Area 1 would be defined on the basis of there being existing (and not planned) presence from two rival networks, which are sufficiently well-established*	Link

			sustainable competition (the remaining 10%) *No areas yet where competition is sufficiently well-established or effective (i.e. Area 1)*				

Country case studies

For five countries where we have identified deregulation in some geographic markets, this section provides in-depth case studies on the latest wholesale broadband market review decisions, with the focus on geographic segmentation and triggers for the removal of SMP specifically. It explores:

- How the regulator has approached the identification of different sub-national markets for WLA and the shares of premises falling into each area;
- The reason(s) and rationale for deregulation and how that works in practice; and
- Whether any regulators could be considered particularly forward-looking in their approach to the development of competition.

Estonia

In February 2025, the Estonian Consumer Protection and Technical Regulatory Authority (ECPTRA) completed its latest review of the wholesale local access (WLA), wholesale central access (WCA) and physical infrastructure access (PIA) markets.[2]

Market definition and competitive assessment

Retail

At the retail level, the ECPTRA identified two product markets, making no distinction between services provided to residential and to business customers:

1. Copper, cable and mobile retail internet access; and
2. Fibre optic internet access (i.e. FTTH/FTTB).

The ECPTRA partially changed its position compared to its draft market analysis, concluding that 4G/5G would be substitutes to copper and cable that could form part of this market over the 2024-2029 review period based on faster than expected growth in mobile connections and operators' continued investments in 5G networks. However, the regulator determined that mobile

[2] https://www.ttja.ee/ariklient/side-ja-meediateenused/sideteenused/sideturg#sidevorgule-kohalik-

internet connections could not yet provide a replacement for fibre, with the latter the only technology that could offer symmetric gigabit speeds.

In defining the relevant geographic markets, the regulator found the copper, cable and mobile market to be national in scope, pointing to the nationwide coverage of 4G services and of Telia's copper network, as well as the widespread availability of 5G services and the presence of Elisa's cable network in many cities. Based on an assessment of market shares, barriers to entry and countervailing buyer power (including ease of switching), the ECPTRA considered the market demonstrated effective competition.

For fibre, the ECPTRA aggregated geographic units[3] that exhibit similar competitive conditions, finding both competitive areas (Area A) and non-competitive areas (Area B). To decide which units should be considered competitive, the regulator used the following cumulative criteria:

- The proportion of residential and non-residential premises covered by at least two internet accesses networks (from different operators) in the geographic unit is at least 40%, and
- The market share (across both consumer and business customers) of the operator with significant market power (SMP) – i.e. Telia – in the geographic unit is below 50%.

Applying these criteria, ECPTRA found out that Area A consisted of 10 (urban) geographic units representing 0.5% of the Estonian territory but 31% of the population. Meanwhile, Area B consisted of 38 (some urban, mostly rural) units covering 99.5% of the country but 69% of the population. In turn, the regulator leveraged the same competitive indicators as those used for the retail market assessment, highlighting in Area B Telia's large market share, high barriers to entry, the difficulty to achieve sufficient economies of scale (due to the lower population density) and limited end user choice relative to Area A. With Area B indicating a lower level of competition than Area A, the ECPTRA therefore considered it necessary to analyse the wholesale market.

Wholesale

The ECPTRA defined WLA as including the physical unbundling of fibre or its parts if technically feasible, virtual unbundled local access (VULA) and access to support services, e.g. equipment hosting services and shared use of buildings. The regulator assessed the geographic market at the wholesale level using the same factors employed in its retail market analysis, again identifying a competitive Area A and a non-competitive Area B (with equivalent geographic units and therefore distributions of territory and population).

[3] In line with Estonian administrative and settlement units in order to provide clear and stable boundaries

Having carried out a three criteria test, the ECPTRA found that Area A is characterised by effective infrastructure-based competition and no longer requires ex-ante regulation. Specifically, the regulator stated that the presence of a large number of regional operators[4] indicates a lack of barriers to entry and considered that there is countervailing buyer power in the retail market that has positive implications at the wholesale level.

In contrast, in Area B, the ECPTRA identified long-term structural, legal and regulatory barriers to entry. Here, it stated that Telia continues to exercise control over important infrastructure and enjoys a technological advantage on the relevant downstream market for fibre, as well as retaining advantages in terms of economies of scale and volume. As this indicates Telia's position of economic power, the regulator found that Area B met the three criteria test.

SMP designation and remedies

With competition sufficiently established in the copper, cable and mobile market and in the sub-national Area A, the ECPTRA determined that no operator held SMP and that sector-specific regulation would not be warranted. The SMP designation and associated obligations imposed on Telia were removed.

However, in respect of Area B, the ECPTRA concluded that competition was not sufficiently effective at either the wholesale or retail levels, taking into account factors such as market shares, barriers to entry, the control of infrastructure not easily duplicated and economies of scale. It found that Telia had SMP upstream, which allowed it to act to a significant extent independently of competitors, contractual partners (i.e. customers) and end users.

The regulator looked to renew and evolve the SMP remedies on Telia in line with market and technological developments, imposing access (VULA), non-discrimination, transparency and price control obligations – all of which would take effect five months from the date of the final decision. While wholesale pricing would be based on top-down fully-distributed historic costs, the ECPTRA stated plans to develop an economic replicability test (ERT) for the broadband access markets as a safeguard for pricing flexibility on VHCNs, in line with the Gigabit Recommendation.[5]

EC comments

The EC had limited comments on this latest market analysis (notified to it in draft form in November 2024), with its feedback focused primarily on the

---

[4] According to the ECPTRA, there are over 200 telecoms operators in Estonia, including about 15 major ISPs

[5] https://www.assemblyresearch.co.uk/regulation-updates/eu-agreement-on-the-gigabit-infrastructure-act-and-adoption-of-the-gigabit-recommendation

ECPTRA's proposed approach to PIA pricing; however, the previous review of WLA and WCA (notified in December 2023) raised concerns with the EC, which issued a serious doubts letter.[6] In particular, the EC considered that the regulator's geographic market analysis was insufficient as it had not taken into account the different competitive conditions (e.g. Telia's retail market share) in cities and rural areas and inland/islands.[7] It also stated that in defining the WLA market, the ECPTRA did not consider the capability of all network operators to self-supply wholesale services to their retail business, which may have otherwise had a significant impact on the assessment of the overall market dynamics and in turn the definition of appropriate regulatory remedies. Following a thorough examination of the EC's comments, the ECPTRA withdrew both its WLA and WCA notifications in February 2024, committing to initiating a new analysis of these markets.[8]

Ireland

In January 2024, ComReg completed its latest review of the WLA and WCA markets in Ireland, issuing a response to its public consultation alongside a final decision.[9]

Market definition and competitive assessment

Retail

ComReg identified two product markets:

1. The Current Generation (CG) market consisting of retail broadband provided over Eircom's copper-only network; and
2. The Next Generation (NG) market consisting of retail broadband provided over any operator's FTTC or FTTP network, or Virgin Media Ireland's (VMI) cable network.

The regulator then assessed the geographic features of these markets with regard to the following issues:

- Geographic differences in entry conditions over time;
- Evolution and distribution of market shares;

---

6 https://digital-strategy.ec.europa.eu/en/news/commission-opens-depth-investigation-proposed-regulation-wholesale-broadband-market-estonia

7 https://circabc.europa.eu/ui/group/2328c58f-1fed-4402-a6cc-0f0237699dc3/library/27829867-f733-4fbe-9e4a-4fd146b31ce7/details

8 https://digital-strategy.ec.europa.eu/en/news/estonian-national-regulatory-authority-ecptra-withdrew-its-proposed-regulation-wholesale-broadband

9 https://www.comreg.ie/publication/market-reviews-wholesale-local-access-wla-provided-at-a-fixed-location-wholesale-central-access-wca-provided-at-a-fixed-location-for-mass-market-products-non-confidential-response-to-consultatio

- Variation in the number and size of potential competitors;
- Evidence of differentiated pricing strategies or marketing; and
- Geographic differences in product functionality and demand characteristics.

Based on an analysis of these criteria, ComReg set out its view that, on a forward-looking basis, both markets should be considered as national in scope. The regulator did not undertake a specific competitive assessment at the retail level, but noted that the presence and subscriber bases of several ISPs are reliant on the existence of WLA and WCA regulation, adding that without this, retail market shares would likely change if access seekers reliant on Eircom's wholesale products are unable to source alternative inputs.

Wholesale

ComReg identified two product markets split by technology:

1. The CG market consisting of LLU, SLU and Line Share products provided over Eircom's copper-only network to access seekers and to Eircom's own retail business; and
2. The NG market consisting of VUA products provided over FTTx[10] networks by Eircom, SIRO, National Broadband Ireland (NBI) and (on a forward-looking basis) VMI to access seekers, and the self-supply of VUA by Eircom and (again on a forward-looking basis) VMI to their own retail businesses.

ComReg assessed the homogeneity (or heterogeneity) of competitive conditions between geographic areas, taking account of both structural and behavioural criteria in respect of each of the WLA product markets, in a two-phase process.

Phase 1

Phase 1 involved a general application of the same five issues as those considered at the retail level to determine whether there were grounds to define national or sub-national markets. ComReg determined that all of these criteria indicated that there were no grounds to define sub-national markets for the provision of CG WLA on the basis of there being insufficient appreciable differences in competitive conditions.

However, in respect of NG WLA, three criteria[11] indicated the likely presence of sufficiently different, yet stable, competitive conditions between geographic

[10] I.e. FTTC or FTTP
[11] Geographic differences in entry conditions over time, variation in the number and size of potential competitors, and distribution of market shares

areas on a forward-looking basis, while two[12] did not. ComReg stated that the available evidence suggested that there were sufficient grounds to conclude that competitive conditions in NG WLA were moving from relative uniformity to differentiation, with the particular influence of NBI's non-commercial rollout in the Intervention Area (IA). The regulator considered that it may not therefore be appropriate to define a single national geographic NG WLA market.

Phase 2

In Phase 2, ComReg considered that the relevant geographic unit for its assessment was the Modified Eircom Exchange Area (the Modified EA), which corresponded to Eircom's network exchange area but was recalibrated to reflect the geographic split between NBI coverage within the IA and Eircom or SIRO coverage outside the IA.

ComReg then applied a set of further – and cumulative – criteria to assess whether or not there were differences in competitive conditions between geographic areas for NG WLA:

1. At least three network operators must be present, or be reasonably forecast to be present (at any level of coverage) in the Modified EA within the five-year market review period;
2. Each individual network operator's coverage in a Modified EA must be (or be reasonably forecast to be) at least 60%; and
3. At least 50% of premises in a Modified EA must be passed by at least three network operators.

Conclusion

Based on its analysis of the relevant criteria, ComReg determined that there were three distinct geographic markets:

1. National CG WLA (1,203 EAs);
2. Commercial NG WLA (1,183 Commercial EAs[13]); and
3. IA NG WLA (1,155 IA EAs[14]).

In both NG WLA markets, the regulator concluded that none of the three competitive criteria were met, but added that it saw no reason for a further geographic segmentation, for example into urban versus rural or to take account potential FTTP rollouts by VMI.

[12] Evidence of differentiated pricing or marketing strategies, and geographic differences in demand characteristics
[13] Representing 79% of premises
[14] Representing 21% of premises

EC comments

Following notification, the EC reviewed the draft decision, stating that the level of coverage adopted by ComReg as the main criterion to lift access regulation (i.e. the presence of three VHCNs in a given Modified EA) seemed to be "overly conservative". It added that the regulator appeared to underestimate other criteria – e.g. the intensity of retail competition, wholesale access provided by competitors and regulation in the upstream PIA market.

ComReg responded that the function of the criterion highlighted by the EC is not to act as the decisive factor on whether or not to lift regulation but instead to determine which relevant NG WLA geographic market a Modified EA should be assigned to. Overall, the regulator considered that its Phase 2 geographic assessment criteria were "reasonable, justified and proportionate", and in line with those used by its peers.[15]

SMP designation and remedies

ComReg concluded that Eircom no longer held SMP in the CG WLA market and that it did not hold such a position in the IA NG WLA market. The regulator removed obligations previously imposed on Eircom subject to an appropriate (12-month) sunset period to give access seekers time to migrate to other wholesale inputs should they so wish.

In contrast, ComReg determined that Eircom had SMP in the Commercial NG WLA market where it would have the ability to behave, to an appreciable extent, independently of its competitors, customers and end users. The regulator's assessment looked at factors under the following broad headings:

- Existing competition, including market shares, indirect retail constraints, vertical integration, relative strength of existing competitors, barriers to expansion, and pricing behaviour;
- Potential competition, including the overall size of the undertaking and control of infrastructure not easily duplicated, barriers to entry in the WLA markets, economies of scale/scope, and the overall strength of potential competitors; and
- The strength of countervailing buying power, including the impact posed by any strong buyers of WLA (i.e. access seekers) on the competitive behaviour of WLA providers.

With respect to remedies, ComReg continued to require Eircom to provide access to a range of services, facilities and technologies, including FTTC- and FTTP-based VUA, and introduced some new access obligations. ComReg also

[15] As demonstrated in this 2018 BEREC report: https://www.berec.europa.eu/en/document-categories/berec/reports/berec-report-on-the-application-of-the-common-position-on-geographic-aspects-of-market-analysis

imposed transparency, non-discrimination, regulatory governance, price control, cost accounting and accounting separation obligations. Regarding the price control obligation, ComReg continued to allow Eircom flexibility to set wholesale FTTH prices at any level it chooses (subject to two constraints: a margin squeeze test; and a price floor) and relaxed its ban on wholesale pricing discounts.[16]

Italy

In April 2024, AGCOM completed its latest review of the WLA, WCA and wholesale dedicated capacity markets in Italy.[17] Over a five-year (2024-2028) horizon, the regulator sought specifically to take account of developments in the market, including TIM's structural separation and its declining retail broadband market share, as well as the rollout of FTTH networks by TIM (through FibreCop) and Open Fiber.[18]

Market definition and competitive assessment

Retail

AGCOM identified three retail product markets:

1. Fixed telephone access for residential customers;
2. Fixed telephone access for business customers; and
3. Broadband access (both symmetric and asymmetric).

These services may be provided over copper, fibre, "mixed copper-fibre" (i.e. FTTC) and FWA technologies, but not mobile or satellite. It does not appear that the regulator has undertaken a standalone definition of the geographic market at the retail level nor an assessment of the state of competition.

Wholesale

In respect of the wholesale product market, AGCOM included physical and virtual unbundling products and services delivered via copper, fibre, mixed copper-fibre and FWA. It excluded mobile and satellite services from its definition, considering them complementary to fixed services rather than substitutable.

AGCOM used the municipality level as the starting point for its geographic market definition for WLA, firstly assessing the level of homogeneity in competitive conditions according to factors such as the network coverage of, and marketing of wholesale services by, the main NGA operators. It also adopted the same approach as in previous reviews by analysing the degree of

16 https://www.comreg.ie/comreg-welcomes-the-european-commissions-clearance-of-its-planned-framework-for-the-regulation-of-wholesale-broadband-markets/
17 https://www.agcom.it/provvedimenti/delibera-114-24-cons
18 https://www.assemblyresearch.co.uk/regulation-updates/italy-fixed-access-markets-deregulation

competition in municipalities versus Milan.[19] To identify similar municipalities, the regulator employed the following parameters and thresholds:

- TIM's retail market share: <30%
- TIM's wholesale market share (including self-supply): <50%
- Coverage of the municipality by the wholesale-only operator's network: >80% of premises; and
- Take-up of FTTH services: >40%.

Again in line with previous market reviews, AGCOM also considered the conditions in the rest of the country, finding a number of municipalities where competitive pressure was more developed but not yet sufficiently stable – the "more competitive municipalities". The regulator used the same criteria to determine areas with emerging competition but with different thresholds:

- TIM's retail market share: <38%;
- TIM's wholesale market share: <70%;
- Coverage of the municipality by the wholesale-only operator's network: <70% of premises; and
- Take-up of FTTH services: >30%.

AGCOM concluded that there were two sub-national geographic markets for WLA:

1. Market 1A: 14 municipalities, including Cagliari and Milan; and
2. Market 1B: The rest of Italy, within which 95 municipalities were considered to be more competitive.

EC comments

Following notification, the EC reviewed the draft decision, stating (among other things) that the criteria AGCOM used for its geographic analysis of the markets and for assessing competitive conditions were quite stringent and not sufficiently forward-looking. The EC invited the regulator, in conjunction with its annual review of the state of competition to: ensure proportionality in the imposition of remedies; consider a mid-term review of the geographic market definitions; and withdraw regulation in geographic markets that become effectively competitive over time, particularly where it is likely that deployments of new networks will continue at pace.

In response, AGCOM stated that it would be "appropriate to accept" the EC's invitation to consider the opportunity for an intermediate review of the

[19] Where there is considered to be effective competition and regulation on TIM has been removed

geographic market definition provided that, in the meantime, a new review had not been started based on the fallout from TIM's network asset sale.[20] The regulator also stated that it periodically updates, on an annual basis, the list of contestable municipalities for the purposes of determining where to impose a cost-oriented price control obligation on TIM.

New market review

In September 2024, the Council of AGCOM voted four-to-one in favour of beginning a new full analysis of the fixed network access markets.[21] The review is considered necessary following the acquisition by Optics BidCo (controlled by US investment firm KKR) of the entire share capital of FiberCop. AGCOM will assess the impacts of the sale of TIM's fixed-line network on the regulatory obligations currently in place and on the various markets connected to the access network, as well as considering whether there is a need to impose, maintain, modify or remove any of those obligations.

SMP designation and remedies

Having considered that Market 1A was competitive, AGCOM withdrew existing obligations imposed on TIM in the 14 municipalities subject to a transition period.

In Market 1B, AGCOM determined that TIM/FiberCop had SMP due to its high market share, economies of scale and diversification, control of infrastructure difficult to duplicate, countervailing buyer power and vertical integration in multiple contiguous markets. The regulator imposed obligations relating to: access to civil engineering infrastructure; access to, and use of, certain network resources (e.g. LLU, SLU and VULA); transparency; non-discrimination; accounting separation; price control; and cost accounting.

However, for the more competitive municipalities, AGCOM considered it appropriate to apply geographically differentiated remedies. Here, it did not impose cost-oriented pricing on wholesale access products, instead requiring TIM to set fair and reasonable prices.

Netherlands

In December 2023, the Netherlands Authority for Consumers and Markets (ACM) completed its latest review of the local access market, focusing primarily on whether there was a risk of SMP at the retail level that would warrant it taking a close look upstream.[22] This review effectively implements a March 2020 court decision overturning the ACM's conclusions in September 2018

[20] https://www.assemblyresearch.co.uk/regulation-updates/a-new-market-structure-for-broadband-in-italy
[21] https://www.assemblyresearch.co.uk/regulation-updates/italys-fixed-access-market-review
[22] https://www.acm.nl/nl/zaak/acm/22/178952

that KPN and VodafoneZiggo held a position of joint dominance in wholesale broadband and should be subject to access obligations.[23]

Market definition and competitive assessment

Retail

In retail fixed internet access, the ACM concluded that cable, copper and fibre were part of the same product market (with no distinction needed between consumers and businesses), although services delivered via mobile and satellite should be excluded.

For the purpose of defining geographic markets, the ACM chose six-number postal code (PC-6) areas as the appropriate geographic base unit[24], considering they represented stable administrative boundaries. The regulator then analysed these areas, combining those with common characteristics based on:

- The number of networks and how many homes each had passed;
- Wholesale market shares;
- Retail prices; and
- Behavioural patterns, including levels of switching.

The ACM subsequently identified five local geographic markets and undertook a competitive analysis that considered factors such as current and prospective market shares, control over infrastructure that is not easy to replicate, vertical integration, economies of scale and breadth, and product/service diversification – see *Table 2*.

Table 2: Summary of the ACM's geographic market definition and competitive analysis

Market	Description	Assessment
I	Covers the fibre footprints of KPN and Glaspoort, regardless of whether fibre has also been deployed by third parties or a cable and/or copper network is present	In light of KPN and Glaspoort's wholesale access commitments (which are being utilised by Odido) and KPN's retail market share being below 50%, the ACM sees no risk of KPN having SMP in this market
II	Covers the fibre coverage of	There is no risk of

[23] https://www.assemblyresearch.co.uk/regulation-updates/dutch-court-overturns-kpn-and-vodafone-ziggos-joint-dominance-in-wholesale-broadband

[24] On average, there are approximately 17 households per postal code and 450,000 postal code areas in the Netherlands

	third parties in urban areas where a cable network and the copper network of KPN are present, with the exception of where KPN/Glaspoort fibre is deployed	VodafoneZiggo having SMP in this market. Its market share is expected to decline, there are wholesale alternatives such as Delta Fiber and the copper network continues to exert competitive pressure at the bottom end of the market
III	Covers the fibre coverage of third parties in rural areas and KPN's copper network, with the exception of where KPN/Glaspoort fibre and/or a cable network is deployed	KPN has a low market share (less than 30%) and its trend over time does not indicate a risk of SMP. The ACM did not see any reason to need to consider other competitive parameters
IV	Covers the coverage of cable networks where KPN's copper network is present, with the exception of where fibre is deployed	VodafoneZiggo's current competitive advantages are rapidly diminishing. Given the expanding rollout of fibre, this market will become effectively competitive with the review period, with no risk that VodafoneZiggo will have SMP
V	Covers KPN's copper footprint where no cable network is present, with the exception of where fibre or cable is deployed	KPN, Glaspoort and others (e.g. Delta Fiber) will overbuild or replace copper with open access fibre networks during the review period. There is no risk of KPN having SMP in this market

Source: Assembly, ACM

From this analysis, the ACM concluded that there was no risk of SMP in the retail markets for internet access provided over copper, fibre or cable networks. Having next performed the three criteria test, the regulator found (in light of the commitments made binding on KPN and Glaspoort[25]) that the third criterion was not met because competition law would be sufficient to address any risk of market failure.

Wholesale

In light of its analysis of the retail market, the ACM considered that it was not necessary to review the associated wholesale market, which in any case should not be expected to exhibit the need for ex-ante regulation.

[25] https://www.acm.nl/nl/publicaties/besluit-tot-bindend-verklaren-toezeggingen-kpn-en-glaspoort

SMP designation and remedies

The ACM did not identify a risk of SMP on any of the five retail markets and concluded that they were or would become sufficiently competitive during the 2024-2028 review period. On this basis, and following public consultation on its draft decision[26] and notification to the EC (which had no comments in response), the ACM stated that it saw no reason to further investigate the market for local access at the wholesale level.

While regulatory intervention was not considered justified, the ACM stated that it would continue to monitor the retail internet access market and the WLA market (including potential changes brought about by consolidation) and supervise compliance with KPN and Glaspoort's commitments as well as other rules for network providers.

The ACM has also committed to analysing the competitive landscape in the telecoms sector each year in order to ensure that providers continue to offer products and services at the best price-quality ratio. In its December 2023 study into the availability and affordability of internet and telephony services, the regulator found that consumers and businesses in more and more places are able to choose between multiple providers of high-speed internet at competitive prices, and that it expects (based on rollout plans submitted by operators) that practically all premises would have access to a fiber connection within the next two years.[27]

As the future deployment plans of operators are somewhat uncertain, the ACM also performed a sensitivity analysis. This indicated that in a worst-case scenario in which the fibre rollout decreases substantially, 95% of the Netherlands would still be connected to fibre in 2027.

Spain

In October 2021, the Comisión Nacional de los Mercados y la Competencia (CNMC) completed its latest review of the wholesale broadband access markets (WLA and WCA) in Spain.[28][29] According to the regulator, the review sought to strike a balance between ensuring competition and promoting investment in NGA networks (particularly fibre),[30] reflecting the significant change the country's broadband market has seen since the previous analysis in 2016.

---

26 https://www.assemblyresearch.co.uk/regulation-updates/netherlands-wholesale-local-access-market-left-unregulated
27 https://www.acm.nl/en/publications/acm-sees-sufficient-competition-dutch-telecom-market-keeps-close-watch
28 https://www.cnmc.es/expedientes/anmedtsa00220
29 This review also covered access to Telefónica's civil engineering infrastructure: https://www.assemblyresearch.co.uk/regulation-updates/spains-new-rules-for-wholesale-broadband-access
30 https://www.cnmc.es/sites/default/files/editor_contenidos/Notas%20de%20prensa/2021/20211015_NP_Mercados%20BA_CO_eng%20(1).pdf

Market definition and competitive assessment

Retail

The CNMC defined broadband services with reference to fixed access technologies, with the vast majority of connections being fibre-based. It stated that there was no evidence of substitution between fixed and mobile broadband services that would justify the inclusion of the two products in the same market, adding that their relationship is complementary.

In determining the relevant geographic markets, the regulator adapted and updated the approach taken in previous market reviews, accounting for changes in competitive dynamics seen since 2016, including the continued rollout of fibre, the increasing number of commercial wholesale agreements and wholesale-only operators, and the consolidation of Digi as a competitor.

The CNMC used the municipality as the relevant unit for analysis due to loss of relevance of copper exchanges in light of Telefónica's switch-off programme. For consistency and continuity in geographic segmentation, the regulator examined levels of competition according to two criteria similar to those employed in the previous review:

1. At least three NGA networks with a minimum individual coverage of 20%; and

2. Telefónica's share (of active lines) in the retail broadband market is below 50%.

This enabled the CNMC to define two geographic areas characterised by different levels of competition:

- Zone 1: 696 municipalities that fulfil both criteria (high levels of NGA infrastructure-based competition, Telefónica's retail market share is below 40%); and

- Zone 2: 7,435 municipalities that do not meet the criteria (relatively lower levels of NGA infrastructure-based competition, higher market share of Telefónica).

This decision resulted in the competitive zone increasing from 66 municipalities (35% of the Spanish population) in 2016[31] to 696 municipalities (70% of the population), leading to significant deregulation of the market.

---

31 https://www.assemblyresearch.co.uk/regulation-updates/spanish-regulator-begins-a-new-review-of-the-wholesale-broadband-access-markets

Wholesale

The CNMC found that the relevant product market for WLA included physical and virtual unbundled access to copper and fibre networks that operators provide to third parties and to themselves (i.e. self-supply). Cable networks were not considered part of the market due to insufficient direct and indirect constraints, including that wholesale access products over cable are almost commercially non-existent.

Regarding the geographic scope of this market, the regulator stated that given the competitive dynamics observed at the retail level in Zone 1 and Zone 2, it would be appropriate to adopt the same definitions upstream. It therefore defined a competitive WLA market in Zone 1 (referred to as Market 1_1) and a non-competitive WLA market in Zone 2 (referred to as Market 1_2).

Having carried out a three criteria test, the CNMC found that Market 1_1 did not exhibit high barriers to entry and tended towards effective competition based on the evolution of market shares, with Telefónica seeing a sharp decline in its market share. It also concluded that ex-post competition law alone would be adequate to address any market failures that might arise.

Regarding Market 1_2, the regulator similarly found that competition law would be sufficient in such a scenario and it considered that the market tended towards effective competition due to the evolution of the market structure, with a notable decline in Telefónica's market share, together with the positive effects of commercial agreements, state aid and the competition provided by alternative technologies. However, the CNMC determined that barriers to entry remain high in Market 1_2 and therefore it met this criterion of the test.

Draft market review

In December 2024, the CNMC published a consultation on its draft analysis of the WCA and WLA markets.[32] The regulator proposed full deregulation of these markets and the withdrawal of requirements on Telefónica to offer its “NEBA local” and “NEBA fibra” services. The CNMC cited four key developments that have contributed to its proposals:

1. Increases in fibre (in particular, FTTH) coverage;
2. Telefónica's declining shares of the wholesale and retail fixed broadband markets;
3. The entry of new operators and business models; and
4. Commercial agreements, which have increased wholesale competition and the availability of high-capacity services for consumers.

[32] https://www.cnmc.es/consultas-publicas/telecomunicaciones/mercados-acceso-local-central

Stakeholders had the chance to provide feedback until 22 February 2025, although the CNMC's timeline for publication of a final decision is unclear.[33]

SMP designation and remedies

The CNMC determined that Telefónica had SMP in both Markets 1_1 and 1_2 due to (among other things) its high market share and vertical integration, barriers to entry to the market (evidence by differences in deployment rates and coverage achieved by each operator), the lack of expected potential competition and economies of scale and scope. This designation also appears to have been influenced by Telefónica's extensive civil engineering infrastructure assets[34], as well as its copper network that was still relied upon for a small, yet declining, share of broadband connections.

The regulator therefore imposed a series of obligations on the operator aimed at resolving the potential competition problems identified. With the copper switch-off process progressing but still ongoing, the CNMC preserved the obligation on Telefónica to provide copper LLU throughout Spain, while maintaining requirements for cost orientation, cost accounting, accounting separation, non-discrimination and transparency. The regulator also imposed a PIA remedy on Telefónica at the national level (alongside cost orientation, cost accounting, accounting separation, non-discrimination and transparency obligations), stating that this was needed to ensure continued rollouts by, and competition from, altnets.

In Market 1_1, the CNMC did not impose any further remedies (e.g. wholesale fibre access) on Telefónica, enabling regulation in the 630 municipalities now determined to be competitive to fall away after a six-month transition period. Regarding the obligation on Telefónica to provide VULA to its fibre network (i.e. its NEBA local service) in the municipalities in Market 1_2 only, the regulator imposed requirements in respect of accounting separation, non-discrimination, transparency and technical replicability. VULA was not price regulated; however, Telefónica was required to meet an ex-post ERT.

[33] https://www.assemblyresearch.co.uk/regulation-updates/spain-deregulating-wholesale-central-and-local-access
[34] The CNMC considered that it would have been premature to define a separate PIA market outside of WLA

Assembly

Assembly

36 Spital Square
London
E1 6DY
United Kingdom

+44 20 3026 2700
info@assemblyresearch.co.uk