Ref. Ares(2026)11026263 - 26/11/2026

Body of European Regulators for Electronic Communications

BEREC

BoR (26) 197

BEREC Opinion on Phase II investigation pursuant to Article 32(4) and 33 of Directive (EU) 2018/1972 of 11 December 2018 establishing the European Electronic Communications Code – notifications procedure:

Case SE/2026/2642

Market for wholesale local access provided at a fixed location (Market 1) in Sweden

25 November, 2026

Table of Contents

1. Executive summary ... 3
2. Introduction ... 4
3. Background ... 4
Previous notifications ... 4
Current notification and the Commission's serious doubts ... 5
4. Assessment of the serious doubts ... 9
a. Serious doubt 1: SMP analysis of network owners connecting more than 5,000 SDUs ... 9
Concerns of the Commission ... 9
Views of PTS ... 11
BEREC's Assessment ... 11
b. Serious doubt 2: network owners that connect less than 5,000 SDUs ... 13
Concerns of the Commission ... 13
Views of PTS ... 13
BEREC's Assessment ... 14
c. Serious doubt 3: Proportionality of obligations ... 15
Concerns of the Commission ... 15
Views of PTS ... 16
BEREC's Assessment ... 17
5. Conclusions ... 18

1. Executive summary

On 30 September 2026, the Commission registered a notification by the Swedish Regulatory Authority, PTS, concerning the market for wholesale local access provided at a fixed location. The regulation on the Swedish market for fixed wholesale local access is based on the 2015 decision, under which TeliaSonera (Telia thereafter) was identified as operator with significant market power (SMP) and was imposed a full set of corrective remedies, out of which only the ones on its fibre network are still in place[1].

PTS proposed regulatory approach differentiates between fibre networks on the basis of the type of premises served, namely between single-dwelling units (SDUs) and multi-dwelling units (MDUs).[2] PTS identifies no competition concerns in markets for MDUs, considering that the segment is not susceptible to ex ante regulation. By contrast, PTS concludes the markets for SDUs warrant the imposition of regulatory obligations (i.e., the three-criteria-test is passed).

Accordingly, PTS proposes to designate 63 wholesale local fibre operators with SMP, each connecting at least 5,000 SDUs. The geographic dimension of each market is determined by the footprint of the network concerned. By contrast, PTS does not designate as having SMP the 123 local fibre operators that are connecting less than 5,000 SDUs[3] applying this threshold to exempt such networks from regulation as it would be disproportionately costly and burdensome.

On the 63 operators identified with SMP (both wholesale-only and vertically integrated), PTS proposes to impose access obligations (in the form of physical access or VULA), non-discrimination (EoI for Telia and EoO for the other vertically integrated operators) and the obligation to set fair and reasonable prices.

On 28 October 2026, the Commission sent a serious doubts letter opening a phase II investigation pursuant to Article 32(4) and 33 of Directive (EU) 2018/1972 establishing the European Electronic Communications Code (EECC). The Commission considers that the measure is not compatible with EU law for the following main reasons:

Serious doubts pursuant to Article 32(4) of the Code (market definition and SMP designation):

- Lack of sufficient justification that all of the identified wholesale markets should be regulated (i.e. the SDU markets above the 5,000 threshold); and
- No competition law analysis regarding SMP designation for operators connecting fewer than 5,000 SDUs (i.e. the lack of a thorough assessment demonstrating that their exclusion from ex ante regulation is justified).

Serious doubts pursuant to Article 33(1) of the Code (Remedies):

- Proportionality of the remedies to be imposed on the SMP operators (i.e. the imposition of an identical set of regulatory obligations on all SMP operators may not adequately reflect differences in their competitive positions and individual circumstances).

[1] The copper regulation has been phased out gradually, with the withdrawal of all obligations in 2023. Telia has announced that it will shut down the entire copper network by 2026.
[2] 51 % of the population live in small houses (SDU) and approximately 43 percent of the population live in multi-dwelling buildings (MDU), see p. 19 in PTS's market analysis.
[3] In Sweden, there are overall 186 different network owners.

On the basis of the analysis set out in this Opinion, BEREC considers that the Commission's serious doubts are justified.

BEREC considers that PTS should make a more comprehensive analysis taking into account all relevant competitive constraints as well as behavioural indicators and market outcomes for all relevant markets serving SDUs. The assessment of remedies should follow the results of this analysis. BEREC considers that it may be appropriate, if supported by an adequate evidential basis, to exclude small network owners from regulation in order to avoid a disproportionate regulatory burden for both the network owner and the regulator if no outweighing benefits for competition can be expected. This should be established on the basis of an adequate assessment of competitive conditions. BEREC also notes that it is important to establish a burden of proof (in terms of depth of the assessment) that is manageable for a high number of markets, as in Sweden, given the resources available to the NRA.

2. Introduction

On 30 September 2026, the Commission registered a notification by the Swedish Regulatory Authority, PTS, concerning the market for wholesale local access provided at a fixed location.

On 6 October, 12 October and 3 November 2026, requests for information (RFIs) were sent to PTS, and responses were received on 9 October, 13 October and 6 November 2026.

The Commission initiated a phase II investigation, pursuant to Articles 32 and 33 EECC, with a serious doubts letter issued on 28 October 2026. In accordance with the BEREC rules of procedure, the Working Group (WG) was established immediately after that date with the mandate to prepare an independent BEREC opinion on the justification of the Commission's serious doubts on the case.

On 6 November 2026, the WG had a kick-off meeting and sent a set of questions to PTS and the Commission. The questions were discussed and answered in (separate) online meetings with PTS and the Commission on 10 November 2026. The objective of the WG was to reach clear conclusions on whether or not the Commission's serious doubts are justified.

A draft opinion was finalized on 19 November 2026 and a final opinion was presented and adopted by a majority of the BEREC Board of Regulators on 25 November 2026. This opinion is now issued by BEREC in accordance with Article 32(5) and 33(3) of the Framework Directive.

3. Background

Previous notifications

PTS has previously notified several measures concerning the regulation of wholesale broadband access markets in Sweden, which provide relevant regulatory context for the present case given that the currently applicable obligations on Telia originate from measures adopted in cases SE/2015/1687-1688. In particular, the regulatory history comprises two rounds of complete market notifications concerning the markets for wholesale local access and

wholesale central access provided at a fixed location, submitted in 2015 and 2019, and several amendments of Telia's obligations (in 2020, 2021 and 2023).

Concerning the 2015 notification, the wholesale local access market included both copper and fibre-based access[4], while the wholesale market for central access was defined as comprising of virtual access to copper, fibre and cable TV networks, with regional or national handover points. Both markets have been defined nationally.

On the wholesale local access market, Telia was designated as having SMP, with a full set of remedies imposed on it. By contrast, the wholesale central access market was not considered susceptible to ex ante regulation, as the three criteria test (3CT) was not met[5].

In 2019, PTS notified a new round of market analysis concerning the wholesale market for local access at a fixed location registered under cases SE/2019/2216-2217[6]. PTS defined separate national markets for copper and fibre, and considered that Telia held SMP on both markets. PTS lessened the obligations imposed on Telia's copper network[7], while, for its fibre network, PTS kept the full set of remedies, namely access, non-discrimination, transparency, accounting separation and price control.

The Commission vetoed PTS' proposed measures in case SE/2019/2216 on the grounds that the competitive conditions in the country were not sufficiently homogenous to be able to define a national market, preventing the adoption of the proposed measures in the fibre market. PTS decided also not to adopt its notified draft measures for case SE/2019/2217 in the copper market, although the Commission issued only comments in this case.

In 2020 (case SE/2020/2245) and 2021 (case SE/2021/2313), the 2015 obligations imposed on Telia's copper network were gradually adjusted with several changes. The remedies on Telia's copper network were subsequently withdrawn in 2023 (case SE/2023/2428), subject to a 6 months' notice period. Therefore, from a regulatory standpoint, PTS' 2026 assessment starts with Telia's regulation of the fibre network as established in 2015.

Current notification and the Commission's serious doubts

1. Current notification

In the current notification, PTS starts with the definition of the relevant retail market underlying both the wholesale local and central access markets provided at a fixed location that comprises mass market high-speed broadband services delivered over fibre and cable TV networks. Mobile broadband and xDSL services are not part of the relevant market.

When analysing the competitive conditions at retail level, PTS outlines a key difference in the provision of services to MDUs and to SDUs. In the case of MDUs, PTS identifies a countervailing mechanism by way of an important degree of buyer power for the property owner, which can negotiate collectively the prices on behalf of the end-users in the MDUs[8]. In the case of SDUs, PTS determines that there is no such countervailing mechanism.

[4] In the form of physical access to the copper and fibre local loops as well as VULA on copper or fibre with handover points in/or adjacent to the exchange.
[5] PTS subsequently deregulated this market in 2015.
[6] Together with the mentioned cases, PTS notified also the review of the market for wholesale central access provided at a fixed location under case SE/2019/2218.
[7] By removing the obligation to provide access to ducts or virtual access over copper amongst others.
[8] PTS also outlines some notable differences among the end-users who are tenants and end-users who are flat owners in terms of the prices they finally pay for the services.

When analysing the competitive conditions at the wholesale level, PTS outlines that the local access to fibre connecting MDUs is usually commercially available and provided by the network owners on competitive terms.

By contrast, SDUs are connected to a single network, often resulting in significantly higher prices for the respective end-users. Overall, the market for high-speed broadband services to MDUs is well functioning, calling for no *ex ante* regulation of the upstream market, while the market for SDUs – local physical and virtual access to fibre networks connecting SDUs – warrants further analysis.

PTS identified 186 different network owners, often with local or regional footprint, that serve SDUs. Parallel deployment is exceptional and, therefore, the end-users in SDUs are locked into the network. To that end, PTS concludes that each network should be regarded as a separate relevant geographic market.

Further, PTS conducts the 3CT for the SDUs market and reaches the conclusion that (i) there are high and non-transitory barriers to entry due to the maturity of the market and lack of economic space for parallel deployment, (ii) the market structure does not tend towards effective competition because of the monopoly structure of the market and the limits in products choice (overall high pricing, technically and qualitatively non-differentiated products) and (iii) the identified market failures cannot be addressed adequately by competition law. The only exception is the SDU-market in Malmö, for which PTS finds that there is a tendency towards effective competition considering that local access to SDUs is offered commercially, absent SMP regulation, by the network owner itself.

When it comes to the SMP analysis, PTS points to the fact that the sizes of the 186 geographic markets identified vary widely, from below 100 to around 600,000 SDUs connected. PTS conducts an individual SMP assessment in 63 of the 186 markets, where the number of SDUs connected is higher than 5,000.

PTS states that approximately 50% of the Swedish fibre access networks are municipally owned and governed by the Swedish Local Government Act. Among other provisions of the Act, for the purpose of this opinion, BEREC notes (i) the 'prime cost principle', a rule "which generally prevents municipalities to charge fees in excess of their costs"[9] and (ii) the principle of 'equal treatment' "which requires equal treatment of municipal members unless there are objective grounds for differential treatment"[10].

PTS concludes that, based on a number of criteria, namely (i) the market share (100% in each case), (ii) the absolute size of the undertaking, (iii) barriers to entry, (iv) the control of non-replicable infrastructure, (v) the degree of vertical integration, (vi) the (non-) existence of commercial access agreements, (vii) the absence of countervailing buyer power, (viii) the lack of potential competition, (ix) the absence of indirect competitive constraints and (x) the incapacity of municipal legislation to sufficiently discipline the network owners and to restrict their ability to abuse their market power to the detriment of competition at retail level, all 63 operators connecting more than 5,000 SDUs have SMP in their own networks.

As regards network owners connecting fewer than 5,000 SDUs, PTS considers that imposing ex ante regulation would entail a disproportionate regulatory burden, particularly when weighed

[9] See Commission's seriuous doubst letter p. 8.
[10] Ibidem

against the expected benefits for end-users. In PTS's view, the potential demand for wholesale local access in areas served by these smaller networks is likely to be limited, thereby reducing the potential benefits that regulatory intervention could bring to end-users. On this basis, PTS considers that further market analysis and the imposition of regulatory obligations in relation to these networks would not be proportionate. Consequently, PTS does not carry out individual SMP assessments for these network owners.

In view of the above, for the 63 network owners connecting more than 5,000 SDUs, PTS proposes to impose differentiated remedies as follows:

- for Telia (the incumbent and previously regulated operator) – obligation to provide physical access, access to associated facilities (co-location, backhauling, support and operational systems), publication of a reference offer, non-discrimination based on EoI, fair and reasonable pricing;
- for the other 13 vertically integrated operators – obligation of access (physical and VULA), access to associated facilities (less interventionist regarding support and information systems), publication of a reference offer, non-discrimination based on EoO, fair and reasonable pricing;
- for the 49 wholesale only operators – obligation of access (physical or VULA), access to associated facilities (less interventionist regarding support and information systems), publication of a reference offer, fair and reasonable pricing.

According to PTS, all the SMP operators are also required to fulfil a general non-discrimination obligation between external customers.

2. Commission's serious doubts

The Commission expressed serious doubts regarding the compatibility of the notification with EU Law on several grounds, covering both the SMP designation (as per Article 32) and the imposition of remedies (as per Article 33).

First, with regard to the 63 network owners proposed to be designated as having SMP, ***the Commission considers that PTS has not provided sufficient evidence to substantiate the need for ex ante regulation in all the identified wholesale markets***. In particular, the Commission observes that competitive conditions in the Swedish high-speed broadband market appear to vary across both the wholesale and retail segments. Differences in the pricing strategies and trends observed across network owners suggest that competitive conditions may not be homogeneous across the relevant network footprints.

Particularly, at wholesale level, the prices charged by larger operators for services at speeds of 100 Mbps and 250 Mbps respectively have increased over the period 2022-2025. By contrast, certain smaller operators charge significantly lower prices, with some having kept these prices stable over the same period, particularly for the 250 Mbps services. Similar differences, according to the Commission, can be observed at the retail segment, whereby the largest operators have implemented substantially higher increases in prices when compared to the smaller ones. The Commission therefore identifies diverging pricing trends across operators.

Additionally, according to the Commission, PTS' analysis is missing significant market data, namely information for services at higher broadband speeds of 500 Mbps and 1 Gbps. The Commission argues that these services represent a quarter of the retail market, and thus the analysis lacks relevant data which renders the competitive assessment incomplete.

Moreover, the Commission says that market power of municipal networks could be limited by the provisions in the Local Government Act, subject to the 'prime cost principle', which implies that the wholesale fees for access could not exceed the cost of provision. In this regard, the Commission questions whether PTS has thoroughly analysed the impact of these regulations on the capacity of at least some of the operators deemed with SMP to behave independently.

Additionally, with respect to the competitive dynamics, the Commission points out that there is presence of alternative operators in the retail market, absent regulatory obligations at local level, which could impact the retail conditions in the market. However, given the typical reliance on wholesale inputs provided at a central location by these alternative operators, the Commission says it is not in a position to infer about their impact.

Overall, the Commission concludes that PTS' SMP analysis in the case of network owners connecting more than 5,000 SDUs does not adequately take into account differences in prices and price trends, the competitive situation at retail level, legal constraints, and other potentially differentiating factors that could have adequately substantiated the conclusions.

Secondly, regarding the other 123 network owners that connect less than 5,000 SDUs, ***the Commission notes that PTS conducted no competition law analysis to decide whether they have SMP or not***. The Commission specifically says that PTS has not assessed whether the competitive conditions in the respective network areas would warrant an SMP designation. The Commission notes that, instead, PTS excludes these operators from further market analysis on the basis of the 5,000-SDU threshold, without undertaking an individual assessment of their competitive position. Despite the fact that PTS considers that the 3CT test is fulfilled for all networks service SDUs, imposing regulation in those cases is deemed "disproportionately costly and burdensome"[11] by PTS in light of the limited demand for local access in those networks.

Furthermore, the Commission criticises that PTS did not conduct a cost-benefit analysis to substantiate the proportionality of excluding these operators from further assessment, nor did it provide sufficient justification for selecting the 5,000-SDU threshold. The Commission says that while it cannot exclude the existence of disciplinary effects on pricing determined e.g. by competitive pressures stemming from neighbouring areas, PTS has not conducted such an analysis.

Finally, the Commission underlines that these operators connecting less than 5,000 SDUs are heterogeneous in terms of their size, some of them having turnovers exceeding the thresholds applicable to micro-enterprises and providing services to both SDUs and MDUs. Consequently, the Commission considers that these operators cannot necessarily be regarded as small solely on the basis of the number of SDUs connected to their networks.

In conclusion, ***the Commission notes that PTS failed to conduct a SMP analysis for the markets determined by networks connecting less than 5,000 SDUs***.

Thirdly, as regards the remedies imposition, ***the Commission questions the proportionality of imposing the same set of obligations on all SMP operators***.

The Commission recalls that, when imposing regulatory obligations, the NRA should select the least intrusive measures necessary to address the identified competition problems. However, PTS differentiates the applicable remedies primarily according to the business model of the

[11] See Commission's seriuous doubst letter pg. 11.

designated SMP operator, distinguishing between wholesale-only operators and vertically integrated providers. This differentiation does not sufficiently account for the differences in competitive conditions across the relevant markets and the specific circumstances of the individual network owners in the Commission's view.

Consequently, the Commission questions whether the proposed set of obligations is sufficiently tailored to the competition problems identified in each market and whether its imposition on all designated SMP operators is proportionate. Particularly, in terms of pricing, despite the aforementioned price differentials (at both wholesale and retail levels) and the 'prime cost principle', the Commission is critical on PTS' proposal to establish price control in the form of fair and reasonable pricing in all cases. PTS is currently developing a BULRIC model that "could serve as a starting point when assessing whether an individual wholesale price is fair and reasonable"[12]. But the Commission has serious doubts that such a price control mechanism is adequate for all the SMP operators, representing the least intrusive remedy.

The Commission considers that, in the absence of a sufficiently differentiated assessment of the competitive conditions across the identified markets, PTS has not adequately demonstrated that the proposed remedies are established in a proportional manner to address the specific competition problems in the Swedish market for local access at a fixed location.

4. Assessment of the serious doubts

a. Serious doubt 1: SMP analysis of network owners connecting more than 5,000 SDUs

Concerns of the Commission

The Commission's first serious doubt concerns the sufficiency of PTS's analysis supporting its conclusion that all identified wholesale local access markets should be subject to *ex ante* regulation.

The Commission recalls that, pursuant to Article 63(2) EECC, an undertaking is considered to have significant market power where it enjoys a position equivalent to dominance, namely a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. Furthermore, in accordance with Article 64(2) EECC and the SMP Guidelines, the assessment must be forward-looking and take account of the relevant market conditions and the competitive dynamics over the review period.

The Commission acknowledges that each network owner connecting SDUs holds a 100% market share within its respective network footprint. Such a market share constitutes a strong presumption of SMP. However, the Commission emphasises that market shares should not be considered in isolation but interpreted in the light of the relevant market conditions, including market dynamics, product differentiation and the extent to which other competitive constraints may operate.

[12] See Commission's seriuous doubts letter p. 14.

In this regard, the Commission identifies several aspects of PTS's analysis that, in its view, remain insufficiently developed:

- First, the Commission observes that competitive conditions and prices appear to vary. In this respect, wholesale prices for 100 Mbit/s and 250 Mbit/s services charged by larger operators generally increased during the period 2022–2025, with these operators tending to be positioned in the higher price segment. Conversely, certain smaller operators offer significantly lower wholesale prices, which have remained relatively stable, particularly for 250 Mbit/s services.

  According to the Commission, retail price developments also appear heterogeneous, with the largest operators recording substantially higher increases than those observed, on average, among the remaining operators. The Commission acknowledges that such differences may reflect locally incurred costs or differences in the intensity of service-based competition. Nevertheless, it considers that these developments require further examination before concluding that the identified markets exhibit sufficiently similar competition problems to justify SMP designation for all of them.

- Second, the Commission notes that approximately 25% of broadband subscriptions concern higher-speed services, namely 500 Mbit/s and 1,000 Mbit/s. However, PTS has not analysed wholesale and retail price levels and trends for these services. In the Commission's view, the absence of such information limits PTS' ability to assess the existence and extent of competition problems in the identified local markets.

- Third, the Commission questions whether PTS has sufficiently assessed the potential constraining effects of the 'prime cost principle' applicable to municipal broadband activities under the Swedish Local Government Act. According to the Commission, this principle may limit the ability of certain municipal network owners to charge excessive prices, since the fees charged for services and utilities provided on a voluntary basis may not exceed the costs of providing those services. The Commission considers that the implications of this legal constraint should be examined as part of the assessment of whether individual network owners are able to act independently of their customers.

- Fourth, the Commission observes that alternative operators have been able to obtain substantial market shares in the retail markets in the absence of the proposed wholesale regulation. It therefore considers that PTS should have examined more closely the extent to which these alternative operators, relying on wholesale inputs provided at central level, exert competitive pressure on the network owners and influence competitive conditions in the relevant retail markets.

The Commission acknowledges that PTS considers the scope for service differentiation by providers to be limited under the communication operator model. Nevertheless, it considers that the presence and market position of alternative retail operators should be properly examined rather than discounted without a sufficiently detailed assessment.

In this context, the Commission also considers that PTS's approach of designating all operators active in SDU markets with more than 5,000 connections as having SMP does not

sufficiently analyse the presence and impact of alternative retail operators, and other possible differentiating factors between local markets or the relevant market data.

Consequently, the Commission considers that PTS has not sufficiently demonstrated that the competitive conditions in all the identified 63 SDU markets with more than 5,000 connections justify a uniform conclusion regarding the SMP position of the relevant network owners.

Views of PTS

In the response to the EC's RFI from 6 October, 2026, PTS explained that the proposed regulation in the markets for local access for SDUs in Sweden connecting more than 5,000 SDUs is based on the following structural characteristics:

- Each network owner has a monopoly in its own network. There is, in principle, no parallel infrastructure, nor is any such (parallel) infrastructure likely to be deployed.
- Wholesale local access to fibre connecting SDUs is generally not provided on a commercial basis.
- As a rule, network owners only provide access to their local networks at the so-called communications operator (CO) level. This access product leaves very limited scope for the accessing ISP to choose transmission speeds, differentiate its products or exercise control over its services. Indeed, the access product resembles a resale service.
- While competition between ISPs on the CO platforms does exist, and in some cases is intense, that competition has only a limited impact on the outcome for end users, both in terms of service quality and prices.

According to PTS, the purpose of the proposed regulation is to increase competition on the wholesale level by establishing an alternative wholesale product, namely local access (in form of physical unbundling or VULA). PTS considers that this would enable competition also between communications operators and operators purchasing dark fibre access. In PTS's assessment, the fact that network owners may not historically have charged prices that are manifestly high does not mean that they should be regarded as lacking significant market power (e.g. when they hold a 100% market share and control a bottleneck facility). PTS underlines that, in the absence of effective competitive constraints on pricing, they may choose, and be able, to charge higher prices in the future. They may also choose to only provide wholesale products that serve their own commercial interests but do not necessarily benefit end users.

Additionally, PTS does not consider the 'prime cost principle' in the Swedish law (Local Government Act) as sufficient to constrain network owners' market power since it does not automatically apply to municipal companies. PTS also underlines that only few municipalities considered it relevant in a survey conducted by PTS (as explained in detail in PTS' response to the RFI from November 3, 2026).

BEREC's Assessment

BEREC observes that the wholesale and retail markets in Sweden, except for the network of the largest operator Telia, have never been regulated. The current market situation on the individual networks is therefore not directly influenced by sector-specific regulatory intervention.

BEREC recalls that according to established case-law, a very high market share held by an undertaking for some time - in excess of 50 % - is in itself, save in exceptional circumstances, evidence of the existence of a dominant position and that the higher the market share and the longer the period of time over which it is held, the more likely it is that it constitutes an important preliminary indication of SMP.[13] BEREC further considers that in principle, SMP regulation of (local) fibre operators may be necessary to ensure the proper functioning of markets for the benefit of end-users.

However, from the information and data available, BEREC agrees with the Commission that the market outcomes appear to vary significantly across different networks. These differences concern price levels and price trends at wholesale and retail level as well as the number of ISPs offering services on a network (and probably the distribution of their retail market shares) which may indicate that there are existing constraints on the behaviour of a network owner. In BEREC's view, these differences appear so important in the Swedish situation that they should be taken into account in course of the 3CT or the SMP assessment, as they may lead to the finding that no *ex ante* regulation is necessary despite a 100% market share of a network at the wholesale level.

As the Commission mentions in its serious doubts letter (p. 10), *ex ante* regulation should only be applied where there is a lack of effective competition at the retail level absent such regulation. If, for example, retail prices in a network which is not subject to *ex ante* regulation are at or close to competitive levels (which might be identified by benchmarking with competitive areas)[14] and/or several ISPs offer services to end users, the retail market might be considered competitive without *ex ante* regulation at the wholesale level.

Indeed, BEREC considers that there seem to be important differences between local markets such that the finding of SMP due to a high market share would be insufficient without providing additional market specific considerations explaining why competitive constraints would be insufficient to deter market behaviour that is detrimental to competition and/or consumers. BEREC notes that apart from Telia, no undertaking has been regulated in the Swedish fibre access market and observes that market outcomes vary considerably between local markets - indicating different levels of constraints on the relevant undertakings. Constraints may arise from different sources, such as a municipality's policy decision, where relevant (though rather unlikely given PTS's explanations) the 'prime cost principle' in the Local Government Act, or indirect constraints by the behaviour of neighbouring networks. PTS raised the point that network owners may price low to avoid future regulation and that this constraint may disappear with a non-SMP finding. In this context, BEREC would like to point to the possibility to initiate a new market analysis if needed.

BEREC also took into account PTS's view that access to networks connecting more than 5,000 SDUs (if available) is currently based on a OSI Layer 3, IP-based bitstream product, which only allows for very limited scope of product- and price-differentiation at retail level. However, BEREC notes that the situation with regard to product differentiation is similar in the MDU-market in Sweden. The MDU owner either procures a CO to provide end users with broadband services, allowing them to choose an ISP from the CO platform (also an OSI Layer 3, IP-based

[13] See Guidelines on market analysis and the assessment of significant market power, SWD (2018)124, page 23

[14] E.g. the city of Malmö, where no SMP was found, or the condition in Telia's network, where ex ante regulation still applies.

bitstream product), or enters into an exclusive agreement with an ISP to provide services to all the households in the building/s.

BEREC is therefore of the view that the first serious doubt of the Commission is justified. BEREC considers that (i) in light of the specific circumstances of this case, the presumption of SMP due to high market shares alone is insufficient and (ii) it would be appropriate for PTS to take into account, alongside the structural elements used already in its market analysis, behavioural indicators and market outcomes in terms of, for example, price levels, price trends or the number of ISPs and their retail market shares. All these indicators are key to ensuring a robust SMP assessment as they can demonstrate whether there are sufficient constraints on a network to prevent it from behaving independently. Also, this may lead to findings that some of the markets need no regulation due to competitive outcomes at the retail level absent ex ante regulation. Subject to the analysis of the second serious doubt, this approach should be applied in principle to all networks irrespective of their size. Ideally, the analysis should also cover very high bandwidths (500 Mbit/s and 1,000 Mbit/s).

b. Serious doubt 2: network owners that connect less than 5,000 SDUs

Concerns of the Commission

The Commission questions the rationale for limiting detailed SMP assessments to network owners exceeding 5,000 connected SDUs. The Commission points out that no competitive analysis has been made regarding SMP designation for operators connecting fewer than 5,000 SDUs. According to the Commission, in order to justify the regulatory approach proposed by PTS, it would have been determinative to establish that the competition problems evident in markets with more than 5,000 connected SDUs are different than the ones in markets below this threshold. The Commission acknowledges for example that competition from neighbouring areas may influence prices, but it considers that PTS has not analysed whether this is the case. In the views expressed by the Commission, the primary issue is whether such a network owner is able to act independently of its wholesale and retail customers.

The Commission considers that operators connecting less than 5,000 SDUs feature varying sizes, some of them having turnovers above the thresholds applicable to micro-enterprises and serving both SDUs and MDUs. Accordingly, the Commission considers that these operators cannot necessarily be regarded as small-scale operators solely on the basis of the number of SDUs connected to their networks.

Views of PTS

PTS argues that in Sweden each network owner who connects SDUs holds a monopoly in its own network. Although PTS finds that the 3CT is met for all networks connecting SDUs, it considers that regulating network owners serving fewer than 5,000 SDUs would be disproportionately costly and burdensome. In other words, the costs and administrative burden associated with access regulation would outweigh the potential benefits for end users.

PTS mentions that these network owners are small municipal companies, with operations conducted exclusively at a local level within a single municipality or parts thereof. PTS points

out that so-called micro-enterprises are exempt from certain regulatory burdens. Micro-enterprises are defined as companies with an annual turnover of less than 2 million euros and fewer than 10 employees.

Among the 123 network owners connecting fewer than 5,000 SDUs (14% of the total SDUs), only twelve exceed the turnover threshold applicable to micro-enterprises, seven of them exceed it only marginally. Of the remaining five operators, only two serve a number of SDUs close to the 5,000 threshold. Three network owners with turnover levels comparable to those of micro-enterprises exceed the 5,000 SDU threshold.

PTS points out that, although smaller networks display broadly the same structural features as larger ones, operators below the threshold have a significantly smaller economic and network footprint and serve fewer end users. Conducting an SMP assessment would therefore be disproportionate because an SMP finding would necessarily entail the imposition of at least one regulatory obligation. In practice, since lighter remedies such as non-discrimination or a reference offer would still require an access obligation, regulated operators would have to develop and maintain a new wholesale access product, together with the related ordering, co-location, switching, support and information systems. These implementation and administrative costs would be similar irrespective of network size, while the potential demand for local access and the resulting benefits for end users would be significantly more limited in smaller networks. On this basis, PTS considers that excluding operators below 5,000 SDUs from the SMP assessment strikes an appropriate balance between the regulatory burden imposed and the expected benefits of intervention.

In summary, PTS considers the threshold of 5,000 connected SDUs to constitute an objective, reasonable and proportionate threshold for assessing absolute size of the network owners and for distinguishing between network owners that should be subject to access regulation and smaller operators for which such regulation would not be proportionate.

BEREC's Assessment

The use of a threshold linked to the size of the undertaking and the scale of its activities is in principle legitimate and proportionate in BEREC's view. A threshold-based approach is compatible with the EECC provided that, it reflects legitimate regulatory objectives and is supported by sound evidential and/or economic justification.

The Commission guidelines on market analysis and the assessment of significant market power identify the absolute and relative size of an undertaking as criteria for assessing whether an undertaking has the capacity to act independently of its competitors, customers, and consumers (i.e. market power)[15]. Thresholds have, for instance, been recently used by Traficom in Finland (case FI/2024/2549[16], markets for local fibre access).

BEREC recognises the need for robust evidence in market analysis and considers that, in the present case, PTS has not sufficiently demonstrated why 5,000 SDUs constitute an appropriate threshold for excluding SMP for such networks. In addition to the network owner's size, its price level should also have been taken into consideration, alongside other behavioural

[15] Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services (2018/C 159/01)
[16] Decision available at: https://circabc.europa.eu/ui/group/2328c58f-1fed-4402-a6cc-0f0237699dc3/library/7c714a77-86cd-4b00-8339-603eddd40972/details

elements when available, as explained already. Also, it would have been useful to establish that the competition problems evident in markets with more than 5,000 SDUs connected are different than the ones in markets below this threshold. For instance, three small network owners with less than 2 million euros turnover are regarded as SMP operators by PTS. One of these network owners has wholesale prices below average. As observed by the Commission, some of the operators connecting less than 5,000 SDUs have turnovers above the threshold applicable to micro-enterprises. There are in fact twelve network owners that exceed the 2 million euros turnover. In this context, BEREC sees that more evidence should have been given for regulating (or not regulating) particular networks.

On the other hand, while BEREC considers that the Commission's serious doubts identify the key relevant issues concerning the evidential basis, economic justification and substantiation of PTS's proposed approach, it takes note that certain aspects of the Commission's reasoning need further qualification. In this respect, BEREC considers that the imposition of ex-ante regulation on small network owners could create a disproportionate regulatory burden since the implementation might be costly and there might be no or low take-up.[17]

BEREC also would like to point out that any network-by-network behavioural evidence and remedy analysis for many local or regional operators must be compatible with the resources of an NRA, and feasible to conduct. The evidentiary requirements associated with the SMP framework should be applied in a manner that is sufficiently rigorous while remaining proportionate and practicable.

In conclusion, BEREC acknowledges that it may be appropriate, based on an adequate evidential basis, to exclude small network owners from regulation in order to avoid a disproportionate regulatory burden for both the network owners and the regulator, if no outweighing benefits for competition can be expected. Nonetheless, BEREC considers that PTS has not sufficiently substantiated the use of the 5,000-SDU threshold as a basis for excluding the 123 network owners from further individual SMP assessment. This does not necessarily mean that all operators below the threshold should be designated as having SMP or become subject to ex ante regulation but that further criteria, in addition to size, are needed to better show the competitive dynamics.

c. Serious doubt 3: Proportionality of obligations

Concerns of the Commission

The Commission’s third serious doubt concerns the proportionality of the remedies proposed by PTS, as they seem to not reflect sufficiently the differences in competitive conditions across the various local markets. Although PTS differentiates remedies to some extent according to the type of operator, notably between wholesale-only and vertically integrated operators, the Commission considers that this differentiation should be also based on the specific competitive conditions prevailing in each local market.

[17] BEREC notes that the Commission has used their veto regarding ČTÚ's case in Czechia, where the regulator had not provided sufficient evidence to justify SMP regulation of small local alternative operators (CZ/2022/2372).

According to the Commission, the evidence shows significant differences in wholesale and retail prices and price trends across networks, which may reflect differences in costs but also different degrees of local service-based competition. Moreover, for municipally owned networks, the Swedish 'prime cost principle' may constrain the operators' ability to charge excessive prices. Such existing elements should therefore be taken into account when determining whether remedies are necessary and, if so, which remedies are appropriate.

Against this background, the Commission specifically questions PTS's proposal to impose a fair and reasonable pricing obligation on all SMP operators. Given the significant differences between local markets, PTS has not sufficiently demonstrated that the same form of price control is necessary and proportionate in every market or that it constitutes the least intrusive means of addressing the competition problems identified, as required by Article 68(2) EECC.

Overall, the Commission considers that PTS should carry out a more market-specific assessment of competitive constraints and existing regulatory safeguards before determining the appropriate remedies, since certain SMP operators may already be sufficiently constrained in their pricing behavior to make some of the proposed obligations disproportionate.

Views of PTS

PTS maintains that broadly similar obligations are justified across the 63 SMP markets because the underlying competition problem is essentially the same. The core remedy is an obligation to provide local physical access or, where physical access is not technically or economically feasible, VULA, accompanied by obligations concerning non-discrimination and fair and reasonable prices.

PTS argues that the regulatory proposal is already differentiated according to the principle of proportionality. Telia, as by far the largest operator and an operator already subject to regulation, faces stricter requirements, including EoI rather than EoO and stronger transparency and implementation obligations. By contrast, EoO applies to the other vertically integrated SMP operators, and VULA is required from others only where physical access is not feasible. PTS underscores the fair and reasonable pricing obligation as the lightest form of price control.

Finally, PTS considers price regulation indispensable to making the access obligation effective. Without the ability to supervise prices, an SMP operator could comply formally with the access obligation while setting the price of the new regulated product at a level that makes access commercially unattractive. The fair and reasonable pricing obligation is therefore intended to prevent the SMP operator from undermining the effectiveness of local access, including by protecting its existing CO-platform product. PTS intends to use a network-specific BU-LRIC model, reflecting each operator's footprint, scale and geographical characteristics, as a benchmark when assessing fair and reasonable prices.

Regarding municipalities, PTS points out that the application of the Swedish 'prime cost principle' cannot, in itself, be regarded as reliable competitive constraint to operator's capacity to fix excessive wholesale prices considering that its application to municipal broadband operators may be uncertain.

In essence, PTS's position is that differences in ownership, current price levels or local circumstances do not alter the common structural competition problem: control of a non-replicable local fibre bottleneck without effective local wholesale access. Proportionality is

addressed primarily by excluding networks below 5,000 SDUs and by calibrating individual remedies on SMP operators above the threshold.

BEREC's Assessment

The Commission's concerns regarding the proportionality and adequate justification of the remedies proposed by PTS are closely linked to its doubts concerning the SMP assessment. In particular, PTS has not sufficiently demonstrated that competitive conditions across the local markets are sufficiently homogeneous to support both the SMP findings and the application of a broadly similar set of remedies to all designated operators.

PTS explains that its approach is primarily based on structural characteristics common to the local markets concerned. These include the network owner's control over the local fibre infrastructure, the lack of sufficiently effective alternative local access products, and the limited competitive constraint exerted by alternative fixed or mobile infrastructures. In PTS's view, retail competition between service providers operating on CO platforms does not remove the underlying bottleneck at local wholesale level, as these platforms generally offer standardized active wholesale products with limited scope for service differentiation. PTS therefore considers the competition problem to be essentially structural and broadly common to the markets in which SMP has been identified.

BEREC acknowledges the relevance of these structural factors as the primary obstacle to competition and takes note of PTS's argument that differences in observed retail and wholesale prices do not necessarily reflect different competitive conditions. BEREC also notes PTS's position that, in the case of municipally owned operators, the Swedish 'prime cost principle' cannot in itself be regarded as a sufficiently reliable constraint on the ability to charge excessive wholesale prices, given the uncertainty on its application to municipal broadband operators.

However, as already reflected in its assessment of the first serious doubt, BEREC considers that in this case the existence of common structural features does not remove the need to assess whether individual operators face materially different competitive constraints. Relevant factors of such an analysis may include differences in wholesale and retail prices and price trends, the presence and effectiveness of service-based competition, and specific constraints applicable to municipally owned networks. While none of these factors necessarily excludes SMP when considered in isolation, their cumulative effect should be adequately assessed before concluding that competitive conditions are substantially equivalent across the local markets concerned.

This assessment has direct implications for the design of remedies. Where a more comprehensive analysis identifies material differences in competitive conditions between local markets, or between sufficiently homogeneous groups of markets, those differences should be reflected, in accordance with the principle of proportionality, in the nature and intensity of the regulatory obligations imposed.

BEREC acknowledges that PTS has already introduced some differentiation in its proposed regulatory framework, notably according to whether operators are wholesale-only or vertically integrated, as well as their size and previous regulatory experience, in particular by distinguishing Telia from the other operators.

More generally, while BEREC considers the remedies proposed for Telia appropriate and proportionate, the competitive conditions faced by the other operators warrant further consideration. In particular, the fact that several smaller operators appear to offer more favourable conditions than larger operators may be relevant when assessing the necessity and proportionality of the obligations imposed on them. Moreover, the fair and reasonable pricing obligation should be carefully calibrated to the competitive conditions identified in each market and may not be justified where existing constraints are sufficient to limit the SMP operator's ability or incentive to charge excessive prices.

Particular consideration should also be given to network owners with fewer than 5,000 connections (in that respect see BEREC's assessment of the second serious doubt), as - if SMP is found - identifying an appropriate access obligation may be especially challenging where the introduction of a new wholesale product entails significant implementation costs. Therefore, in case such operators are identified with SMP, the design of the remedies should take due account of the need to minimise disproportionate implementation burdens.

In light of the above, BEREC shares the Commission's serious doubt concerning the proposed remedies, in particular insofar as their justification relies on an SMP assessment that does not sufficiently establish the degree of homogeneity of competitive conditions across the local markets concerned. The assessment of remedies should therefore follow from a more comprehensive SMP analysis. Where no SMP is established, no remedies should be imposed. Where SMP is identified but competitive conditions differ materially across markets or groups of markets, those differences should be appropriately reflected in the regulatory obligations imposed.

PTS should therefore further substantiate the necessity and proportionality of the proposed remedies on a market-specific basis, or by reference to sufficiently homogeneous groups of markets. This would ensure that regulatory intervention is tailored to the competition problems actually identified and does not go beyond what is necessary to address them.

5. Conclusions

On the basis of the economic analysis set out in section 4 above, BEREC considers that the Commission's serious doubts regarding the draft decision of the Swedish Regulatory Authority on SMP analysis and remedies - as expressed in the Commission's letter to PTS of 10 October 2026 are justified.

BEREC is of the opinion that PTS has not taken into account all relevant indicators in course of the SMP assessment of the 63 SDU markets with more than 5,000 connections. Considering further indicators may in some cases lead to the conclusion that constraints on the behaviour of the network owner exist and that retail market outcomes are competitive without wholesale *ex ante* regulation. BEREC is also of the opinion that PTS did not demonstrate sufficiently that no *ex ante* regulation is warranted for all networks with less than 5,000 connections. Considering this, BEREC also shares the Commission's serious doubts concerning the proposed remedies, in particular insofar as their justification relies on an SMP assessment that does not sufficiently establish the degree of homogeneity of competitive conditions across the local markets concerned.

In the light of the Commission's serious doubts and the argumentation above, BEREC considers that PTS should make a more comprehensive analysis taking into account all

relevant competitive constraints as well as behavioural indicators and market outcomes for all relevant markets serving SDUs. The assessment of remedies should follow the results of this analysis. Where SMP is identified but competitive conditions differ materially across markets or groups of markets, those differences should be appropriately reflected in the regulatory obligations imposed.

BEREC considers that it may be appropriate, if supported by an adequate evidential basis, to exclude small network owners from regulation in order to avoid a disproportionate regulatory burden for both the network owner and the regulator if no outweighing benefits for competition can be expected. This should be established on the basis of an adequate assessment of competitive conditions. BEREC also notes that it is important that the burden of proof is established such that it can be achieved for such a high number of markets as in Sweden, with the given resources of the NRA. Finally, in case that very small networks are identified as holding SMP, the design of the remedies should take due account of the need to minimise the implementation burdens.