

Commission Consultation on Revisions to GBER

Submission by Ericsson

1. Executive Summary

1.1 Provision of gigabit capable broadband is a key enabler of both the economic and social objectives of the Guidelines which inform the present review, and of “Internet of Things” (IoT) connectivity which is in turn a key enabler of achievement of the objectives of the Guidelines. 5G Fixed Wireless Access (FWA) is a cost-effective means to deliver gigabit-capable broadband where direct fibre connection is not economically feasible. In line with the principle of technology neutrality, 5G FWA should be seen as a valid alternative to fixed line fibre connection when assessing projects for GBER. GBER as currently drafted (Article 52 and 52a) do not allow this, but restrict GBER for 5G if a 4G network is present. 5G represents a step change from 4G, which is not a gigabit-capable technology and the latency of which would not allow for certain IoT applications. GBER should therefore be adjusted to allow 5G FWA even where a 4G network is present: we propose a limited amendment to Article 52a.

2. Proposal to amend Article 52a of GBER

2.1 This submission is made in response to the Commission’s consultation on a targeted review of the General Block Exemption Regulation (State aid): revised rules for State aid promoting the green and digital transition. Ericsson welcomes this targeted review and the support which the Commission seeks to bring to very significant policy objectives for the EU.

2.2 The Commission’s consultation document sets out the objectives for the targeted review, which include supporting the European Green Deal and Industrial and Digital Strategies. Specifically, the review takes place in light of the revisions the Commission already has in train to a number of State Aids Guidelines:

- Energy and Environmental Guidelines;
- Regional Aid Guidelines;
- Research, Development and Innovation Framework; and
- Risk Finance Guidelines

2.3 The targeted review provides proposed amendments to a number of Articles of GBER, which do not include Section 10 – Aid for Broadband Infrastructures, and specifically Article 52a – Aid for 4G and 5G mobile networks, which was revised in Commission Regulation (EU) 2021/1237 of 23 July 2021. We believe however that – despite the recent review and revision to Article 52a – the broader linkages to the areas of policy which are the subject of the current review make it appropriate to look again at one specific aspect of the treatment of 4G and 5G mobile networks in GBER.

3. Relevance of Article 52a to the present targeted review

3.1 Since the Commission Communication in 2016 entitled “Connectivity for a Competitive Digital Single Market - Towards a European Gigabit Society”, the Commission’s Digital Strategy has rightly emphasised the importance of gigabit capable technologies as enablers of both the consumer communications market and of machine-to-machine connectivity – the “Internet of Things” (IoT). The IoT market itself is an enabler of a very broad

range of technologies and innovations which are at the heart of the European Green Deal and Industrial and Digital Strategies. It follows that investments in communications infrastructure could serve the objectives of connectivity, or could serve the objectives covered by the State Aids Guidelines which inform the present review: investment in gigabit-capable technology could form a component of a wide range of projects falling within those Guidelines.

3.2 The connectivity provided by communications infrastructure is for example an essential foundation element for smart energy management, smart transport systems, high efficiency robotized production units, advanced logistics, and many aspects of innovation. Ensuring that such activities can be placed in areas other than those reached by normal commercial investment in communications technology will be an important element in ensuring that all regions can benefit from digital and green economic opportunities. The provision of high speed broadband at affordable cost in less advantaged areas is a key part of the success of the EU's regional policy.

3.3 It is therefore important for the purposes of this review to ensure that Section 10 of GBER fully supports the objectives covered by the Guidelines which inform this review. We believe that Section 10 of GBER – and specifically Article 52a – could be improved in one limited respect in order better to support the objectives of the Guidelines.

4. GBER's treatment of 4G and 5G

4.1 Through Article 52a, GBER effectively treats 5G as an incremental development from 4G, not a step change, which the Broadband State Aids Guidelines define as significant new capabilities in broadband service availability and capacity, speeds and competition. Thus, Article 52a.3 provides that GBER cannot be used to support a 5G deployment where a 4G network is present. However, in certain important respects relevant to the broadband market and IoT applications, 5G has technical attributes which are different to 4G and enable Fixed Wireless Access (FWA) to gigabit-capable broadband and through that to IoT capabilities. Taken together, these would allow the objectives of the Guidelines which inform this review to be met in a way which would not be possible through 4G and earlier technologies. For these purposes at least – which are covered by GBER Article 52a.11 – 5G should be seen as a step change from 4G.

4.2 GBER Article 52a.11 separates reliable provision of 30 Mbps download speeds from reliable provision of 100 Mbps download speeds when providing for projects potentially qualifying for block exemption, but treats 4G and 5G equally in providing them. Even considering just the issue of download speed, in practice 4G might in good circumstances reliably provide 30 Mbps download speeds but is unlikely to reach a sustained reliable service at 100 Mbps. 5G would be necessary for reliable speeds of 100 Mbps, and is a gigabit-capable technology unlike 4G.

4.3 The differences are not confined to download speeds. 5G's use of Massive MIMO (multiple input, multiple output) brings significant improvements to stability and coverage within the cell site, and the significantly lower latency achieved by 5G will permit much more responsive applications as needed for advanced robotics, autonomous transport, drones, logistics etc, none of which could be supported by a 4G based data connection.

4.4 Both from a technical standpoint, and in terms of the potential for domestic and business broadband, a 5G FWA network would therefore constitute a step change from a 4G network. In terms of performance characteristics, 5G FWA can provide a very cost-effective

way to bring gigabit network capability to areas and premises which it is more costly to serve by a fibre to the premises (FTTP) gigabit-capable connection. Early deployment of 5G FWA into underserved areas will bring gigabit connectivity, both providing immediate benefits to domestic and business customers, but also building the gigabit connectivity market and so boost the business case for eventual FTTP installation.

4.5 This submission addresses only the question whether 5G FWA constitutes a step change over 4G FWA – it does not address the broader question whether 5G constitutes a step change over 4G overall, which is better dealt with under the new Broadband State Aid Guidelines – rather than in GBER – in line with the Commission’s proposed new version of the Broadband State Aid Guidelines.

5. Proposed amendments to GBER Article 52a

5.1 We are conscious that Article 52a has recently been revised and would therefore propose a very limited further amendment (below, proposed additions to text in red) which will leave the structure of Article 52a intact but allow for the use of GBER to support 5G FWA including when a 4G network is already present. All other conditions would remain as in the current text of Article 52a. The proposed amendment is annexed to this submission.

5.2 If Article 52a is so amended, it will open the way to using GBER to promote the rapid provision of cost-effective gigabit-capable broadband, which will underpin the objectives of all of the Guidelines which inform this targeted review.

Article 52a Aid for 4G and 5G mobile networks

1. Aid for 4G and 5G mobile network deployment shall be compatible with the internal market pursuant to Article 107(3) of the Treaty and shall be exempted from the notification requirement of Article 108(3) of the Treaty, provided that the conditions laid down in this Article and in Chapter I are fulfilled. 29.7.2021 EN Official Journal of the European Union L 270/59

2. The eligible costs shall be all costs for the construction, management and operation of a passive mobile network. The maximum aid amount for a project shall be established on the basis of a competitive selection process as set out in paragraph 7, point (a). Where an investment is carried out in accordance with paragraph 7, point (b), without a competitive selection process, the aid amount shall not exceed the difference between the eligible costs and the operating profit of the investment. The operating profit shall be deducted from the eligible costs ex ante on the basis of reasonable projections and verified ex post through a claw-back mechanism.

3. **Except as provided in paragraph 11,** 5G investment shall be located in areas where mobile networks have not been deployed or where only mobile networks able to support mobile services of up to 3G are available and where there are no 4G and no 5G mobile networks present or credibly planned to be deployed within three years from the moment of publication of the planned aid measure or within the same time horizon as the deployment of the subsidised network, which shall not be shorter than two years. This shall be verified by mapping and public consultation in accordance with paragraph 4. 4G investment shall be located in areas where mobile networks have not been deployed or where only mobile networks able to support mobile services of up to 2G are available and where there are no

3G, 4G or 5G mobile networks present or credibly planned to be deployed within three years from the moment of publication of the planned aid measure or within the same time horizon as the deployment of the subsidised network, which shall not be shorter than two years. This shall be verified by mapping and public consultation in accordance with paragraph 4.

4. The mapping and public consultation referred to in paragraph 3 shall meet all the following requirements:

(a) the mapping shall clearly identify the geographic target areas envisaged to be covered under the public intervention and shall take into account all present mobile networks, depending on the type of investment. Mapping shall be performed on the basis of maximum 100 x100 metre grids. Mapping shall always be verified through a public consultation;

(b) the public consultation shall be carried out by the competent public authority through publication of the main characteristics of the planned measure and the list of geographic target areas identified in the mapping exercise in accordance with point (a) on an appropriate website (including at national level). The public consultation shall invite interested parties to comment on the measure and to submit substantiated information in accordance with point (a) regarding their mobile networks in the target area that are present or credibly planned to be deployed within three years from the moment of publication of the planned aid measure. If the granting authority takes a shorter or longer time horizon than three years for the deployment of the subsidised infrastructure, the same time horizon, which cannot be shorter than two years, must also be used to assess whether networks referred to in the previous sentence are credibly planned to be deployed. The public consultation shall last at least 30 days.

5. The aided infrastructure shall not be taken into account to meet the coverage obligations of the mobile networks operators that arise out of conditions attached to rights of use of 4G and 5G spectrum.

6. The supported project shall bring a significant improvement (step change) compared to mobile networks present or credibly planned to be deployed within three years from the moment of publication of the planned aid measure or within the same time horizon as the deployment of the subsidised network, which cannot be shorter than two years, in accordance with paragraph 4. A step change takes place if, as a result of the subsidised intervention, a significant new investment in the mobile network is undertaken and the subsidised network brings significant new capabilities to the market in terms of mobile service availability, capacity, speeds and competition compared to the present or credibly planned networks. The project must include substantial investments in passive infrastructure going beyond marginal investments related merely to the upgrade of the active elements of the network.

7. The aid shall be granted as follows:

(a) the aid shall be allocated to providers of electronic communications networks and services on the basis of an open, transparent and non-discriminatory competitive selection process in line with the principles of public procurement rules and respecting the principle of technology neutrality, without prejudice to the applicable public procurement rules, based on the most economically advantageous offer. For the purposes of the L 270/60 EN

Official Journal of the European Union 29.7.2021 competitive selection procedure, the aid granting authority shall establish in advance objective, transparent and non-discriminatory qualitative award criteria that have to be weighed against the requested aid amount. At similar quality conditions the bidder with the lowest amount of aid requested shall be awarded the aid;

(b) when the aid is granted without a competitive selection procedure to a public authority to deploy and manage, directly or through an in-house entity, a passive mobile network, the public authority or the in-house entity, as the case may be, shall provide only wholesale services using the subsidised network. The public authority shall ensure accounting separation between the funds used for the operation of the network and other funds at the disposal of the public authority. Any concession or other entrustment to a third party to build or operate the network shall be allocated through an open, transparent and non-discriminatory competitive selection process, in line with the principles of public procurement rules and respecting the principle of technology neutrality without prejudice to the applicable public procurement rules, based on the most economically advantageous offer.

8. The operation of the subsidised network shall offer the widest possible active and passive wholesale access, in accordance with Article 2, point (139), under fair and non-discriminatory conditions. Active wholesale access shall be granted for at least seven years and wholesale access to the physical infrastructure including ducts or poles shall not be limited in time. The same access conditions shall apply on the entirety of the subsidised network, including on the parts of such network where existing infrastructures have been used. The access obligations shall be enforced irrespective of any change in ownership, management or operation of the subsidised network. In the case of aid for the construction of ducts, the ducts shall be large enough to cater at least for all existing mobile networks operators.

9. The wholesale access price shall be based on one of the following benchmarks: (i) the average published wholesale prices that prevail in other comparable, more competitive areas of the Member State or the Union; or (ii) in the absence of such published prices, the regulated prices already set or approved by the national regulatory authority for the markets and services concerned; or (iii) in the absence of such published or regulated prices, the pricing shall comply with the cost orientation and the methodology mandated in accordance with the sectorial regulatory framework. Without prejudice to the competences of the national regulatory authority under the regulatory framework, the national regulatory authority shall be consulted on the terms and conditions for access, including on prices, and on disputes related to the application of this Article.

10. Member States shall put in place a monitoring and claw-back mechanism if the amount of aid granted to the project exceeds EUR 10 million.

11. The use of the publicly funded 4G or the 5G network to provide fixed wireless access services shall only be allowed as follows:

(a) in areas where there is no network able to reliably provide speeds of at least 30 Mbps download present or credibly planned to be deployed within three years from the moment of publication of the planned aid measure or within the same time horizon as the deployment of the subsidised network, which cannot be shorter than two years, if the

following cumulative conditions are met: (i) the mapping and public consultation exercise also takes into account the fixed broadband networks present or credibly planned determined according to Article 52(4); (ii) the supported 4G or 5G fixed wireless access solution is able to reliably provide speeds of at least 30 Mbps download and at least a doubling of download and upload speed compared to the fixed **or mobile** networks present or credibly planned in those areas;

(b) in areas where there is no network able to reliably provide speeds of at least 100 Mbps download present or credibly planned to be deployed within three years from the moment of publication of the planned aid measure or within the same time horizon as the deployment of the subsidised network, which cannot be shorter than two years, if the following cumulative conditions are met: (i) the mapping and public consultation exercise takes also into account the fixed broadband networks present or credibly planned determined according to Article 52(4); (ii) the supported 4G or 5G fixed wireless access solution is able to reliably provide speeds of at least 300 Mbps download and 100 Mbps upload and at least a doubling of download and upload speed compared to the fixed **or mobile** networks present or credibly planned in those areas.