



ecta RESPONSE

**TO THE PUBLIC CONSULTATION BY BEREC
ON THE**

**DRAFT REPORT ON SATELLITE
CONNECTIVITY FOR UNIVERSAL SERVICE**

BoR (22) 83

15 August 2022

Introduction

1. **ecta**, the **European Competitive Telecommunications Association**,¹ welcomes the opportunity to comment on BEREC's Draft Report on Satellite Connectivity for Universal Service - BoR (22) 83 (hereafter 'Draft BEREC Report').
2. **ecta** represents those alternative operators who, relying on the pro-competitive EU legal framework that has created a free market for electronic communications, have helped overcome national monopolies to give EU citizens, businesses and public administrations quality and choice at affordable prices. **ecta** represents at large those operators who are driving the development of an accessible Gigabit society, who represent significant investments in fixed, mobile and fixed wireless access networks that qualify as Very High Capacity Networks and who demonstrate unique innovation capabilities.
3. **ecta** considers that satellite communications may be suited to cover the 2-3% of EU households located in very remote areas, where the costs of terrestrial networks (including fixed, fixed-wireless access, and mobile) cannot be recovered, as a stop-gap measure. Commercial initiatives should always prevail over considering Universal Service funding.
4. Below, **ecta** provides its brief remarks on the Draft BEREC Report, expressing **agreement that the regulatory issues raised in the Draft BEREC Report have a national dimension, which supports a case-by-case approach to satellite communications solutions for universal service**. **ecta** also expresses a series of punctual comments on the Draft BEREC Report.
5. **ecta** wishes to add important dimensions - **risks of competitive distortion and crowding-out private investment** in terrestrial networks (fixed and wireless), relating to Universal Service, state aid, national security and sovereignty, which need to be addressed by appropriate regulation. In particular, **where private investment in suitable terrestrial networks has already occurred, or where terrestrial networks have been granted state aid, or demand-side stimulation measures (such as vouchers) are adopted, it would not be appropriate to 'overlay' this with satellite-based Universal Service**.

1. Comments on the contents of the Draft BEREC Report

Extent of current use of satellite communications, and satellite-based Universal Service

6. Satellite is not a widely used technology for the delivery of mainstream electronic communications services for individual citizens in the EU. As BEREC's Draft Report shows, its use for the delivery of Universal Service is currently limited in practice only to the provision of a voice communications service in Greece (*Sections 2.1.3.2 and 2.1.2*).

¹ <https://www.ectaportal.com/about-ecta>

Services studied (with regard to scope of Universal Service)

7. BEREC states that: *“The main applications studied for universal services include internet access, video-streaming, home office, VPN connections or cloud services with authentication, remote desktop and video conferencing” (Section 2.1.4).*
8. Whilst **ecta** does not dispute that some of these are widely used applications, although definitely not all, it must be noted that this **does not appear to correspond to the list contained in Annex V of the EECC**. The Draft BEREC Report does not explain why there is a divergence from the EECC.

Capabilities and ‘suitability’ of satellite communications systems (relevance to Universal Service)

9. BEREC’s Draft Report indicates, correctly, that the capabilities and broadband transmission capacity of various existing and planned satellite systems are increasing (*Sections 2.2.1, 2.2.2 and 2.2.3*), which may, in turn, increase their potential relevance going forward, in particular to provide services to limited numbers of users in very remote areas (*BEREC’s reporting on a study conducted for the German regulatory authority BNetzA, referred to in Section 2.2.2.*)
10. **ecta** wishes to observe, especially with reference to the capabilities of systems that are coming into operation imminently (the *“capacity in the sky which can be used for universal service provisioning”*), that **BEREC may be understating the capabilities of geostationary systems (Section 2.1.1) and may be overstating the capabilities of non-geostationary systems (Section 2.1.2).** **ecta** addresses both below.
11. BEREC appears to treat geostationary systems with scepticism, notably suggesting that: *“[...] services might suffer negatively from high round-trip-delay” (Section 2.1.6)*. New generation geostationary satellite systems have considerable potential to serve users in very remote areas, which should not be underestimated. Performance is improving, and, as a matter of fact, several European (fixed and mobile) telecommunications operators have already concluded private commercial agreements with operators of such systems, precisely with a view to serving users in remote areas that cannot be connected to suitable terrestrial (fixed and wireless) networks for the foreseeable future
12. As regards non-geostationary (especially low-earth orbit) systems (e.g. Starlink and OneWeb, and in the future potentially Kuiper and the proposed European space-based connectivity initiative), it is assumed that these will provide greatly improved capacity and greatly improved latency. BEREC goes as far as to state that: *“[...] latency is similar to terrestrial networks”* and *“those communications are one-to-one comparable with terrestrial networks” (Section 2.1.6)*. BEREC also reports (*Section 3.1.8*) that (presumably the Spanish CNMC stated that): *“If new commercial satellite projects could provide internet access services at the competitive price level, they could establish solid competition to existing technologies, to a minor degree in urban and to a larger degree in rural areas”*. **ecta** wishes to comment in this regard that:

- a) Terrestrial networks clearly have, and will continue to have, far better performance (ability to carry large data volumes, downstream and upstream bandwidth, latency, etc.) than any satellite system. Among the key features of FttH, FWA and 5G is precisely the ability to provide far greater bandwidth and considerably lower (potentially single digit) latency.
- b) No satellite system is likely to meet the objective of availability of 1 Gbit/s to all households by 2030 foreseen in the EU's Digital Decade Policy Programme². Also, as Member States' legislation/regulation evolves, satellite systems may not be able to reliably meet the minimum speed requirements for the purposes of adequate broadband internet access service in the context of Universal Service. For instance, in Spain, the law transposing the EECC³ already foresees 100 Mbit/s to 100% of the population in 2023. The minimum Universal Service speed is likely to evolve towards higher speeds in the future in various Member States.
- c) The figures reported by BEREC on monthly data volumes consumed by fixed broadband users (*Section 2.1.5*) are extremely conservative (59.5 GB/month in Germany, forecasted to evolve to 86.5 GB/month by 2025). In France, the number for Q1 2022 is 168 Gb/month⁴. In Italy, the number for Q1 2022 is 222 Gb/month (extrapolated from 7.4 Gb/day, multiplied by 30 days)⁵. The final BEREC Report would benefit from a broader assessment of current and expected monthly data volumes.
13. The BEREC Draft Report also discusses the 'suitability' of internet access via satellite (*Section 3.1.4, as part of the NRA survey*). ecta notes that this section reveals the differences in the decisions taken in EU Member States concerning 'adequate broadband internet access service' (or previous national decisions), rather than discussing satellite systems' actual capabilities. For the sake of completeness of the analysis, it would be preferable for BEREC to separate-out the national legislation/regulation from the satellite system capabilities.
14. In light of the considerations outlined above, **ecta invites BEREC to:**
- a) **Adopt a technology neutral approach, reflect the services listed in Annex V EECC, and include a general endorsement of satellite technology solutions as relevant for Universal Service in very remote areas, where at least in the short term, the deployment of terrestrial fixed and wireless connectivity technologies would not be feasible.**
- b) **Delete the statement on one-to-one comparability of certain satellite systems with terrestrial networks**, also because this could have **unintended consequences**, for

² https://ec.europa.eu/commission/presscorner/detail/en/ip_22_4503

³ Ley 11/2022, de 28 de junio, General de Telecomunicaciones. BOE Núm 155, pág 140: <https://www.boe.es/boe/dias/2022/06/29/pdfs/BOE-A-2022-10757.pdf>

⁴ Page 10 of ARCEP's Q1 2022 observatory: https://www.arcep.fr/fileadmin/reprise/observatoire/1-2022/obs-marches-T1-2022_juil2022.pdf

⁵ Page 4 of AGCOM Q1 2022 observatory: <https://www.agcom.it/documents/10179/27289736/Allegato+15-7-2022/638080c9-de74-4166-b674-f1ef7c2d9cae?version=1.1>

instance prejudging NRA market analyses i.e. weaken their legal certainty.

- c) **Include in the final Report, that Universal Service funding can only be envisaged where it has been verified that no private operator is providing or willing to provide terrestrial (fixed or wireless) connectivity services in the short term meeting the specifications of Annex V of the EECC, as transposed in the national law or regulations of the Member State concerned, aiming at closing the digital divide.**

Disaster relief considerations

15. Satellite services have already proven their relevance as an immediate fall-back and on an interim basis for civil emergency services, public security services, mobile backhaul, etc. in case of disasters affecting both fixed and wireless networks (e.g. floods, forest fires, earthquakes, etc.). This is to some extent reflected in the Draft BEREC Report (*Section 2.1.4.1*).
16. However, **ecta** wishes to make clear that satellite services are not a good solution for the general population in disaster situations, notably because **electricity is needed** to power the customer-premises equipment, and active antennas required by low-earth orbit systems, etc. **ecta asks BEREC to clarify in the final Report that satellite communications solutions are useful for reserve/standby purposes for public authorities, but not as an alternative to terrestrial fixed and wireless networks for the general population.**

2. Comments on the regulatory considerations in the Draft BEREC Report

17. **ecta** has taken good note of *Section 2.3* of the Draft BEREC Report, entitled: “*Some regulatory considerations for Satcom based universal services*”.
18. **ecta is in full agreement** where: “*BEREC observes that there is a large national dimension to each of the regulatory issues identified, which supports a case-by-case approach to Satcom solutions for universal service*”.
19. Among the regulatory issues listed by the Draft BEREC Report are spectrum-related matters, legal interception requirements based on national law, and questions relating to authorization and enforcement possibilities in case of non-European satellite network operators.
20. **ecta agrees that these points are important, and are a matter for national authorities, and, ecta adds that national security requirements, and (digital) sovereignty requirements, may not evidently be applicable to non-European satellite providers. Clearly, compliance with such requirements must be a precondition to satellite operators being selected as a Universal Service provider (as well as their selection in the context of disaster relief preparations). It cannot be the case that EU operators face strict cybersecurity obligations, and may be required to remove equipment, whilst satellite communications would not be subject to such requirements.**

3. Further comments – preventing competitive distortions

No USO funding for satellite where terrestrial (fixed and wireless) networks deliver services

21. **ecta** members build and operate fixed, fixed-wireless access (FWA) and mobile networks, are heavily engaged in the expansion of Very High Capacity Networks (VHCN), including in less dense and remote areas, provide services over their own and/or third party networks, and drive demand and take-up of such networks, thanks to competitive and innovative offers made available to customers.
22. In several EU Member States, **ecta** members are required to contribute financially to the provision of Universal Service, typically with the incumbent telecommunications operator being selected by the Government or NRA as the Universal Service Provider and being the beneficiary of the funding. This has been, and remains, a source of deep frustrations, because competitive operators consider that the amounts demanded by the Universal Service Providers are poorly motivated, excessive, and are used to distort competition to the benefit of one operator and to the detriment of competitors. There is a real concern that with the EECC transposition in EU Member States, and the definition of ‘adequate broadband internet access service’ in some Member States, the amounts to be paid by challenger operators could increase.
23. To avoid repeating errors made in the past in the context of Universal Service, or further exacerbating problems, **Universal Service funding can be envisaged only where it has been verified by the NRA that no private operator is delivering or willing to provide terrestrial (fixed or wireless) connectivity services in the short term** meeting the specifications of Annex V of the EECC, as transposed in the national law or regulations of the Member State concerned. **Not doing so would lead to funding a competitor to existing networks/services, undermining the business model and investments of commercial operators, and would lead to a double distortion in case Universal Service is subject to industry funding.**
24. Similarly, **where terrestrial networks have been granted state aid, or demand-side stimulation measures such as vouchers are adopted, it would not be appropriate to ‘overlay’ this with satellite-based Universal Service.**
25. For the avoidance of doubt, **ecta** emphasizes that:
 - a) Private commercial agreements between terrestrial operators and satellite operators to deliver services to remote areas can have a positive impact, as long as competition is not distorted.
 - b) Insofar as demand-side measures such as voucher schemes are defined in a technologically neutral way, these could conceivably be taken up by users to procure satellite-based services (but satellite-based services do need to meet the set minimum specifications).
 - c) None of the statements made in this response preclude that a satellite operator could conceivably be designated as a Universal Service provider if it meets the requirements and necessary safeguards.

No abuse of USO funding to expand services outside the Universal Service area/scope

26. Even if the geographic scope of satellite-based Universal Service is limited as outlined above, and also to avoid repeating errors made in the past, safeguards are needed (e.g. accounting separation and auditing) to **ensure that Universal Service funding is not abused to expand commercial services outside the geographic area concerned by USO funding.**

No use of USO funding from outside the EU to expand services into the EU

27. Non-EU satellite operators may receive Universal Service funding in non-EU countries (as described in *Section 2.1.3.1* of the BEREC Draft Report). It needs to be ensured that this is not used to distort markets within the EU, e.g. to win Universal Service funding in the EU by being able to make a better offer than EU providers, or to provide commercial services in competition with EU terrestrial (fixed and/or wireless) operators.

Attention needed to state aid, and potential related distortions to competition

28. Both EU and non-EU satellite operators may be beneficiaries of state aid, from EU and/or national sources, and indeed from non-EU sources. This state aid may be aimed at the delivery of government communications, as is the case today for some of the private satellite companies mentioned in the Draft BEREC Report, and as is the case today in the form of partial state-ownership of such companies.
29. The Draft BEREC Report rightly flags the concern of the NRA of The Netherlands (*Section 3.1.6*) to the effect that: *“the availability of (artificial) cheap Satcom offers may slow down the extension of coverage of fixed and mobile networks in rural areas”*.
30. The proposed European space-based connectivity initiative foresees a focus on secure government communications, i.e. it is not intended primarily to deliver Universal Service, or to compete with telecommunications operators. However, it is explicitly foreseen in the EC legislative proposal that the contractor selected will also be able to provide commercial broadband services. In fact, Article 7(4) of the draft Regulation⁶ requires the European Commission to adopt safeguards as part of the commercial arrangement and suggests their content in rather abstract terms. However, the draft Regulation neither contains which specific safeguards must be included in the agreement nor that there be any verification that they are in effective operation before the contractor offers broadband services. There may be a concern that, even with these safeguards in place, the contractor could sell commercial broadband services at prices that are below cost, or only represent incremental cost or some limited margin over and above the cost incurred to supply secure government communications, where the contractor is being funded by governments. This entails severe risks of distorting broadband markets. Such commercialization could occur not only in remote areas, but anywhere, and hence there may be a business case for the contractor to target broadband customers in denser areas as well to gain revenues quickly.

⁶ https://ec.europa.eu/info/sites/default/files/proposal_regulation_union_secure_connectivity_programme.pdf

4. Conclusion

31. **ecta** endorses BEREC's proposed position that the regulatory issues listed in the Draft BEREC Report have a national dimension, which supports a case-by-case approach to satellite communications solutions for universal service.
32. **ecta** hopes to have contributed usefully to potential improvements to the BEREC draft Report, both punctually on various subjects addressed, and with regard to the further issues raised, which are issues to be addressed by regulation.
33. **ecta** trusts that BEREC and NRAs will recognize the serious risks of distortion of competition associated with both Universal Service funding and with state aid to both EU and non-EU satellite companies, as well as the points made on national security requirements and (digital) sovereignty requirements. **ecta** recommends that BEREC includes additional sections in the final BEREC Report, reflecting these concerns.

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In case of questions or requests for clarification regarding this contribution, BEREC and NRAs are welcome to contact Mr Luc Hindryckx, Director General of **ecta** or Ms Pinar Serdengecti, **ecta** Regulation and Competition Affairs Director