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BEREC
Body of European Regulators for Electronic Communications

BoR (25) 170

BEREC Report on the outcome of the Public consultation on the Draft BEREC Report on submarine cables connectivity in Europe

04 December, 2025

Contents

1. Introduction

This report summarises the responses provided by the stakeholders during BEREC's public consultation on the Draft BEREC Report on the submarine cables connectivity in Europe (BoR (25) 85), further "the Draft Report", as well as BEREC's views on the issues raised by the respondents. The Draft report was opened to public consultation from 11 June 2025 until 11 July 2025.

Seven respondents contributed to the public consultation, namely:

1. Amazon Web Services EMEA SARL (AWS)
2. Bundesverband Breitbandkommunikation e.V. (BREKO)
3. European Competitive Telecommunications Association (ECTA)
4. European Subsea Cables Association (ESCA)
5. Liberty Global
6. Telefónica
7. Vodafone Group (Vodafone)

BEREC appreciates the submissions and has carefully considered all of them. Comments, observations and recommendations raised by the respondents are summarised below, and BEREC's views are presented in separate boxes. All non-confidential contributions are publicly available and accessible on the BEREC webpage. This report is a summary, and it does not explicitly elaborate on observations that are not directly related to the Draft Report subject to public consultation.

The Report on the outcome of the public consultation is organised following the sections of the Draft Report submitted to public consultation.

This Report on the outcome of the public consultation complements the final BEREC Report on domestic submarine cables connectivity in Europe[1]. Both reports are being published simultaneously.

[1] BoR (25) 171, 4 December 2025, available at https://www.berec.europa.eu/en/all-documents/berec/reports/berec-report-on-domestic-submarine-cables-connectivity-in-europe

2. General views

In this section, BEREC presents a short summary of the general views and comments shared by the stakeholders.

AWS and **BREKO** highlight the importance of submarine cable infrastructure and security. **AWS** calls for BEREC's attention to the critical impact of permitting process efficiency and expresses its support to a risk-focused approach regarding physical and logical resilience requirements together with encouragement for physical security standards' harmonization.

BREKO highlights three key aspects that deserve particular attention in the ongoing debate: redundancy, prevention and repair measures, and the protection of sensitive infrastructure data.

ECTA appreciates the informative content of the Report and thanks BEREC for providing a data-driven analysis on the number of cables, their location, length, types of companies owning/operating cables, wholesale access, etc. ECTA comments on the relevance of the Significant Market Power (SMP) regime and emphasizes a need for better regulation in some cases (where it is needed and has not been applied, and where regulation is inadequate and needs improvement) and monitoring of effective competition. ECTA also invites BEREC to be cautious about follow-up work with regard to suggesting possible new (national or EU-level) initiatives related to the authorisation regime for submarine connectivity, considering that such suggestions may unintentionally result in creating uncertainty, or even complexifying rather than simplifying authorisation procedures, both for existing and new operators of such systems.

ESCA underlines the importance for regulators and policymakers to consider the operational, technical, and strategic dimensions of subsea infrastructure when shaping national and regional policies. ESCA surrounds its position by indicating the following main aspects to be considered by BEREC: industry engagement, including not only global platforms, but also the regional industry structures; coordination and harmonisation of regulatory regimes, not only between competent authorities, but also across policy domains; establishment of designated single points of contact (SPOC) for subsea cable policy; assurance that new or revised regulations affecting submarine cables are developed in consultation with those who operate, maintain and invest in these systems.

Liberty Global calls for the systematic prioritisation of three principles in relevant policy measures and regulatory initiatives: a stable regulatory environment, improvement of cables' geographic resilience and security through public and private practices/measures and public support for continuity of private investment.

Telefónica emphasizes the importance of maintaining the freedom to install cables on the continental shelf and EEZ (Exclusive Economic Zone), while respecting coastal States' competencies in environmental protection. It also points out the following: the consistent appliance of the general authorization regime, ensuring legal certainty for operators; an

avoidance of unnecessary regulatory burden in competitive markets; public-private cooperation and the promotion of common technical standards; the need to replace aging cables; security and resilience against physical and cyber threats; the economic viability of new investments in low-density areas.

Vodafone supports BEREC's efforts to map infrastructure, identify regulatory gaps, and promote resilience and provides some policy recommendations for resilience, security, and governance of submarine cable infrastructure in Europe.

BEREC's response:

BEREC agrees with AWS and BREKO regarding the importance of submarine cables and its security.

BEREC welcomes the recognition by ECTA of the importance of a data-driven analysis presented in this report. On the SMP regime, namely on the need for regulation (where not previously applied) or for its improvement, BEREC would appreciate detailed information/data concerning the mentioned cases, which would allow BEREC and its member to assess these competitive concerns.

BEREC shares Telefónica views on the need to promote investment/deployment of submarine cables in the EU, while ensuring that the environmental frameworks, plans and requirements in each region or country are fulfilled, and avoiding excessive administrative or regulatory burden.

BEREC welcomes Vodafone support on the topics covered by this report.

3. Comments on Executive summary and Chapter 1 – Introduction

AWS shares BEREC's position that submarine cable infrastructure is critical for enabling global communications and supports economic development and social interconnection. **AWS** supports BEREC's efforts to ensure the security, resilience, and protection of this critical infrastructure. However, in AWS's opinion, the report should address the critical impact of the permitting processes on submarine cable deployment and maintenance. Currently, permitting timelines vary extensively across jurisdictions and can exceed one year, creating significant uncertainty in project planning and investment decisions. This uncertainty directly affects Europe's network resilience by delaying the addition of new systems and necessary repairs. These delays ultimately constrain the growth of Europe's digital economy.

AWS highlights that predictable, transparent and specified permitting timelines and processes are essential to plan and secure the supply-constrained marine resources needed for installation and maintenance activities.

AWS recommends establishing harmonised permitting and licensing processes that consider end-to-end lifecycle requirements of submarine cable systems. This should include adopting a 'trusted applicant' process for pre-vetted companies who have demonstrated their ability to meet the EU's high security requirements; establishing transparent timeframes with clear guidelines on review process initiation; maintaining tight restrictions on deadline extensions; and supporting expedited processes for repair and maintenance activities. **AWS** encourages each Member State to establish a single coordinating body to serve as a 'one-stop shop' for submarine cable permits, with a view to establishing a single European coordinating body in the future.

BREKO supports BEREC in highlighting that in certain situations public funding may be needed to ensure the connectivity of national territories, as the business models may not allow the private sector to recover investments.

BREKO agrees with this assumption considering the infrastructure's growing importance and in parallel increasing insecure geopolitical situation. The measures ensuring that core network operations can be maintained in the event of a temporary failure of a submarine cable connection – as for example creating redundancies – should be supported.

In addition, **BREKO** states that it would be beneficial if EU funding was also available for repair and prevention measures e.g. increasing the number of repair vessels and equipping the submarine cable infrastructure with sensors that recognize if objects approach the cables. Furthermore, BREKO would welcome a supervision and monitoring of submarine cables and possible incidents. This is especially of importance for international waters that do not fall within the jurisdiction of the Member States. Against this background, BREKO welcomes that BEREC highlights the importance of a monitoring in combination with sensors in its report.

According to **ECTA**, the draft Report usefully notes that nearly a fifth of the cables have received public funding, and highlights that many cables will need replacement as the end of their lifecycles will be approaching. Many of these cables are on routes (e.g. to remote areas or coastal villages) where investment is not justified based on future revenues, i.e. public funding is likely to be needed also in the future.

ESCA strongly welcomes the report's reference to engagement with the cable industry. However, it is equally important that regional industry structures are acknowledged and utilised. ESCA encourages BEREC and NRAs to continue to engage across the industry to ensure relevant, practical, and harmonised policy outcomes.

Telefónica welcomes BEREC's initiative to analyse domestic submarine cable connectivity in Europe, recognizing its critical role in territorial cohesion, digital inclusion, and the resilience of electronic communications infrastructure. In the same line, **Vodafone** welcomes BEREC's initiative to assess the state of domestic submarine cable infrastructure across Europe. By **Vodafone**, the report rightly recognises the strategic importance of these systems for economic resilience, national security, and societal continuity.

Telefónica considers that the challenges associated with submarine cables should be assessed within the context of ongoing debates at the European level (such as the Digital Networks Act – DNA) regarding the need for a new regulatory framework that promotes investment and ensures adequate returns for EU network operators.

BEREC's response:

BEREC agrees with AWS on the critical impact of the permitting processes on submarine cable deployment and maintenance, and the need for quick, predictable, transparent and specified permitting timelines and processes. However, these aspects are not in the scope of the report and many of the related issues on permitting processes and framework exceed NRAs' competences.

BREKO touches on a relevant issue when considering the EU funding could also be available for initiating repair and prevention measures e.g. increasing the number of repair vessels and equipping the submarine cable infrastructure with sensors that recognize if objects approach the cables.

BEREC notes positively the support of Telefónica and of Vodafone to this analysis of domestic submarine cable connectivity in Europe.

BEREC shares Telefónica's views that challenges associated with submarine cables should be taken into consideration in the ongoing debate on the DNA.

4. Comments on Chapter 2 – Overview of the domestic submarine cables in Europe

According to **Liberty Global,** as the demand for international connectivity continues to soar, the need for robust and resilient submarine cable infrastructure also grows, and the market is responding adequately to this demand. The prices for bandwidth on most relevant submarine cable routes are generally declining. New capacity is being lit every year, and new cables are being planned, commissioned and deployed. Liberty Global considers the current state of the market in Europe to be relatively strong. The many new cables are improving resilience on existing routes and increase global resilience through opening new ones. Moreover, Liberty Global welcomes the broad recognition amongst public and private stakeholders of the relevance of submarine cable infrastructure and the need for cooperation, and supports the European Commission's encouragement of EU Member States to develop maintenance and repair capacities for submarine cable infrastructures.

Telefónica concurs with BEREC that submarine cables are essential for ensuring connectivity to insular and remote regions. The increasing diversity of operators and technologies, such as the integration of optical fibres in power cables, has enhanced competition and resilience.

Telefónica believes that infrastructure planning should consider the age, capacity, and redundancy needs of existing systems, especially in areas highly dependent on a single cable.

BEREC's response:

BEREC generally agrees with Liberty Global that new international submarine capacity is being lit every year, and new cables are being planned, commissioned and deployed. However, the situation for international cables and for certain domestic cables (especially those connecting small islands or territories) may differ, and regulatory monitoring and/or regulatory intervention, when adequate, may be needed (as it is the case in some of the EU countries) to ensure that submarine capacity does not act as a bottleneck to providing services for any actor willing to compete in providing retail services in these territories.

As for the "improving resilience" of existing and new infrastructure, BEREC concurs with Liberty Global regarding its importance and welcomes further collaboration between different stakeholders in the submarine cable markets and public authorities.

BEREC appreciates that Telefónica and Vodafone welcome the initiative of the present report. BEREC confirms that the points that according to Telefónica should be taken into consideration for infrastructure planning are all mentioned in the BEREC report.

5. Comments on Chapter 3 – The legal framework

In **BREKO**'s views, information sharing should be restricted to the smallest possible group of authorized parties. For instance, concerning the onshore infrastructure (landing stations), it is important that companies that operate these critical infrastructures do not have to transmit geo-referenced information to the Single Information Point in the first place. This is because any data transmission and storage at different locations poses an increased security risk.

ESCA considers that the report rightly notes that coordination between competent authorities is essential, but they urge that this coordination extends across policy domains as well as within them. Regulatory regimes not directly associated with telecommunications, such as environmental permitting, maritime spatial planning, and maritime transport, increasingly have a direct impact on cable deployment and maintenance. Without appropriate alignment, there is a risk of unintended consequences for critical communications infrastructure. This also extends to the need to harmonise any proposed approaches within the NIS2 or the CER directive. In this line, ESCA urges the Member States and the EU to consider the establishment of designated single points of contact for subsea cable policy, not just licensing, and that these leads engage in regular technical dialogue with the industry.

Both **Telefónica and Vodafone** supports the application of the European Electronic Communications Code (EECC) to submarine cable systems and agree that general authorisation regimes should apply consistently.

Vodafone recommends BEREC to promote harmonised, end-to-end regulatory guidance for submarine infrastructure, aligned with the NIS2 and Critical Entities Resilience Directives. This should include streamlined permitting processes, consistent access obligations, and a common framework for market analysis and SMP designation. A unified EU-UK-NATO approach is also essential, given the interdependence of transatlantic and intra-EU connectivity. Strengthening the resilience of submarine cables requires robust collaboration between public authorities and private operators. **Vodafone** supports the creation of a voluntary and secure incident reporting mechanism for subsea cable disruptions. This mechanism would enable operators to share key information such as the location of affected infrastructure and root cause analyses, with relevant EU, UK, and NATO authorities.

BEREC's response:

BEREC agrees with BREKO on the sensitivity of data and restricting information sharing to the smallest possible group of authorized parties, especially in the case of geo-referenced information. As can be seen in the report, BEREC has refrained from providing detailed data on the location of domestic submarine cables landing points to maintain confidentiality and avoid security risks.

BEREC shares ESCA's views on the need for regular engaging in technical dialogue with the industry and, in this context, thanks ESCA for providing their views. It is however complex to establish single points of contact for subsea cable policy, as the competences are distributed among different transnational, national, regional and even local authorities. Nevertheless, the setting of fora for discussion and action by EU and national authorities may help in structuring collaboration between public authorities and private actors aimed to harmonise regulation of permits and other aspects, as requested by Vodafone.

The proposal from Vodafone to support the creation of a voluntary and secure incident reporting mechanism for subsea cable disruptions, apart from the existing obligations to notify incidents to public authorities is interesting and BEREC encourages Vodafone and other operators to develop it in more detail.

6. Comments on Chapter 4 – The *ex-ante* economic regulatory treatment of submarine cables

Telefónica appreciates the comparative analysis of regulatory approaches across countries. In Spain, the shift from national regulation to geographically specific markets allowed for obligations to be tailored to the competitive reality of each route. The progressive deregulation of all the routes with effective competition, has been a positive development.

ECTA indicates that the fact that some NRA concluded to the presence of SMP and imposed a set of regulatory obligations underscores the continued relevance of the SMP regime as a crucial component of the EU regulatory framework. ECTA reports that one of its members is currently facing a situation of excessive wholesale charges for connectivity to small relatively nearshore islands with low population and concludes that there are therefore cases where regulation is needed but has not been applied, and cases where regulation is inadequate and needs improvement.

BEREC's response:

BEREC acknowledges the stakeholders' diverging views on the regulation applied in the markets for submarine cable connectivity in different countries. As shown in the case studies, different situations lead to different outcomes. In any case, as expressed also by stakeholders, BEREC is conscious of the relevance of domestic submarine cables to ensure a competitive landscape for all retail services provided in islands and other territories with no terrestrial trunk infrastructure, and the need to regulate when needed to ensure that all market actors can provide their retail services and to lift regulation when possible, to facilitate investment.

ECTA's contribution portrays one of the situations which may warrant regulatory intervention, specifically if access barriers and/or excessive prices are identified. As pointed out by BEREC in its report, the high investments required to install alternative submarine cable infrastructure, especially to serve insular territories which may offer less attractive business cases, may constitute a significant barrier to entry of different operators. This bottleneck can be addressed through ex ante regulation, whenever deemed adequate and tailoring relevant obligations to the specific context.

7. Comments on Chapter 5 – Case studies

In **Telefónica**'s opinion, it is crucial that regulation considers the specific characteristics of each route, including technical, economic, and geographic factors. And it is also very relevant that a prospective analysis of the situation is assessed. According to Telefónica, Spain serves as a case study of how regulation can adapt to market evolution.

BEREC's response:

BEREC's intention including three different case studies (Iceland, Spain and Portugal) was to show that the existing SMP analysis regime and obligations allow for taking into account different situations in different cases, leading to regulation of specific routes when needed or to de-regulation, for example when barriers to entry are mitigated, or a trend towards effective competition is identified.

8. Comments on Chapter 6 – Potential challenges and future trends

AWS supports a risk-focused approach grounded in empirical analysis and encourages BEREC to harmonise physical security standards and recognises that cybersecurity measures are most effectively implemented at the data and application levels by operators who can adapt quickly to evolving threats.

AWS also states that a coordinated approach to marine spatial planning is essential for submarine cable deployment in increasingly crowded seas. Planning must recognize both submarine cables' unique routing requirements and their minimal environmental impact compared to other marine activities. An effective framework should: enable multiple routing options rather than designated corridors to avoid security vulnerabilities; protect existing cable routes and landing points; preserve areas for future deployment; coordinate with other maritime activities while maintaining submarine cables' status as critical infrastructure; and facilitate strategic landing points across EU countries for resilient connectivity.

In addition, **AWS** points out that as new marine spatial planning frameworks are developed, it is crucial to ensure a smooth transition that does not hinder ongoing projects. New requirements should not be applied retroactively; rather, the focus should be on implementing them for future projects. Moreover, the Commission should encourage coordination of marine spatial planning between Member States to foster a consistent, predictable environment that both safeguards existing infrastructure and supports the deployment of new cables.

AWS supports BEREC's recognition that public funding mechanisms play an important role in connecting territories where private investment alone may not be economically viable. The public funding instruments enable national and regional authorities to develop essential infrastructure that might otherwise not be commercially viable, supporting both initial deployment and the eventual replacement of ageing systems. This approach helps ensure that all European citizens can benefit from high-quality digital connectivity, regardless of their geographic location.

Vodafone highlights the global shortage of cable repair vessels and the operational complexity of repairs. Delays of up to six months have been reported, exacerbated by pre-booked commercial projects, and limited emergency availability. Vodafone supports measures that encourage new entrants into the European cable installation, maintenance, and repair sector. This would increase overall capacity and help reduce costs. In the event of multiple critical incidents, Vodafone advocates for a virtual pooling of repair capabilities, whereby Member States with sovereign repair assets collaborate to prioritize deployment to the most critical infrastructure.

ECTA highlights that many cable routes are not characterised by effective competition, and that it is key to monitor its evolution. ECTA also agrees with the security, reliability and redundancy considerations outlined by BEREC (Chapter 6.1). There is also support for

BEREC's finding that the renewal of current submarine cable systems and subsequent transfers of capacity by wholesale clients often will require regulatory analysis (Chapter 6.2) and that public funding will be needed going forward, for new cable systems where future traffic does not allow commercial viability, and to improve security, reliability and resilience (Chapter 6.3).

By **ESCA**, the report highlights good practices adopted in some jurisdictions, but it is also important to acknowledge that policy and regulatory development in others is still evolving, and at times this develops in ways that pose unintended risks to long-term cable resilience. **ESCA** urges BEREC and national regulators to ensure that new or revised regulations affecting submarine cables are developed in consultation with those who operate, maintain and invest in these systems.

In **Liberty Global's** views, the challenges identified by BEREC can be addressed through the systematic prioritisation of the following three principles in relevant policy measures and regulatory initiatives: i) create a stable regulatory environment, in line with the principles of appropriateness and proportionality; ii) encourage both public and private practices/measures which improve cables' geographic resilience and security; iii) ensure the continuity of private investment through the use of public funds in response to genuine market failures only, i.e. where the market is unable to achieve a reasonable level of resilience.

Liberty Global agrees with the challenge identified in section 6.1 of the draft Report that some of the most relevant topics for the submarine cable market today is ensuring the security, reliability and redundancy of the connections provided through the cables. Liberty Global also considers diversity to be essential for the security of European submarine cables since it reduces the risk of simultaneous failures from shared vulnerabilities. Other measures are also considered to improve resilience, e.g. governments could incentivize additional drops where practicable, on existing or planned cables, to help operators diversify routes – enabling effective risk management and shorter routes. This may in turn give market participants greater opportunities to swap capacity.

Additionally, **Liberty Global** invites Member States to coordinate their efforts in mapping submarine cables and keep it up to date, at minimum on an annual basis. The mapping should include all relevant associated data such as available and potential capacity, technical characteristics, main security features, redundancy and/or peering arrangements, ownership and control information. This supports immediate disaster response and aids in strategic planning for future enhancements in resilience.

Liberty Global agrees with the European Commission's 2024 Recommendation that Member States should endeavour to expedite administrative processes relating to the repair of cables (within the boundaries of administrative law).[2] For example, removing administrative barriers via a one-stop-shop for cable consortia may help achieve this outcome.

[2] 2024 Commission Recommendation on the security and resilience of submarine cable infrastructures, p. 10.

Liberty Global argues with BEREC's position in section 6.2 of the draft Report, stating, that, whilst such analysis may be key to ensure that regulators' decisions are well-founded, there are broad indications that the market is responding well to demands for cable replacement and therefore interventions from national regulators should be limited.

Liberty Global considers that the private sector should remain in the lead where renewal of submarine cable infrastructure is concerned. In planning, commissioning and deploying new infrastructure, it is for the operators to ensure end-to-end resilience and to apply secure by design principles. Liberty Global notes that – as the draft Report also finds – various national regulators have, in recent years, deregulated the submarine cable market. Therefore, our view is that all regulatory interventions into this market should abide by restrictions imposed on jurisdiction and should adhere to the principles of appropriateness and proportionality.

With regards to section 6.3 of the draft Report, **Liberty Global** agrees with BEREC that public funds should be used where commercial investment is not viable but warns that public funds should not crowd out private investment. Public intervention should remain limited to clearly defined cases of genuine market failure and should not disrupt the healthy dynamics already at play in the sector. In ensuring a stable and predictable environment for private investment, it is key that all equivalent networks and services are treated equally – especially as regards applicable regulatory requirements.

Telefónica identifies the following key challenges: the need to replace aging cables, especially in a difficult financial context for EU network operators; ensuring security and resilience against physical and cyber threat; the economic viability of new investments in low-density areas. Telefónica supports the use of public funds. Public-private cooperation and the promotion of common technical standards are also essential to enhance interoperability and efficiency.

In agreement, **Vodafone** states, that the report rightly identifies security and redundancy as key challenges. Vodafone supports the development of SMART cables equipped with sensors for real-time monitoring and early fault detection. However, Vodafone does not support a mandatory or strongly prioritised investment requirement for smart or sensored subsea cables at this stage. Traditional protection measures, such as cable burial and exclusion zones, remain the most effective first line of defence.

Vodafone recommends that any future investment in smart cable technologies be preceded by rigorous pilot projects and cost-benefit assessments. These should evaluate not only technical feasibility but also operational value in enhancing resilience and response. Until such evidence is available, smart cables should not be treated as a baseline requirement for funding or regulatory compliance.

Vodafone encourages BEREC to support innovation in submarine cable technologies, including DWDM, AI/ML-based predictive maintenance, and integration with satellite and terrestrial networks. Vodafone also recommend that BEREC monitor the evolving role of hyperscalers in the subsea ecosystem and assess the implications for competition, sovereignty, and regulatory oversight. Finally, Vodafone urges BEREC to work with the

European Commission to ensure that submarine cable infrastructure is fully integrated into the EU's broader digital and green transition strategies.

Vodafone strongly supports BEREC's recognition of the role of public funding in submarine cable deployment and renewal. Vodafone recommends the establishment of a dedicated EU resilience fund for critical infrastructure, with eligibility based on redundancy, cross-border connectivity, and security enhancements. Funding should be channelled through the Connecting Europe Facility (CEF), the European Defence Fund, and NATO innovation instruments. This is particularly urgent given the ageing of telco-owned systems and the growing dominance of hyperscalers in new builds. European governments must assess whether strategic autonomy requires a minimum number of European-owned or controlled transatlantic cables and if so, provide targeted support.

Vodafone supports targeted public investment to enhance the physical and operational security of subsea cable infrastructure, particularly at critical nodes such as manholes, beach landing stations, and Cable Landing Stations (CLS). These assets are essential to Europe's digital sovereignty and economic resilience, yet many were constructed before the emergence of modern hybrid threats and lack adequate protections. Investment should focus on: end-to-end physical security, including intrusion detection and hardened enclosures; power redundancy and sustainability, with backup systems and green energy integration; upgraded surveillance systems to reduce response time to physical intrusion.

BEREC's response:

BEREC acknowledges the contribution from AWS regarding physical security and cybersecurity measures and notes the relevance of addressing such matters in the context of evolving digital threats. Also, in the context of the current geopolitical challenges, it is important to emphasize that the security of electronic communications should be approached in a holistic manner, encompassing all relevant dimensions. Harmonization of relevant standards developed by European bodies is a precondition for more consistent implementation by industry aiming at enhancing security across Europe.

In addition, BEREC concurs with AWS that risks for submarine cables are an important issue to consider when planning spatial deployment, and it is very important to enable in advance multiple routing options (although it is not always possible to have diversity in designated corridors, and is dependent on the topography of the submarine terrain), aiming for resilient connectivity. As expressed by AWS, coordination among countries is needed to support this.

Specifically, BEREC takes note of ECTA's support for the continued monitoring by public authorities and the general aspects considered in the section about potential challenges.

BEREC agrees with ESCA on the need to maintain cooperation with all relevant stakeholders in defining and applying the underlying regulatory framework.

Liberty Global expresses support for BEREC's conclusions regarding potential challenges relative to submarine cables' resilience, and namely on improvements of the regulatory

framework. BEREC will continue to monitor all relevant developments, contributing to foster competitive market dynamics.

BEREC notes that the challenges identified by Telefónica are identical to those included in the BEREC report as key challenges.

All actors support public funding for the deployment of new submarine cables or renewal of the aging ones (many respondents being also beneficiaries of such funds). This is already expressed in the report, making it clear that there would be a case for public subsidies where there is no business case justifying pure private investment. Regarding the proposal from Vodafone on funding for submarine cables, Connect Europe Facility (CEF) Digital includes funding with the aim to deploy new and significant upgrades of connectivity routes, where (i) the existing infrastructure cannot satisfy demand for affordable and adequate services in line with the EU connectivity objectives for 2030, (ii) there is a lack of the necessary redundancy to guarantee reliable, resilient, adequate, and secure international connectivity, (iii) the users in the served territories suffer from suboptimal services or prices compared to those offered in more competitive but otherwise comparable areas or routes. These routes can be located within EU countries, between EU countries and between the EU and third countries, including Outermost Regions and other Overseas Countries and territories.[3]

BEREC considers that the ideas raised by some of the actors as supporting targeted public investment to 1) enhance security at critical points such as manholes, beach landing stations, and CLS, 2) availability of vessels for repairing submarine cables, are worth considering by public administrations in those cases where the private initiative cannot cover the associated costs and 3) pilot smart cables, are of interest to be explored by the EC and national administrations. On point 3) was already reflected in the draft report, and on points 1) and 2), BEREC has added a text in section 6.1. In any case, as expressed by Liberty Global, public intervention should remain limited to clearly defined cases of genuine market.

BEREC takes into account the encouragement of Vodafone regarding innovation in submarine cable technologies and considers also of special relevance the integration with satellite and terrestrial networks.

Regarding monitoring of the evolving role of hyperscalers in the subsea ecosystem and assessing the implications for competition, sovereignty, and regulatory oversight, BEREC and its members have been monitoring the investments in submarine cables, not only by telecom operators, but also by hyperscalers, as suggested by Vodafone (please see, for example, the BEREC Report on the entry of large content and application providers into the markets for electronic communications networks and services[4]), and plan to continue doing so.

[3] See https://hadea.ec.europa.eu/programmes/connecting-europe-facility/about/backbone-connectivity-digital-global-gateways_en.

[4] BoR (24) 139, see: https://www.berec.europa.eu/system/files/2024-10/BoR%20%2824%29%20139_BEREC%20Report%20on%20the%20entry%20of%20large%20CAPs%20in%20ECS-ECN_0.pdf.

Notwithstanding, it's important to highlight that hyperscalers are mostly deploying in international routes, which is not in the scope of this report.

BEREC agrees that public policy and regulation for submarine cable infrastructure must be integrated into the EU's broader digital and green transition strategies and would thank Vodafone and the rest of stakeholders for any specific input on it to take it into consideration.

9. Comments on Chapter 7 – Summary and conclusions

AWS highlights that the steps taken today to facilitate marine spatial planning, streamline processes, enhance protection, and ensure adequate funding mechanisms will determine Europe's ability to maintain and expand its critical submarine cable infrastructure for decades to come.

BREKO supports BEREC's recognition of the strategic role of submarine cables and encourages further concrete steps to strengthen Europe's digital resilience. BREKO calls for targeted EU funding not only for infrastructure deployment but also for redundancy, repair capacity, and SMART cable technologies. With these measures, Europe can ensure that its submarine cable infrastructure remains secure, resilient, and future-ready.

ESCA supports BEREC's efforts to improve the regulatory environment for submarine cables in Europe and continues to stress the importance of a coherent, harmonised approach across the EU. ESCA encourages continued cooperation with international and regional industry fora and stress the importance of maintaining an open, technically informed dialogue as Europe builds towards its Digital Decade objectives.

Liberty Global recognises the critical role that submarine cables play in ensuring secure, resilient, and high-performing connectivity across Europe and beyond. It considers itself a key stakeholder with direct investment in subsea connectivity infrastructure, and as such it supports a future-oriented approach which balances the need for regulatory stability, geographic resilience, and strong private-sector leadership. Liberty Global believes that the key challenges in the submarine cable market can be effectively addressed by fostering proportional regulation, encouraging both public-private cooperation and private-led innovation, and maintaining a clear focus on long-term resilience through diversity and redundancy.

Telefónica emphasizes, that the deployments and the challenges associated with them should be assessed within the context of the ongoing debates at the European level (such as the DNA) regarding the need for a new regulatory framework that promotes investment and ensures adequate returns for EU network operators. Telefónica believes that BEREC's report provides a solid foundation for future European policies on submarine cables and encourages continued exploration of key issues such as resilience, funding, and technological innovation (e.g., SMART cables), as well as maintaining ongoing dialogue among all the stakeholders.

BEREC's response:

BEREC supports the views of the different stakeholders on the strategic role of submarine cables (BREKO), the need for a future-oriented approach (AWS and Liberty Global) as well as the need to address not only deployment but also for redundancy, repair capacity, and SMART cable technologies (BREKO and Telefónica). In addition, BEREC agrees that cooperation with international and regional industry fora with this aim is essential, as highlighted by ESCA.

This strategic role of submarine cables, as well as the challenges posed on its deployment, resiliency and security must be taken into account, as Telefónica states, in the design of the future DNA.