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Body of European Regulators for Electronic Communications

Submarine cable connectivity: Competition & market dynamics, ex-ante economic regulation and future challenges

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BEREC Report on domestic submarine cables connectivity in Europe
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Objectives

- Providing an overview of the domestic submarine cable systems ensuring communications services in Europe and the main purpose of their deployment

- Showing detailed information on the historical and current ex-ante economic regulatory treatment of submarine cables in the different BEREC member countries with the presentation of three specific case studies

- Identifying the main challenges and emerging trends according to NRAs

→ **For this purpose a questionnaire was shared with all BEREC members**

NB: Some countries did not have data on deployment or could not provide them because for confidentiality or security reasons. Publicly available data were used.

Public consultation

- The draft report was opened to public consultation from 11 June to 11 July 2025

- **7 respondents**
  - **6 ECS/ECN providers & their associations**: BREKO, ECTA, ESCA, Liberty Global, Telefonica, Vodafone;
  - **1 large CAP**: Amazon Web Services.

Main findings – Overview of SC systems

- 15 out of 27 countries with direct access to sea have segments of submarine cables connecting national cable landing stations (CLS) mostly deployed in the Mediterranean Sea (41%) and in the Atlantic Ocean (38%), while almost 16% of the segments are deployed in the Baltic Sea
- Large majority is purely domestic SCs and 12% are part of an international cable systems
- A large majority of SCs is deployed by ECN operators acting at the retail level and using submarine cables for their own network connections and operations + in most cases they also offer wholesale connectivity to others,
- Almost 1/3 of the SC systems are between 10 and 25 years old. 14% started operating over 35 years ago
- Nearly 20% of the domestic submarine cables analysed in this report benefitted from public funding → public funding instruments vital for assuring connectivity

Main findings – Regulatory treatment

- 6 NRAs (Croatia, France, Greece, Iceland, Portugal, and Spain) have carried out a market analysis regarding or including domestic submarine cables leading to regulation of submarine cables with designation of an SMP operator: 4 (Croatia, Greece, Iceland, Portugal) are still regulating, and 2 (France and Spain) deregulated respectively in 2017 and 2024, but still monitor the evolution
- 4 NRAs (Greece, Iceland, Portugal and Spain) under M14/2003, 1 NRA (France) under M4/2014 and 1 (Croatia) under both M14/2003 and M4/2014
- Different remedies applied (3 NRAs on access, reference offer, transparency, non-discrimination and price control. 1 NRA also account separation and 2 NRAs also on financial reporting)
- Different forms of regulation: in France guidelines before regulating and Italy economic conditions for wholesale access to SC subject to public funds under NRA assessment
- Three case studies on Iceland, Portugal and Spain

Main findings – Trends and challenges

- Security, reliability and redundancy of the connections provided through submarine cables
- Replacement of current submarine cable systems as the end of their lifecycle is approaching and the need for very high investments, especially when submarine cables serve remote areas or coastal villages sparsely populated, where investment is not justified based on future revenues

→ Key to monitor the evolution of effective competition in the long term, which requires precise data/information from different stakeholders. NRAs should be able to collect information relating to SCs from both public and private entities (owners like telecom ECN operators or big tech companies, suppliers, among others).