Council of the European Union

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NOTE

From:	Presidency
To:	Delegations
Subject:	Draft Council Conclusions on reliable and resilient connectivity

Delegations will find in the Annex draft Council Conclusions on reliable and resilient connectivity.

The Presidency intends to discuss the draft conclusions at the **Telecommunications and Information Society Working Party of 21 January.**

ANNEX

Draft Council Conclusions on reliable and resilient connectivity

THE COUNCIL OF THE EUROPEAN UNION,

RECALLING

- The Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 on establishing the European Electronic Communications Code,
- Directive (EU) 2022/2555 of the European Parliament and of the Council of 14 December 2022 on measures for a high common level of cybersecurity across the Union, amending Regulation (EU) No 910/2014 and Directive (EU) 2018/1972, and repealing Directive (EU) 2016/1148 (NIS 2 Directive),
- The Letta Report "Much more than a market – Speed, Security, Solidarity. Empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens" of 17 April 2024,
- The Draghi Report "The future of European competitiveness" of 9 September 2024,
- The Niinistö Report "Safer Together: Strengthening Europe's Civilian and Military Preparedness and Readiness" of 30 October 2024,

BUILDING ON:

– The Commission White Paper on "How to master Europe's digital infrastructure needs?" of 21 February 2024,
– The Commission Recommendation of 26 February 2024 on Secure and Resilient Submarine Cable Infrastructures,
– The Council Conclusions of 21 May 2024 on "The Future of EU Digital Policy"
– The Council Conclusions of 6 December 2024 on the Commission White Paper "How to master Europe's digital infrastructure needs?".

General framework

1. NOTES that the European Union's connectivity infrastructure faces new and unprecedented challenges arising from an increasingly complex geopolitical situation, as underscored by the impact of the Russian Federation's military aggression against Ukraine, and from the growing frequency of natural disasters due to global climate change.

2. ACKNOWLEDGES that these pressures expose the vulnerabilities of terrestrial and non-terrestrial networks, thus requiring a strategic redefinition of communications network development in light of the critical dependence of our society and economy on electronic communications, to safeguard the EU's strategic autonomy and economic prosperity, with particular attention to technological and economic resilience, together with digital sovereignty.

3. STRESSES that a comprehensive approach to the development of a reliable and resilient network infrastructure is essential for addressing new challenges related to more frequent natural disasters, cyber-attacks and geopolitical related threats. This approach should be enabled within the new, legal and strategic framework.

4. RECOGNISES that the large majority of intercontinental internet traffic runs over submarine cable infrastructures, which form the critical backbone network, being at increasingly risk, as demonstrated by various incidents notably in the Baltic Sea. WELCOMES in this regard the measures in the Commission Recommendation on "Secure and Resilient Submarine Cable Infrastructures" and AGREES with the Commission's White Paper on "How to master Europe's digital infrastructure needs?" on the importance of a higher level of resilience and integration of all communication channels - terrestrial, non-terrestrial and, importantly, submarine - as a precondition for secure communications.

5. ENDORSES the vision of the Connected Collaborative Computing Network ("3C Network") set out in the Commission White Paper mentioned above, which is of strategic importance to safeguard and advance the EU's digital technological sovereignty. RECOGNISES the 3C Network as a key concept to enhance European innovations and create an ecosystem of connectivity and computational capacity in support of data and AI-based applications.

6. RECALLS that reliable and resilient connectivity through network integration and diversification has emerged as one of the key priorities, requiring multi-layered, interoperable and redundant networks. NOTES the need to mitigate communication disruptions by improving the redundancy of the power supply for mobile network infrastructure and land corridors for the backbone network.

7. CALLS FOR the establishment of a new strategic approach that takes into account current and emerging technologies like AI, 6G and quantum communications, with a focus on the convergence of diverse network elements such as fixed, mobile and satellite (and other non-terrestrial elements) into a cohesive, integrated, European digital ecosystem and market. CALLS FURTHER FOR coordination with ongoing research and piloting initiatives on connectivity, such as the Smart Networks and Services Joint Undertaking, as well as other relevant connectivity infrastructure projects supported by EU funds like Connecting Europe Facility, including submarine cables, backbone connectivity infrastructures, as well as large scale pilots for 3C Network projects.

8. NOTES that this strategic approach for integrated and resilient communication networks, should lead to the integration of various communication network types — including terrestrial, non-terrestrial, and submarine cables — while considering diverse business models and current trends. This holistic approach aims to unify different network types into a cohesive, reliable, and resilient system, fostering ubiquitous and seamless connectivity across Europe enhancing competitiveness and reinforcing the European Single Market.

9. EMPHASISES that the convergence of 3GPP and non-3GPP networks presents a unique opportunity to take advantage of the strengths of different technologies and combine the best of their characteristics. NOTES that further development of integrated architecture will potentially create a unified network that delivers a superior user experience.

10. RECOGNISES the critical importance of international cooperation in enhancing global digital infrastructure resilience and reliability. HIGHLIGHTS the need for supporting EU candidate countries and other like-minded partner countries through the existing platforms, like the Global Gateway, providing technical assistance, capacity-building and financial support, while collaborating with like-minded partners to search convergence on approaches to move towards joint criteria for reliable and resilient networks as well as digital infrastructures and promote European solutions.

Resilience by network type diversification and interoperability

11. EMPHASISES that reliable and resilient connectivity can be improved through network type diversification by relying on multi-layered, interoperable terrestrial and non-terrestrial communication means supported by a robust backbone infrastructure, as well as risk assessments and good practices on mitigating measures.

12. ACKNOWLEDGES the rapid development of next-generation satellite communication systems, including multi-constellation networks, a large number of which are registered and developed outside the EU, which puts pressure on access to Earth's orbits and spectrum. RECOGNISES at the same time the complementary roles of satellite (and other non-terrestrial capabilities), for uninterrupted availability of service under all circumstances to remote and underserved regions, providing critical redundancy and resilience against ground-based disruptions.

13. HIGHLIGHTS the strategic importance of the IRIS² EU satellite constellation for addressing long-term challenges in satellite communications security, safety, and resilience. Stresses its role in underpinning Europe's economic development, strategic autonomy and technological leadership also increasing the EU's independence from non-European providers for communication services. EMPHASISES therefore the need for a timely rollout of the IRIS² constellation and developing Europe's capacities in satellite communications from industrial as well as regulatory point of view as a necessary step forward to achieve advanced connectivity services for governmental users and bridge connectivity gaps across the Union, and ultimately, for Europe's security and resilience.

14. UNDERLINES that The Union should therefore ensure sufficient, safe, reliable and secure access to geostationary, medium and low earth orbits and to radio spectrum capacity, in line with international law, and better control of access to its market by satellite constellations registered outside the EU. ACKNOWLEDGES the ongoing evolution towards integrating mobile and satellite technologies including the recent 5G standardisation and 6G development, which promotes convergence and ensures seamless availability of electronic communication services regardless of the location.

15. FURTHER RECOGNISES the transformative potential of Direct-to-Device (D2D) satellite services, which extend beyond consumer smartphone applications to address mobility-related vertical markets such as automotive, aeronautical, and maritime sectors. NOTES the critical role D2D services can play in improving public services, including civil protection, with far-reaching benefits across multiple domains. ACKNOWLEDGES that further integration of satellite and mobile technologies will drive socio-economic growth, improve network resilience, bridge the digital divide and address global connectivity challenges.

16. HIGHLIGHTS the growing challenge of intentional Global Navigation Satellite Systems (GNSS) jamming and spoofing impacting a wide range of critical infrastructure and services. ACKNOWLEDGES the work of the EU GNSS Interference Task Force. CALLS FOR a coordinated EU effort to establish a robust mechanism for managing information related to GNSS disruptions, ensuring timely reporting, data sharing, and coordinated response measures across Member States. UNDERLINES that precise time synchronisation provided by GNSS is essential for many strategic industries, including finance and electronic communications, and therefore any kind of disruption to these systems may have far-reaching economic and societal consequences.

17. NOTES that investments in sustainable technologies such as renewable energy supply, energy storage and smart metering contribute not only to the reduction of the carbon footprint but also to strengthen the resilience of infrastructure, ensuring uninterrupted access to power at a time of emergency.

18. CALLS FOR strategic investments to enhance digital infrastructure resilience, with a particular focus on critical cables for backbone networks. STRESSES the need for comprehensive support for submarine cable infrastructure, including threat prevention, risk detection, incident response, recovery and repair capacities, and deterrence. NOTES the vulnerability of cross-border terrestrial fibre-optic connections basing on the lack of redundancy for physical routes.

19. RECOGNISES ongoing initiatives on fostering resilience such as in the framework of Council Recommendation 2023/C 20/01 on a Union-wide coordinated approach to strengthen the resilience of critical infrastructure and the NIS report on Cybersecurity and resilience of Europe's communications infrastructures and networks as follow-up to the Nevers Call of 9 March 2022 as well as the Commission Recommendation of 26 February 2024 on Secure and Resilient Submarine Cable Infrastructures.

20. UNDERSCORES the critical importance of cybersecurity in developing reliable and resilient connectivity infrastructure, as well as security of technological and trade interdependencies. UNDERLINES the importance of transposing and implementing the NIS 2 Directive to ensure that the digital infrastructures and services are cyber secure. STRESSES the need to mitigate risks associated with supply chain security for all types of networks. In this context, CALLS to accelerate the full implementation and enforcement of the 5G cybersecurity toolbox, as well as the measures on supply chain security in line with the NIS 2 Directive. NOTES that working towards connecting the different protocols and communication channels, notably through standardisation, will require ensuring a high level of cybersecurity in each of the networks.

21. HIGHLIGHTS the necessity of creating a holistic approach to electronic communications infrastructure that breaks down historical silos in the development of different network types (e.g., submarine, satellite, fibre, 5G/6G). CALLS FOR strengthening interoperability at the core of any new strategic approach when it comes to network architecture and infrastructure.

22. RECOGNISES the strategic importance of developing a European integrated resilient communications network that ensures ubiquitous coverage, provides seamless interoperability, and maximises resilience across its various elements and holistically through network type diversification. EMPHASISES that the development of such a network should be driven by market dynamics accompanied by targeted EU support, including through guidelines and funding for strategic connectivity projects.

Single market for reliable and resilient connectivity

23. ACKNOWLEDGES that the Single Market is a main driver for EU competitiveness and innovation, positioning the Union as a global leader in the digital economy, strengthening its strategic autonomy and digital sovereignty, which results in providing prosperity to its businesses and citizens.

24. UNDERLINES that the Single Market for electronic communications should be deepened through further harmonisation while recognising different business models of service providers. EMPHASISES that the improvements of the Single Market for electronic communications will reinforce the Union's digital sovereignty and competitiveness and contribute to ubiquitous coverage by reliable and resilient networks, for the benefit of EU citizens and businesses.

25. NOTES that fostering a European integrated resilient communications network can open new market possibilities within the electronic communications sector, as well as horizontally in the digital economy, enhancing the Union’s global competitiveness by driving technological innovation.

26. UNDERSCORES that the radio spectrum plays a key role for the benefit of the Single Market, EU economy and society as a whole. STRESSES that the efficient and coordinated use of radio spectrum supports EU policies, while maximising societal value, and serves to reach the objective of the improvement of the Single Market. NOTES that the convergence of the networks requires efficient spectrum sharing between different networks, including terrestrial and non-terrestrial networks, the prioritisation of new band allocations and support to emerging technologies, with a cross-border dimension.

27. ACKNOWLEDGES the successful European model of gradual spectrum harmonisation and the role of the International Telecommunication Union in radio spectrum management. CALLS FOR the enhancement of the EU-level support mechanism for the Member States, which will provide a constructive framework, allowing to respond to encountered cross-border interferences cases within the EU and with third countries, not limited to purely technical issues.

28. ENCOURAGES the deployment and further development of futureproof, secure, and trustworthy standards as a baseline for technological developments, maintaining the EU's technological sovereignty, and driving innovation and cohesion of the EU electronic communications sector. INVITES the European Commission and Member States to enhance the Team Europe approach in international fora by actively participating in global standard-setting processes, promoting European-developed standards, and ensuring a coordinated European digital infrastructure strategy that includes all communication layers.

29. CALLS FOR a higher level of resilience by diversification and seamless, ubiquitous connectivity through further developing an integrated and resilient European communications network in a multilayered approach encompassing: standardisation activities advancing integrated networks, targeted financial mechanisms supporting development of interoperable networks, and guidelines facilitating market-driven deployment.

30. INVITES the European Commission to report to the Council on significant developments regarding integrated and resilient European communication networks. This should contribute to exchanging information and monitoring progress in achieving seamless and ubiquitous connectivity, as well as to warning against risks and threats to reliable and resilient connectivity across the EU and within Member States, especially those exposed to major civil and non-civil risks.

31. INVITES the Commission to build on the work of the Submarine Cable Infrastructure informal Expert Group and reflect on concrete proposals to further promote the reliability and resilience of these infrastructures as a crucial part of European communication networks. FURTHER CALLS FOR developing the comprehensive approach to security and resilience of submarine cable infrastructures laid out in Recommendation (EU) 2024/779, for instance, with regards to enhanced monitoring and rapid response capacities to limit the vulnerability of key digital infrastructure.

32. RECOGNISES that continuous and uninterrupted connectivity is essential for a secure and properly functioning Union. TAKES INTO CONSIDERATION the more frequent natural disasters and other threats, which make the redundancy of networks power supply an urgent challenge. CALLS the European Commission to analyse and propose appropriate measures, including financial support (without pre-empting the negotiations of the next Multiannual Financial Framework MFF).

33. COMMITS to continuously monitor and adapt the EU's communication infrastructure strategies to address emerging technological, geopolitical, and environmental challenges, ensuring reliable and resilient connectivity across the Union.