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| **Executive Summary Sheet (Max 2 pages)** |
| Impact assessment on a potential institutionalised European partnership on smart networks and services[[1]](#footnote-1) |
| **A. Need for action** |
| **What is the problem and why is it a problem at EU level?**  |
| The European networks and services industry is facing industrial competitiveness and technology sovereignty challenges with regard to the deployment of 5G infrastructures as a basis for digital lead markets, and research and innovation on 6G systems. Problems include:* Europe’s inability to exploit the full potential of the digitalisation of the economy;
* limited technological sovereignty as regards critical technologies of smart network and service value chains, in particular due to ever‑increasing global competition for European suppliers;
* slow deployment of infrastructure platforms for digital lead markets; and
* limited interest in addressing societal issues such as climate change through digital solutions.

The main problem drivers are: * 5G’s insufficient capabilities to respond to advanced communication and computing requirements;
* the insufficient presence of EU actors in global digital value chains;
* the lack of integration of EU value chains;
* the slow development of 5G;
* the need for cybersecurity, ethics and privacy; and
* the lack of energy efficiency.

The above issues are expected to lead to limited technological sovereignty as regards critical technologies of smart networks and services value chains, a lack of infrastructure platforms for innovation and a risk of lagging behind in research on 6G-based networks and services. |
| **What should be achieved?** |
| The goal is to ensure technological sovereignty as regards smart networks and services value chains. In this context, the aim is to enable European players to develop the R&I capacities for 6G technologies as a basis for future digital services in the period to 2030. The initiative also aims to foster the development of lead markets for 5G infrastructure and services in Europe. Both set of activities (for 5G infrastructure deployment and 6G R&I) will foster the alignment of future smart networks and services with EU policy and societal needs, including energy efficiency, privacy, ethics and cybersecurity. |
| **What is the value added of action at the EU level (subsidiarity)?**  |
| This partnership will address cross-border/transnational challenges, the pooling of resources, strategic roadmaps, the need for critical mass to meet policy objectives and the need to coordinate different actors across different sectors of the digital economy, which cannot be tackled as effectively by Member States acting alone, in particular as regards R&I on 6G systems. |
| **B. Solutions** |
| **What are the various options to achieve the objectives?** **Is there a preferred option or not? If not, why?** |
| The options are as follows: * baseline option — traditional calls under the framework programme;
* option 1 — co-programmed European partnership;
* option 2 — institutionalised European partnership.

The preferred option is option 2, which is likely to have the biggest scientific, economic and societal impact and greater coherence, although it is the most costly and complex. |
| **What are different stakeholders’ views? Who supports which option?**  |
| Stakeholders have recognised the importance of a partnership approach for Europe’s future networks and services ecosystem across digital value chains. The consultation indicated a preference for a co‑programmed or an institutionalised partnership, but many respondents, including the key players, also stressed that they are open to both models, depending on a number of administrative and legal factors. |
| **C. Impacts of the preferred option** |
| **What are the benefits** **of the preferred option (if any, otherwise of main ones)?**  |
| The benefits are clearly maximised under the institutionalised partnership option (option 2) which would:1. be more effective, especially in terms of economic, technological and societal impacts, by securing stronger stakeholder commitment and contributing to regulation and standardisation activities, and to public policies including technological sovereignty and ‘green deal’ objectives;2. improve external coherence by effective outreach to other initiatives and a clear mandate to establish synergies with EU, national and regional programmes, in particular for deployment; and3. offer very good overall efficiency, despite additional costs.  |
| **What are the costs of the preferred option (if any, otherwise of main ones)?**  |
| The costs relate to the establishment of a joint undertaking and its operation. |
| **What are the impacts on SMEs and competitiveness?**  |
| EU companies in the field of networking, cloud computing and the ‘internet of things’ will benefit most, as will companies in ‘vertical’ industries. The initiative should also help them to maximise the effectiveness of R&D investments and speed up the development process, which would improve their competitiveness. EU SMEs and micro-enterprises in the field will experience direct and indirect economic benefits. The partnership will not impose regulatory obligations on them; rather, it will open up opportunities in terms of cost reduction for the design of new products and help them gain easier access to investment to deploy marketable solutions at EU scale. |
| **Will there be significant impacts** **on national budgets and administrations?**  |
| The impact on national budgets and administration will be limited to governance participation. |
| **Will there be other significant impacts?**  |
| There will be positive impacts on competitiveness, global standardisation and related trade and investment. |
| **Proportionality?**  |
| The preferred option does not exceed what is necessary to solve the original problem. |
| **D. Follow up** |
| **When will the policy be reviewed?**  |
| The partnership will be reviewed in line with the standard Horizon Europe policy on reviewing partnerships, probably involving annual key performance indicator (KPI) reviews and in‑depth review at mid-term and towards the end of Horizon Europe. |

1. ‘Smart networks and services’ is a working title; it will be adjusted following high-level political guidance in time for the adoption of the Commission proposal. [↑](#footnote-ref-1)