

Response of Arcep to the consultation on the GSR-24 Best Practice Guidelines, on charting the course of transformative technologies for positive impact

1 What are the challenges and opportunities faced by policy-makers and regulators in embracing transformative technologies for positive impact?

Internet and telecommunication exchange networks serve as the infrastructure of freedoms. The freedoms of expression and communication, of access to knowledge and sharing, and also of enterprise and innovation are key to a country's competitiveness, growth, employment and national cohesion.

With the full enjoyment of these freedoms paramount, Arcep seeks to ensure that exchange networks develop as a "common good", irrespective of the form of their ownership, and that they meet stringent requirements in terms of accessibility, universality, performance, neutrality, trust and sustainability.

Arcep was born out of the realization that independent State intervention was necessary to ensure that no force, economic or political, was in a position to control or curb the ability of the public, businesses, associations, publishers and innovators to exchange information. An expert and neutral arbitrator, it acts as the architect and custodian of exchange networks as common goods.

Arcep establishes the conditions for an open and decentralized organization of networks. It promotes competition that is conducive to investment in order to ensure the competitiveness of the sectors that it regulates. It provides for the interoperability of networks, so that networks, despite their diversity, remain easy to access for users and do not become partitioned. It establishes proper coordination between public and private actors, particularly in the context of local authority involvement. Finally, it promotes access to high-quality fixed and mobile services for all and resilient networks.

Arcep protects against any attempts to undermine Internet neutrality. More generally, it combats any form of barrier that could threaten the freedom to exchange information on networks and users' freedom of choice and takes a keen interest in this regard in content-access intermediaries (e.g. terminals, major platforms, etc.) whose practices restrict user choice.

Arcep ensures that the market is open to new players and all forms of innovation **in the public interest**. To support innovation in France, it has set up several experimentation spaces, such as a regulatory sandbox and 5G experimentation platforms with industrial players.

Lastly, the issue of a sustainable, inclusive digital future figures among the top priorities of ever more regulators, including Arcep. Without underestimating the contribution already made by digital technology in terms of innovations in the fight against global warming, the fact is that the industry will need to make efforts to reduce its environmental footprint, as the size of its impact continues to grow exponentially.

2 What are the key regulatory measures and guiding principles to follow to foster positive and inclusive impact of transformative technologies?

The biggest digital platforms have become a must for economic and social relations. They are able to determine what content and services can be put online and under what conditions users can gain access. Moreover, as they encompass many services, they become closed ecosystems in which users are often held captive, limiting their freedom of choice. To ensure that digital markets are open, contestable and fair, the European Union adopted a new regulation, the Digital Markets Act (DMA), in 2022.

Opening up these ecosystems helps to preserve and promote competition and innovation in new services. Arcep's ambition, therefore, is to play a full part in building an **open, accessible, resilient and sustainable digital sector**.

To this end, Arcep is also closely monitoring **generative artificial intelligence (AI) services**, which have tremendous potential, and has responded to a call for contributions from the European Commission to identify competition-related challenges in generative AI¹.

Generative AI is a versatile technology that can have an impact on many sectors of activity and on consumer behaviour. Its potential applications are vast and wide-reaching. This type of AI should provide significant opportunities, from both economic and societal points of view. It could also give rise to competition-related concerns, owing in particular to its reliance on data access, computing power and cloud services. The availability of an affordable, predictable power supply is also an issue (more so than for digital). In that regard, so-called frugal AI offers advantages that could prove compelling.

It is important to assess the potential impact of this technology on the choice of end users while it remains in the early stages of market adoption. Generative AI is becoming a gateway to Internet content and services, a trend which, if confirmed, could have an impact on users' ability to access the full content of the Internet and identify sources. Ultimately, this could undermine the openness of the Internet.

Furthermore, the growth of products and services powered by generative AI brings with it a fundamental challenge, as there is little doubt that the introduction of such technologies will increase the environmental impact of digital ecosystems, in particular in terms of their energy consumption. It is therefore necessary to assess this impact and take appropriate mitigation measures. AI players, like all digital actors, must play their part, as the global electricity consumption of data centres, AI and the crypto-currency sector could double between 2022 and 2026, according to the International Energy Agency. AI will only be able to contribute to the environmental transition of the economy if AI-based services themselves are sustainable.

In conclusion, it is therefore important for legislators and regulators to promote **sustainable, competitive and open markets** in the interest of competition, innovation, economic development and the emergence of services, as well as of the economy and society.

3 How to drive positive behaviours of market players?

Arcep has implemented collaborative regulation through data-driven regulation – an approach that combines player accountability, strengthened analytical capacity for the regulator, and the mobilization of users and civil society.

The aim is to harness the power of information to steer the market in the right direction. In practice, this means not only gathering more precise information from regulated players but also broadening data sources through, for example, crowdsourcing tools, finer data processing, etc. There are two main objectives of data-driven regulation: to enhance the regulator's capacity to act, particularly in terms of oversight; and to inform user choice, better orient the market and promote investment.

Lastly, with respect to the environmental impact of digital technology, Arcep and Arcom have developed a General policy framework for the eco-design of digital services (RGESN) in collaboration with ADEME, DINUM, CNIL and INRIA. This is a technical paper aimed at experts and professionals involved in the development, conception and design of digital services. It sets out criteria to ensure that a digital service follows an eco-design approach which addresses the integration of environmental characteristics in product design with a view to improving the product's environmental performance throughout its life cycle. In particular, it identifies best practices **for reducing the environmental footprint of AI training and inference.**

¹ https://www.arcepa.fr/fileadmin/lepost/70/Arcep-raconte_contribution-Arcep-IA-generative_lepost70.pdf