

ARCEP'S RESPONSE TO THE CONSULTATION FOR THE GLOBAL SYMPOSIUM FOR REGULATORS (GSR) 2019 BEST PRACTICE GUIDELINES ON "FAST FORWARD DIGITAL CONNECTIVITY FOR ALL"

1 What are the core design principles for collaborative regulation?

The digital environment is characterized by rapid technological change generating continuous innovation in terms of both business models and uses. Regulation must adapt to this new context, by improving collaboration with all sector stakeholders, including end users. At ARCEP, this collaborative regulation has led to the implementation of data-driven regulation – an approach that combines player accountability, strengthened analytical capacity for the regulator, and the mobilization of users and civil society.

Its principle: Harness the power of information to steer the market in the right direction. In practice, this means not only gathering more precise information from the players regulated, but also expanding the data sources, for example by employing crowdsourcing and more refined data processing tools, etc.

Data-driven regulation has two major objectives:

- amplify the regulator's capacity to act, particularly in a supervisory role;
- inform users' choices, steer the market better, ensure return on investment.

One type of action consists in honing the regulatory tools in order to analyse the ever richer volumes of information and make it possible to increase the speed and effectiveness of regulation by detecting weak signals and systemic problems.

Another consists in empowering users and "link-actors" (public players, associations, civil society, measurement tools, comparators, etc.) by providing them with precise, personalized information in order to make them regulatory players. Through the choices they make, users can "reward" or "punish" the economic players, thus becoming fully fledged regulatory players by influencing economic players' decisions. In this context, the regulator plays an important role: it can support users' choices, providing positive market incentives.

It must be stressed that data-driven regulation cannot exist without the involvement of public authorities. This must not be confused with simple transparency – first, because the regulator intervenes to establish priorities and highlight certain parameters specifically; and second, because the regulator standardizes certain concepts and centralizes the information if appropriate. Lastly, with data-driven regulation founded on a legal framework, it is not a matter of imposing requirements regarding the market behaviour of the regulated players; rather, it must be mandatory for the players to produce the information based on parameters established by the regulator.

To allow these changes to come about, the volume and quality of the data accessible to regulators must be increased, and their sources multiplied. A leading example of this is the mobilization of users to report problems encountered based on a civil-act rather than a customer-complaint approach. Municipalities have thus developed "fix-it"-type applications allowing those they

administer to report different sorts of malfunction (pavements in disrepair, etc.). When it comes to regulation, this type of tool can prove very useful for detecting weak signals or obtaining direct information making it possible to reduce information asymmetries with the players regulated. In order to optimize its action and complete the data it produces clean, the regulator can resort to a **crowdsourcing** approach with various third-party players. ARCEP has done just that with players such as **crowdsourcing** application vendors, user protection players and players in the transport sector, and intends in due course to extend this to players in real estate, tourism, etc.

In order to monitor the quality of service and coverage of, for example, fixed or mobile telecommunication networks, ARCEP has initiated a partnership approach to facilitate the opening up of data and measurements that are increasingly reliable and representative of user usage. It is currently focusing on two areas.

On one hand, ARCEP has worked on a road map for the website [Monreseaumobile¹](http://www.monreseaumobile.fr) whose objective is to enhance public data and open up completely to the measurements effected in the field and to **crowdsourcing**. To that end, ARCEP has published the "Regulator's Kit" to allow the local communities and players conducting measurement campaigns to assess the quality of the mobile experience themselves. It has also reissued its call for players involved in measurement and **crowdsourcing** in particular to join in these activities based on transparent and relevant measurement methodologies.

On the other hand, ARCEP is employing an innovative co-construction approach to matters relating to Internet quality of service by bringing together measurement tools, Internet access providers and academia to ensure that the tools cater to the greatest extent possible to consumers' requirements in terms of information on Internet quality. The first work carried out as part of these activities has made it possible to draw up a code of conduct for players involved in measurement activities, the first version of which was published in December 2018 and will be added to on a regular basis. The work also made it possible to develop an "access ID card" API, which will eventually be installed in the operators' boxes and accessible to measurement tools that comply with the code of conduct, enabling them to characterize the environment of the user effecting the test (access technology, offer subscribed to, parallel uses of connection, etc.).

2 What benchmarks for regulatory excellence and market performance can form the basis for digital infrastructure regulation?

Assessment of the regulatory excellence and market performance of electronic communications can be based on a variety of criteria depending on the objectives pursued. Three such criteria deserve particular attention: competition, openness and freedom of choice, and innovation.

2.1 Competition

Since the telecommunication market in Europe was opened up to competition on 1 January 1998, several hundred new operators have emerged. In 20 years, in France, competition has taken firm root on the fixed market, thanks to the success of unbundling, and a mobile market has emerged, animated from the outset by several players. New players independent from the incumbent operator have emerged and ensured their sustainability by progressively investing in their own infrastructure, exploiting synergies between their fixed and mobile networks and innovating. The

¹ Website www.monreseaumobile.fr is a mapping tool that can be used to compare operators and provides users and decision makers with two types of information on mobile network performance: operator coverage maps, and quality of service indicators.

competitiveness of the electronic communication sector has thus been strengthened by the development of new players, not least as a consequence of interoperability and interconnection between operators.

In recent years, the regulatory context has undergone significant technological and economic change, facilitated *inter alia* by a new digital ecosystem, with the appearance of online services modifying the traditional value chain of electronic communication services.

The increasing hold that the main platforms exert over the economy and society calls for debate on how to limit that hold, which is economic, competitive and societal. While it is essential to modernize the law on competition, in certain cases that will likely not suffice to provide timely and appropriate responses to the structural competition-related problems linked to the operation of such platforms.

At the same time, excessively heavy and unwieldy regulations must also be avoided, as they would be unsuited to the challenges of digital and could reinforce barriers to market entry.

Wieldy approaches must therefore be favoured, based first and foremost on monitoring and the accountability of the different categories of player, accompanied by the right incentives.

Moreover, while maintaining the necessary flexibility, *ex ante* regulation will most probably be essential in certain cases in order to implement calibrated solutions requiring complex operating processes (especially if mechanisms for data portability, interoperability or competitors' access to data sets held by platforms are deemed necessary), in order to allow other companies to develop on markets presently foreclosed by certain major platforms.

2.2 Openness and freedom of choice

By imposing itself as a space of global innovation and expression, the Internet has attracted new attention. The fact that everyone can not only connect themselves but also access and contribute freely becomes a cardinal value, embodied in the principle of Internet neutrality.

Since 2016, the European legislator has protected Internet neutrality, through its open Internet regulations. Thus, ARCEP's mission since then has been to oversee Internet access providers' practices liable to weigh on this principle of neutrality, conduct surveys and impose sanctions that can amount to as much as 3 per cent of an operator's turnover.

Over and above Internet neutrality, ARCEP is of the view that complementary measures must be taken to ensure an open Internet, particularly by having open terminals (smartphones, voice assistant, connected car/TV)². These are just as essential as networks in order to access services and content on the Internet and have a considerable impact on user experience.

Freedom of choice for users in their access to and production of digital content and services – particularly since the 2015 European regulations on an open Internet – is a cardinal value of telecommunication regulations in France and Europe when it comes to guaranteeing an open Internet and freedom of innovation without having to seek permission.

While European law covers interventions permitted in regard to content and applications at infrastructure-level (telecommunication network), there is no guarantee in regard to the main point of access to the Internet, i.e. terminals. As indicated above, the 2018 ARCEP report presents

² <https://www.arcep.fr/uploads/txgspublication/recommandations-terminaux-fev2018.pdf>

an unprecedented in-depth analysis of the restrictions that this equipment and associated operating systems (05) impose on freedom of choice and freedom of innovation.

2.3 Innovation

Innovation is a source of technical and economic progress, and a key lever for achieving long-term growth in a sector. And more specifically in networks, innovation can have repercussions that go beyond the telecommunication sector alone. The possibility of decentralized innovation in networks is essential for the development of digital tools and services based on innovative business models. In addition, increased speed of networks gives rise to a virtuous cycle of development of new uses, which in turn encourages further innovations in the networks.

The regulator, in carrying out its mandate, must therefore promote innovation, the development of new services, and adaptation of those services to users' needs.

In the interest of promoting innovation, the regulator's role should be, above all, to enable and facilitate. The regulator's primary job is not, by its actions, to influence the choice of technologies, which must as far as possible be determined by the market. The regulator's activity must therefore be technologically neutral and offer the best possible protection for innovation, and must pay due regard to consumers' interests. Proactive measures and exchanges with all players in the value chain in the sector (start-ups, competition hubs, manufacturers, operators, as well as users) are thus key elements for knowing and understanding the emerging ecosystem. The aim is to ensure that there is no impediment to the latter's effective self-organization, and to identify the potential framework measures that may be needed to enable innovation to develop.

3 What new regulatory tools and approaches are at hand for enabling digital experimentation?

In addition to the new data-driven-regulation intervention approach, ARCEP has launched a number of activities, such as the "5G pilot projects" interface enabling all players in the 5G value chain to learn about specific cases of use and future challenges of this next generation under real-life conditions, allocate frequencies to interested players for the purpose of full-scale deployments and obtain initial feedback on experience gained to aid reflection and design of future ARCEP allocations; a "Start-ups & experiments" interface to support start-ups, enterprises and local communities in their experimental initiatives; and a "free frequencies" site dedicated to bands subject to general authorization for informing stakeholders and for hosting information provided on a voluntary basis by IoT stakeholders and for reporting on quality of service issues in those bands.

In January 2019, ARCEP along with the government issued a call for the creation of 5G trial platforms in the 26 GHz frequency band, which are open to third parties. The aims of the initiative are to enable all of the stakeholders to seize the opportunities being opened up by this frequency band, and to identify new uses enabled by these frequencies.

ARCEP has also joined forces with Epitech – the school of computing innovation and expertise – to jointly organize a hackathon for students on frequency allocations for mobile networks. One of ARCEP's objectives is to reflect with the students on the evolution of one of the regulator's tasks – frequency allocation. Indeed, the development of new radio technologies and multiplication of requests for the use of frequencies will make it necessary to rethink how frequencies are currently allocated and managed, moving towards dynamic, innovative and eventually decentralized allocations while maintaining some degree of control on the part of ARCEP. ARCEP has therefore

invited students at Epitech to reflect on this in a context characterized by scarcer frequency bands at the bottom of the radio spectrum and the anticipated development of very localized networks high up in the spectrum.

Lastly, a "regulatory sandpit" has been created for enterprises wishing to test an innovative service or technology but are not fully in a position (e.g. owing to their size or for technical reasons) to comply with all the regulations that would normally apply. Under these conditions, limited periods of exemption from part of the regulatory framework can be arranged under specific conditions in exchange for closer supervision of the activities in question on the part of the regulator.
