

Press release

FUTURE NETWORKS

"Artificial intelligence in telecoms networks" and "Smart farming" – Arcep publishes two new briefs as part of its cycle of inquiry into future networks

Paris, 14 January 2020

In September 2018 Arcep began a new cycle of inquiry to anticipate how networks are likely to evolve over the next five to ten years. What shape might they take? What impact will they have on Arcep's job as regulator? The goal for Arcep is to prepare for upcoming challenges in regulating communications networks, and to steer its actions accordingly.

To help conduct this new forward-looking exercise, Arcep surrounded itself with a Scientific Committee of 10 leading figures: academics, entrepreneurs and industry veterans covering a wide range of expertise. The Committee met on 2 December of last year to discuss two new briefs, which are being published today on Arcep's website.

Two new Future networks briefs will be published today on the Arcep website

Artificial intelligence in telecoms networks

Artificial intelligence is a promising technology. What role can it play in telecoms networks? To answer this question, the brief being published by Arcep looks at two uses in particular: network functions optimisation and improving radio planning (managing access to spectrum and expanding mobile coverage areas using smart panels). It also explores several of the issues surrounding this technology such as standardisation, model ownership and the opacity of algorithms, particularly with respect to operators' mastery of these parameters from a regulatory perspective.

Smart farming

The agriculture sector today is facing a great many challenges: productivity, food sovereignty, environmental... The digitisation of farming is emerging as a growth enabler for the sector. The brief published by Arcep describes the digital solutions that have been developed to rise to these challenges, and explores the issue of managing the data generated by this newfound connectivity. This entry into the big data era could result in the data being owned by a small handful of players. This in turn could lead to new dependency schemes for famers, and a loss of sovereignty for both farmers and on a national scale.

As with the previous briefs, this work serves as progress reports on the inquiry to date, and thus does not reflect the Committee members' or Arcep's position.

Arcep invites all interested parties to contribute to this reflection process by sending their feedback on these to documents to "<u>reseaux-du-futur[a]arcep.fr</u>", which will help the Authority to further deepen its analysis. A final version of these documents will be published afterwards. An eighth and final brief will be published shortly. It will address network virtualisation use cases.

Kicking off a debate on future networks and their role in the City: Arcep opens up a dedicated space on its website, and will be hosting a conference in June

All of the briefs published by Arcep can now be found in a dedicated space on its website.

These briefs will serve as the departure point for the discussions at the conference dedicated to Future networks that Arcep will be hosting in June. The central questions that will be addressed will include: what

benefits can we draw from these innovations to map out a desirable model for society? And, on the flipside, could they threaten the values upheld by European democracies? And what role should the regulator play to make these networks help achieve a desirable future?

"Future networks" Scientific Committee: 10 leading figures brought together by Arcep



Pascal Agin
Senior Director, R&D
and Operations
Thalès



Moojan Asghari Co-founder of the start-up **Sesame**



Valérie Blavette Vice-President of Celtic Core Group



Olivier Ezratty Innovation strategy consultant



Serge Fdida
Professor at the
Université Pierre et
Marie Curie, Founder of
Onelab, Director of
Equipex FIT



Lucile Hofman
Director in charge of
connectivity, Métier
Solutions for cities and
territories, Engle



Valérie Issarny Scientific Director, Inria



Daniel Koffman Professor at Telecom Paris Tech, Co-founder and Director of LINCS, Co-founder and CEO of ICT4V



Muriel Sangouard Head of production and broadcasting direction Radio France



Jean-Paul Smets
CEO of Nexedi

Associated documents:

Seven briefs have been published to date as part of the reflection process on future networks:

- Future networks Digital tech's carbon footprint (July 2019) (in French)
- Future networks Dynamic spectrum management (July 2019) (in French)
- <u>Future networks Connectivity issues and challenges: the smart regions example (July 2019) (in French)</u>
- Future networks Agile architectures: Network virtualisation (July 2019) (in French)
- Future networks Connected cars (February 2019)
- Future networks Artificial intelligence (January 2020) (in French)
- Future networks Smart farming (January 2020) (in French)

Arcep at a glance

The Regulatory Authority for Electronic Communications, Postal Affairs and Print Media Distribution (Arcep), a neutral and expert arbitrator with the status of independent administrative authority (IAA), is the architect and guardian of internet, fixed and mobile telecoms and postal networks in France.