



1997 - 2017

20 YEARS OF REGULATION



ARCEP IN THE REPUBLIC



GÉRARD LARCHER,
PRESIDENT OF THE SENATE

The Telecommunications Regulation Act instituted the Telecommunications Regulatory Authority (ART) which was created in 1997 and to which Arcep became the successor in 2005, at which time its responsibilities were expanded to include postal activities.

At once necessary and expected, this Act for which I served as rapporteur marked the end of the public telephone monopoly. We were convinced – and we were right – of both the virtues of competition backed by effective regulation, and the possibility of reconciling it with the imperatives of public service and regional development.

20 years later, in an environment disrupted by the advent of digital technology, the need for efficient regulation remains. Net neutrality, having access to high quality mobile coverage and superfast Internet access are all major issues for our fellow citizens and our businesses, for regional development and cohesion in our Republic. The Senate will thus work to ensure that Arcep uses every prerogative entrusted it by the Parliament in 2016, notably with a view to building “data-driven regulation”.



CLAUDE BARTOLONE,
PRESIDENT OF THE NATIONAL ASSEMBLY

20 years, such is the life span of a generation born in a time when the telecommunications sector was being opened up to competition, and later profoundly shaken by the digital revolution. Just like the sectors it regulates, Arcep’s history is one of constant evolution: since 1997, no fewer than 18 laws, orders and regulations have altered its mandate, expanded its responsibilities, and changed its methods of regulation, right up to the Digital Republic Act of October 2016. However, one aspect has remained

constant: the dedication to progress that must benefit all citizens, and to not letting anyone fall by the wayside. This is at the core of Arcep’s mission of public interest.

20 years is also the age of maturity. A new era is beginning for Arcep, which must work to facilitate the digital revolution. In this changing environment, its scope of action will undoubtedly continue to evolve, as the boundaries between traditional industrial sectors are steadily disappearing. It will also need to become more autonomous, requiring for example financial resources to be assigned to Arcep in order to guarantee its ability to carry out its duties. This evolution must go hand in hand with a strengthening of the National Assembly’s supervisory responsibilities. These responsibilities must extend beyond those that exist today. In this way, both the National Assembly and Arcep will be able to fulfil the roles with which they have been entrusted by our institutions.

20 years from now, we can expect that Arcep will have further evolved, keeping pace with on-going progress. While we await the next anniversary, I wish Arcep all the best in continuing to shape the future.

IN THE EUROPEAN FAMILY



ANDRUS ANSIP,
EUROPEAN COMMISSION VICE-PRESIDENT
FOR THE DIGITAL SINGLE MARKET

The EU relies on national regulators to make sure that rules governing electronic communications are applied uniformly and consistently so that we achieve the right policy objectives for Europe. Arcep has shown its full commitment to this European vision. I know that Arcep, as 2017 chair of BEREC, will continue its valuable contribution to creating a truly European Digital Single Market and strengthen BEREC's important role in improving the EU's internal market for communications networks and services.



**BRUNO
LASSERRE,**
PRESIDENT OF
THE INTERIOR SECTION
OF CONSEIL D'ETAT

Celebrating Arcep's 20th anniversary means sharing the joy and pride of all those in France who helped to build it. It also means remembering that the concept of a regulator comes from Europe, with an obligation for the States to separate the tasks of regulation and operation, and a scope of action limited to the obstacles that cannot be lifted by common competition law.

**"The concept
of a regulator comes
from Europe"**

We have three challenges before us today. First, responding to global operators' strategies, despite regulation is constrained by the geographical confines within which it applies.

Through the cooperation between Europe's 28 regulators, BEREC has demonstrated that we can have an "evidence-based" Europe. Second, stimulating innovation and investment, in a way that benefits Europe's 500 million consumers, but also entrepreneurs. Third, opening regulation up to a new "common good": net neutrality.



**JEAN-MICHEL
HUBERT,**
FORMER CHAIRMAN
OF ART

Europe and regulation: already a long history marked by opening our telecoms markets up to competition on 1st January 1998. There were three key enablers for this tremendous challenge: European directives, national laws and new regulatory authorities, all serving the imperative of consolidating the unity around set objectives and ensuring their consistent implementation. It was with these beliefs that,

on the initiative of France, at a meeting held in Paris in December 1997 the Independent Regulators Group (IRG) was born. Its objective: for shared experience to drive shared success.

**"For shared
experience to drive
shared success"**

This "club" has naturally expanded, has become somewhat institutionalised, but continues to be there to demonstrate to Brussels and to international bodies, within an increasingly globalised market, regulators' desire to maintain the focus and clarity that the many stakeholders expect. A grand ambition and a good fortune for Europe, its market players and its consumers.

 **2002**

First Telecoms Package, merging market analysis with competition law

 **2007**

Creation of the predecessor of BEREC, the Body of European Regulators for Electronic Communications

 **2010**

First meeting of ERGP, the European Regulators Group for Postal Services

"«Europe! Europe!» Are we condemned to be like goats, jumping up and down on a chair occupied by American operators, singing their own praises to protect themselves while hoarding all the data?"

MARIE-ANNE FRISON-ROCHE,
Professor at Sciences-Po Paris

"Switzerland has its cooperative model for optical fibre, France has its network sharing model for broadband. Long live broadband's development!"

PHILIPP METZGER,
Director of OFCOM (Switzerland)

"The single telecom market policy has given us a great deal. The question today is: can we continue to sustain an effective sector-specific policy for the EU in a Europe that has come to a standstill?"

YVES GASSOT,
Chief executive officer of IDATE

"It was inevitable that Europe, whose phone number some have claimed not to know, give birth to cooperative telecoms regulation."

CHRISTINE LE BIHAN-GRAF,
Lawyer, Paris Bar, associate at the firm De Pardieu Brocas Maffei

"«Merry Christmas» was the first SMS ever sent in Europe, more than twenty years ago. Season greetings still inspire a vast amount of texting today. The way we deliver messages has changed; the content not really!"

ALEJANDRA DE ITURRIAGA,
Director telecommunications and audiovisual division of CNMC

"Borrowing from Jean Monnet, working together beyond our differences (actually, French was England's official language for 300 years) and geographical boundaries (actually, we are only 34km apart), we always find a common interest."

SHARON WHITE,
Chief executive of Ofcom (UK)

"When operators look at you, do they see a national regulator protecting national interests? Or a branch of the European regulatory system which takes the local conditions into account?"

HENK DON,
Member of the ACM board

"Similarly to France and Norway being early contributors to the European Internet deployment, Arcep and Nkom are first adopters of European net neutrality recommendations."

TORSTEIN OLSEN,
Director general of Nkom

"In France, a data-driven regulatory approach is being tested: QoS indicators may be gathered by consumers and can be packaged in rating systems. We are all looking very attentively to this experience."

FATIMA BARROS,
Chair of ANACOM

"Say hello to tomorrow but never say goodbye to yesterday. So keep on competing, investing and connecting. Be vigilant - and may the market forces be with you all."

WILHELM ESCHWEILER,
Vice-president of BNetzA

"Over the past two decades, Arcep has emerged as one of our most valuable partners in the formation of European regulatory policies, and a source of best practices for all the European Authorities in electronic communications and postal services."

DIMITRIOS TSAMAKIS,
President of EETT, professor at the National Technical University of Athens

THE ENTREPRENEUR'S ALLY



PIERRE-JEAN BENGHOZI,
MEMBER OF THE ARCEP EXECUTIVE BOARD

Enabler of economic growth, source of innovation and an engine of high quality services: helping businesses in their digital transition is one of Arcep's top priorities. This concerns every business, tech start-up or not. French SMEs do not lag behind today only because of their technical culture, but also because of connectivity issues: function creates need. Committed to anticipating and enabling future services, connecting every business and supporting outside of the box innovations, Arcep has redefined its priorities and fleshed out its toolkit so that entrepreneurs and SMEs are no longer an overlooked dimension.



PAUL CHAMPSAUR,
FORMER CHAIRMAN
OF ARCEP

It is the evolution of telecommunications technologies that has made it possible for several competing operators to coexist. Without government intervention, the monopoly, which was often held by a public enterprise, would have continued to exist. To remedy this market failure, every European country created its own regulatory authority, whose task is to ensure that competition develops and remains fair and effective.

"It is thanks to businesses that invest heavily and count on the rules set out by the regulator to be stable that competing operators are able to grow"

This authority must remain independent as the State still has control over the entity that inherited the public

enterprise which held the monopoly over the legacy network's core elements, such as the copper local loop, which would be too costly for several companies to reproduce. It is thanks to businesses that invest heavily and count on the rules set out by the regulator to be stable, that competing operators are able to grow. My most gratifying memory is of seeing coverage expand across the country thanks to unbundling, undertaken at the time by enterprises such as Neuf and Free. This is how broadband access at competitive prices became ubiquitous: the fruit of true competition.



MARIE EKELAND,
CO-FOUNDER OF DAPHNI,
VICE-PRESIDENT
OF FRANCE DIGITALE

In working to include start-ups in European net neutrality debates, through the balance that was eventually achieved, Arcep demonstrated the importance of including entrepreneurs in regulatory discussions. It will be vital for start-ups to continue to be included in discussions devoted to building an open Internet, on topics ranging from the fairness

of platforms to data portability. Their presence will be especially useful in light of the need to devise innovative self-regulation solutions to meet the challenges induced by the proliferation of players, users and digital services by relying, for instance, on reputation systems and crowdsourced data.

"There will be a need to devise innovative self-regulation solutions to meet the challenges induced by the proliferation of players"

The ability to innovate freely, within the core of an open Internet, also requires start-ups and regulators to interact in new ways. Let us hope that Arcep's recent introduction of a single point of contact for start-ups and a system of relaxed regulation for those who want to experiment, will facilitate the emergence of new French champions in the communications sector!

 1998

Telecommunications market opened to competition, thanks to the Telecommunications Regulation Act No.96-659

 2001

First 3G frequencies allocated to operators

 2015

New range of products by La Poste to allow content-neutral pricing

"Create, innovate and tap into consumers' enthusiasm to change the rules of the game: is that not what entrepreneurs are all about!?"

TAÏG KHRIS,

Founder & chief executive officer of Onoff Telecom

"Investing in the telecom infrastructures of tomorrow supposes fair competition between operators. #ModernRegulation"

MARTIN BOUYGUES,
Chairman & chief executive officer of Bouygues

"A country builds its networks knowing that one day they will be filled: it is one of the truths about telecoms. How many factories know they will be operating at full bore 20 years from now? #NeverEndingStory"

"IoT is a new opportunity that Europe must not miss out on, a new space for new rules and new players!"

LUDOVIC LE MOAN,

Co-founder & chief executive officer of Sigfox

"Network regulation, competition between operators, protecting consumers' and businesses' digital interests, the Internet of Things: Arcep is working to safeguard our digital freedom!"

MARC TAIEB,
Chief executive officer of Bolloré Télécoms

EMMANUELLE AURIOL,
Professor of Economics at TSE - Université Toulouse 1 Capitole

"CGPME and Arcep, working together to help SMEs and SoHos in their digital transition!"

"20 years of successful regulation that has benefitted the people of France. Bravo Arcep! But keep your hands on the wheel. There can be no sustainable investment without competition. A duopoly is never far away."

XAVIER NIEL,

Founder, deputy chairman, chief strategy officer & senior vice-president of Iliad Group

"Arcep: Architect of Revolutionary Change – new Era, new Practices"

JACQUES VEYRAT,
President of Impala

FRANÇOIS ASSELIN,
President of the CGPME

"The actions taken by Arcep enable entrepreneurs to create, to innovate, to offer consumers high quality products and services, at competitive prices, while also helping to create jobs."

"Arcep: Acceleration, Regulation, Convergence, Entertainment and (always) Positive! Happy anniversary... 20 years old: isn't it a great age to be?"

MICHEL COMBES,
Chairman of the board of SFR Group, chief executive officer of Altice

CÉLINE LAZORTHES,
Founder & chief executive officer of Leetchi.com

ARCEP, COMMITTED TO ACHIEVING NATIONWIDE COVERAGE



MARTINE LOMBARD,
MEMBER OF THE ARCEP EXECUTIVE BOARD

More than ever before, ensuring regional connectivity is a top priority for Arcep. Superfast fixed access and high quality mobile coverage are essential ingredients in any region's attractiveness, as much in rural as urban areas, for providing jobs and satisfying everyone's day-to-day needs. Arcep is mobilising its entire arsenal to achieve the right balance between public action and market forces, which is the only way to meet this major challenge.



PATRICK CHAIZE,
PRESIDENT OF AVICCA,
SENATOR

For every generation of technology, every surge in usage, we need to meet the needs of widely disparate regions, from rural to mountainous to overseas to small towns.

"The actions of lawmakers and regulators, and the initiatives of national and local government need to converge within a strategic and adaptive vision."

In an ultra-connected world, any significant divide with lucrative areas, in terms of timeline or price, comes at the cost of lost appeal

and competitiveness. On the flipside is the considerable challenge of being able to do business remotely, in those regions where the quality of living is high. Fixed superfast network rollouts are well underway, but far from complete. Strong measures need to be put into place to guarantee high quality mobile coverage. And we are only just getting started on 5G and the Internet of Things. The actions of lawmakers and regulators, and the initiatives of national and local government need to converge within a strategic and adaptive vision.



JEAN LAUNAY,
MEMBER OF PARLIAMENT

Regional coverage helps strengthen ties between the people of France. It should be seen in the same way as rivers, waterways, roads and railways. And it lies at the heart of regional issues and challenges, whether for fixed or mobile coverage or fibre rollouts.

Can anyone imagine France without running water or electricity?

"At home, at work, when travelling or on holiday, the true meaning of Digital for the People"

The stakes are just as high today. If anyone needs persuading, they need only observing our most agile populations, always looking for a network, or listening to the frailest among us. We are working to guarantee that every person in France has a fast connection. At home, at work, when travelling or on holiday, the true meaning of Digital for the People becomes clear.

 2004

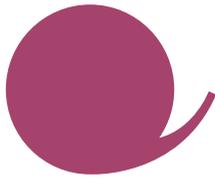
Creation of the predecessor of GRACO, the Forum for discussions between Arcep, local authorities and operators

 2005

Creation of the universal postal service, which includes a parcel service

 2011

Allocation of the 800 MHz frequency band, carrying ambitious 4G rollout obligations for rural areas



"Fibre networks may be here to stay, but behaviours are changing: the Minitel, cable TV, ADSL, FTTH... For the past 20 years, Rennes métropole has been ensuring coordinated local fibre rollouts with operators and through public-initiative networks."

BERTRAND DELOFFRE,
Vice-president of Rennes métropole

"Superfast broadband and 4G for the whole of the Oise in 2020, with a balanced commitment from local authorities and private operators."

JÉRÔME BASCHER,
Departmental councillor for Senlis township, vice-president of administration and finance

"A regulator to erect a stable framework, operators to invest and public authorities to support them: the winning combination for achieving regional coverage."

STÉPHANE RICHARD,
Chief executive officer of Orange

"20 years ago, I was meeting with ART staff to talk about the Minitel and the internet. Today, we are talking about fibre and gigabits for all. The regulator and telecoms have changed a lot since then, some might even say at the speed of light!"

JEAN-MICHEL SOULIER,
President of Covage

"Homo Arcepiens is 20 years old. This young species has proven its ability to strike out and conquer new territories. Its strength is and must continue to be its ability to adapt to a changing world, and its openness to newcomers."

ANTOINE DARODES,
Director of the French Digital Agency

"Absinthe, the «Green Fairy», has its roots in the Doubs. One century later, optical fibre has become the new «Electrical Fairy», and being deployed without moderation!"

DENIS LEROUX,
President of the Doubs Très Haut Débit joint association, vice-president of the Doubs Regional council

"What better than the «French model» to combine coverage and competition that benefits everyone, thanks to a neutral and open network?"

GABRIELLE GAUTHEY,
Director of investment and local development of La Caisse des Dépôts

"A marvellous strand of glass to deliver ubiquitous superfast access to everyone. It was not dressmakers that needed persuading, but rather authorities and elected officials of all stripes. Explaining that asymmetrical speeds are not the result of a generation gap, and that investing in building a nationwide optical fibre network open to all was becoming an issue of national importance."

JACQUES DE HEERE,
Chief executive officer of ACOME

"When I was a member of the Arcep board, quality of service for trains and cars on the road was measured at a standstill. Thanks to GRACO discussions, things have evolved."

DANIEL-GEORGES COURTOIS,
Chief councillor at the Cour des Comptes

"Regulation, public service and innovation go hand in hand! Partnerships, digital products: by prioritising local services provided by human workers, La Poste is working to strengthen its regional development mandate."

PHILIPPE WAHL,
Chief executive officer of La Poste Group

GUARDIAN OF THE OPEN INTERNET



FRANÇOISE BENHAMOU,
MEMBER OF THE ARCEP EXECUTIVE BOARD

An open Internet: it should be a foregone conclusion. And yet, the battle continues. Europe has seized on the issue. Three reigning principles: actively monitor, demand transparency on the practices of operators tempted to curb network neutrality by favouring certain content, engage in data-centric regulation. The scarcity of neutrality infringements in France testifies to the widespread adherence to this imperative.



ISABELLE DE SILVA,
PRESIDENT OF THE FRENCH
COMPETITION AUTHORITY

An innovation catalyst, the Internet is to the economy of the 21st century what electricity was to the economy of the 20th century. Creator of its own momentum, it simultaneously raises fears of seeing entire economic areas pre-empted by all-powerful players.

"Protecting an open Internet is a joint undertaking"

Competition law is well equipped to meet this challenge. Flexible, it does not obey rigid classifications: its application adapts to the market's evolution. Universal, it depends neither on the nature of the services in question, nor the location of the companies' headquarters. Lastly, pragmatic, it combines instruments of enforcement and of regulation

to guarantee merit-based competition. Beyond that, protecting an open Internet is a joint undertaking: all regulators must contribute to it, according to the particular forms of intervention afforded them and their general interest missions.



MOUNIR MAHJOUBI,
FORMER PRESIDENT
OF CNUM

"We must champion democratic, collaborative and inclusive control over the Internet"

Tomorrow's economy will be based on platforms: it is crucial that their specific properties be taken into account when crafting regulation. Aiming to ensure that the Internet remains an open space that develops

as a common asset, CNum and Arcep share the same vision: we must champion democratic, collaborative and inclusive control over the Internet. France has been leading the charge in Europe since the Digital Republic Act introduced an obligation for platforms to treat consumers fairly. To be truly efficient, the legal corpus needs to be completed by a flexible and innovative inter-regulation mechanism. It is against this background that the Government recently called on CNum to clarify its recommendation to create a public and transparent system for evaluation platforms' practices. Initial findings coming up in March 2017!



Arcep proposals and recommendations on Internet and network neutrality



Regulation (EU) 2015/2120 of the European Parliament and Council of 25 November 2015 laying down measures concerning open Internet access



Publication of Arcep report to the government on IPv6 adoption



"For an economist, net neutrality has both pros and cons. But one undeniable merit of this measure is the guarantee that small and large content providers will be treated equally."

MARC BOURREAU,
Professor – researcher at
Télécom ParisTech

"The internet made it possible to build irreplaceable knowledge commons, from Wikipedia to Open Source software. Let's keep it that way!"

TRISTAN NITOT,
Chief product officer of Cozy Cloud

"Open Internet rules are wholesale access rules for the whole economy, guaranteeing consumer access to retail, banking and entertainment, hence why they pay for broadband in such great numbers."

EDWARD BLACK,
President & chief executive
officer of CCIA

"Proud to have accompanied @Arcep in the rise of IPTV yesterday and ADSL over fibre today. #convergence #Arcep20years"

JEAN-CHRISTOPHE THIERY,
Chairman of the Canal+
Group management board

"Data sorting by platforms and network ratings equals manipulating information and opinions. In its modern version. And are we even talking about zero rating?"

AGNÈS DE CORNULIER,
Legal & political analysis
coordinator of La Quadrature du Net

"Over the past 20 years, Arcep has successfully guaranteed an open Internet enabling the emergence of innovative start-ups and services, success for France and success for Europe. #AndMayItContinue"

"The Internet is the essential communications infrastructure of the 21st century. Its access, its power and its sturdiness derive from its openness: never hypothesize on what it's transmitting."

NICK LEEDER,
Managing director of Google France

DANIEL KAPLAN,
Co-founder & chief
executive officer of FING

"The secrecy of private correspondance is the bedrock of modern democracy. Do we still need to explain why Deep Packet Inspection is bad?"

BENJAMIN BAYART,
President of the French Data Network

"Arcep's open Internet platform – propelling France towards creating the 21st century Silicon Valley. But will it become the new Freedom Fries for some other countries?"

"France and Europe have always led the way in digital market regulation. From privacy protection in 1978 to transparency on algorithms and data portability starting in 2018: 40 years of legislative and regulatory innovation serving openness and users."

KARTIK RAJA,
Chairman & lead investor
of Phimetrics

JEAN-BAPTISTE SOUFRON,
Lawyer at FWPA Avocats

ARCEP, A PARTNER WITH PROVEN EXPERTISE



PHILIPPE DISTLER,
MEMBER OF THE ARCEP EXECUTIVE BOARD

Far from excluding dialogue, independence actually enhances it thanks to the expertise it guarantees. This expertise is indeed rooted in the ongoing dialogue with socio-economic stakeholders and the regions. It is made available to Parliament and the Government which can consult the Arcep board, including on matters of inter-regulation. These issues can now be tackled through joint endeavour by the different authorities' boards which can exchange their opinions, and so provide a fresh perspective.



**OLIVIER
SCHRAMECK,**
CHAIRMAN OF CSA

In their 20 years of existence, Arcep and CSA have forged many and fruitful cooperative ties that extend well beyond the reciprocal requests for opinions imposed periodically by governing texts.

"The full importance of the healthy collaboration between CSA and Arcep, to guarantee that one single freedom to communicate"

Access to the audiovisual services that CSA is responsible for regulating often goes by way of the networks regulated by Arcep. Network providers' competitiveness depends more and

more on the quality of their audiovisual products. Finally, the huge global digital platforms, sandwiched between content and pipes, have the power to challenge both the diversity of the first and the neutrality of the second. And herein lies the full importance of the healthy collaboration between CSA and Arcep, to guarantee that one single freedom to communicate, each according to its mandate and its own priorities.



**ISABELLE FALQUE-
PIERROTIN,**
PRESIDENT OF CNIL

Back in 2012, CNIL began advocating for the development of inter-regulation. We are convinced that, in this complex digital universe, where the boundaries between professions and sectors are dissolving, public authorities need to coordinate with one another to unify their requests for compliance from stakeholders, and from businesses in particular. It is a matter of effective public action, and of clarity in that action. Here,

Arcep and CNIL share several topics of interest. Electronic communications operators' retention of connection data and the future e-privacy directive are two good examples.

"The boundaries between professions and sectors are dissolving, public authorities need to coordinate with one another to unify their requests for compliance from stakeholders"

Legislation now supports this inter-regulation, since the Digital Republic Act allows for "cross-referrals" between CNIL and Arcep. The first exchanges between the two institutions over "compliance packs" for the telecoms market represent a positive step in that direction. Nobody doubts that this cooperation will only grow and become stronger in the years ahead.

2002

Creation of FRATEL, the network of French-speaking telecommunications regulators

2003

First digital market barometer, the fruit of a collaboration between the Economic General Council (CGE) and Arcep, with which the French Digital Council teamed up for the 2016 edition

2016

Contribution to France Stratégie public consultation on the outlook for 2017 – 2027

"Can there be fairness
without pluralism?"

Pluralism without openness?

Openness without competition?

Competition without transparency?

Transparency without privacy?

When technology gets involved...

... so do Arcep and its partners!"

FRANCESCA MUSIANI,

Permanent researcher at CNRS

and ISCC, associate researcher

at the Centre for the Sociology of

Innovation of MINES ParisTech-PSL

"Data: a powerful tool of market
regulation. #data-driven regulation.

Today, @arafer_officiel gets them
from operators. Tomorrow from
travellers? #crowdsourcing"

BERNARD ROMAN,

President of ARAFER

"By stepping up its open data policy,
Arcep has become an increasingly
vital source of information for
analysing and understanding the
changes at work in the digital world."

PHILIPPE BAILLY,

President of NPA Conseil, founder of
the Carrefour de l'Internet des Objets

"The digital market barometer that
we publish jointly with Arcep every
year serves to deepen our respective
analyses of regulation, its evolution
and the digital economy's growth."

LUC ROUSSEAU,

Vice-chair of Economic
General Council

"Arcep: the hub and guarantor
of the quality of FRATEL
discussions, which bring together
French-speaking regulators
from five continents."

PHILIPP METZGER,

Chairman of FRATEL

"When Arcep takes the metro,
the RATP provides more telecom
and digital services for travellers
and their safety: an Arcep-
RATP partnership for 3G, 4G and
professional mobile radio networks."

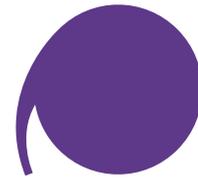
ELISABETH BORNE,

Chief executive officer of RATP

"Arcep has been a valued participant in our
work, contributing data, evidence-based analysis
and policy insights as well as contributing
to the international dialogue that is the hallmark
of the OECD. Happy Birthday from the OECD."

ANDREW WYCKOFF,

Director for science, technology
and innovation of OECD



"My best wishes to Arcep for
its 20th anniversary, a partner
that Conseil d'Etat case law is
pleased to accompany, whether
in setting prices, defining roaming,
numbering plans or, more broadly,
the evolution of soft law."

BERNARD STIRN,

President of the litigation
section of Conseil d'Etat

"Arcep is like the big sister
in the family of regulators. Still
young, it continues to grow and
experiment. But older than the
rest, it inspires its younger siblings
by imparting its experience."

ERIC BROUSSEAU,

Scientific director of the chair
"Governance and regulation" and
of the "Club of Regulators" of
the Université de Paris 4 Dauphine

"1968: 15% of households with a
phone line, and a Plan that makes
catching up a priority. 2017: the
Plan's successor, France Stratégie, is
working with Arcep to prepare for 80
billion connected objects in 2020."

FABRICE LENGART,

Deputy commissioner-general
of France Stratégie

ARCEP, EMPOWERING USERS



MONIQUE LIEBERT-CHAMPAGNE,
MEMBER OF THE ARCEP EXECUTIVE BOARD

Arcep works to ensure competition that benefits users. Empowering users begins with guaranteeing respect for their rights. It also means facilitating their choices, by providing them with relevant information and by safeguarding the market's fluidity. The regulator's approach, which has been guided by 30 proposals since 2011, is being renewed today in a bid to build more, for and with users.



JOHANNES GUNGL,
CHIEF EXECUTIVE
OFFICER OF RTR

"The protection of the rights of man and the citizen requires a public force; consequently this force is established in the interest of all, not in that of those to whom it has been entrusted." (Declaration of the Rights of Man and of the Citizen, Article 12)

"Arcep's mission to strengthen the rights of end users is rooted in the French Revolution"

Although Arcep has only just ceased being a teenager, Arcep's mission to strengthen the rights of end users is rooted in the French Revolution, more than 200 years ago. In my view, Arcep has always managed to combine the role of public force and strong advocate for end-users' rights.

Arcep has once again accomplished this mission by passing its leading network test, creating transparency to enable end-users to make informed decisions. Arcep – keep your revolutionary spirit! Europe will need it for the challenges ahead!



JEAN-LUDOVIC SILICANI,
DEPUTY-CHAIR OF THE
PUBLIC WORKS SECTION
OF CONSEIL D'ETAT,
FORMER CHAIRMAN
OF ARCEP

The French Postal and Electronic communications code reminds us that Arcep works on behalf of users and protects consumers. By enabling innovation to spread, the main objective of opening the sector up to competition was to facilitate the development of new services and to reduce prices. Broadband and later superfast broadband access, both fixed and mobile, are available to a growing percentage of the population,

at prices that have decreased by 20% in five years! Lower costs have also meant consistently high margins: investments have reached a record high (€8 bn in 2015).

"By enabling innovation to spread, the main objective of opening the sector up to competition was to facilitate the development of new services and to reduce prices"

At the same time, there is greater transparency on the products, thanks to objective and impartial information that is published on the quality of the services and coverage levels across the country. Lastly, operators have streamlined their plans, and so made users' lives easier. Let's hope this virtuous circle continues.

 **2004**

Launch of coordinated analysis between Arcep and its European counterparts on the wholesale roaming market

 **2007**

Introduction of the RIO code to facilitate mobile number portability

 **2016**

Development of an online reporting platform for users, both consumers and enterprises



"Regulatory authorities guarantee fair competition that is vital to businesses' development. This is an element of trust without which there can be no growth and no jobs."

PIERRE GATTAZ,
President of MEDEF

"Coverage maps, QoS scoreboards: Arcep's actions allow consumers to choose the products that suit them best."

NATHALIE HOMOBONO,
Director general of DGCCRF

"Crowdsourcing quality of experience will only work if users are motivated. «Same quality, same price» could be the pledge of trust for telecoms players."

BERNARD DUPRÉ,
President of CRESTEL,
head of innovation of RATP

"Liberté Living-Lab working alongside Arcep, an agile regulator, to rethink public involvement in the #digital and #data era!"

MOHAMMED-ADNÈNE TROJETTE,
Chief executive officer of Liberté Living-Lab

"EU regulation creates competition in telecoms markets. Competition generates consumer welfare. A winning formula!"

ÖRJAN BRINKMAN,
President of BEUC

"«For the many, who are not as individuals excellent men, nevertheless can, when they have come together, be better than the few best people, not individually but collectively.» Was Arcep's future already written by Aristotle?"

FABIEN RENAUDINEAU,
Chief executive officer of Qosi and 4GMark

"Modern, cybernetic regulation must give pride of place to openness, transparency, citizens' commitment to creating a true collective intelligence that serves the common good."

HENRI VERDIER,
Director of SGMAP - DINSIC

"Telecoms was the first business sector to have an independent ombudsman, allowing virtually all of the customers of operators declared with Arcep to use this free mediation system, should a dispute arise."

CLAIRE MIALARET,
Mediator of electronic communications

"20 years ago, there was no Google, Facebook or even SamKnows. But there was Arcep! We hope to be as old as Arcep one day. ☺"

SAM CRAWFORD,
Co-founder of SamKnows

"Regulation that enables the market to thrive is good... Regulation that is also committed to the reality of quality of service, and - maybe? - sets a minimum threshold, is better!"

ALAIN BAZOT,
President of UFC-Que Choisir

"Talking on the phone with a person who is deaf, hearing impaired or speech impaired? A service that will (at last) be available in France!"

JEAN-FRANÇOIS LABES,
President of Unisda



ARCEP, OFFICE OF INNOVATION



JACQUES STERN,
MEMBER OF THE ARCEP EXECUTIVE BOARD

Fostering innovation is one of the objectives that Arcep has been assigned. In its recent strategic review, the Authority chose to make it one of its top four priorities. This «pro-innovation prism» is leading the regulator to lower regulatory barriers to experimentation, notably in terms of accessing scarce resources such as frequencies, and to protect innovators by taking a neutral attitude that enables new technologies to evolve, right up to their possible adoption by the market.



PASCAL FAURE,
DIRECTOR GENERAL
OF DGE

Digital innovation is in the process of profoundly transforming our industry and our economy. This innovation is first and foremost technological, with networks that deliver increasingly faster connections (5G, optical fibre), with the Internet of Things, artificial intelligence, robotics, cloud computing and big data. It contributes to create new services, applications and business models – notably those being ushered in by start-ups – which are altering the way value-added is distributed and erasing the dividing lines between the digital sector and the rest of the economy.

**"Public policies
need to anticipate
and shepherd
the digital
transformation"**

To reach its full potential and free up innovation, public policies need to

anticipate and shepherd this digital transformation by providing clarity and ground rules that are fair for all of the players, including those that are not yet born. The rules and regulations governing electronic communications must help sustain this momentum: making data openly available, having proper control over them, more flexible spectrum management and the right to experiment are all decisive steps in this direction.



**PROFESSOR
ALAIN FUCHS**
PRESIDENT OF CNRS

The amount of innovation being mobilised at any given moment to make our digital world possible is truly exceptional. And this tide of constant renewal of concepts and technologies continues unabated. To give just one example: the distribution and connection of networks on an international scale is gradually abolishing any distinctions between fixed and mobile, between the cloud and the network itself. Understanding and mastering the system

of systems that perpetually evolving communication infrastructures have become is a major scientific challenge.

**"It is vital to
join forces"**

This challenge indeed supposes our ability to construct intellectual models and tools that allow us to characterise, model and master infrastructures and objects as quickly as they come into being. It is a challenge that galvanises CNRS and its partners: to be able to understand ever expanding objects with the required depth, power and speed, it is vital to join forces, within the sphere of public research of course, but also between public research and industry players.

 **2002**

Arcep's decision authorising the launch of Wi-Fi in France

 **2015**

Arcep's and stakeholders process of preparing for the Internet of Things revolution

 **2016**

The Digital Republic Act introduces a more flexible framework for experimentation

"When it comes to the Internet of Things, we need to rid ourselves of the idea of frequencies dedicated to a single technology or market, which should give way instead to unlicensed frequency bands."

OLIVIER HERSENT,

President & chief technical officer of Actility, vice-chair of the LoRa Alliance

"Much more than a regulator, Arcep is an innovator for digital start-ups: by proving its commitment to the IoT revolution, and in the actions taken to facilitate experimentation."

ANNE-MARIE KERMARREC,

Co-founder & chief executive officer of Mediego

"Innovating means being useful to customers and making their lives easier, from postal riders to the IoT Hub, it's what La Poste has been doing for 500 years."

NATHALIE COLLIN,

Deputy chief executive officer & head of digital solutions and communications of La Poste Group

"Innovation without standardisation: in the long run, isn't it just an hallucination?"

PHILIPPE VALLÉE,

Chief executive officer & executive board member of Gemalto

"New forms of connectivity are paving the way for developing innovative smart city services, and Arcep provides us with a collaborative approach that allows us to anticipate and to help the regulatory framework to adapt."

ALBERT ASSERAF,

Director of strategy, marketing and research of JCDecaux France

"An #innovation like «Le Lab, by @Qowisio» – a lab for trialling and developing multi-tenant smart buildings – is only possible on a playing field that is open to everyone."

CYRILLE LE FLOCH,

Chief executive officer of Qowisio

"Innovation cannot be decreed or planned. Encouraging it means encouraging the unpredictable, the outlandish, the most baffling and most ambitious ideas thanks to open-minded regulation."

OLIVIER EZRATTY,

Innovation and new digital technologies consultant

"The Internet of Things will usher profound changes into our lives and especially into our cities. These changes will only be possible if every stakeholder listens and adapts to these innovations."

LAETITIA GAZEL ANTHOINE,

Chief executive officer of Connectings

"Still no petrol, still no GAFA, but a utopia at work: regulating for innovation and for a digital republic in Europe."

STÉPHANE DISTINGUIN,

Founder & chief executive officer of FaberNovel

"Orange continues to invent and build the networks of tomorrow, the cornerstones of the digital transformation and of our economic development."

MARI-NOËLLE JÉGO-LAVEISSIÈRE,

Senior executive vice-president, innovation, marketing and technologies of Orange



ARCEP, NETWORKS ARCHITECT



BENOÎT LOUTREL,
DIRECTOR GENERAL OF ARCEP

Communication networks are our society's nervous system. Arcep works to guarantee their availability nationwide, so that our fellow citizens might benefit from innovative services, at an affordable price. This multi-dimensional action is based on pro-investment regulation of market players and supporting local authorities in making the digital transition, wherein photons are replacing electrons in our homes.



JEAN-CLAUDE MALLET,
ADVISER TO THE
FRENCH MINISTER OF
DEFENCE, FORMER
CHAIRMAN OF ARCEP

Operators, the regions and State government departments are all working to build superfast networks, and to lay the groundwork for our future in an increasingly digital world. But this will also be a world of threats that use cyberspace and manipulate cyber technologies to subvert, to spy on, to paralyse and even to destroy infrastructures and resources that are critical to our economy, our social lives and our defence systems.

"Imperative to guarantee the networks' security, and especially their resilience"

The White Paper on national defence and security clearly stressed the accelerated rate of development of these threats and

the strategies they employ. It is therefore imperative to guarantee the networks' security, and especially their resilience. Their ability to withstand incidents and attacks and to recover will become an increasingly crucial issue, for both economic livelihood and State sovereignty. This is why, with the help of the National Cybersecurity Agency of France (ANSSI), it is essential that the sector work continually to improve its protection capabilities. Arcep has managed to become a recognised partner for ANSSI and for all of the State government departments with sovereignty mandates, and I congratulate it.

"Will new services be provided by traditional mobile operators or will new providers emerge?"

Many believe the technology could address every facet of the connected society, whether it be improved manufacturing, connected medicine, ultra-efficient smart cities or self-driving cars that can take us wherever we want to go. But will these services be provided by traditional mobile operators or will new providers emerge?



PHILIP MARNICK,
DIRECTOR OF THE
SPECTRUM GROUP AT
OFCOM, CHAIR OF THE RSPG

People are looking to the fifth generation of mobile services, 5G, to support almost every service you can imagine – from traditional mobile broadband to the next stage of the industrial revolution.

 2002

"Bravo" group recommendations on the technical and commercial implementation of unbundling

 2009

First Arcep decision setting a symmetrical framework for fibre rollouts

 2016

Guidelines on mobile infrastructure sharing (roaming, mutualisation)

"Networks form the backbone of today's global digital economy. And as we build 5G, collaborative regulation will be critical to improving lives."

HOULIN ZHAO,
Secretary general of ITU

"#Open Internet is the world's engine for continued growth and innovation and will ultimately replace every other legacy network – for voice, data and video."

DAVE SCHAEFFER,
Founder & chief executive officer of Cogent Communications

"Innovative IoT services will emerge successfully thanks to a climate of complete digital trust!"

FRANCK LEBEUGLE,
Director of AFNOR
Certification Business

"Today, IPv6 is no longer an option, but rather crucial to maintaining an open and interoperable Internet, notably for the Internet of Things."

EMMANUEL SARTORIUS,
President of Afnic

"More than just simple pipes, networks are at the heart of an inclusive digital society which, tomorrow even more so than today, will connect people and machines all over the world. A pro-investment framework is a prerequisite to all that."

PIERRE LOUETTE,
Deputy chief executive officer of Orange, president of Orange Digital Ventures

"Eutelsat is convinced that networks, a common asset, will remain the infrastructures of freedom if an inclusive and partner-based vision for the future prevails. We will continue to evolve in support of these goals."

RODOLPHE BELMER,
Chief executive officer of Eutelsat Communications

"What a revolution can we expect to see in 2022, with 550 million 5G subscriptions, 10 times more mobile traffic and 29 billion connected objects... Maybe the first robot managers? Will we still be able to tell the real from the virtual? Some hope so, and some believe so, according to Ericsson's ConsumerLab."

FRANCK BOUETARD,
Chief executive officer of Ericsson France

"Superfast networks are completed and enhanced by unlicensed frequencies (Wi-Fi, IoT narrowband, etc.). What of shared 5G frequencies? We must not miss this opportunity to bolster innovation!"

JOËLLE TOLEDANO,
Professor of economics at Centrale Supélec

"The aim of the longstanding cooperation between Arcep and ANFR is to continue to pave the way for tomorrow's mobile communications, with ever more efficient infrastructures and spectrum resources!"

JEAN-PIERRE LE PESTEUR,
Chairman of the ANFR executive board

"New oligopolies show up, strong regulation is key for companies to be able to benefit from digital technology."

DANIELLE JACOBS,
Director of BELTUG,
chair of the INTUG board



REGULATING IN THE 21ST CENTURY



SÉBASTIEN SORIANO,
CHAIRMAN OF ARCEP, BERC CHAIR 2017

The creation of Arcep in 1997 marked the end of an era: the era of State control over communications infrastructures in France. But let us not misunderstand: public authorities did not withdraw but rather reinvented themselves. Relinquishing none of its ambitions for the telecoms networks that are so vital to the life of the nation, the State was able to decentralise their operation, through the emergence of an independent regulator – the transmission belt between the public interest and the market – and through new forms of solidarity at the national and local level.

Twenty years later, telecoms stand out as a successful example of this new alchemy of public authorities, which uphold the interests of our fellow citizens, and public service requirement by relying on economic forces, local initiative, innovation. And the need for regulation only continues to grow, as the many recently adopted national and European Acts demonstrate, not to mention the postal sector which Arcep has also been regulating for 10 years now.

#FrameworkReview

#2017Chair

#CrossBorderParcels

#InvestmentOpportunities

#FrequencyLicences

#PragmaticRegulation

#ConnectedTerritories

#WhiteAreas

#CoverageMaps

#PlatformsDevices

#Interconnection #NN

#NewConnectivity

#CoInvestment

#QualityofService

#OneOffice

#Empowerment

#Crowdsourcing

#OpenDialogue

#UnlicensedFrequencies

#StartupOffice

#AgileCollaboration

#DigitalIntelligence

#JointReflection

As enduring as it may be, this need for regulation must not prevent us from rethinking how we go about it. We have already seen it in other areas: the rise of digital culture is ushering in a new era of government action, based on sharing and agility. Herein lies the very crux of the “360° outlook” that Arcep has adopted “pivot” in which Arcep has been engaged since the strategic review it performed in 2015.

Regulating with data

In a complex and ever-changing environment, it is harder to anticipate the future, which can hamper the regulator’s ability to use its traditional toolbox.

But digital technology can also forge new channels. By publishing the right information, we can make every user a “mini regulator” who will reward virtuous market behaviour through the act of purchasing, and so steer the sector in the right direction.

Regulating with data is thus an approach that goes well beyond mere transparency. It means “unbundling data”, in other words looking for data deep in economic stakeholders’ “bellies”; or relying on crowdsourcing as cities are doing with their “fix it” tools. As it works to promote the smart and abundant

processing of information, the regulator may opt to become the hub of a “RegTech” community composed of specialised companies and members of civil society.

“Pro-innovation” regulation, continually opening new doors

Telecoms regulation has enabled talented entrepreneurs to access the resources – numbering, frequency, copper local loop, interconnections – they needed to build new networks and services, and unlocked innovation well beyond anything previously imaginable.

In the digital era, “pro-innovation” regulation will remain more crucial than ever before. Because it is almost always marginal players who discover and create new worlds, innovation must not be confined to incumbent players or pre-existing models. For the regulator, this means working to guarantee that the internet remains open, so that everyone can interact and innovate, without bias nor silos. It means accepting abundance and uncertainty, giving everybody a chance, creating room for experimentation and the emergence of alternative models, inside or outside the market, free of all preconceived notions.



Photographies credits : C. Bartolone © Assemblée nationale; G. Larcher © Sénat; A. Anspic © European Union, 2017 / Source: EC - Audiovisual Service / Photo: F. Walschaerts; B. Lasserre © Hamilton / REA; J-M. Hubert © Arcep; P-J. Benghozi, M. Lombard, F. Benhamou, P. Distler, M. Liebert-Champagne, J. Stern, B. Loutrel © Arcep - S. Meyer; P. Champsaur © Arcep; P. Chaize © Sénat; J. Launay © Assemblée nationale / Domi photographe; I. de Silva © Conseil d'Etat/Dircom; M. Mahjoubi © CNum; J-C. Mallet © Arcep; P. Marnick © OFCOM; J. Gungl © Christof Wagner - RTR; A. Fuchs © CNRS / Francis Vernhet; P. Faure © Minefi / P. Bagein; O. Schrameck © CSA / Christophe Calais; I. Falque-Pierrotin © CNIL / F. Plas; J-L. Silicani © G. Rolle / REA; M. Ekeland © CNum / p.2 © N. Rosenfield / Unsplash ; p.5 © fdecomite / Flickr ; p.7 © Mooshny / Shutterstock ; p.9 © Miks Mihails Ignats / Shutterstock ; p.11 © S. Isabella Turk / Ribbonhead / Flickr ; p.13 © S. Rodriguez / Shutterstock ; p.15 © I'm Priscilla / Unsplash ; p.17 © Pexels ; p.19 © Serato / Shutterstock

Graphic design : Spintank – ISSN n° 2258 – 3106 – Arcep – February 2017

MANIFESTO

ARCEP, COMMUNICATIONS NETWORK ARCHITECT AND GUARDIAN

Internet, fixed and mobile telecom and postal networks constitute the “**Infrastructures of freedom**”. Freedom of expression, freedom to communicate, freedom to access knowledge and to share it, but also freedom of enterprise and innovation, which are key to the country’s ability to compete on the global stage, to grow and provide jobs. Because it is essential in all open, innovative and democratic societies to be able to enjoy these freedoms fully, national and European institutions work to ensure that these networks develop as a “**common good**”, regardless of their ownership structure, in other words that they meet high standards in terms of accessibility, universality, performance, neutrality, trustworthiness and fairness.

Democratic institutions therefore concluded that independent state intervention was needed to ensure that no power, be it economic or political, is in a position to control or hinder users’ (consumers, businesses, associations, etc.) ability to communicate with one another.

The electronic communications and postal regulatory authority (Arcep), a neutral and expert arbitrator with the status of quasi autonomous non-governmental organisation, is the **architect** and **guardian** of communication networks in France.

As network architect, Arcep creates the conditions for a plural and decentralised network organisation. It guarantees the market is open to new players and to all forms of innovation, and works to ensure the sector’s competitiveness through pro-investment competition. Arcep provides the framework for the networks’ interoperability so that users perceive them as one, despite their diversity: easy to access and seamless. It coordinates effective interaction between public and private sector stakeholders when local authorities are involved as market players.

As network guardian, Arcep enforces the principles that are essential to guaranteeing users’ ability to communicate. It oversees the provision of universal services and assists public authorities in expanding digital coverage nationwide. It ensures users’ freedom of choice and access to clear and accurate information, and protects against possible net neutrality violations. From a more general perspective, Arcep fights against any type of walled garden that could threaten the freedom to communicate on the networks, and therefore keeps a close watch over the new intermediaries that are the leading Internet platforms.