



Telecoms as the “Secured Data Hub” for the digital society

Data is the fuel for great customer experience and opportunities in the future



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Orange is a French-based global telecommunications operator with sales of 41 billion euros in 2017 and 150,000 employees worldwide, including 92,000 employees in France. The Group has a total customer base of 261 million customers worldwide, including 201 million mobile customers and 20 million fixed broadband customers. The Group is present in 28 countries. Orange is also a leading provider of global IT and telecommunication services to multinational companies, under the brand Orange Business Services.

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Foreword

Building the foundations of Trust for the future digital world

At the GSMA, we are convinced that the combination of data and technology will radically transform how we live and work, generating enormous value to our society. The world is at the dawn of a new digital revolution with both enormous potential and considerable uncertainty. The scale of this next wave of digital transformation creates a strong rationale for multi-stakeholder collaboration.

It is essential to assess both opportunities and pitfalls, and to anticipate the best way to reconcile innovation with security and privacy protection so that all our customers benefit. It is therefore our collective responsibility to ensure that data – all data – are carefully managed. We believe that telecom operators’ strong security-and-privacy DNA gives them a unique role to play in creating a trusted data ecosystem.

Portability is an essential building block of this customer-centric vision. It provides citizens with a way to derive value from their personal data. We think it is essential to put in place the conditions for all digital users to benefit from their data – for example by using them to create a tailored customer experience or provide innovative data-enabled services.

In 2017, a group of leading European telecom operators – Deutsche Telekom, Orange, and Telefónica – created the Data Portability Cooperation initiative. This started a journey with the ambition to turn the data privacy regulation into an operational reality for European citizens.

The GSMA aspires to be a driver of action and transformation for our society. Our priority is to avoid fragmentation and multiple standards, which would produce a suboptimal customer experience. We aim to take this initiative to a higher level because we are convinced that the Data Portability Cooperation initiative is the right foundation for simplifying data management in a secure way, so that it will unlock innovation and growth.

This publication is intended as a document for industry discussion. We hope it will generate reactions and new ideas that will feed debate. The initiative is open to any company willing to join us on this journey – to work together on privacy protection, while building up trust in the digital world.

We will be more than happy to welcome new partners to foster the development of a trusted data ecosystem.



Afke Schaart

VP and Head of Europe, Russia and CIS Countries at GSMA



Executive Summary

Intelligent connectivity, the powerful combination of flexible, high-speed 5G networks, the Internet of Things (IoT) and artificial intelligence (AI) will radically transform the way people work and live, as their lives rely more and more on data. Connected devices are expected to quadruple the average individual's daily data interactions by 2025¹. If data management is not paid enough attention, consumers could lose control over their data or – worse – suffer breaches of their privacy.

That's why trusted data managers will be an essential condition for a successful digital society. These managers will be trusted data hubs that are independent, operate according to a high standard of ethics – and are also embedded in the digital economy, so that they are convenient, secured and technically excellent.

In line with the General Data Protection Regulation (GDPR), the telcos' vision is to put customers in control of their data, so that data is used for their benefit. The telecoms industry must work together for a brighter future, in which they can unlock innovation and the value of personal data. Telcos' value proposition is Trust, Transparency and Simplicity in data management.

Telecom operators are well positioned to become trusted data managers. Privacy and security are part of their DNA. They have excelled in data management for decades; have a strong history of compliance with the strictest regulations; are equipped with advanced digital capabilities; and are deeply rooted in local markets. They are also aware of the importance of building long-lasting relationships with customers.

The Data Portability Cooperation (DPC) initiative is an inclusive working group facilitated by the GSMA and led by major European Telecommunications operators including Deutsche Telekom, Orange, and Telefónica. It has been developing a first draft of specifications to provide trustworthy, secure, and automated data portability for consumers. The essence of the specifications is the telcos' vision of transparency and control.

Other telecom operators and industries are welcome to join the Data Portability Cooperation initiative to develop it further. They will have the opportunity to build an ecosystem of trusted data managers that reach beyond the telecoms industry.

¹ IDC Data Age 2025 report

Things are changing fast, we need to prepare for a data-centric future

People are increasingly dependent on data, which support services such as entertainment, e-commerce, banking, travel or food. As providers of these services become more important to people’s lives, the number of daily data interactions per connected individual is expected to grow from about 1,200 to 5,000 in 2025¹.

As a result, data creation will boom. Already, humanity produces around 20 exabytes a day, the equivalent of 5.5 billion high-definition movies. This is expected to grow 26 per cent a year from 2018 to 2025¹. With the introduction of 5G, the IoT is forecast to reach 25 billion connections by 2025.

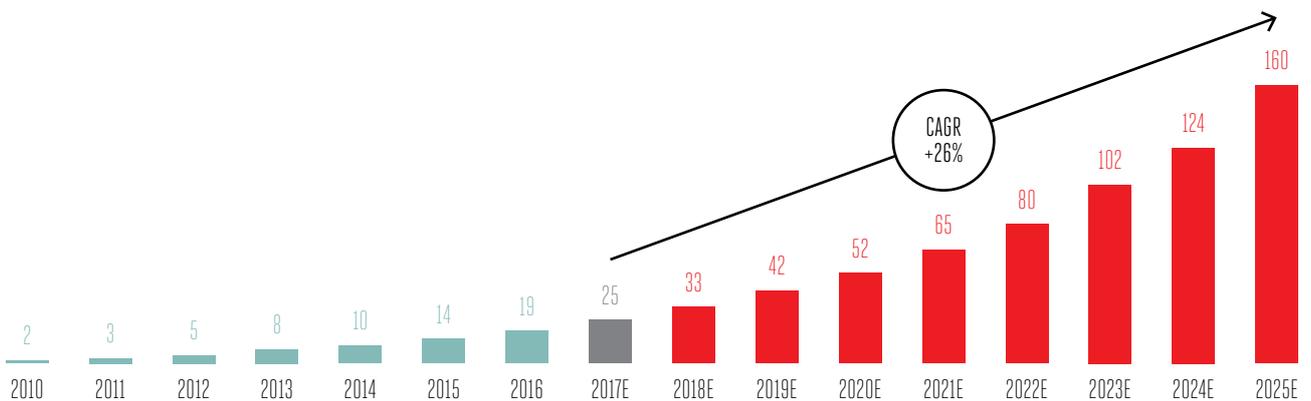
A big chunk of this is personal data, which is related to an identified or identifiable individual – for example,

name, ID, address, location, contract information, and banking data. The rest of the data is generated by companies’ day-to-day operations – such as network scans, analytics, and business transactions – and by sensors, which produce data through individual interactions with company services.

The data are of critical importance, as they enable companies to improve their services, make them more relevant, and develop new ones. In the future, advanced algorithms will lead to a huge range of compelling, innovative services that will anticipate people’s wishes and needs, while helping them navigate life’s challenges and setbacks.

Figure 1

Global Digital Information created per annum (Zettabytes²)



¹ IDC Data Age 2025 report

² zettabyte (ZB) = 1,000,000 petabytes (PB)



Still, it is not always easy for citizens to keep their data secure. Personal data are scattered around many places: a typical individual has more than 100 online accounts¹ and will have many more in the near future. Daily life is often lived in a maze of silos and online accounts. While people benefit from many services, they are not always aware of the value of their data or the risks to their privacy. They want to continue to benefit from the convenience provided by the services but without the downsides.

That means people will need trusted data managers – and these will be essential for the success of a digital society. These managers need to be independent and to adhere to a high standard of business ethics. They should also excel technically, be rooted in the digital economy, and provide services that are convenient and secure. In short, they should constitute a trusted and secure data hub.

Our vision is to put the customer in control

The protection of customer data has always been a priority for telcos. Now, people are becoming increasingly concerned about the protection of their personal data. 84 per cent feel they are not sufficiently in control of it. 20 per cent are considering using a lot fewer of those digital services that have poor data protection. And 10 per cent are not using digital services at all².

European telecom operators are convinced that our Industry must work together for a better future through data management based on the values of trust, transparency, control, and simplicity. Those are the key principles to enable the digital economy and to build a secure ecosystem. It provides the foundations for growth.

Telcos want to put customers in control of their data and provide them greater privacy. In line with the GDPR, they will offer tools and services that provide people with visibility on the use of their data. These will include common data formats that make possible interoperability and the transfer of data from one trusted data manager to another.

Telcos will use data to tailor and enhance customers' experiences for Telco services. They will also offer handy data-based services with innovative, value-added features that make daily life easier. Each customer will be able to choose what data they want to be used in tailored services and experiences. Telcos will only use data in order to benefit their customers.

1 Dashlane Inbox Scan Analysis, 2015

2 2018 OVUM Digital Consumer Insights



Telecom operators are well positioned to become trusted data managers

Secure networks and reliable communications are part of telcos' DNA. Telecom operators continuously build and operate mission-critical networks and have always been close to the pipes through which all data from industry and society flow. Security has been and will remain the focus for telcos. To provide the necessary support, they have developed strong and proven cyber security capabilities. Over the last 10 years, less than 2 per cent of people affected by a data breach was in the telco sphere¹. Telcos have the best track record in privacy and data management. They have become a paradigm for privacy and security: for example, mobile lines are now used for multiple authentication processes.

Telcos have also been processing relevant data for decades. The services they offer mean they have been dealing with an ever-increasing amount of information and have become pioneers in managing new types². As a result, they have developed a long track record of successfully managing immense quantities of data.

Telecom operators are in a privileged position to be secure data hubs and, as such, true enablers of the digital economy. They have protected data for decades, keeping secret communications and subscribers. They have developed a range of digital capabilities and are deeply rooted in local markets. They also understand the critical importance of building long-lasting relationships with customers, and always putting them first.

¹ Oliver Wyman analysis based on market analysis of databreaches.net and IDTheftCentre reports

² Cisco: Global Fixed and Mobile Internet Traffic

A group of Telecom operators started this journey working on a first draft of specifications for data portability, empowering customers with their data

Since September 2017, an open group of European operators including Deutsche Telekom, Orange and Telefónica have been collaborating within the GSMA to develop the Data Portability Cooperation (DPC). This is a test-and-learn initiative, of which the first step has been to draft specifications for data portability. These specifications are being proposed to the industry as a whole as a means to add value for customers while protecting their privacy and thus empowering them.

The draft specifications define the ways in which customer data should be exchanged. This means data portability can be carried out in the interests of customers. In particular, the specifications define technical aspects such as a flexible data scope configuration, communication protocols, and data formats.

It is the first industry initiative to build common specifications for secure and automated data portability. The proposed specifications are flexible by design, so each operator can complement a common data scope by adding data of other types. Each telco can define on the scope when adhering to the initiative, considering local and technical requirements. A link to the first draft of the specifications is available in the appendix.

In the future, any trusted data manager will be able to adhere if it meets the principles of service symmetry, security, simplicity, transparency, and reciprocity.

While this initiative is only one possible option, it has helped to develop a first draft of the specifications focused on data migration and putting the customer first: only the customer can decide whether to share its data or not.

Figure 2

Requirements of the Data Portability specification

(More details in Appendix)





Join the DPC Initiative at GSMA to finalize the specifications and build a trustful data ecosystem

A first draft of the specifications for data portability will soon be available. As telcos we believe that enabling a positive and people-centric digital future requires constructive collaboration between all stakeholders.

A unique and common solution will benefit customers by avoiding fragmentation and complexity. All telcos are welcome to participate in the GSMA facilitated working groups, and they will then be able to have an input to the specifications being drawn up. Wider participation will enable the building of industry-wide specifications and mean they are used on a larger scale.

Telcos have the opportunity to collectively build the best solution for their customers. They also have a collective responsibility to make their customers more aware of the importance of their data and the need to take control of them.

Data Portability Cooperation is an initiative supported by a significant part of the telco industry. It is a successful example of innovation resulting from an industry genuinely collaborating for the greater good.

The initial draft of the specifications and on-going developments indicate that the project could be leveraged beyond telcos. The common principles make it easier for different stakeholders to join whilst leveraging resources and benefit individuals.

Deutsche Telekom, Orange and Telefónica envision a world in which privacy is protected and data trusted. We are convinced that a greater good will come from reconciling data security and innovation. We want to build an ecosystem of secure data hubs, something that is currently lacking. We welcome all organizations sharing the same vision to join.

Appendix

First draft of the technical specifications

The first draft of the specifications defines which customer data should be exchanged. It will be enriched over the time with additional elements, such as protocols, etc.

The reader can find below a link to a first draft of the Data Portability Cooperation Technical Specifications.

www.dataportabilitycooperation.org

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