# Drive revenue beyond connectivity

Atos: delivering tomorrow's technology today





## The case for change in telecoms

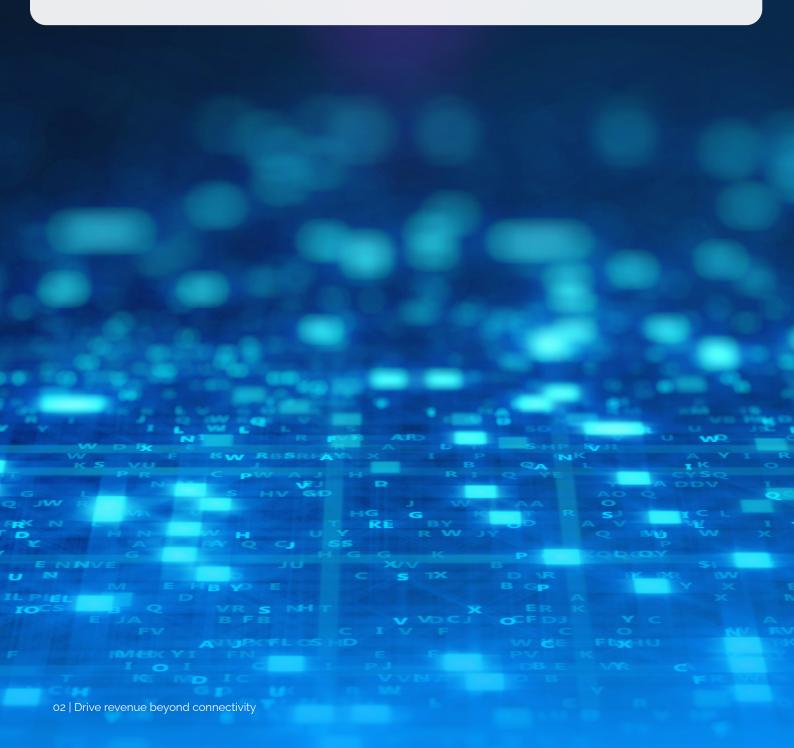
From computer vision-enabled smart cities to autonomous cars, digital healthcare, mobility-as-a-service and more, the future of telecoms is evolving beyond connectivity.

Driven by 5G and multi-access edge computing, today's telcos have an exciting opportunity to participate and win in the cloud economy. After all communications service providers (CSP) sit at the very heart of these major technological advances. And they have unrivalled experience delivering services at scale to millions of consumers.

With the focus now turning to high value enterprise services, telecoms companies are in the driving seat. If the opportunities are significant, so are the challenges. Telcos, however, have little options but to respond. Pure connectivity has become

commoditized, transported data prices are dropping and margins are being squeezed. Therefore, creating new sustainable revenue-driving business models is not just an option, it's a necessity in meeting the challenges of today's fiercely competitive markets.

Atos is uniquely placed to accelerate telecommunications transformation of existing networks, to turn data into value, as well as speeding up the introduction and (r)evolution of new services and solutions for customers across many sectors.



## From 5G to the future: becoming a next generation digital service provider

As a systems integrator and trusted partner with 20 years' experience in the telecoms sector, Atos combines extensive digital transformation and systems integration capabilities with deep domain expertise. Our next generation telecoms ecosystem partners, our unique combination of Atos infrastructure, applications and data capabilities all contribute to the creation of a truly next generation service experience.

#### (R)evolution of new services and solutions

- Accelerate digital service delivery. Bring digital services to market faster with Atos-powered digital technology and business services – bundled and delivered with telco connectivity and compute services.
- Enable business model transformation. Our data-driven commercial and technical product catalogue enables personalization and bundling of owned and third-party assets. Leverage the Atos customer engagement platform to develop easy to configure, activate and use digital services to enhance customer engagements. Transform the OSS/MANO layer to orchestrate and automate digital services end-to-end.
- Create state of the art digital building blocks. Build the
  digital infrastructure at the heart of transformation with
  the latest 5G technology, virtualized infrastructure, edge
  solutions, Atos OneCloud and the machine learning,
  Al, analytics and automation needed to ensure selfoptimizing environments.

#### Accelerate your journey to net zero

By design, next generation networks must contribute to reducing carbon emissions and energy consumption of telco operations and in new green B2B2X digital services. Having strengthened our net zero digital services and expertise with highly specialized skills from EcoAct, an Atos company, we're helping to pioneer the most efficient core and radio access networks, low energy cloud transformations and eco-design platforms to design and launch new eco smart services.

We enable our customers around the world to assess, measure, track, reduce and offset their carbon emissions. They are supported by expert advisory services and the Atos Decarbonization Center of Excellence, which combines telecommunications and carbon expertise.

- Net Zero Transformation advisory: analyze climate maturity and define a Net Zero strategy and roadmap at enterprise level or for specific business functions.
- Green digital support services: eco-design platforms to develop green digital products and services with B2B2X smart carbon calculators, data-driven tools to monitor carbon forecasts and climate risks and manage overall ICT emissions.
- Nature-based solutions: customized carbon credit generation projects and financial tools to define, implement and monitor options for offsetting and removing residual emissions at telecom companies.

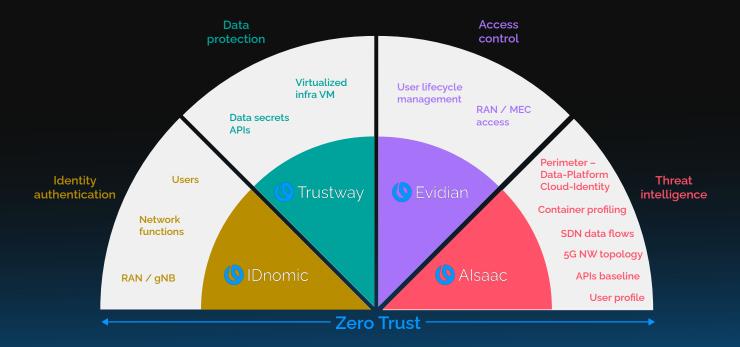
## Trust in your business advantage

With network security a key factor in 5G, protections requirements range from telco Cloud Security Posture Management (CSPM) through encryption of distance network lines and highly secure certificate management to sophisticated automated incident response systems. All of these provide a secure and reliable platform for all the MEC applications running on top of 5G, and are essential elements of modern **Secure Service Edge (SSE)** concepts as well as of Telco Security as a Service offerings.

As a global leader in security, Atos delivers the telecom, cloud and 5G protection that forward-thinking operators need today, including:

- Cloud Security Posture Management (CSPM) for B2B
  Cloud and Telco Cloud: Simplify security operations and
  reduce cloud-related incidents by enabling complete
  visibility, control, and compliance from a single source with
  a multi-cloud managed service.
- Identity and Access Management (IAM): Evidian Identity and Access Management as-a-Service ensures that applications and users access resources only when authorized.
- Public key infrastructure (PKI): Enable millions of subscribers and devices to authenticate, securely access IT resources and exchange data with IDnomic PKI solutions.
- Managed detection and response (MDR) solutions: Using advanced security analytics of endpoints, user behavior, applications and the network, Alsaac's advanced managed security services provide deeper detection and faster response.
- Encryption Key Management: Atos Trustway Data Protect Key Management System (KMS) provides a centralized key management platform equipped with data access control and monitoring capabilities.

#### Atos Prime Telecom and Cloud Security Products



## Making the future real

At Atos, we don't just talk about the future, we deliver it today. Working with some of the world's largest and most innovative telecommunications companies, we help radically transform business models and operating environments to secure and grow revenues and margins.

Accelerating service delivery



### Delivering a new 'Digital Vision' with BT

Al video and image analysis is now used industry-wide in applications such as transport safety, manufacturing quality control and location tracking. Enabling this technological leap, Atos and BT's jointly developed 'Digital Vision' computer vision solution improves security and monitoring for customers by enabling effective, real-time use of video and image data. Digital Vision uses BT's leading digital 5G/FTTx connectivity with Atos's Computer Vision platform and edge computing to ensure business customers receive a scalable, ready-to-deploy service with round-the-clock support and

Find out more here



## Predictive analytics 5G edge solution with Verizon

Atos and Verizon have launched an industry-leading partnership to power intelligent IoT solutions with private 5G multi-access edge computing for businesses, governments and communities worldwide. Providing an end-toend architecture and outcomebased service model that includes hardware, 5G, application and automation, field services and service desk support, the solution will transform the way companies leverage predictive analytics to enable new levels of operational efficiency, risk mitigation and revenue generation. Find out more here

000000

#### Securing Qatar's national Smart City Program (TASMU)

Atos and Ooredoo are working together to deliver cybersecurity threat detection and response services to Qatar Smart City Program "TASMU" – the first smart city project in the Middle East. Supporting the Qatar National Vision 2030, the project integrates cloud-native intelligent security analytics and next-generation Artificial Intelligence (AI) capability from the Atos Alsaac platform to secure TASMU's infrastructure and applications into the future.

#### Enabling business model transformation

#### Multinational telco serving Africa and the Middle East markets.

#### Delivering access with telco-wide API initiative

With access and interoperability issues common across multi-region telecoms providers, this global operator engaged Atos to bring everything together. The API program objectives were ambitious: provide the internal commercial function with uniform access to its entire service portfolio while ensuring API access and usage for third parties. Following an in-depth API assessment and roadmapping program by Atos, the creation of a marketplace for public API management and the development of an API subscription management model, internal assets have been exposed as standard services and robust access and control mechanisms are now in place to radically simplify the environment.

#### French-based operator with a European presence.

#### Consolidating rating, charging and billing functions for major French operator

Inflexible legacy systems, long product delivery times and the inability to bundle non-telco services were just some of the challenges solved by consolidating BSS to a single next-gen platform. Designed and delivered by Atos, this critical project has modernized and simplified rating, charging and billing functions – with seamless integration into the telco's existing environment. Now, with the performance and scalability to process mass transactions in real-time, the telco has the tools to enhance quality of service, improve customer experience and deliver new business models. All of which have contributed to maintaining profitability.

#### Major Netherlandbased operator.

#### CRM transformation for major Netherlands-based telco

With expectations rising, a cutting edge omni-channel experience is critical to driving subscriber growth. But an inconsistent and highly fragmented customer journey – lacking a single customer view – was driving up acquisition costs and new product time to market. Working with Salesforce and Vlocity, Atos has re-imagined the underlying infrastructure, deploying a new cloud-based core CRM platform, B2B self-service portal and business intelligence system. Six legacy systems have been retired – resulting in significant cost savings – and system security and resilience have increased. Now, the telco's 1000+ customer service agents have the tools to deliver a great experience with the self-serve portal meeting the evolving expectations of customers.

#### Creating state of the art digital building blocks

## Major German

#### Driving agility in the cloud for German-based operator

This major initiative aimed to transform the telco's existing end-of-life voice and messaging applications into a virtual machine or container-based cloud environment. The Atos CI/CD Solution was selected to give the telco rapid service agility to onboard new 5G Core voice and messaging applications. In addition, the Atos monitoring and data analytics solution enables AI/ML driven closed control loops, prediction and self-healing capabilities to address network issues. The result is lower cost operations and higher serve quality for the organization and its end customers.

## Atos solutions for digital service providers



#### **Customer Engagement Platform**

The mainstream arrival of advanced broadband technologies, in combination with IoT and edge computing, is a game-changer. In this competitive market, customer experience and engagement are key differentiators. We can work in partnership to guide, support and accelerate your journey to a next-generation Customer Engagement Platform and BSS transformation.



#### **Data Monetization**

With a combination of leading-edge innovation labs/tools/frameworks and multiple telecom engagements around the globe, Atos has developed a unique datadriven intelligence solution. Whether you have already embarked on, or are contemplating your journey,

Atos Data Monetization is here to help – with our success measured by yours.



#### Telco Cloud

Atos Telco Cloud is a private or hybrid cloud environment to host Network Functions

(VNFs / CNFs) of 5G and other telco networks.

Performance and reliability are critical. It has been designed to meet the demanding levels of secure network traffic flow combined with ultra-low latency requirements.



#### **Next-Gen Telecoms Networks**

In the age of 5G, the convergence of cloud, edge and artificial intelligence technologies will revolutionize the way people live, work and play – creating major new opportunities and challenges for telecoms operators. Atos Next-Generation Telecoms Network ecosystem will accelerate your ambitions to become a next-gen telco.



#### **OSS Transformation**

Alongside the growing importance of virtualization technologies and demands for agile service creation, Atos OSS Transformation is ready to handle multi technology and multi environment scenarios. The solution comprises a complete set of OSS domain services from operational support & readiness subdomain cross fulfilment, up to assurance processes.



#### Telco Production Excellence

Under Telco Production Excellence, Atos runs the application and the related infrastructure in the core value chain of telco clients and takes end-to-end outcome responsibility of IT services. Atos transforms the Current Mode of Operation (CMO) to an agile and customer centric and highly automated Future Mode of Operation (FMO) to ensure Quality of Services (QoS) and efficient operations.

## Atos solutions for digital service providers



#### **B2B Cloud for Telcos**

Cloud is an enabling technology of B2B2X telco business models. Atos supports telcos with the cloudification of their IT operations, as well as in introducing "as a service" offerings to their end customers. At the same time, Atos provides customer enablement services or the consumption of new telco products.

Find out more here



#### **Telecom Cloud Sovereignty**

Service sovereignty – independence of foreign jurisdictions – is an important differentiator in today's market, highly relevant to telcos who operate critical national infrastructure. Atos, with our unique combination of cloud and security expertise, is a key player in both cloud sovereignty and 5G technological sovereignty.

Find out more here



#### Edge and MEC applications

Edge applications suitable for telco value-add service delivery will be a critical future element. Edge-level artifical intelligence will play a key role.

Atos specializes in edge video analytics throughout many industry sectors, serving use cases as diverse as physical security, operational excellence (e.g. airfield or port operations), retail intelligence and automated quality inspection.

Find out more here



#### **Mobile Private Networking**

Mobile Private Networks (MPNs) play an important role in emergency organizations and homeland security, and now are increasingly found at manufacturing plants, mines, hospital campuses, sport stadia, airports and seaports.

The Atos Lifelink product family is an ideal offering for modern "industrial 5G" applications.

Find out more here

To find out more, visit: https://atos.net/en/industries/telecommunications

## **About Atos**

Atos is a global leader in digital transformation with 112,000 employees and annual revenue of c. € 11 billion. European number one in cybersecurity, cloud and high performance computing, the Group provides tailored end-to-end solutions for all industries in 71 countries. A pioneer in decarbonization services and products, Atos is committed to a secure and decarbonized digital for its clients. Atos is a SE (Societas Europaea), listed on Euronext Paris and included in the CAC 40 ESG and Next 20 Paris Stock indexes.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Find out more about us atos.net atos.net/career

Let's start a discussion together









Atos is a registered trademark of Atos SE. January 2023. © Copyright 2023, Atos SE. Confidential Information owned by Atos group, to be used by the recipient only. This document, or any part of it, may not be reproduced, copied, circulated and/or distributed nor quoted without prior written approval of Atos.