# Next Service Orchestrator Generation

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Telecom Sector

Your business technologists. **Powering progress**

# What we do

**Creating business advantages for clients with our global IT services**

Atos is a leading player in global Information and Communications Technology services, software, platforms and payments solutions. With its deep technology expertise, Atos drives business progress for its clients to achieve measurable results.

**Bull** atos technologies  **worldline** e-payment services  **canopy** the atos cloud  **bluekiwi** An Atos Company  **Atos** Consulting  **Atos** Worldgrid  **UNIFY**

Managed Services

Transactional & Payment Services

Consulting

Cloud & Enterprise Software

Systems Integration

Big Data & Security

Communication Software & Platforms

**10,000**
UK & Ireland
United Kingdom, Ireland

**6,500**
Iberia
Andorra, Portugal, Spain

**16,500**
France

**9,000**
North American Operations

**4,000**
South America
Argentina, Brazil, Chile, Colombia, Uruguay

Headcount as of February 2016

**8,000**
Benelux & The Nordics
Belgium, Denmark, Estonia, Finland, Luxembourg, Sweden, The Netherlands

**13,000**
Central & Eastern Europe
Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Greece, Hungary, Italy, Lithuania, Poland, Romania, Russia, Serbia, Slovakia, Switzerland, Turkey

**12,000**
Germany

**6,000**
Asia Pacific
Australia, China, Hong Kong, Indonesia, Japan, Malaysia, New Zealand, Philippines, Singapore, Taiwan, Thailand

**15,000**
India, Middle East & Africa

**Atos** | Worldwide IT Partner

# Future networks

- "Hyper-connected world" driven to a better use of the network possibilities

- New orchestration requirements
  - flexibility

- Anyone-Everywhere

- Balance investments from stakeholders

- Dynamically network process

**AtoS**

# Operating Networks and Services

- Interconnected world, automatically adapt infrastructure for smart services

- Big Data and Data Analytics
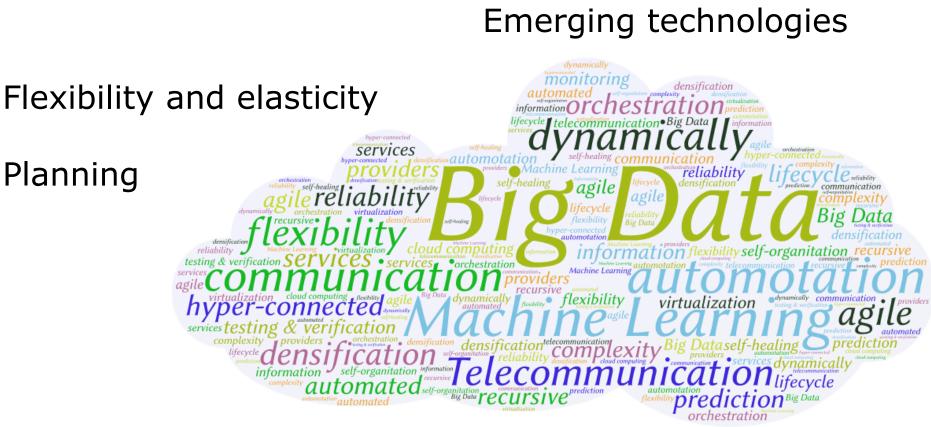  - technology and business transformation
  - anticipate customers needs



- 5G Digital transformation

  - vendors and providers
- Network complexity

**AtoS**

# XG vision- Terms

Prediction

Emerging technologies

Flexibility and elasticity

Planning



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# Challenges

Service Communication products from wide range of stakeholders

- **MANO** architectures should be **flexible**
- Low cost: **Onboarding, testing and verification**
- Complexity in **service lifecycle**
- **Agile working** frequent incremental changes in an open and trusted manner
- **Recursive deployment** to support **multitenancy**
- OSS systems should evolve **3rd party service components** interfaces

**AtoS**

# Automation!

Data analytics and Policies for network self-healing and self-organization:

- Policies will define operations for different domain controllers providing **activation and remediation functions**.

- **Network self-healing** will be a capability of OSS remediation and discrete and composite levels.

- **Self-organization** will be achievable through micro-service orchestration controlled by internal and external agents.

- **Monitoring use of network** will provide information about customer demand over large locations.

- Include new technologies, such as **Galileo navigation**, will gave new insights for the vertical sectors.

# Densification vs Rural areas





- Developed countries but also developing ones

- Cost efficient deployment

- Use of spectrum

- Increase use of Backhaul



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# Greener communication

- Footprint
- New actors
  - Energy producers
  - IT companies
  - Brokers
- Interconnection of electricity networks
- Distributed Energy Resources (DERs)
- Forecast generation and consumption

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## Questions?
## Thanks

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