We are THE European IT Leader and a top 5 Digital services player worldwide

€ 13bn in 2017
Big Data & Security
1 Mission, 4 Go-to-Markets, 4 Business Lines

HPC, AI & Quantum
High-performance solutions, data management & quantum computing innovation

Big Data
High-end platforms and appliances & IT modernisation

Cyber Security
Cyber Services
Intelligent platforms for digital security, trust & compliance

Mission Critical Systems
Intelligent systems for Defence, Homeland Security, Aerospace & Transport

Intelligence in a data driven world
A data-driven economy is now on its way

Data drives the process
Data drives the customer experience

Data drives the business

By 2020 there will be more data than stars in all the galaxies of the Universe, 75 billions of connected smart objects.

70’s  90’s  10’s
Mainframes  Web & mobile  Internet of Things

1 ZETTABYTE = $10^{21}$ bytes = 1,000,000,000,000,000,000,000 bytes
HPC & Quantum Global Business Line

Key figures

300 M€ Revenue in 2017
> 20% growth vs 2016

500++ HPC experts worldwide

TOP 5 HPC Players
19.2% 2017/2016 growth
Expanding HPC limits

- HPC & AI systems
- Data Management
- SW environment
- HPCaaS
- Modular Data Centres
- Quantum Computing
BullSequanaX delivered in main centers in France & Germany

**50++** PFlops sustained

**20** Calculateurs Pétaflopériques

- 12 PFlops / Rank #1
- 6 PFlops / Rank #1

**Key numbers/ References**
Atos has a unique value proposition

HPC & Quantum
High Performance High-performance technologies for insight platforms & data management

As a pioneer (#1 in Europe, #5 worldwide) in High-Performance Computing, we provide uniquely powerful HW/SW solutions and services to compute massive data flows and turn them into business outcomes.
High Performance Computing

Delivering efficient HPC Solutions

Be Efficient

Pick the Best of Breed Technologies
Design the right solutions
Speed-up productions, Give value to simulations
Consider Hybridation through HPC cloudification
Deliver Operational Excellence
Bring Innovation into your solutions
Artificial Intelligence apps gain momentum

Cognitive
50% of all consumers will interact with services based on cognitive computing on a regular basis by 2018*

Analytics
50% of all business analytics software will include prescriptive analytics built on cognitive computing functionality by 2020*

Smart machines
40% of new enterprise applications will include smart machine technologies**

* IDC
** GARTNER
Atos technologies strategy on AI

### High Performance Computing
- **BullSequana X**
  - (GPU blades)
  - **READY**
- **Google Alliance**
  - (ML Engine & APIs in the Cloud)
- **EPI**
  - (European Processor Initiative with Vector acceleration)

### Enterprise Computing
- **BullSequana S**
  - (2 to 32 CPU + 2 to 32 GPU)
  - **READY**
- **Data Lake Appliance**
  - (also used in Prescriptive SOC)
  - **READY**
- **Codex AI Suite**
  - **READY**
- **Machine Intelligence**
  - (with Siemens)
  - **READY**
- **EPI**
  - (European Processor Initiative with Deep Learning acceleration)

### Edge Computing
- **Edge Computer Prototype**
  - (embedded computing)
  - **READY**
- **EPI**
  - (European Processor Initiative with Deep Learning acceleration)
ATOS Research program on AI

- Free University of Brussels - Scalable fraud detection techniques in big data context, Time Series
- Catholic University of Louvain - Graph mining for fraud detection
- Jean Monnet University / Hubert Curien - St Etienne - Online learning and boosting methods, Massive Deep Learning topology
- INSA of Lyon - Linked Data for Prescriptive Analytics, Feature Selection, Data Value assessment
- University of Passau - Data Value Assessment, Certificate Program, Deep Learning on Data Streams
- University of Milano - Expert rules ranking methods

ENS - Saclay - Advanced Machine Learning, Algorithm development, IPOL
CEA List - Saclay - Advanced Machine Learning FMK, Machine Learning expertise, High performance hardware

Atos & Worldline Research programs
Why Codex AI Suite?

Codex AI Suite

Fast track to Artificial Intelligence

An AI software suite, leveraging machine learning and deep learning capabilities to easily build and deploy artificial intelligence applications across any infrastructure.
End-to-end, fast development of complex enterprise use cases

Enable to easily combine ML, DL, analytics and data management to deliver complex and accurate use cases

Applications are infrastructure-agnostic

Enable applications to run on HPC, enterprise and Edge servers, on clouds and on-premises

HPC business can deliver NG applications

From precision medicine, to imaging diagnosis, driver assist, autonomous maintenance, …
Atos AI Labs to find your AI business value

Discover what AI can do for you

Design the AI project to start with

Define your AI journey in just 2-days

AI learning

AI projects

AI journey & platforms
Detecting Gravitational Waves

Full Universe Simulation

HPC and AI

Analyzes Gravitational Lenses
10 Million Times Faster

Square Kilometre Array
Big Data Analytics

IOT

AI & Machine Learning

European Processor Initiative

towards eXascale

Quantum

HPC 2018

Exascale and beyond
Atos Quantum Learning Machine
Quantum: a long term strategic R&D program

The Atos Quantum Learning Machine,
A Quantum simulator appliance

Generate Quantum algorithms without quantum hardware constraints
Describe quantum circuits
Simulates qubits
Bull Sequana announcement in 2015
“Live innovation to the fullest”
Thank you

For more information please contact:
agnes.boudot@atos.net