



ENEX Editorial Coordinators Meeting

Identity. Value. Proof.



Luxembourg is becoming an important European Digital Trust Center

- High-capacity fiber and secure 5G connectivity
- Strategic international network interconnections
- Strong cybersecurity, governance, and compliance frameworks
- Public-private digital innovation and research ecosystem
- Trusted national data exchange and interoperability platform
- Tier IV certified, energy-efficient data center ecosystem
- Sovereign cloud and secure national data hosting capabilities
- **European-sovereign HPC capacity (MeluXina)**



Luxembourg is part of the EuroHPC initiative



European High Performance Computing Joint Undertaking

Over 8 billion Euro for cutting-edge supercomputing and quantum computing ecosystem in Europe



European Network of Competence Centers in HPC

United network of HPC actors in 33 European countries to foster adoption of HPC



European Master for HPC

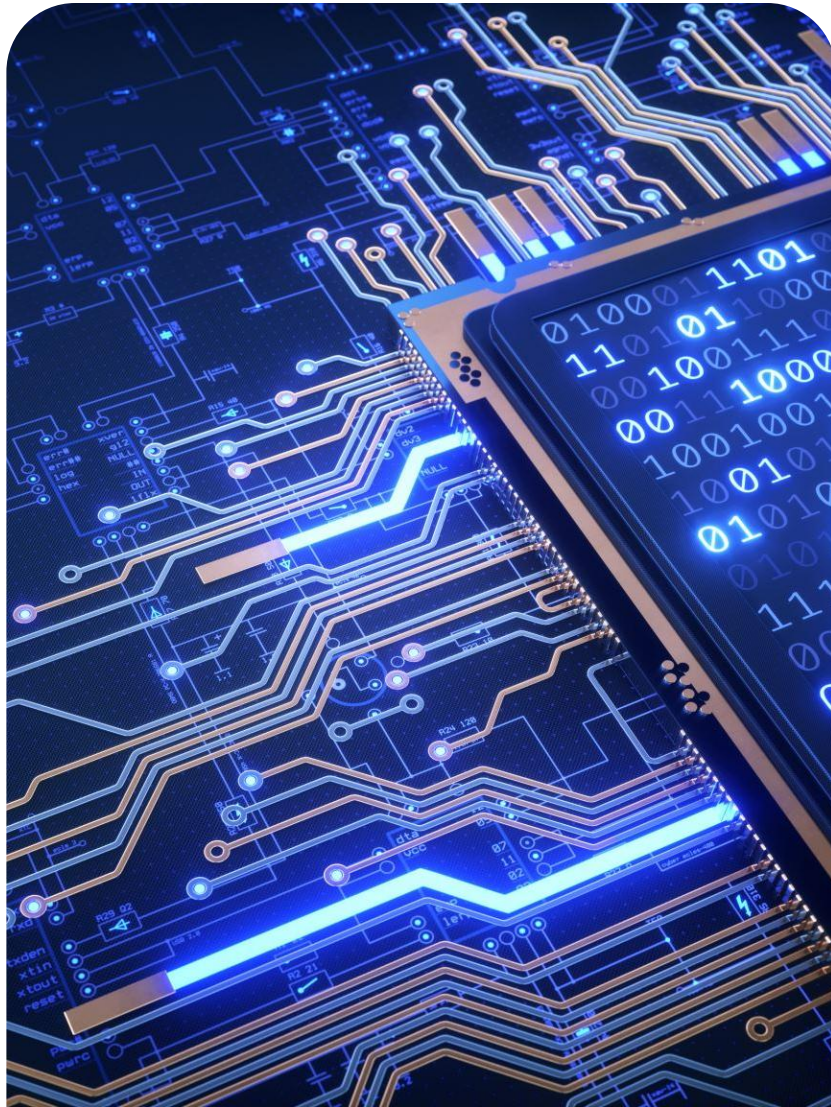
Pan-European Master's program by leading educational institutions focused on HPC



IN THE HEART OF THE EUROPEAN SUPERCOMPUTING ECOSYSTEM



Your data, our supercomputing expertise



LuxProvide serving all activity sectors



Finance



Health &
Public
Sector



Space



Industry &
Logistics



EU Projects



Startups



Alliances &
Partnerships



LuxProvide services



HPC & COMPUTING SERVICES

We provide the compute where and how you need it:

- HPC as a Service (IaaS)
- HPC as a Commodity (PaaS)
- HPC as an Appliance (SaaS)

Outcome:

Scalable and secure workloads



AI & DATA PLATFORM

We turn complexity into operational insight:

- Numerical simulation
- Artificial Intelligence
- Big Data analytics
- Digital Twins

Outcome:

Predictive and optimized solutions.



ADVISORY & DESIGN

We help you define and structure what matters:

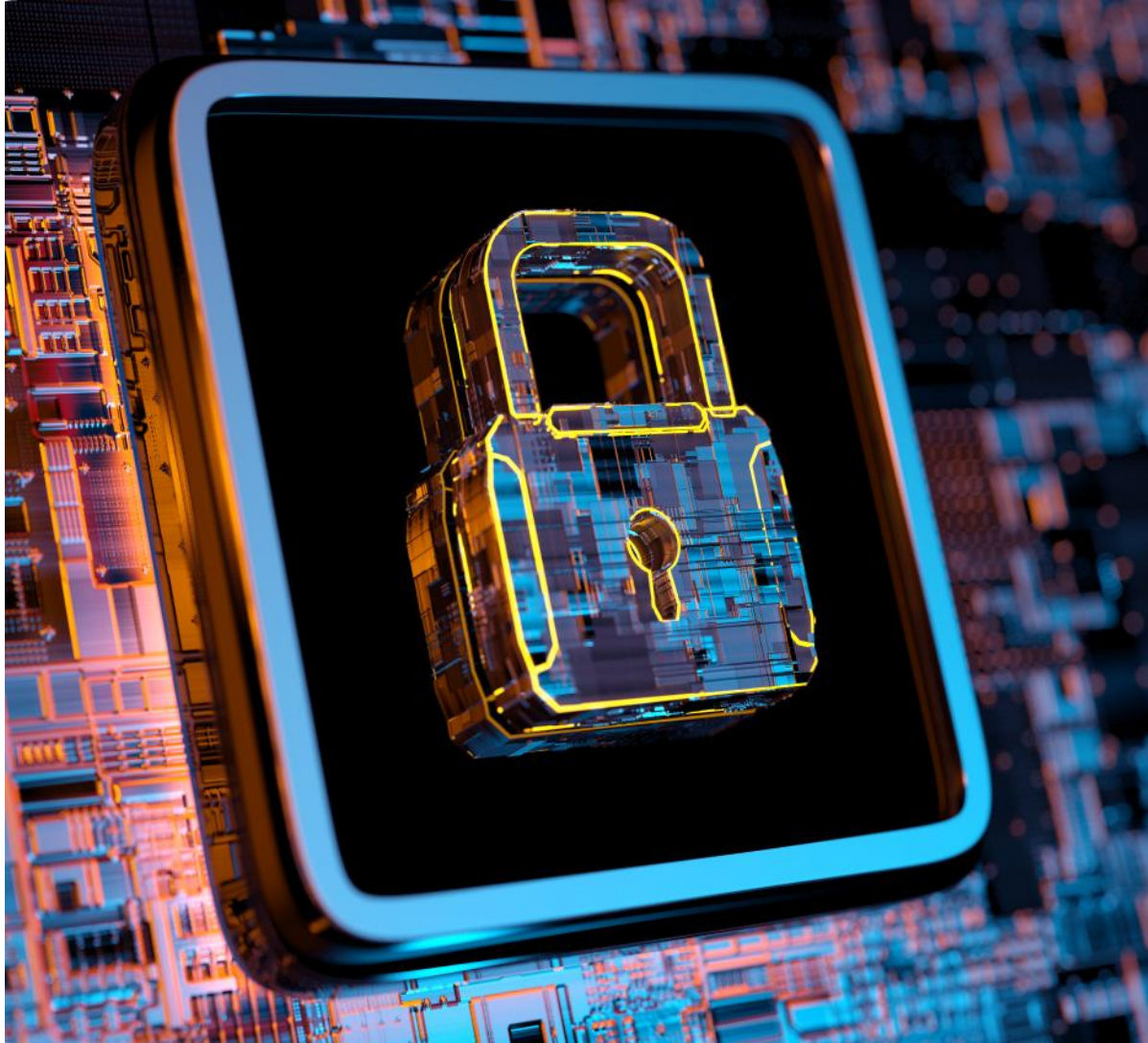
- Data & AI strategy definition
- Process optimization through AI
- HPC-ready simulation design

Outcome:

**Clear roadmap.
Reduced design risk.**



Data Security and Sovereignty



ISO 27001

Meets **enterprise-grade security** standards



Data Center tier IV



Data Sovereignty

Provides a **neutral** and **sovereign** platform for data



No IP claims



What does it mean to Broadcasting/Media sector?

18,000,000,000,000,000

FLOPS PEAK PERFORMANCE



MeluXina's computing power is so vast that it would require over **two million times** the Earth's population making a calculation in one second to match its capacity.



Content production

Use Cases:

1. Automated video editing & highlight creation

(e.g. sports broadcasters using AI tools to create instant highlights during matches)

2. Virtual production & AI-assisted control rooms

(BBC experimenting with AI + XR control rooms for live production, moving towards agentic AI)

Faster production cycles (baseline: 10h)	40-60% faster rendering & post-production
Lower production costs (baseline: €10k)	20-50% reduction in production costs
More scalable content creation (baseline: 2 videos per day)	5-10x More content production per production

NOTE: Based on industry benchmarks (AP, HPC rendering) and observed workflows transformations, and depending on the level of automation and integration

Newsroom automation

Use Cases:

- 1. Automated articles & summaries**
(e.g. Associated Press automating earnings reports and sports recaps)
- 2. AI transcription, research, drafting**
(e.g. used across BBC and Reuters newsrooms)

Faster story

(baseline: 10h)

60-90%

reduction in time to produce basic stories

Higher article output

(baseline: 8 stories a day)

3-5x

more articles produced per journalist

More time for investigation

(baseline: 50-60% of time used in repetitive tasks)

30-40%

More time for investigative journalism

NOTE: Based on industry benchmarks (AP, HPC rendering) and observed workflows transformations, and depending on the level of automation and integration

Live broadcast

Use Cases:

1. **Real-time captions**
(e.g. BBC live text AI)
2. **AI agents in control rooms**
(e.g. ITN trials)

Faster content delivery

(baseline: 5 minutes)

sec vs min

near real-time captioning & highlights

Lower production effort

(baseline: 8-12 operators)

20-40%

Reduction in live production staff workload

Real-time accessibility

(baseline: delayed)

<1.5 sec

instant captions & translation

NOTE: Based on industry benchmarks (AP, HPC rendering) and observed workflows transformations, and depending on the level of automation and integration



Thank You

LuxProvide



Júlio César Pinho
Head of Industry Sector
@: julio-cesar.pinho@lpx.lu
M: + 352 621 322 173