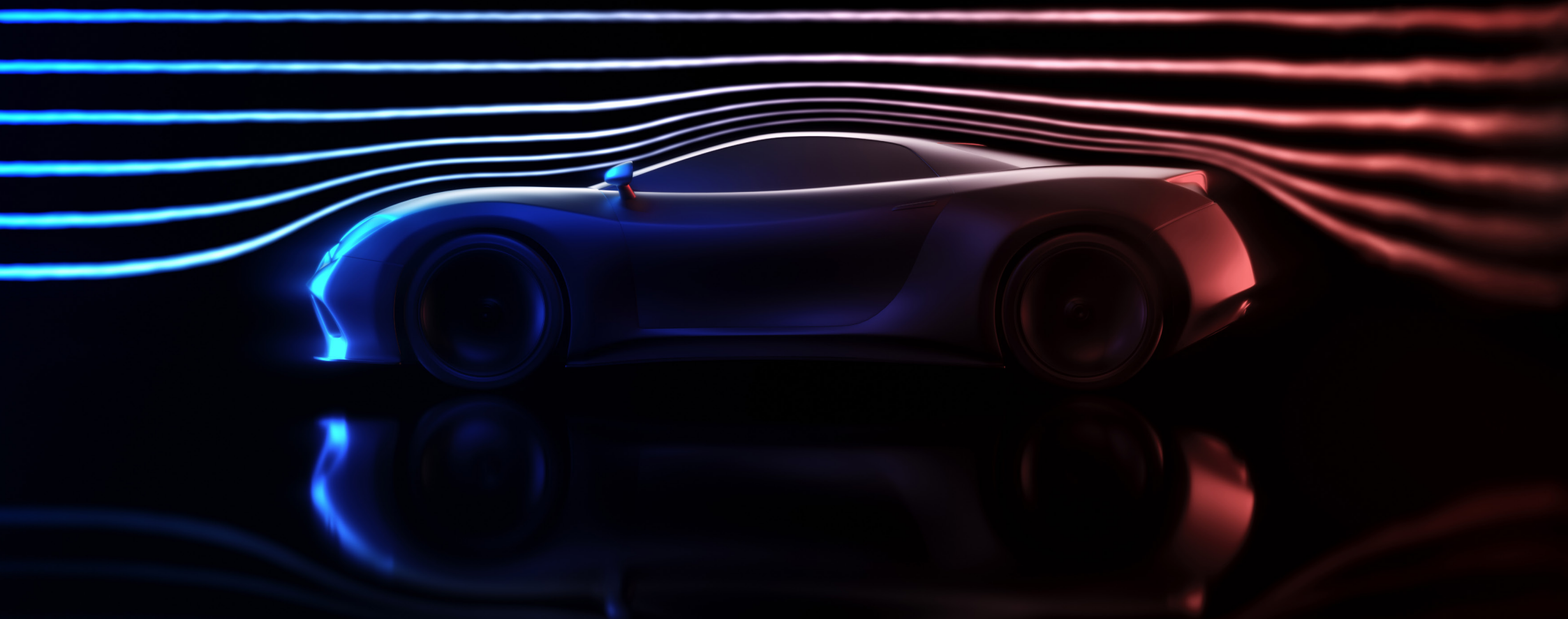




HIGH-PERFORMANCE COMPUTING (HPC)

High-performance infrastructure



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TELIA - HIGH PERFORMANCE

Network modular clusters of infrastructure

High-performance computing (HPC), also known as supercomputing, refers to computing systems with extremely high computational power that are able to solve hugely complex and demanding problems. In the digital era, HPC is at the core of major advances in innovation and a strategic resource. Telia understands the demands and needs of high-performance computing in this growing market segment. Whether you are in the automotive, financial services, oil and gas, research, rendering/filmmaking, healthcare, machine learning (AI), big data, blockchain, entertainment or other business, we welcome implementation of your specific solutions. Telia can also provide its own leading, cost-effective HPC environmental implementations.

We provide innovative, secure and reliable networks, racks and white space for your compute and storage systems, allowing your servers/GPUs to perform an uninterrupted workflow.

Hosting your HPC clusters in Telia's high-performance data centre reduces risks, while you see added value in low-TCO, scalable, world-class environments that are easy to deploy and manage.

HPC provides the benefits of low costs with high performance, streamlining business processes with high accessibility, offered by Telia in parallel with its own digital infrastructure.

Telia can work with you to implement HPC white space to rack ready solutions. If your clusters need specialised liquid, water or air cooling or kW to MW speed of growth and deployment, all with a low and secure operational total cost of ownership, let's get in touch.

Telia is a world-class company with the world's number one internet backbone and global reach. Finland is known for its ease of doing business, good governance, political stability, and sustainable, green power with a reliable, world-class power grid. Low cost, low risk, secure infrastructure and location.

1

Low opex, TCO, tax

Competitive network pricing, low corporation tax at 20% (2020), power prices 30–40% less than FLAP markets. Ten-year PPAs.

2

Speed and market reach

Speed to market and reach. Low-risk, stable location and environment. Networks able to reach 800 million people in 50 ms.

3

Proven ecosystem

Multi-country data centres. Workforce to deliver and operate. Government and municipal support. Tech and ICT heritage.

4

Sustainable and scalable

Sustainable green power from a world-class power grid and infrastructure. Ability to scale, permit, power, people availability.



TELIA HELSINKI DATA CENTER

“One of the greenest open (LEED-certified) data centres in the world...”

“The digital bridge between Europe and Asia”



Finland's largest open data centre



34,340 m² footprint, 15,000 m² of IT white space, up to 5,000 racks, 200,000 server positions



Certifications: ISO 27001, ISO 14001, ISO 9001, ISO 45001, ISO 22301, PCI DSS



The only data centre in Finland with LEED Gold Data Center v4 and CEEDA Design and Operate GOLD certification



100% renewable electricity 24-megawatt IT capacity. 30+ years life. 100-megawatt site capacity.



Heat reuse project in progress – waste heat to be recycled into the district heating system (ERE)



Potential ERE heat capacity to warm over 20,000 homes PUE < 1.2 (water cooling) with added heat recovery



2N power distribution with N+1 redundancy. Dual 110 kV grid connection and dedicated 50 MVA main transformers.



Quality - 100% uptime operational record



Carrier-neutral facility

Quality of service capacity
availability with global reach



“WORLD-CLASS DESIGN AND
OPERATIONAL EXCELLENCE”



TELIA HELSINKI DATA CENTER

FROM: Ready now: Pre-installed 12U and 52U racks up to 20 kW with fibre connectivity, PDUs and electronic locking. The Telia Helsinki Data Centre has white space certified by the Finnish Transport and Communications Agency (Traficom). Traficom represents Finland in the International Telecommunications Union (ITU) and the European Telecommunications Standards Institute (ETSI).

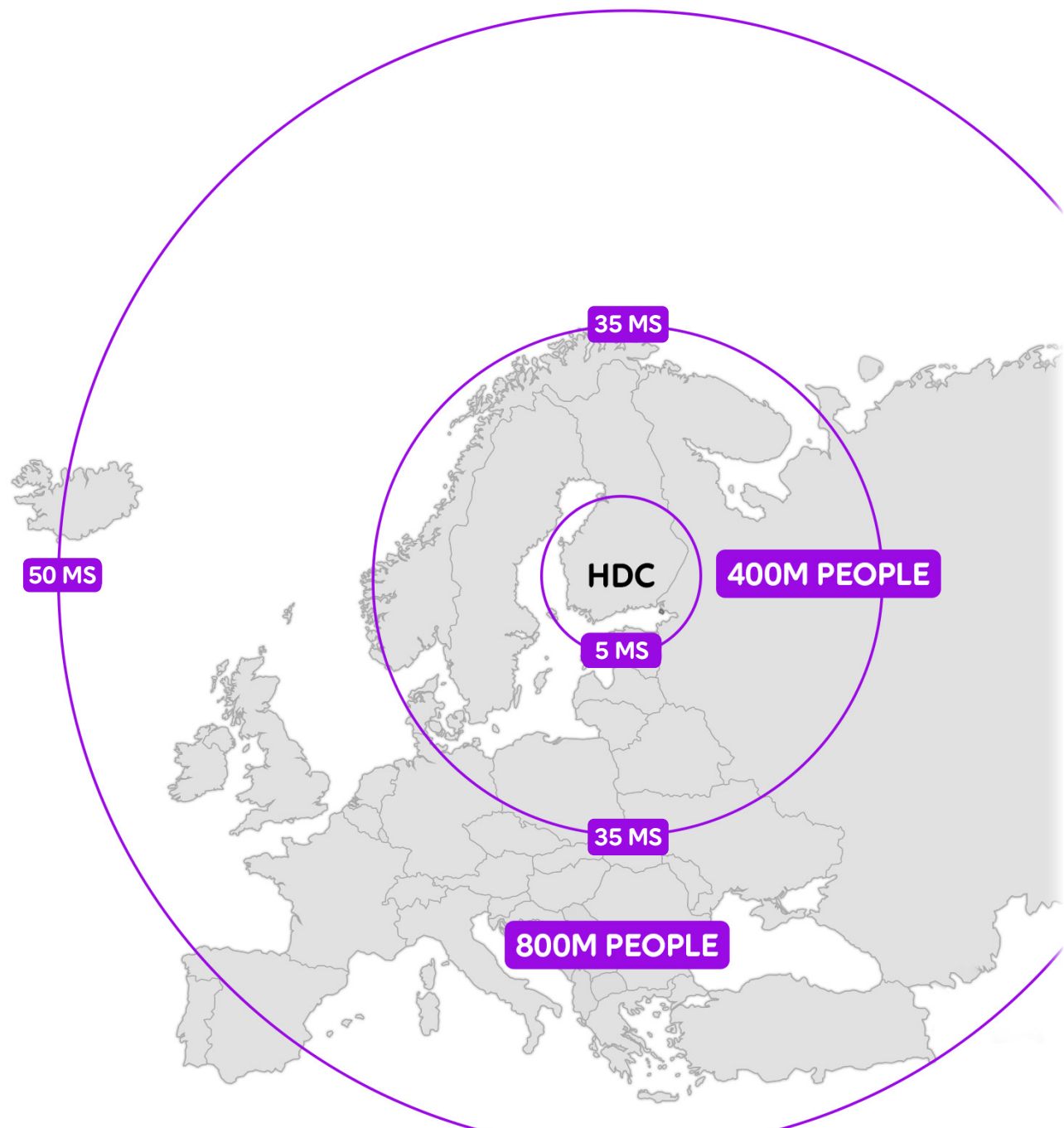
TO: Dedicated client halls - 1 MW - 4 MW outfitted to your requirements, up to two floors with 14 MW.

Data driven driving data

Dedicated interconnect connections: Telia Cloud Connect (Managed Cloud), Megaport, MS Azure, Google Cloud (not routed via Sweden, 5 ms), AWS (Amazon Web Services)
Access to LINX ESPANIX
MSK-IX AMS-IX DE-CIX Net Node

Telia cloud 9 First Finnish IaaS provider with ISO 27001 security certification. Data remains in Finland.

Telia Cygate Managed Services Provider (MSP), NaaS, 24/7 monitoring and management.



NORDIC FINLAND TELIA HELSINKI DATA CENTER

HIGH-PERFORMANCE OPERATIONAL
ENVIRONMENT

HIGH-PERFORMANCE DATA CENTRE

HIGH RANKINGS

HIGH RETURNS

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