

## NORMANDY Val-de-Reuil





### THE ALTERNATIVE DATA CENTER NETWORK



By 2030, Nation Data Center aims to develop 12 regional locations in France, establishing a network of local and sustainable data centers compliant with data sovereignty principles.

With our expert teams, we create and operate state-of-the-art, secure, and reliable infrastructures designed to address a wide range of IT challenges and meet your specific needs.



#### **SOVEREIGNTY**

The Nation Data Center network, with its 100% French ownership and equipment, offers a genuinely sovereign alternative that complements existing housing solutions. This distinctive positioning ensures the independence and security of your infrastructures, regardless of their criticality, and guarantees their housing in France operating within the framework of European legal regulations.

#### **LOCAL**

Nation Data Center is establishing a highly efficient and decentralized nationwide network with its current and upcoming locations. This network provides high performance housing solutions throughout France, precisely where they are most needed. To address the increasing demand for reduced latency, we are developing global interconnectivity for data centers while remaining independent of any specific telecom network. This approach allows us to align our service with your interests and optimize communication costs.

#### **SUSTAINABILITY**

To ensure that your economic interests are in line with environmental considerations, all of our data centers will apply energy efficiency principles. We will achieve this by implementing a range of state-of-the-art technologies and environmental guidelines such as free cooling, geothermal energy, rehabilitation of existing buildings and the use of local and renewable energy sources. This approach allows NDC to optimize energy consumption while minimizing our carbon footprint.





OFFICES

RETAIL



RESIDENTIAL



MIXED-USE

# ALTAREA LEADER IN URBAN TRANSFORMATION IN FRANCE

Altarea responds effectively and comprehensively to the **challenges of regional transition** by providing high value-added bespoke urban solutions, always putting people first.

The Group offers tailor-made solutions, putting its unmatched skills in property development to work for the success of urban projects.

As a multi-business player, its integrated model gives it all the necessary skills for all asset classes.

By delivering urban solutions for these areas undergoing transformation, Altarea helps to recreate the urban bond between outlying areas and the heart of gateway cities in a commitment to responsible and sustainable real estate that has a positive impact on regions as a whole.

Altarea's approach is exemplary in terms of environmental transition, with the systematic consideration of sustainability issues in its projects (energy efficiency, limited urban sprawl, reversibility of buildings, biodiversity, etc.). The Group regularly tops global rankings for its environmental performance.

NATION DATA CENTER IS A FULLY OWNED SUBSIDIARY OF THE ALTAREA GROUP

## THE ALTAREA GROUP IN FIGURES

€3.0<sub>bn</sub>

2022 revenue

€2.57<sub>bn</sub>

MARKET CAPITALIZATION

December 31, 2022 Euronext Paris Comp. A

€21.3<sub>bn</sub>

PROJECT PIPELINE



## **NORMANDY**

Nation Data Center is fully revamping a banking data center on a 1.5-hectare site in Val-de-Reuil.

NDC Normandy is conveniently located less than 100 km from Paris, 30 km from Rouen, and 110 km from Caen, in a large industrial park that accommodates largescale communications infrastructures (Altitude, Orange, EDF). With our highly secured housing services for IT production tools, you can confidently rely on our data center in Normandy to meet your business requirements.

2,000 IT (SQ.M)
10 POWER (MW)

**1.2** PUE

**250** OFFICES (SQ.M)

99.982 UPTIME (%)

SECURITY (a)



- >> 24/7 on-site security and fire protection
- » Defence in Depth strategy featuring high-security double-perimeter fencing (height 3.5 m) and perimeter detection
- >> CCTV surveillance of all interior and exterior areas



» Single-person airlock Two-factor authentication, including biometric access, compliant with ANSSI (French National Cybersecurity Agency) standards

COOLING



- » tier 3 design (EN 50600), two redundant cooling production and distribution circuits
- >> Design PUE: 1.2
- » Geothermal energy as the primary source of cooling, supported by chillers for backup
- >> Heat recovery and reuse in the local district heating system, supplying heating for housing and public buildings in Val-de-Reuil
- » Zero water consumption in the cooling process

CONNECTIVITY (C)



**OPENING IN 2024** 

» tier 3 design (EN 50600). two meet-me rooms with several redundant inputs (SPOF-free)

ENERGY (4)



- » Site power supplied by a high-availability grid Redundant (2N) generator sets for backup
  - Redundant (2N) electrical power distribution system
- » Solar photovoltaic production system



WATCH THE 3D VIDEO





## **HOUSING OPTIONS**

We offer a range of housing solutions from colocation to cages, customized storage space and private rooms.

NDC Normandy is fully equipped to welcome all types of IT infrastructure and even the most innovative with direct liquid or immersion cooling technologies.

#### **Characteristics:**

- 1,050 sq.m main IT room (colocation & private cages)
- 5.5 m ceiling height Raised flooring with finished floor level of 0.7 m
- 11 cold aisle containment pods with 346 racks measuring 800 by 1,200
- Air flow temperature of 23-25°C
- Three 85 sq.m dedicated rooms:
- 3.5 m ceiling height Raised flooring with finished floor level of 0.7 m
- One 20-rack pod per room
- Air flow temperature of 23-25°C
- Two dedicated HPC rooms spanning a total of 350 sq.m
- One 110 sq.m robotics room





## **SECURITY**

Security is at the heart of the data center's design and operation strategy.

We have implemented numerous security measures between the site perimeter and the IT environment:

- High-security fencing (height 3.5 m) and perimeter detection
- Personnel and material airlocks equipped with state-of-the-art biometrics and CCTV technology
- Identity management, authorizations and traceability
- CCTV surveillance throughout the site & earliest possible detection of intrusion attempts allowing for rapid response in case of breaches
- Strict authentication process: two-factor authentication including biometric access to sensitive areas
- Compliance with Level 1 ANSSI security guidelines
- Consistency between physical, logistical and electronic security measures
- 24/7 year-round on-site security and fire protection





## **HIGH AVAILABILITY**

Infrastructure tailored to the highest standards.

#### Power:

- Site power supplied by a high-availability grid
- Redundant (2N) electrical power distribution system
- Redundant (2N) generator sets for backup power
- Solar photovoltaic production system

#### **Cooling:**

- Two redundant cooling production and distribution circuits
- **Geothermal energy** as the primary source of cooling, supported by chillers for backup
- Server rooms with a cold air containment system (CAC) to channel cooling flows
- Chilled water production for the summer period in 2N mode





## **SERVICES**

Our 24/7 support center relies on two NSOCs (Network Service Operation Center) which supervise the entire Nation Data Center network.

#### Hands and eyes services

- Our service offering includes well-rounded hands and eyes support. It comprises a comprehensive range of connectivity, management and data backup solutions.
- Secure, dedicated back office software allows you to manage your consumption and access and benefit from the full hands and eyes support offering.

#### **Ancillary services**

Alongside the IT rooms, we also provide customers with the following ancillary services:

- On-site offices
- Private storage
- Wi-Fi
- Prep room
- Break room
- Delivery management





## **ENERGY EFFICIENCY**

NDC Normandy was designed with a view to **minimizing its carbon footprint**.

## The data center will run mainly on decarbonized energy sources, with zero water consumption:

- Electricity generated from renewable energy and supplementary renewable energy from photovoltaic production
- WUE\*: zero water consumption in the cooling process
- Cooling via geothermal energy
- Heat recovery and reuse in the local district heating system, supplying heating for housing and public buildings in Val-de-Reuil

#### Metrology and artificial intelligence

- Metrology and the IT room's digital twin can be accessed in real time and made available to our customers (PUE, energy consumption and temperature per rack, operating conditions, floor plan and rack occupancy).
- The sensors are linked to an AI system that optimizes cooling regulation in real time.

## Management and operating processes fully compliant with ISO 14 000 standards

- The operating team's mission is to ensure increased productivity for the customer by optimizing both operating costs and infrastructure efficiency.
- We provide customer support in implementing a circular economy (waste management and recycling) and energy efficiency policy.



<sup>\*</sup> Water Usage Effectiveness



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