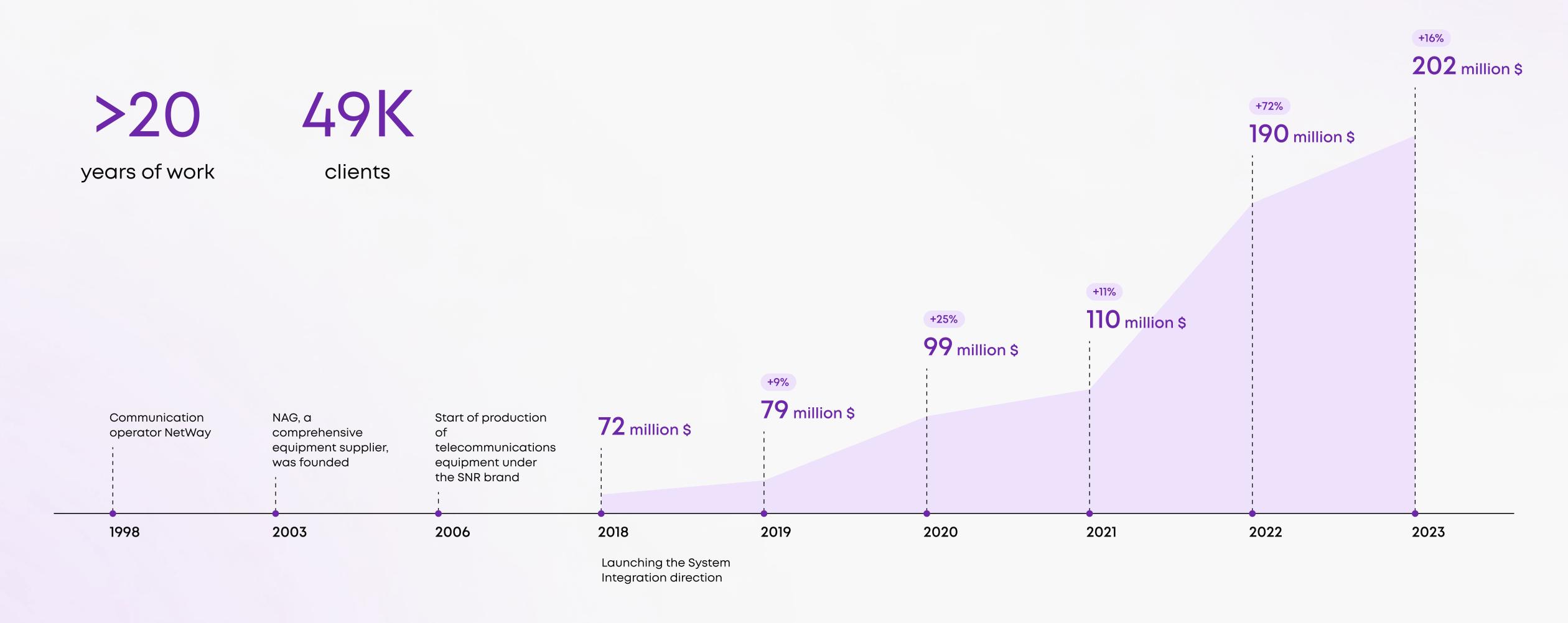


DATA CENTER INGINEERING INFRASTRUCTURE

NAG HISTORY

NAG is a leading telecom and IT solution provider representing a 20-year history of expertise. Since 2003 NAG has served for customers in 25+ countries in CIS and Middle East regions.



IMPLEMENTATION CYCLE







INITIATION AND PLANNING

Audit. Concept, budget estimate. Feasibility study





ACCEPTANCE EVENTS

Executive documentation. Local and complex tests. Training of the Customer's personnel. Commissioning of projects





SUPPORT

Warranty, service and routine maintenance. Postwarranty support and maintenance



DESIGN AND ENGINEERING

Technical specifications for design.
Stages "Design, Working documentation". BIM/SFD modeling.Preparing for certification at Uptime Institute





PROJECT IMPLEMENTATION

Civil works. Installation of equipment. Commissioning works. Site certification





EXPANSION AND MODERNIZATION

Audit and analysis of the current situation. Development proposals for expansion and modernization





APPROVALS

Coordination of documentation with customers, supervisory authorities and expert organizations





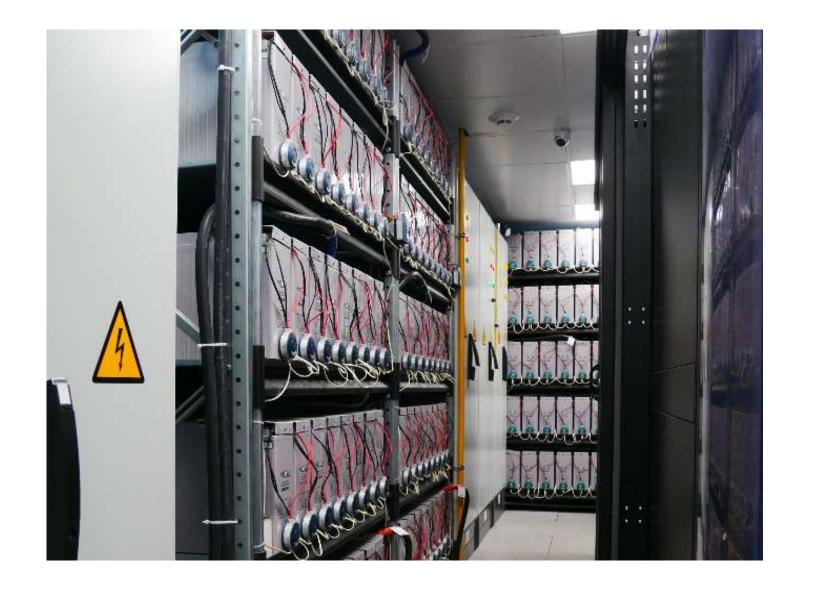
LOGISTICS

Supply of equipment and materials. Factory acceptance.





CHOICE OF TECHNOLOGY







Brownfield (built-in)

Server

Machine rooms

Prefab-data center

Containerized data center

Modular data center

Greenfield ("in the field")

Specialized buildings and structures for data centers.



DATA CENTER ENGINEERING SYSTEMS COMPOSITION

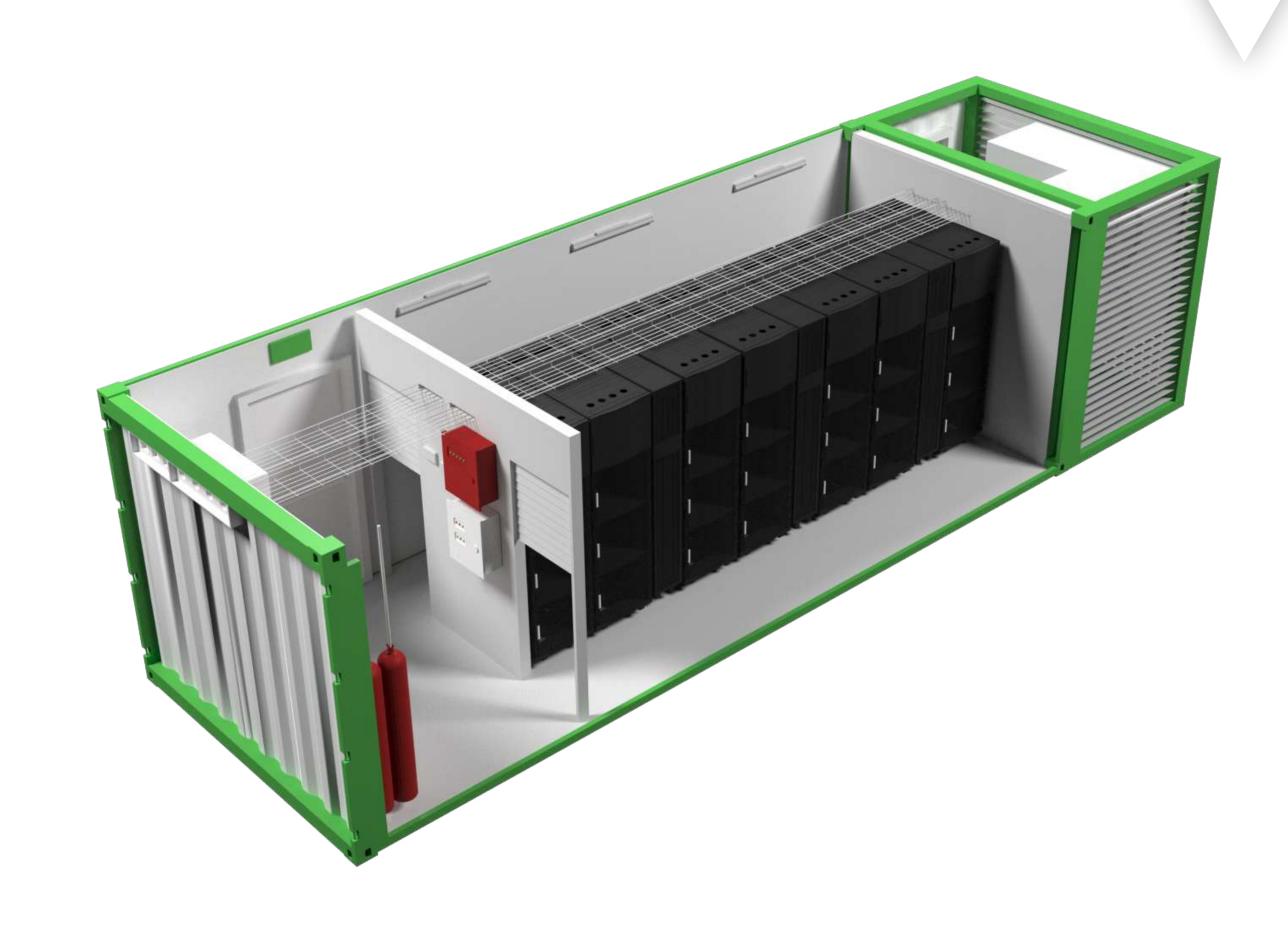




CONTAINER DATA CENTER

PRINCIPLES OF CONSTRUCTION OF THE DATA CENTER:

- The solution is built on a turnkey basis;
- Wide metal welded container;
- Shortest production time and minimal site requirements;
- Assembly and testing at a specialized production site before shipping to customer;
- Individual configuration and design ,according to the customer's brand book;
- Working temperatures -60...+60;
- Rapid on-site launch of a data center in 2-7 days;
- Possibility of redeployment with minimal preparation time;
- 24 months warranty.





DIMENSIONS AND LAYOUT OF THE DPC

The sizes of container data center make it ready to be transported by water, railway or trucks to any territory. The module bases are equipped with adjustable supports, with an adjustment range of 100mm, which allows to place data center on a various types of sites. The floor of the CCDC module is designed for loads of at least 2500 kg/sq.m.

Design of the data center includes elements to ensure the possibility of its multiple loading and unloading onto transport using construction equipment (top slinging devices)

All elements of the data center systems are located inside the main structure, which does not require additional installation work from the outside (with the exception of laying external power/communication lines) when placing the data center on the work site.

The module layout ensures maximal usage of the entire container space.







MICRO DATACUBE

COMPOSITION OF THE COMPLEX:

- Input switchgear;
- Uninterruptible power supply system based on static battery UPS;
- Air conditioning system;
- Real time mnitoring system;
- Power distribution system;
- Fire extinguishing system.





5.5 kW / 7.5 kW / 12.5 kW



AIR CONDITIONING SYSTEMS



Equipping facilities with precision air conditioners of our own brand SNR;

SNR-AC is a series of precision air conditioners designed for process cooling of server rooms, data centers, and computer rooms. The intelligent system allows you to accurately control and maintain the set values of target temperature and relative humidity;

As part of complex projects for your tasks, we will calculate and select the necessary air conditioning system.



UNINTERRUPTED POWER SUPPLY (UPS)







Modular online UPSs of the SM and CM series are designed to protect three-phase power supply systems for servers, data centers, industrial and medical equipment from power outages, surges and deviations in voltage and frequency, pulse and high-frequency interference.

Modular design with N+X redundancy, hot-swappable power modules.

AC/AC efficiency >95%, input power factor >0.99 with input THDi<3%.

Fully digital control (DSP) with high stability, reliability and safety.

Integrated IGBT module with improved performance and reduced size;

Smart sleep mode to save energy and extend system life.

Optimized battery management, intelligent control of all charging and discharging processes.

The "Cold start" option allows you to turn on the UPS from the battery without mains power. Monitoring of critical components such as fans and capacitors, configurable alarm for maintenance period.

Programmable dry contacts, the functions of each port can be defined by users.

User-friendly operator interface with a colorful 10.4-inch touch screen.

CM series uninterruptible power supply can be installed in a server cabinet.



SERVER CABINET, PDU



The reinforced Metal Box design allows you to install equipment with a total weight of up to 1500 kg;

Reinforced casters and adjustable legs;

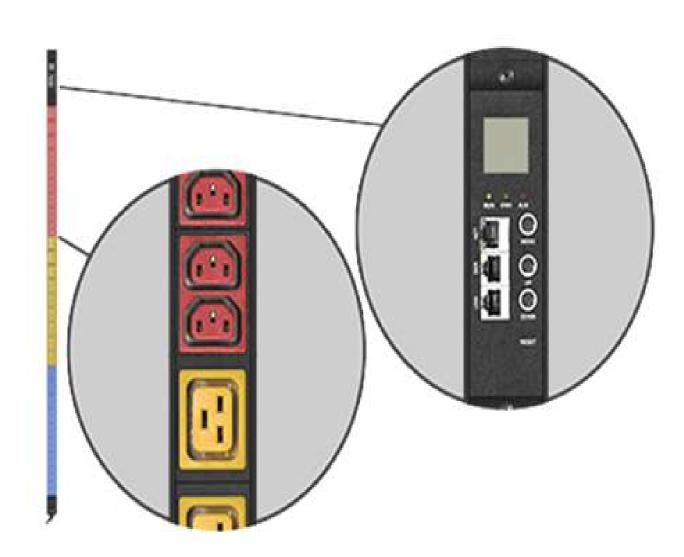
4 vertical guides, with convenient depth adjustment;

Possibility of convenient fastening of cabinets to each other;

Cabinet can be equipped with single or double doors with an increased perforation area of at least 80%;

Vertical flat organizers are included with the cabinet. They have loops for quick mounting of vertical power distribution units (PDUs);

The standard package includes a grounding system, as well as all the necessary components for assembling the cabinet and a set of fasteners for equipment (screws, washers, nuts - 40 pcs).



Input voltage control;

Monitoring the total load current;

Control of total power consumption (kW);

Monitoring of total electricity consumption (kW/

h); Supports daisy chain connection via a hub.



DIESEL GENERATOR SET (DGS)











TYPES:

- Single-phase and three-phase;
- Mobile and stationary;
- Open, in a casing, in a container, on a chassis.

Provides long battery life (without external power supply);

When carrying out maintenance of the uninterruptible power supply system. During the UPS shutdown, the load must be protected from a possible power outage (the diesel generator set is running, not the city network).



ISOLATED HC SYSTEMS





We produce a system of isolated corridors under our own brand Metal Box;

The system is more efficient than a traditional central air conditioning system - up to 50% energy savings;

Modular, scalable, expandable design;

The optimal solution for cooling large and medium-sized data centers equipped with precision air conditioners.



OUR ACHIEVEMENTS

> 100

large integration projects in the field of IT, telecommunications and security > 15_{MW}

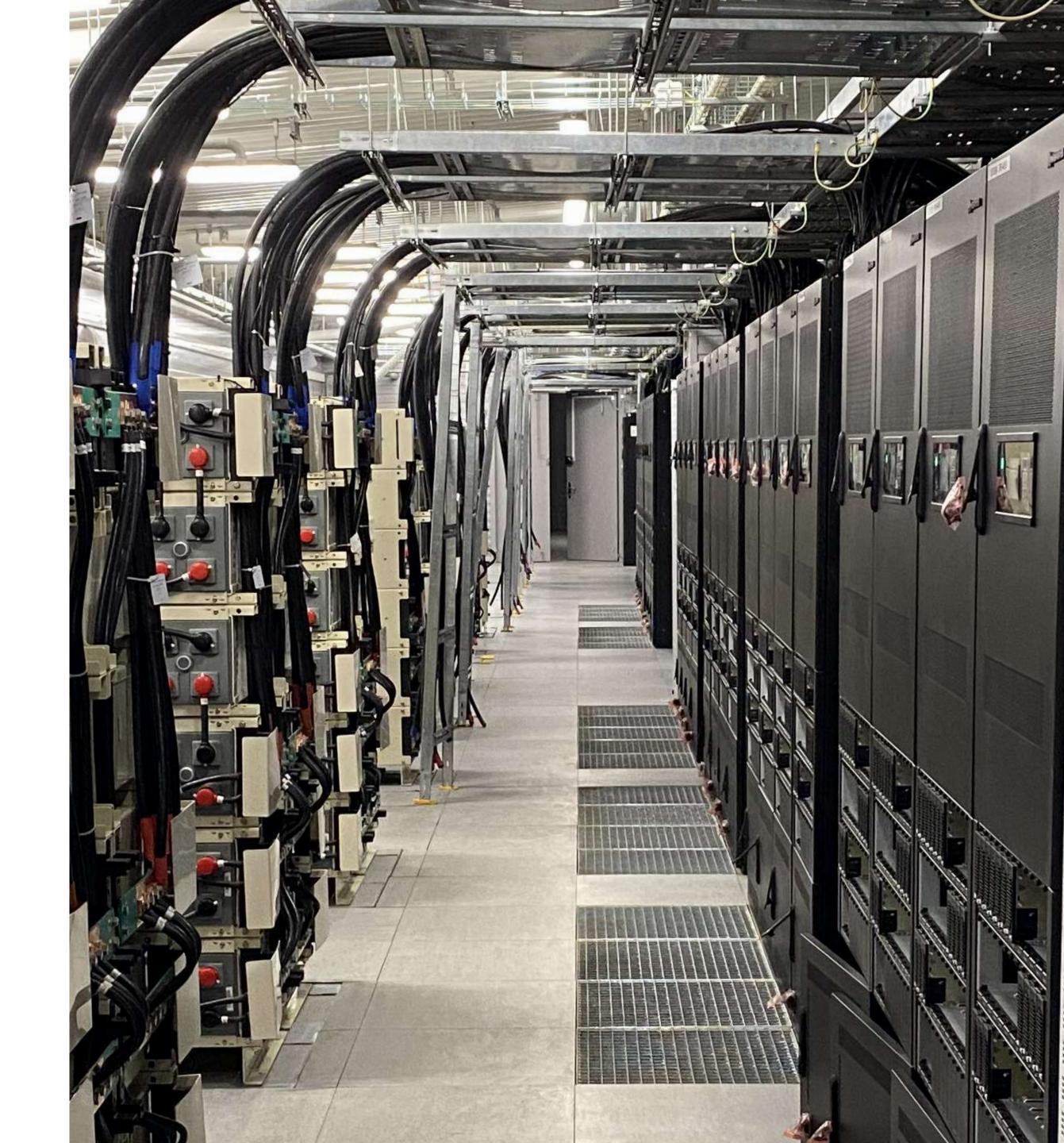
data center capacity delivered into operation

> 70

customer training and company employees in year

> 2000

consultations with involving experts in year





OUR EXPERIENCE





















GEOGRAPHY OF NAG



Dubai (UAE)

Almaty (Kazakhstan)

Tashkent (Uzbekistan)

NAG LOGISTICS CENTERS

Shanghai (China)

Washington (USA)





CONTACTS -

O UAE, DUBAI

Office M-03, Al Garhoud Business center Building +971 0 42599967 sales@snr.global

© REPUBLIC OF UZBEKISTAN, TASHKENT

52, Mirzo-Ulugbek district, 7-TOR Sairam Street +998 55 508 0660 sales@nag.uz © REPUBLIC OF KAZAKHSTAN, ALMATY

151 Abai Avenue, Alatau Business Center, office 1109 +7 727 344 34 44 sales@nag.kz

