EMIIA.AI

SPATIAL INTELLIGENCE

EMIIA.AI SIP – distributed cloud AI platform that solves key challenges in cloud technologies, IoT and RTLS systems, delivering **efficiency 10 times higher than global competitors.**

Result: Significant reduction of capital and operational expenses **(CapEx and OpEx)**, as well as total cost of ownership **(TCO)** across various industries.

PROBLEM

› Digital twins and AI, including AI agents, are expected to accelerate **internet traffic growth by 40% to 60%**

› **By 2030, the volume of data is expected to reach 400 zettabytes** — 10,000 times more than in 2010. Internet traffic is doubling every 4 years

› **Growth of capital, operating expenses, and total cost of ownership** (CapEx/OpEx/TCO) related to data processing, storage, delivery, as well as AI inference and software deployment.

SOLUTION

EMIIA.AI MAP (data mapping technology) — automation of working with digital twins of spatial objects and business processes.Processing, optimization, and compression of data while preserving the accuracy of the core information.

Up to 80% data volume is reduced, processing speeds up, and total cost of ownership (TCO) decreases.

Application:

› Cloud technologies and AI
› Internet of Things (IoT/AIoT)
› RTLS systemd)

PROBLEM

- **The network is becoming more expensive than energy:** Equinix in Singapore pays $1 million more for networks than for energy, while Cloudflare in Amsterdam pays $2.1 million for networks versus $1.5 million for electricity
- **Network latency** during data delivery, software deployment, and AI inference (east-west traffic, north-south)
- **AI autonomy**
- **Growth of capital, operational expenses, and total cost of ownership** (CapEx/OpEx/TCO) related to data processing, storage, and delivery, as well as to AI inference and software deployment

SOLUTION

EMIIA.AI LEM/IoT — распределенная программно-аппаратная инфраструктура ИИ на базе автономных кластеров и шлюзов EMIIA.AI LEM/EMIIA.AI IoT

Infrastructure, security, and communication channel costs are reduced by up **to 60% (TCO – total cost of ownership)**

Two cycles of technological and economic equipment operation.

Application:
- Cloud technologies and AI
- Internet of Things (IoT/AIoT)
- RTLS system

PROBLEM

› **Lack of fully functional indoor positioning systems** in buildings and structures

› **Searching for people during emergencies** in buildings and structures is difficult or even impossible

› **Digital twins for RTLS systems are heavy,** complex to integrate, expensive to develop, and require ongoing maintenance costs

› **Increase in capital, operational expenses, and total cost of ownership** (CapEx/OpEx/TCO) in the field of Internet of Things and RTLS systems

SOLUTION

EMIIA.AI SDK/MRV — seamless geolocation and navigation technology for open spaces and indoor environments (RTLS)

Sensor usage in Internet of Things and RTLS systems **is reduced by up to 30%**

EMIIA.AI MAP (data mapping technology) — automation of working with digital twins and their storage

Data volume is reduced by up to 80% and processing speeds up

Application:

› Internet of Things (IoT/AIoT)
› RTLS system

ЭКОНОМИЧЕСКИЕ ЭФФЕКТЫ

Reducing costs for storage, processing, deployment, and data delivery allows **businesses, researchers, and developers to:**

- Significantly reduce TCO (total cost of ownership)
- Increase ROI (return on investment)
- Speed up time-to-market for products (Time-to-Market, T2M)

Business model - B2C, B2B, B2G, B2M:

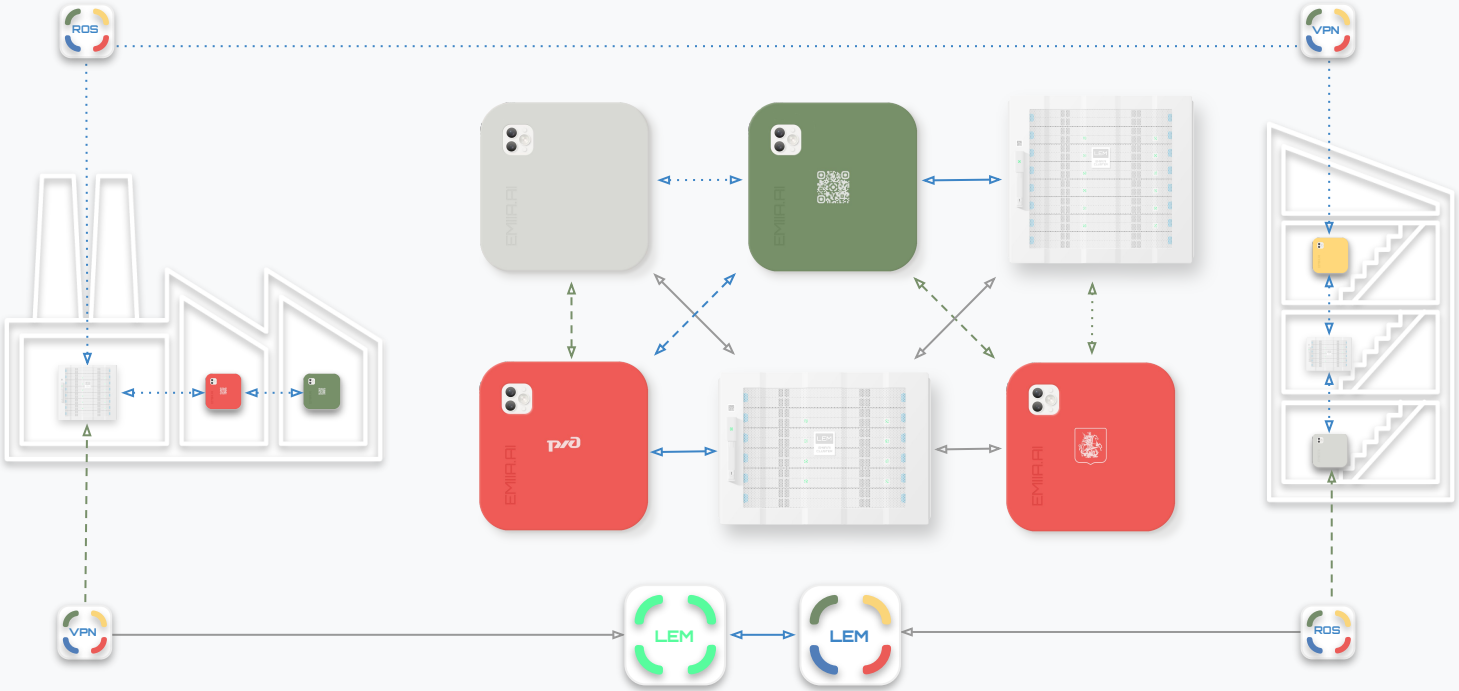
- API as a product (APIaaS)
- Artificial Intelligence as a Service (AIaaS)
- Hardware as a Service (HaaS)

Market: BRICS+

Technology focus: Internet of Things (IoT/AIoT)

Platform classification: Fault-tolerant autonomous infrastructure for AI, connectivity, and navigation (RTLS)

ARCHITECTURE OF THE DISTRIBUTED CLOUD AI PLATFORM EMIIA.AI SIP BASED ON AUTONOMOUS EMIIA.AI IoT GATEWAYS, CLUSTERS, AND EMIIA.AI LEM DATA CENTERS



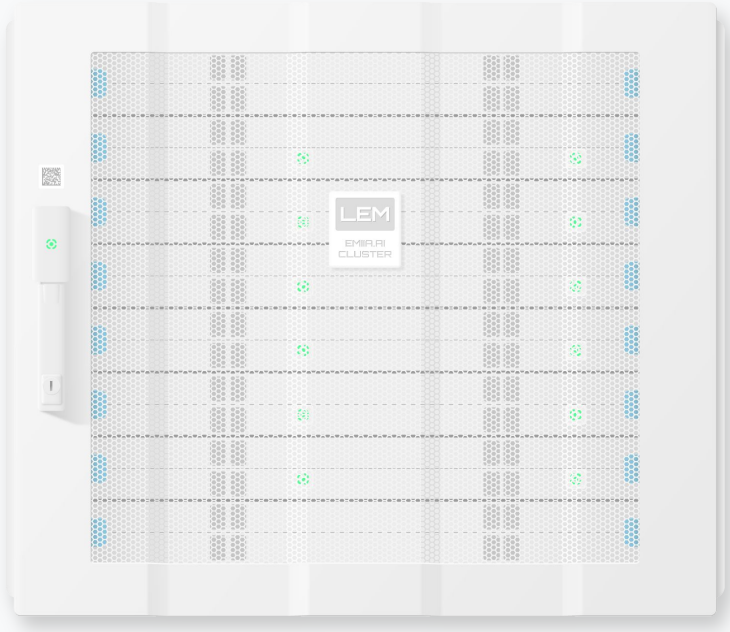
EMIIA.AI LEM CLUSTERS AND DATA CENTERS (HIBRID HPC/COLD, FROZEN DATA)

SOFTWARE AND HARDWARE SOLUTIONS OF THE DISTRIBUTED CLOUD AI PLATFORM EMIIA.AI SIP: EMIIA.AI IoT GATEWAYS AND EMIIA.AI LEM CLUSTERS

GATEWAY **EMIIA.AI IoT**

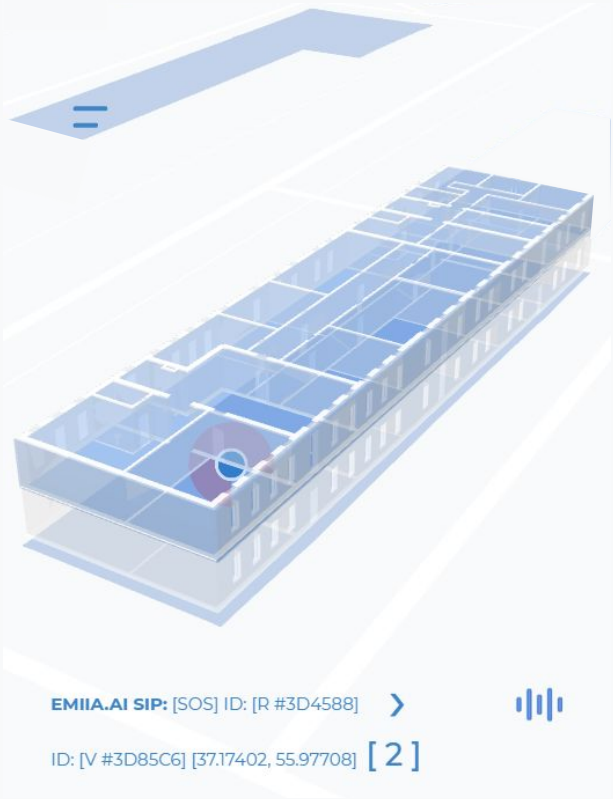
EDGE/FOG/CLOUD COMPUTING

LAN/WAN/WLAN/WMN



CLUSTER **EMIIA.AI LEM (NODE 12)**

BASIC TECHNOLOGY



EMIIA.AI SDK/MRV — Machine Radio Vision EMIIA.AI MRV (Machine Radio Vision), a neural network library for signal processing and data visualization (SDK/API).

FEATURES: Pattern recognition, calculation of speed, coordinates, and direction of moving objects, including behind radio-transparent obstacles (people, animals, etc.). Range: through radio-transparent barriers up to 9 meters, in open space up to 300 meters.
The solution enables precise real-time object tracking and intelligent AI-powered navigation — both outdoors and indoors.

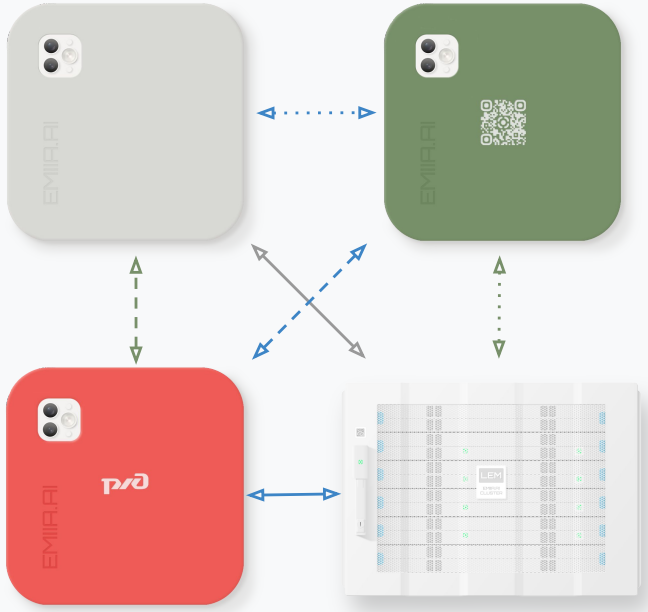
EMIIA.AI MRV (RTLS system). The technology is based on radio-frequency machine vision using AI **algorithms.**

INTEGRATION: The technology forms the core of the IT architecture, hardware software stack, and EMIIA.AI SIP cloud platform.

USE CASES / PRODUCTS

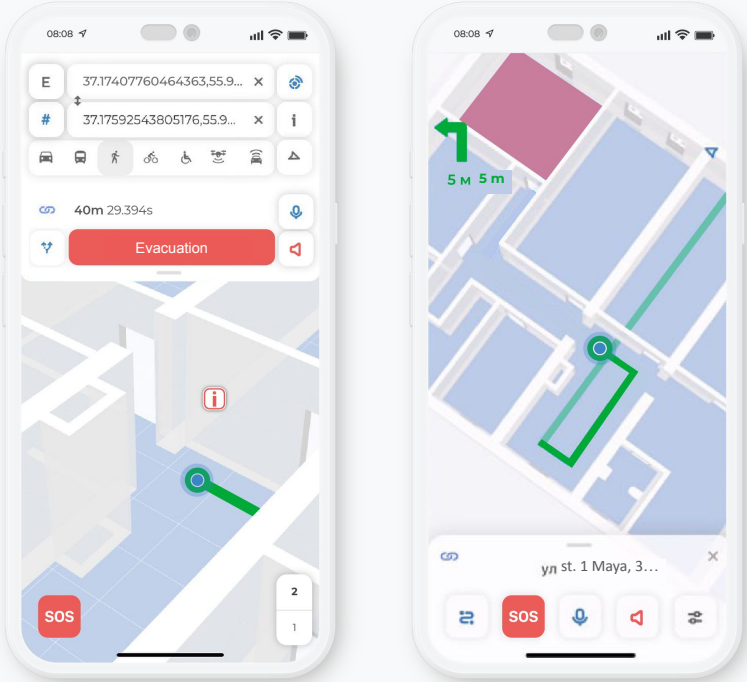
AI AGENTS EMIIA.AI LLM
Autonomous AI agents within the ERP system structure: AI Mapper (digital twins), AI Auditor (production processes), AI Analyst (business processes), AI Pilot (coordination and creation of AI agents), AI Rescuer (public safety)...

NETWORK AI COMPUTER EMIIA.AI COM
A powerful AI computer with wireless access to a cloud desktop (VDI) via thin clients, suitable for studying, research, gaming, programming, neural network training and inference, software deployment, as well as various professional and practical tasks.



VIDEO PRESENTATION (MP4) ↗

USE CASES / PRODUCTS



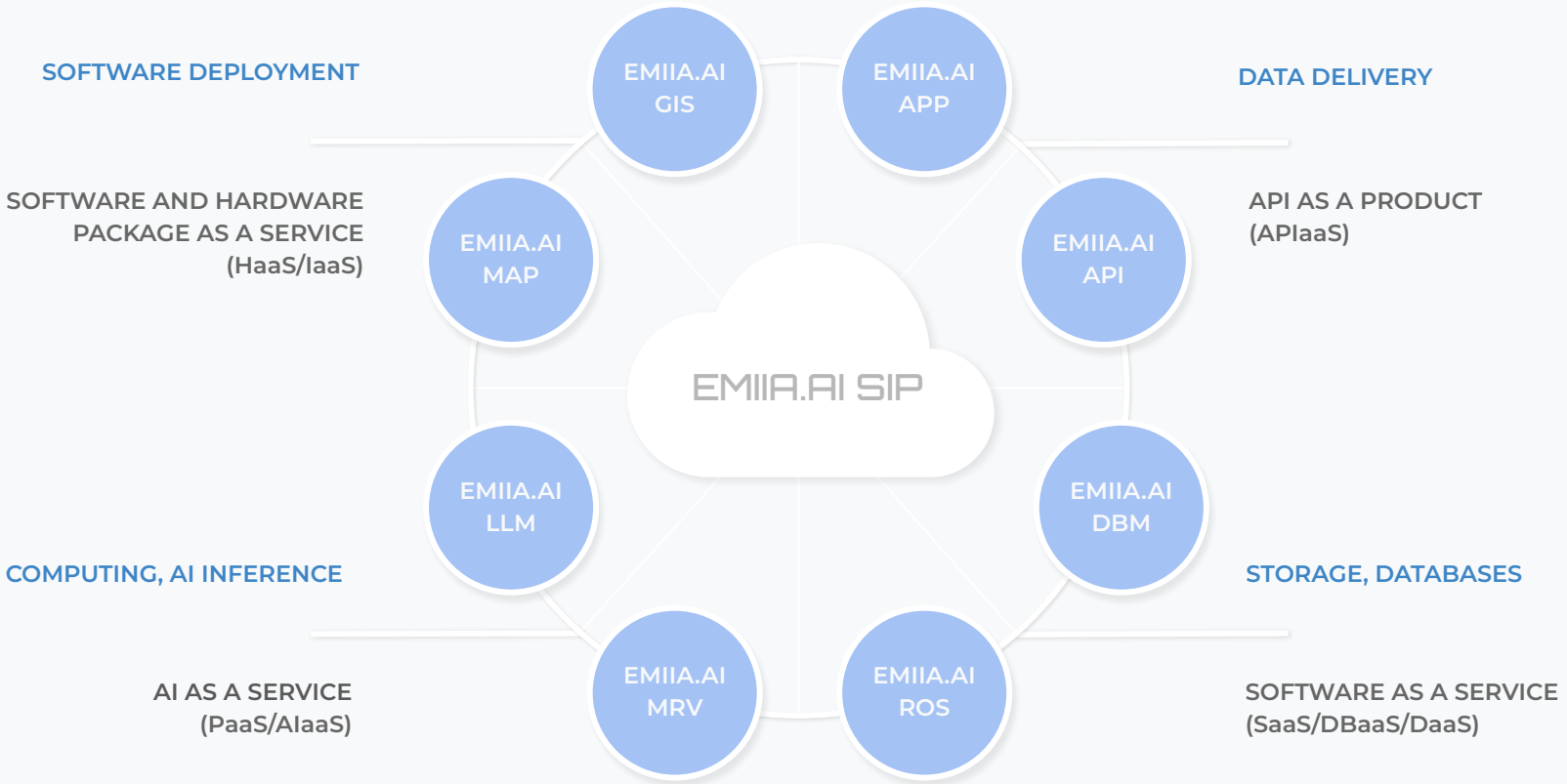
SECURE ENVIRONMENT EMIIA.AI SOS (PDF) ↗

NAVIGATION WITHOUT GPS EMIIA.AI SDK/MRV
Indoor/Outdoor - navigation without using satellite systems — only access to our wireless network or the internet is needed to determine location, both outdoors and indoors.

SECURE ENVIRONMENT EMIIA.AI SOS EMIIA.AI
the first project that solves the problem of evacuation in emergencies using artificial intelligence.

RZD USE CASE (PDF) ↗

SOFTWARE TOOLS OF THE DISTRIBUTED CLOUD AI PLATFORM EMIIA.AI SIP



MARKET ANALYSIS

$1.2 trillion **(CAGR 16–18%)** the global cloud services market, including IoT and AI, will reach by 2030

$61.7 billion **(CAGR 27–30%)** the global RTLS market will reach by 2030

$31.2 billion **(CAGR 35–40%)** the Russian cloud services market, including IoT and AI, will reach by 2030

$18.8 million **(CAGR 30–35%)** The Russian RTLS market will reach by 2030

COMPETITIVE ENVIRONMENT

CLOUD TECHNOLOGIES EMIIA.AI MAP

Amazon: S3, AWS Lambda, CloudFront

Google: Brotli, Snappy

Yandex: HIGGS

SBER: Object Storage Service (OBS)

INTERNET OF THINGS (IoT/AIoT) EMIIA.AI IoT

Cisco: IoT Gateway

Hewlett: HPE Edgeline EL4000

Huawei: IoT Gateway

Kaspersky: IoT Secure Gateway

GEOLOCATION (RTLS - Hybrid) EMIIA.AI MRV

Google: GIS (maps)

Apple: UWB

Yandex: GIS (maps)

SBER: GIS (maps)

COMPETITOR DETAILS (PDF) ↗

PROSPECTS FOR PROJECT DEVELOPMENT (2030), INVESTMENT PARAMETERS

7.9 exaflops of platform computing power

8.7 exabytes of data storage capacity on the platform

100 million active platform users: B2B, B2C, B2G, B2M

Implementation deadline: 2027. Full operational capacity planned for 2030.

Forecasted financial parameters:
IRR – 47%, ROI – 300% (over 6 years), **ARR – $1–1.5 billion** by 2030.

Auditor: Skolkovo Innovation Center.
Investment Expertise: Skolkovo Innovation Center.
Pre-Money Valuation (PMV): **$15 million.**

INVESTMENT REQUEST

LLC "EMIIA" is raising funds to scale the **EMIIA.AI SIP** platform, develop products and services, organize serial production of **EMIIA.AI LEM/EMIIA.AI IoT clusters/gateways (version 3)**, patent developments, as well as build a multifunctional **EMIIA.AI LEM** data center (storage of cold and frozen data – HYBRID HPC/COLD/FROZEN DATA, laboratory and production facilities).

Achievement of project parameters and bringing all company products to TRL-9 level requires investments.

Required investment amount (Stage 1): **$5.6 million.**

INVESTMENT PROPOSAL (PDF) ↗

STRATEGIC PARTNERS

Lomonosov Cluster — a place where science turns into business. The cluster's main goal is to ensure close cooperation between research organizations, universities, and the real economy sector, as well as to create infrastructure for innovation.

RZD is Russia's largest railway network, transporting 1.1 billion passengers annually. "Transtelecom," a subsidiary of RZD, is in the top 5 broadband operators, managing 78,000 km of fiber optic cable and developing IT infrastructure.

Sber is Russia's leader in AI development: the bank invests about $1 billion annually in artificial intelligence and plans to increase its investments by 1.5 times over the next 5 years in AI and IT infrastructure.

MARKET ANALYSIS (2030)

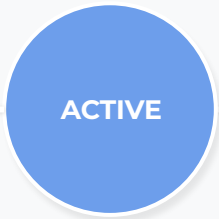
1.67 BILLION PROCESSORS

Total Addressable Market

$1,2 TRILLION/YEAR

the capacity of the total addressable market

*** The total market combines** cloud, IoT, and RTLS, covering all key segments: B2B, B2C, B2G, as well as interactions between people, machines, and artificial intelligence (B2M, M2M, AI agents).



100 MILLION PROCESSORS

active platform users

$8,4 BILLION/YEAR

potential platform capacity

*** Formula:** Number of active users × ARPPU – 30% adjustment (100 million × 84/year); reflects the maximum possible blended revenue.

30 MILLION PROCESSORS

Paying platform users

$3.6 BILLION/YEAR (AR)

revenue from paying users

Customer profitability metrics: ARPU = $3/month, ARPPU = $10/month, CAC = $3/year, RSC = $7/year, LTV = $791/7 years.

BREAKDOWN OF THE METRICS (PDF) ↗

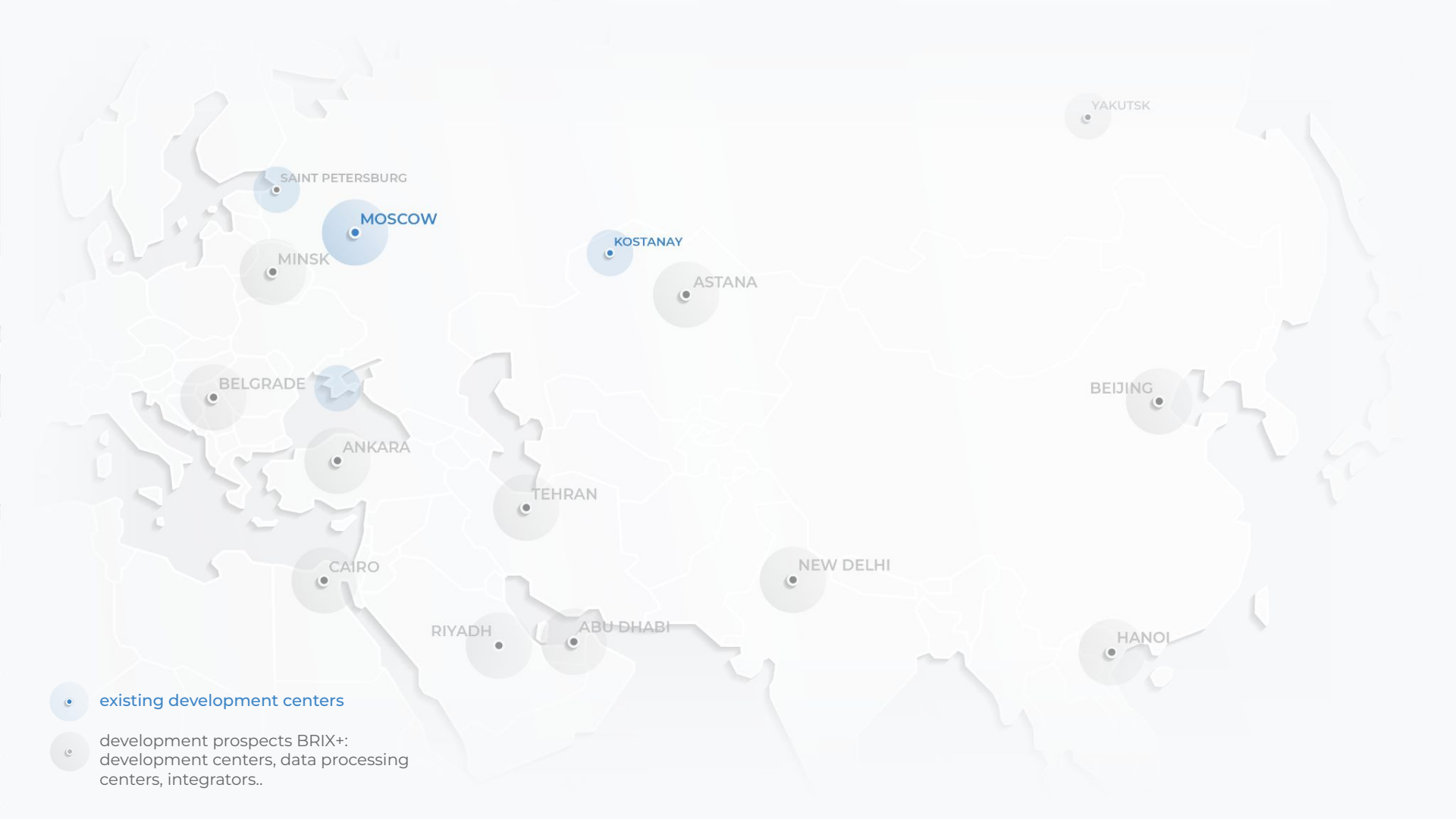
DIAGRAM (HTML/CSV/EXCEL): ↗

SUMMARY FINANCIAL INDICATORS OF THE COMPANY (HISTORICAL AND PROJECTED DATA)

Year	Assets, thousand dollars	Revenue, thousand dollars	Profit (loss), thousand dollars	Number of employees	Note
2021	44,4	5,2	-4,1	4	Reported data
2022	65,6	6,5	4,5	8	Reported data
2023	90,9	16,2	11,8	12	Reported data
2024	11,2	23,8	13,2	18	Reported data
2025	139,6	28,1	-997,8	21	Investments
2026	9 696,4	2 499,6	-4 989,1	25	Investments
2027	54 886,6	18 473,5	Data is confidential	28	PreIPO
2028	Data is confidential	Data is confidential	Profit	30	PreIPO
2029	Data is confidential	Data is confidential	Profit	50	IPO
2030	Data is confidential	Data is confidential	Profit	2000	IPO

ROADMAP

Indicator/Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Research and development works (R&D)										
Registration of the results of intellectual activity										
Software development and **EMIIA.AI** SIP cloud platform				Alpha	βeta					
Development of **EMIIA.AI LEM/IoT** hardware-software systems (clusters/gateways)	Ver. 1		Ver. 2		Ver. 3					
Pilot implementations: B2C, B2B, B2G, B2M (IaaS, PaaS, DTaaS, DaaS, FaaS, GaaS, STaaS, APIaaS...)										
Market: B2C, B2B, B2G, B2M (IaaS, PaaS, DTaaS, DaaS, FaaS, GaaS, STaaS, RaaS, DBaaS, APIaaS)										
Construction of **EMIIA.AI LEM** data center (cold data – HYBRID HPC/COLD DATA)										
PRE-IPO										
IPO										


YAKUTSK
SAINT PETERSBURG
MOSCOW
KOSTANAY
MINSK
ASTANA
BELGRADE
BEIJING
ANKARA
TEHRAN
CAIRO
NEW DELHI
RIYADH
ABU DHABI
HANOI
existing development centers
development prospects BRIX+:
development centers, data processing
centers, integrators..

О НАС

"EMIIA LLC" is a DeepTech startup company specializing in end-to-end digital technologies. TRL: 8-9, CAGR: 58%, R&DC: 57%.

Strategy by 2030: to become one of the top 100 global and top 10 Russian companies in distributed spatial data processing systems, with a valuation exceeding $1 billion. Achieve over thirty international and Russian patents.

We base our development not on analogs, but on technological trends.

Our mission is to create accessible AI infrastructure and provide unique resources for businesses, researchers, and developers in the field of operational technologies!

Promising directions for 2030+ include building quantum Internet of Things (QIoT) infrastructure — navigation based on quantum sensors (gravity, magnetic field), computing, communications, and data protection.

RATINGS OF INTERNATIONAL EXPERT RESOURCES

TOP 30

AI Companies and Startups in Russian Federation 2025 ↗

FINALIST/LONGLIST

BRICS Solutions Awards 2020/2024 ↗

TOP 10

Artificial Intelligence Companies in Russian Federation 2025 ↗

ABOUT US

The EMIIA team of specialists has developed and commercially implemented the "KSK GRAAD": **GitHub ↗**. Over one hundred thousand replications of the software solution (microprogram/firmware) have been installed. The commercial and scientific foundation formed in "KSK GRAAD" underlies the EMIIA project and technologies. EMIIA's source code is included in the program **GitHub Arctic World Archive (Арктический мировой архив кода ↗)**, aimed at archiving and preserving modern open-source software for a thousand years in permafrost conditions.

The project team, built around the core of research and development, consists of top-tier engineers who have worked together for many years in high-tech fields and is strengthened by AI agents.

Our R&D team includes over 20 engineers.

PROJECT TEAM (LEADING SPECIALISTS)

VLADIMIR STAROSTIN (CEO/CTO IT)

IT: ML, MRV, IT architecture, business model, commercialization

– Ten years of experience in IT management and development
– Two completed projects (software and hardware solutions)
– More than one hundred thousand replications of developed software (firmware)

ALEXANDRA SMYSLOVA (COO)

Industrial design: UI,UX, business model, commercialization

– Ten years in industrial design and project management
– More than one hundred interfaces and design solutions have been developed with more than one million replicated

ALEXEY LUMAN (CTO CLOUD)

Cloud: IT, ML, MRV, Cloud architecture

– Ten years of experience in IT management and development
– Two completed projects (software and hardware solutions)
– More than one hundred thousand replications of developed software (firmware)

ANDREY KONSTANTINOV (CDO)

Hardware solutions: ML, MRV, Hard architecture

– Ten years of experience in developing hardware solutions in the field of passive identification of moving objects.
– More than ten software and hardware systems have been developed

ABOUT THE PROJECT AND TEAM (INTERNET RESOURCE) ↗

EMIIA.AI

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