

# Beyond Russian hackers

Moscow's cyber landscape 2019-2020 – an overview for ISACA Netherlands

June 2020

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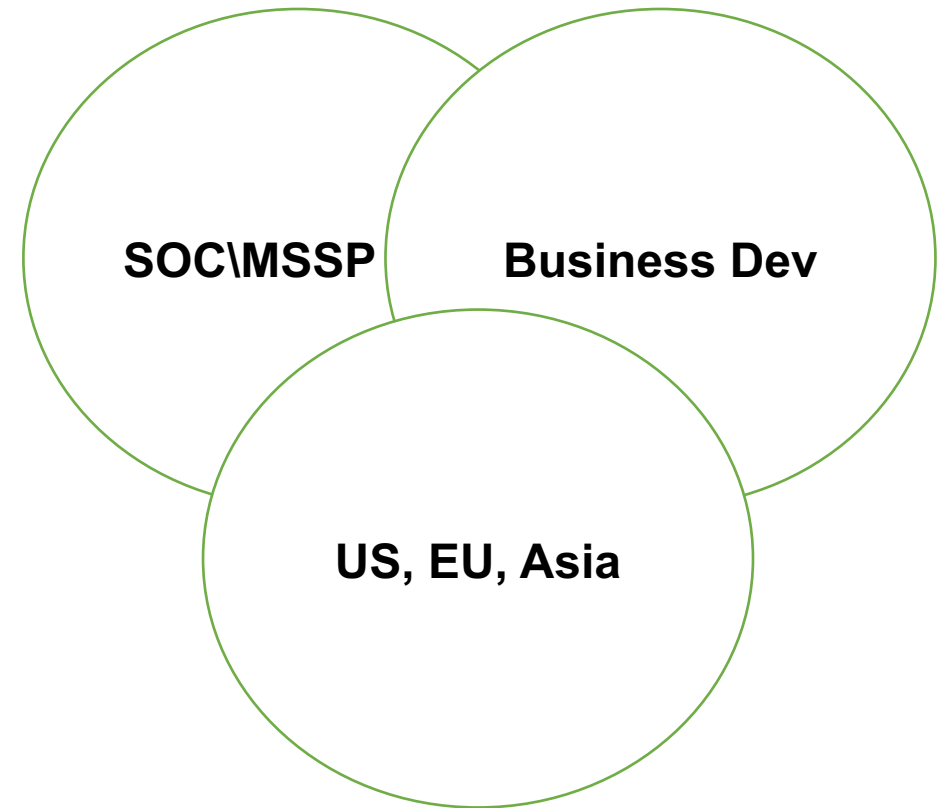


# About Me

## 1. What I did

Threat Intelligence Analyst (Eastern Europe)  
Global Head of Sec. Architecture (Oil&Gas corps)  
Head of Security Products (VARs)  
Head of SOC\MSSP  
VP, Infosecurity, ISACA Moscow  
CISA, ITIL Expert

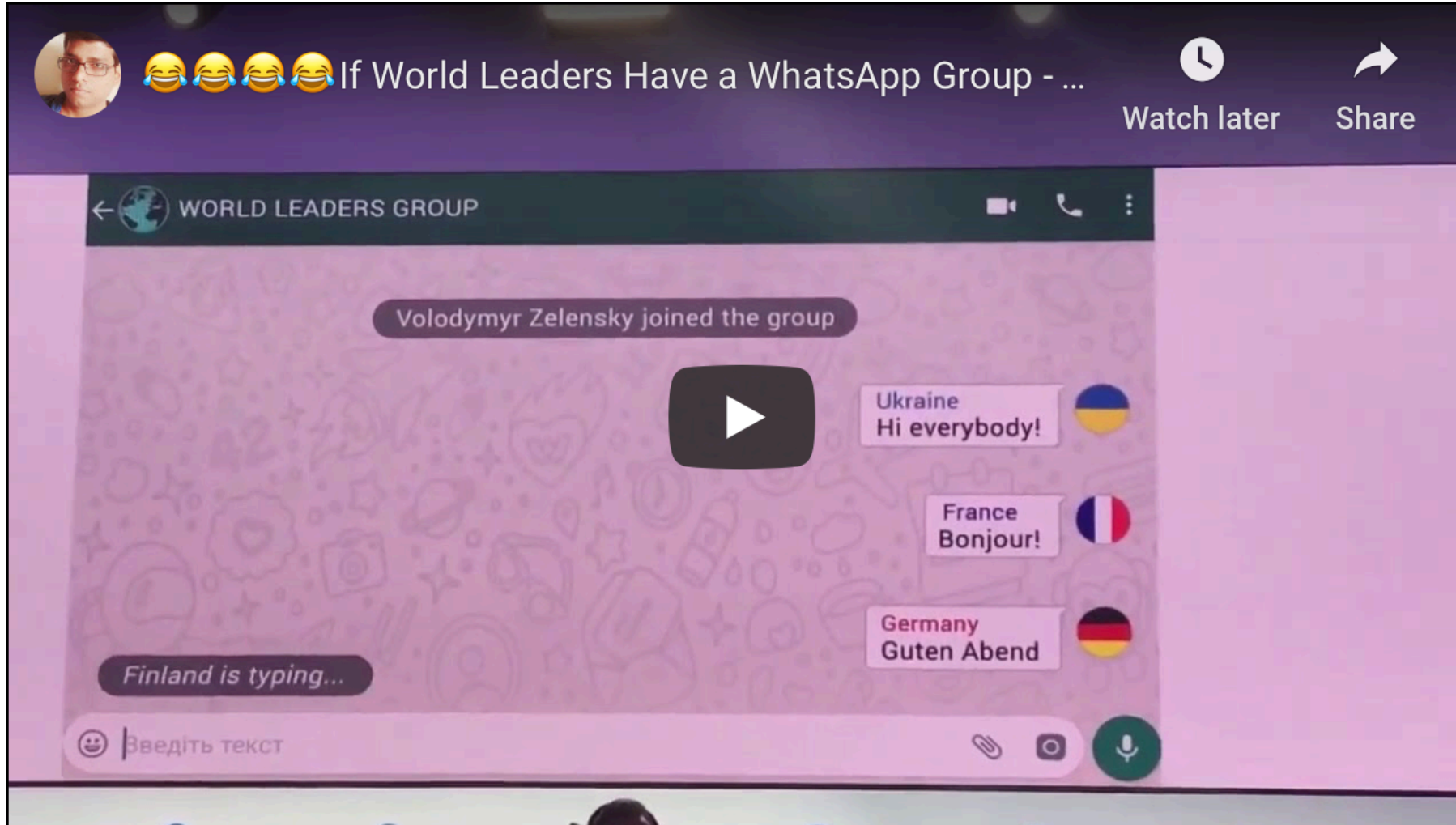
## 2. What I am doing for living



# Warm Up: World Leaders Chat



# World Leaders Chat by Ukrainian President Zelensky



# Russian Federation: Key Dimensions

# Geography - Map



# Geography – map in comparison with NL

**Russia**

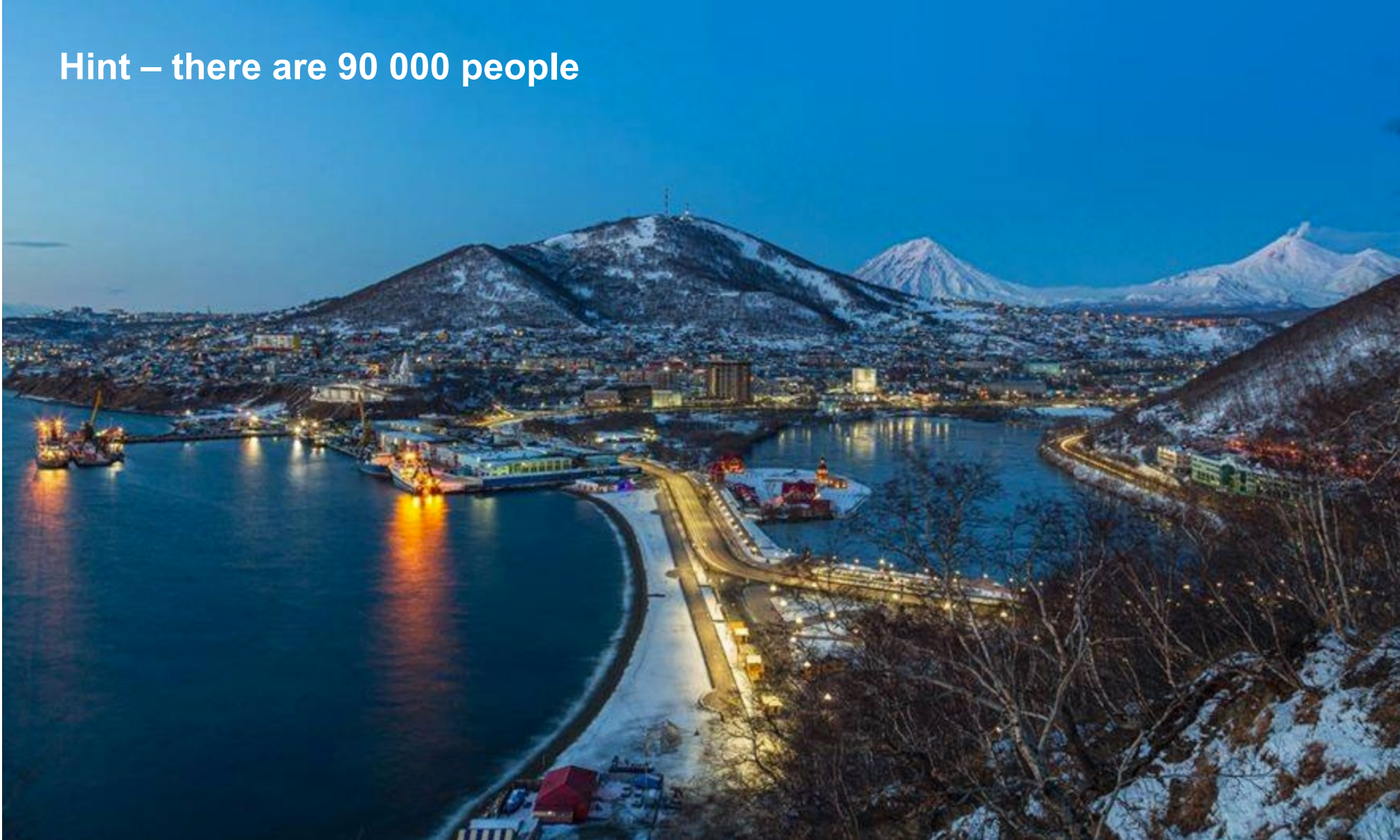


**Russia + NL**



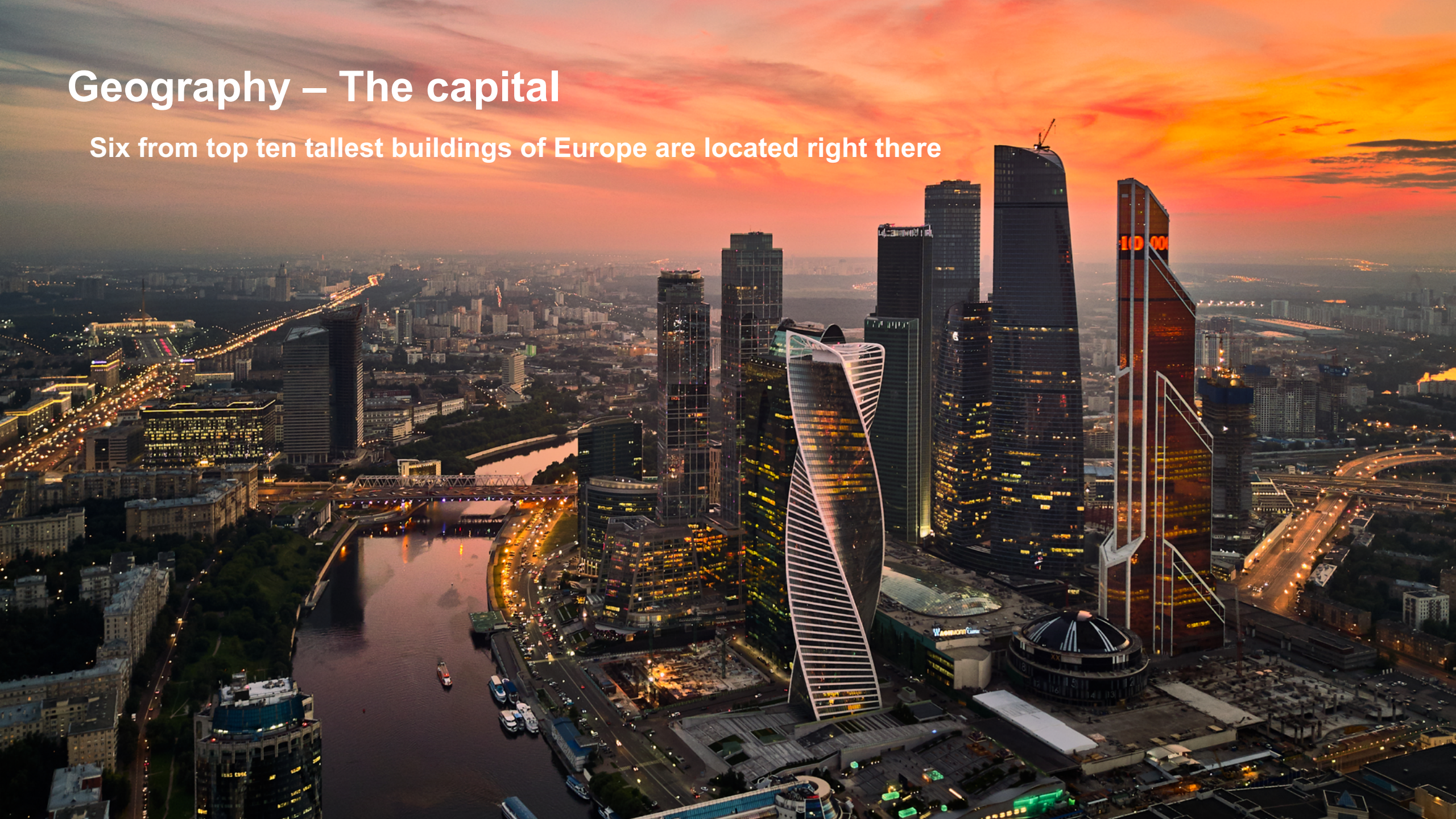
# How many bears are living there?

Hint – there are 90 000 people



# Geography – The capital

Six from top ten tallest buildings of Europe are located right there



# Russia is huge and diverse.

Let's proceed with one more step to make use of it

# Geography – Key cities



Moscow (12,4m)

Saint-Petersburg (5,4m)

Novosibirsk (1,6m)

Yekaterinburg (1,5m)

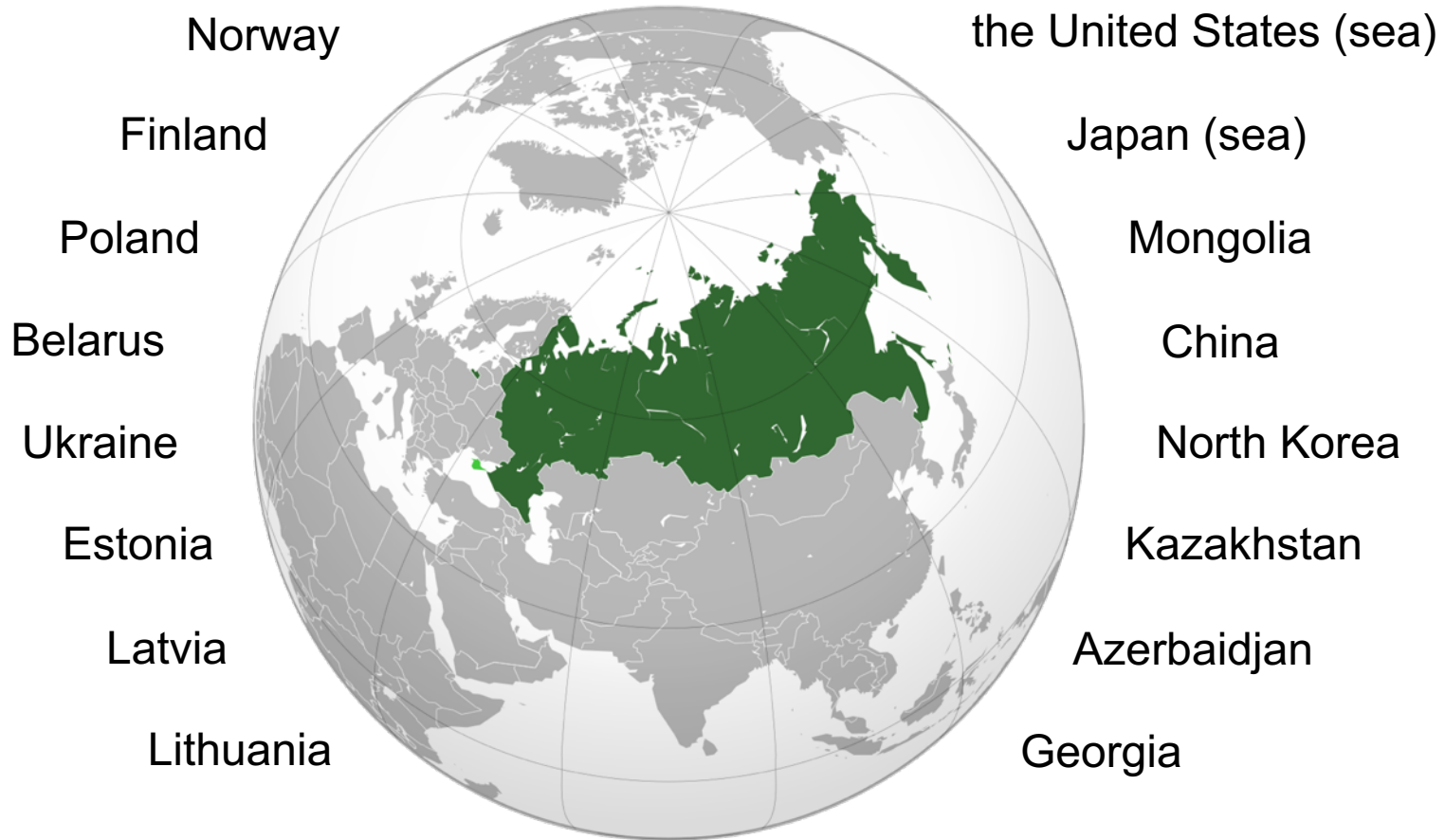
Nizhny Novgorod (1,3m)

Kazan (1,3m)

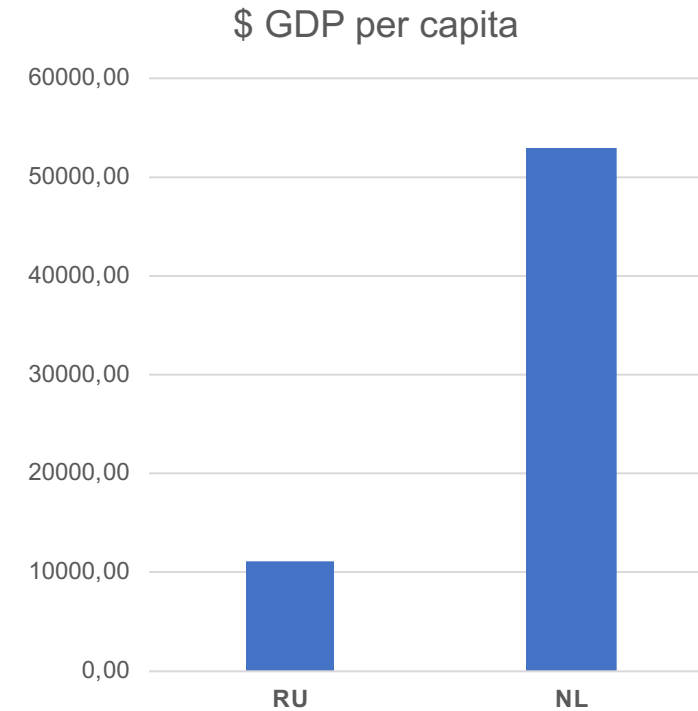
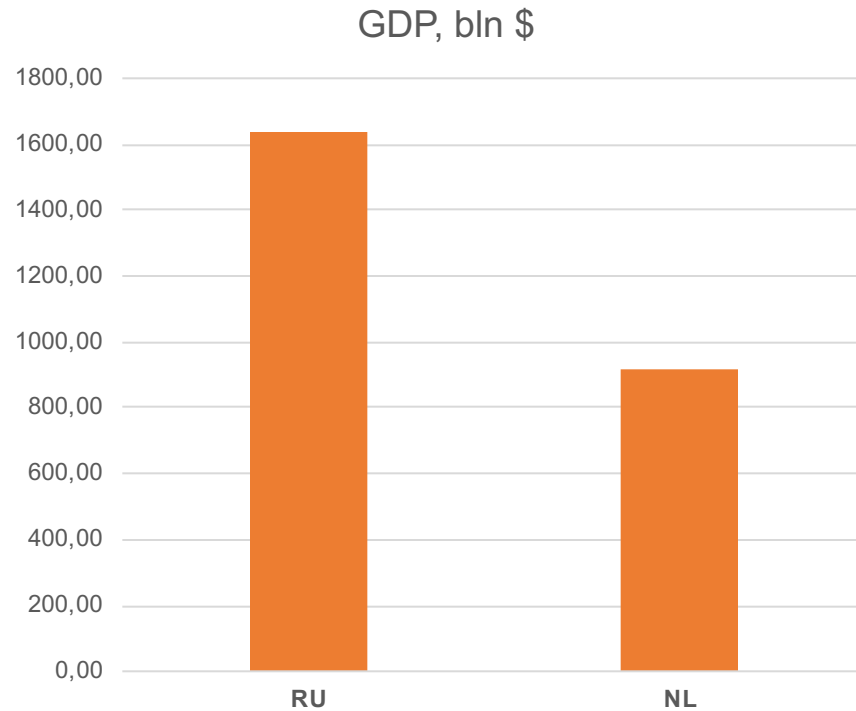
+9 cities >1m>Amsterdam

+36 cities >0,4m>Utrecht

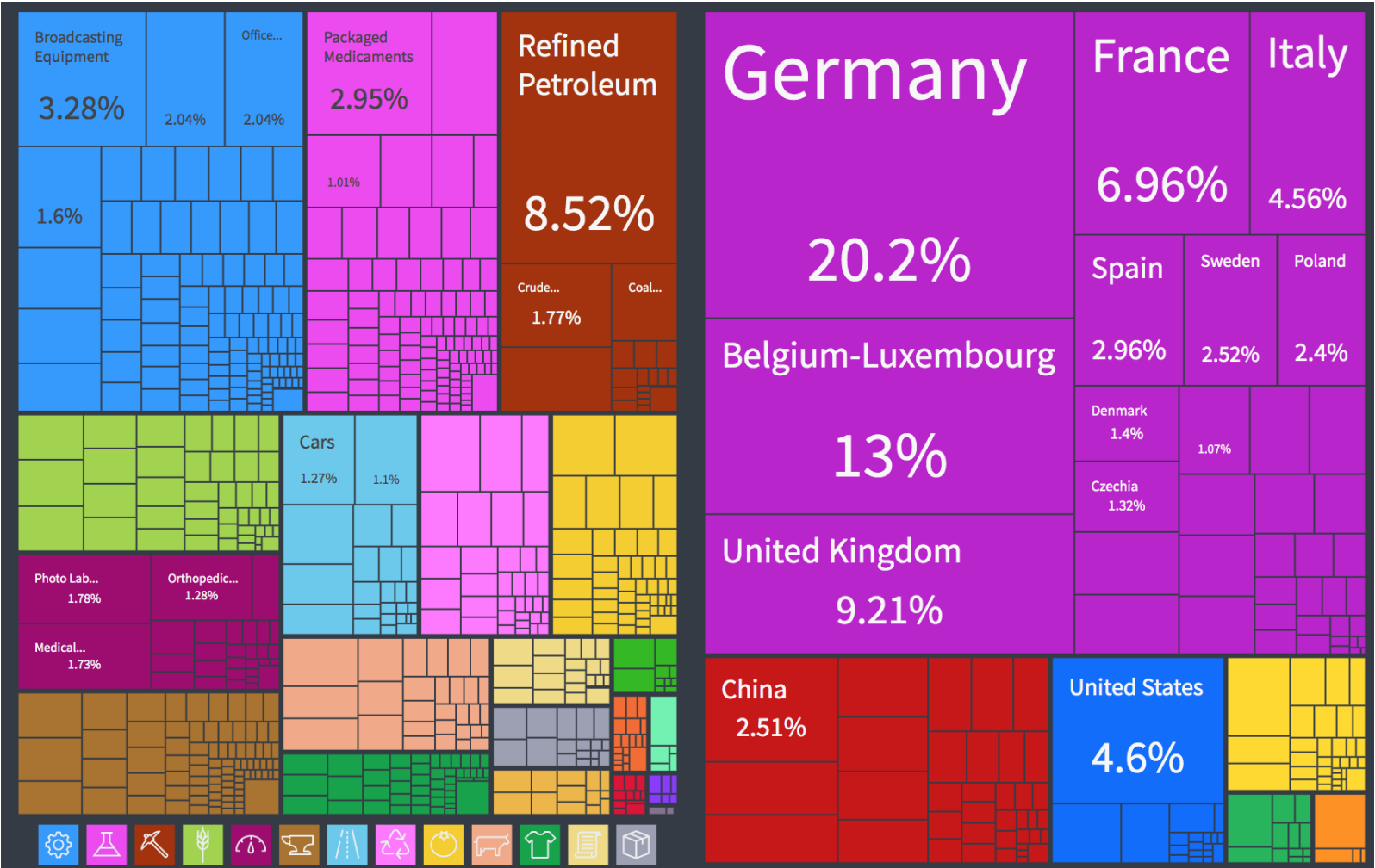
# Geography – Key Neighbors



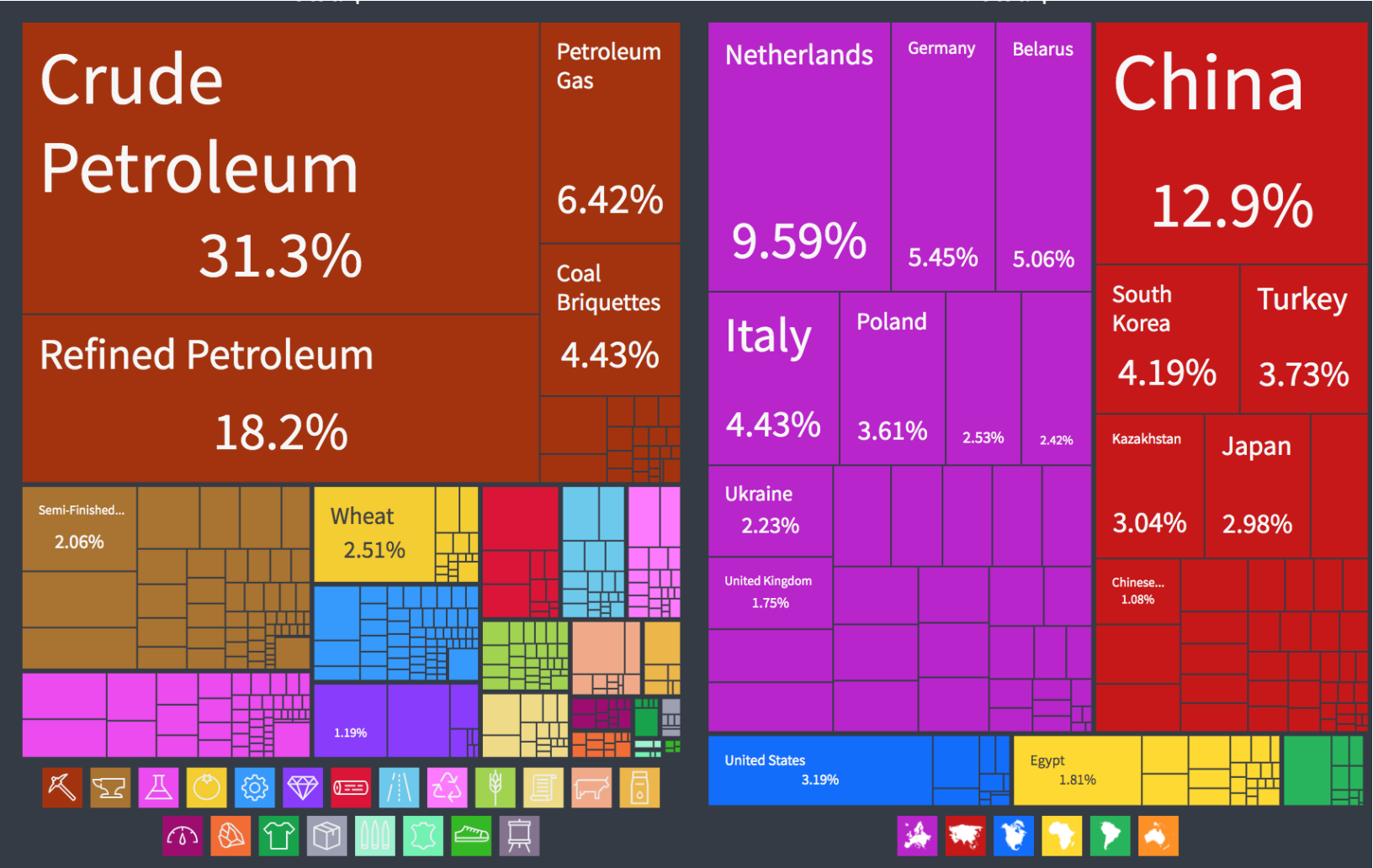
# Economy



# International Trade - NL



# International Trade - RU



# A joke - Kremlin and Email



# Russia in Digital



# FinTech



Bank #1 (\$13Bn revenue). Digital pioneer: iImplementation of in-house agile culture (Sbergile); laboratories for R&D in blockchain, Big Data, AI, IoT and Robotics. Russia's biggest data center 30 MWt and 5 Exabyte.



**Tinkoff**  
Bank

#1 Digital bank in the country, reported as world's biggest 100% online bank (no offices). Launched in 2008



Top-5 bank. Modern IT infrastructure. The first to test blockchain in interbank transaction (with Sberbank).



ГАЗПРОМБАНК

Top-3 Bank, focus on corporate clients. Blockchain in factoring. Investor in RQC quantum cryptography tech. Owns Digital VC fund DigitalHorizon.



The first 100% online bank focused on individual entrepreneurs and self employed (freelancers) clients



[Fintechru.org](https://fintechru.org) Russian Fintech association, unites key stakeholders. Focus on coordinating digital twins, blockchain and open API development for the industry



Russia's largest electronic payment service with 30M accounts. 40% Russians use YM at least once a year. Joint venture by Yandex and Sberbank



20M accounts and 150K payment terminals.



The first E-payment service launched in 1998 . 36M accounts, used by 34% of Russian making online payments.



ML for visual recognition technology startup. Face recognition product for banks (account access) Wells Fargo among clients. Invested by Sberbank and Sistema VC.



Russian Quantum Center. Startup developer of quantum computing technology in Russia. Investor pool includes Gazprombank.



Develops AI-powered chat bot to replace call centers in client support.



National payment system. 11M cards emitted and 381 bank connected.

# Digital Health

## Large companies:

**Yandex**

Internet giants Yandex and Mail.Ru (45M and 80M daily audience) develop own digital health.net platforms for services such as doctor search, online consultation, e-health record, diseases and pharma database, AI-powered bots, etc.

**@mail**

**SBERBANK**

Russia's biggest bank aims to create e-health platform as an open nationwide ecosystem for communication between all healthcare market players and citizens.

**MEGAFON**

All domestic telecom operators develop own mobile telemedicine platforms to consult clients and help with finding a doctor.

**MTC**

**Rostelecom**

Rostelecom national telecom operator is to equip 14000 medical facilities all around Russia with broadband internet access.

**medme**  
**INVITRO**

MedMe is a major strategic investor in Digital Health, co-founded by Invitro group - the largest medical laboratory network in Eastern Europe.

**Sk Biomed**

**SK Biomed** cluster unites around 400 health and biotech startups with industry leaders.

**"Digital healthcare"** consortium created in 2018 to unite large industry leaders with startups and smaller developers and coordinate in producing tech standards for the future industry.

## Startups:

**UNIM**  
UNITED MEDICINE

Digital Pathology SaaS-platform for remote diagnostics and consultation. UNIM Digital Pathology software provides morphological diagnostics in the cloud.

**doc+**

mobile telemedicine platform, storage and processing of medical e-records

**NEURO CHAT**

NeuroChat. Brain-computer interface to assist handicapped in operating prosthetics and other external devices

**3dbio**

3D Bioprinting solutions for tissue/transplant engineering. First in the world printed biological tissue.

**BOTKIN.AI**

Botkin.ai. Domestic AI platform for diagnostic and risk analysis of the disease development

**ТРЕТЬЕ МНЕНИЕ**

Third Option. AI-powered SaaS-platform for the analysis of ultrasound, X-ray and microscopic images.

**EXOATLET**

Exoskeleton for medical and social rehabilitation

**Медархив**  
Система хранения и обработки медицинских данных

MedArchive. Medical e-record and data storage platform for remote assistance

## Unicorns

Yandex



**TINKOFF**



Yandex Taxi



kaspersky

Acronis



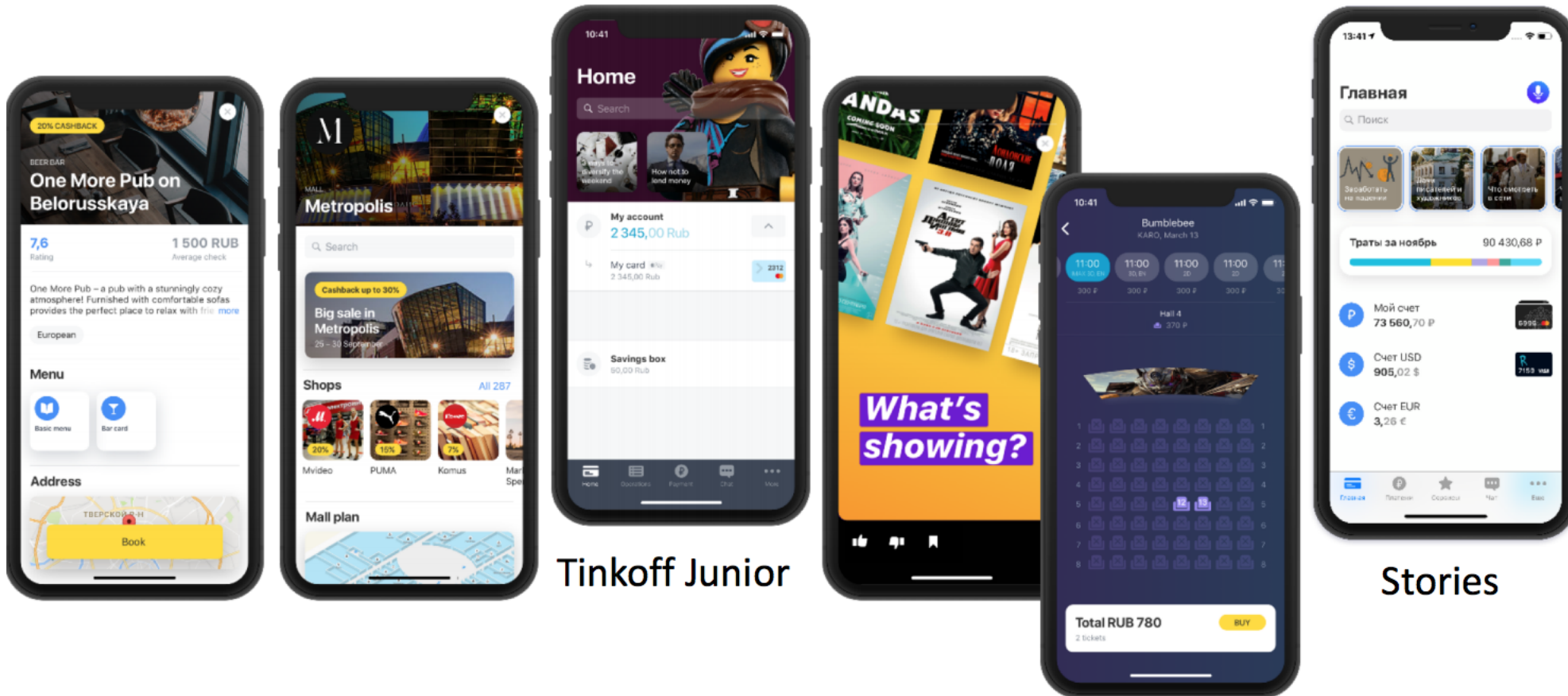
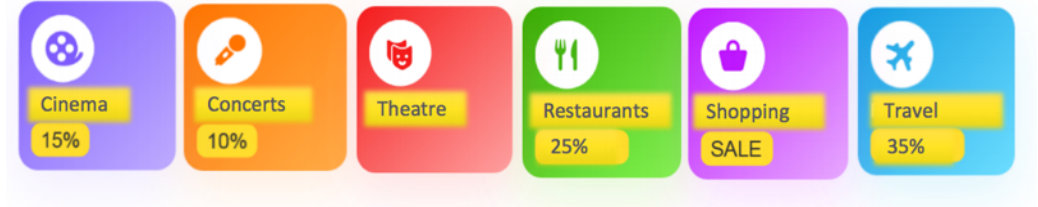
# SuperApps Battle

**Y**andex



**TINKOFF**

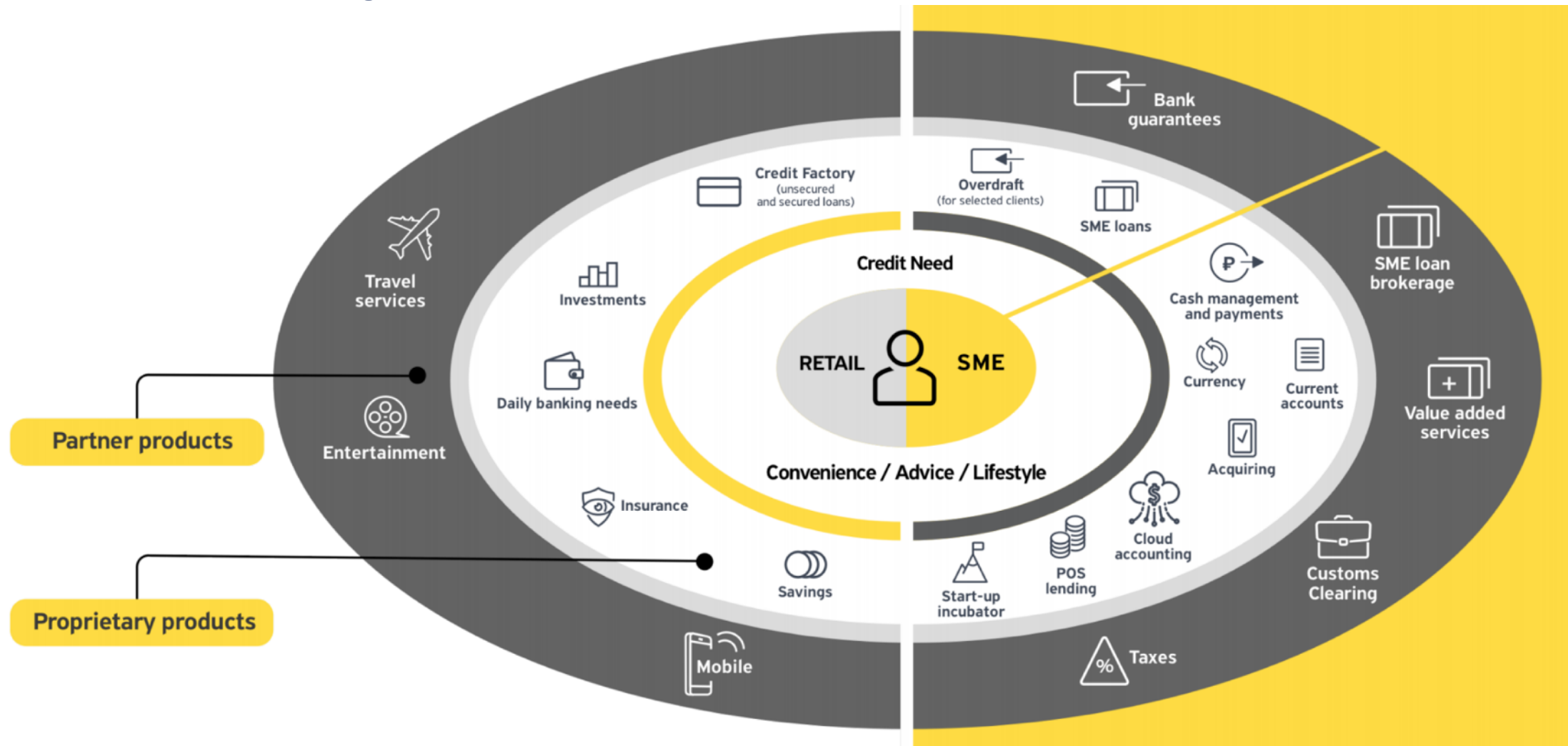
# SuperApp in Real Life



Tinkoff Junior

Stories

# Tinkoff's Ecosystem



# Sberbank's Ecosystem



# Love story

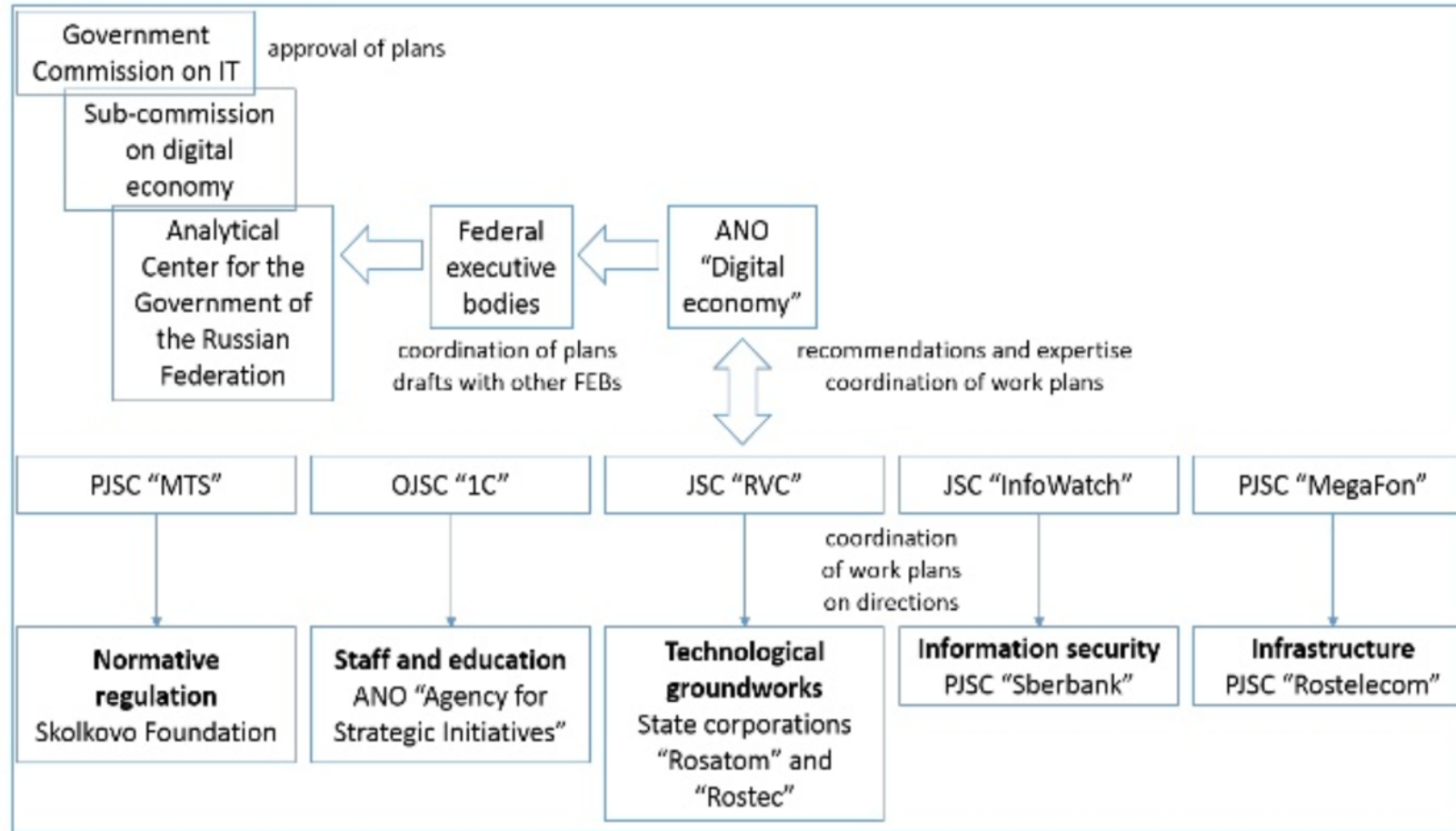


# Digital Transformation of State in Russia



# Digital Economy Program

Key stakeholders:



Credit to Team Finland

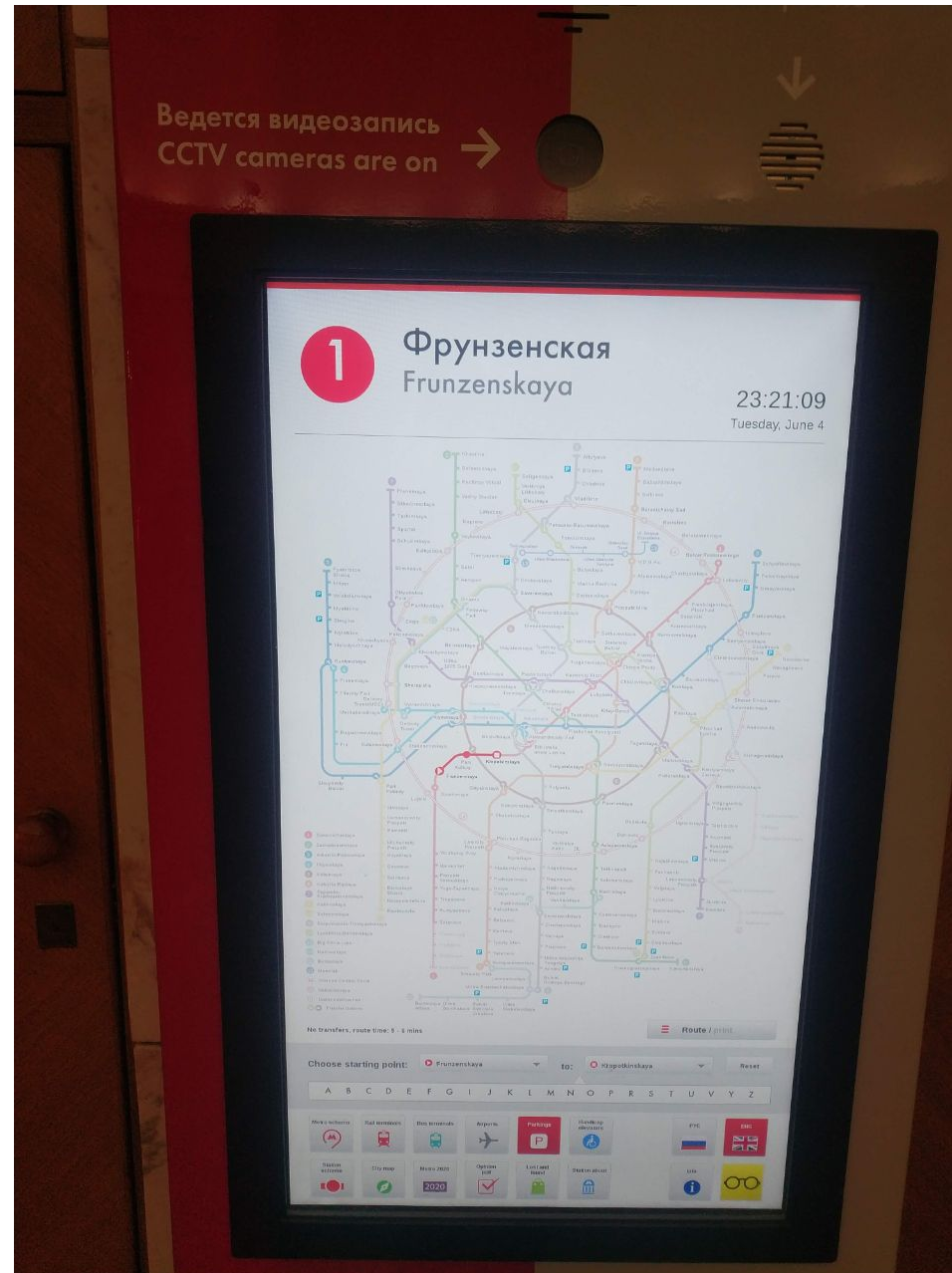
*Federal budget for the program is estimated at **\$18 Bn** for 2019 – 2024 timeframe.*

*50% will be allocated for information infrastructure development.*

Six pillars for the Program:

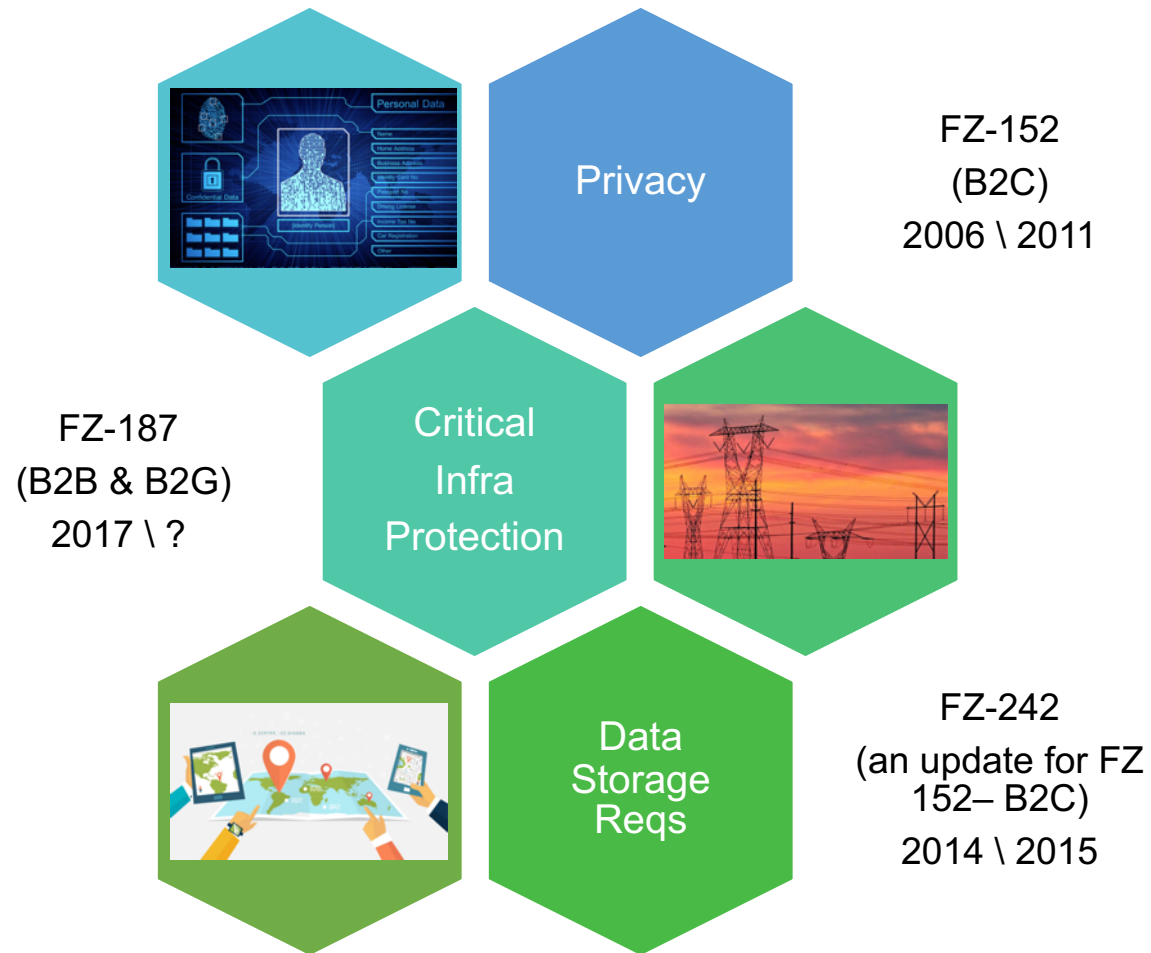
- R&D&I in information technologies
- Information infrastructure
- E-government
- Information security
- Normative regulation
- Human resources and education

# Moscow Metro



# Russian Federation: Security Regulations

# Key Security Regulations in Russia



**You can expect discover  
there medium level of  
security regulation, e.g. less  
then in UK, US or EU**

# How are paid Russian hackers?



# Security workforce in Moscow – Net salaries

1. Information Security Director 30-78k\$
2. Information Security Manager 14-28k\$
3. Network Security Engineer 9-36k\$
4. Application Security Engineer 18-54k\$
5. Penetration Tester 9-54k\$
6. SOC Analyst L1\L2 9-12k\$\22-30k\$
7. SOC Architect 51-87k\$
8. SOC Head 51-87k\$
9. Anti-fraud Manager 18-45k\$

## Indices Difference

Consumer Prices in **Amsterdam** are 90.17% **higher** than in **Moscow**  
Consumer Prices Including Rent in **Amsterdam** are 94.39% **higher** than in **Moscow**  
Rent Prices in **Amsterdam** are 101.49% **higher** than in **Moscow**  
Restaurant Prices in **Amsterdam** are 93.01% **higher** than in **Moscow**  
Groceries Prices in **Amsterdam** are 94.56% **higher** than in **Moscow**  
Local Purchasing Power in **Amsterdam** is 70.79% **higher** than in **Moscow**

# Key Talent Pools (Targets)

1 000+ cybersecurity workers



100 - 500 cybersecurity workers



# You're unworthy



**There are a lot of things  
within security ecosystem in  
Russia, not just “hackers”**

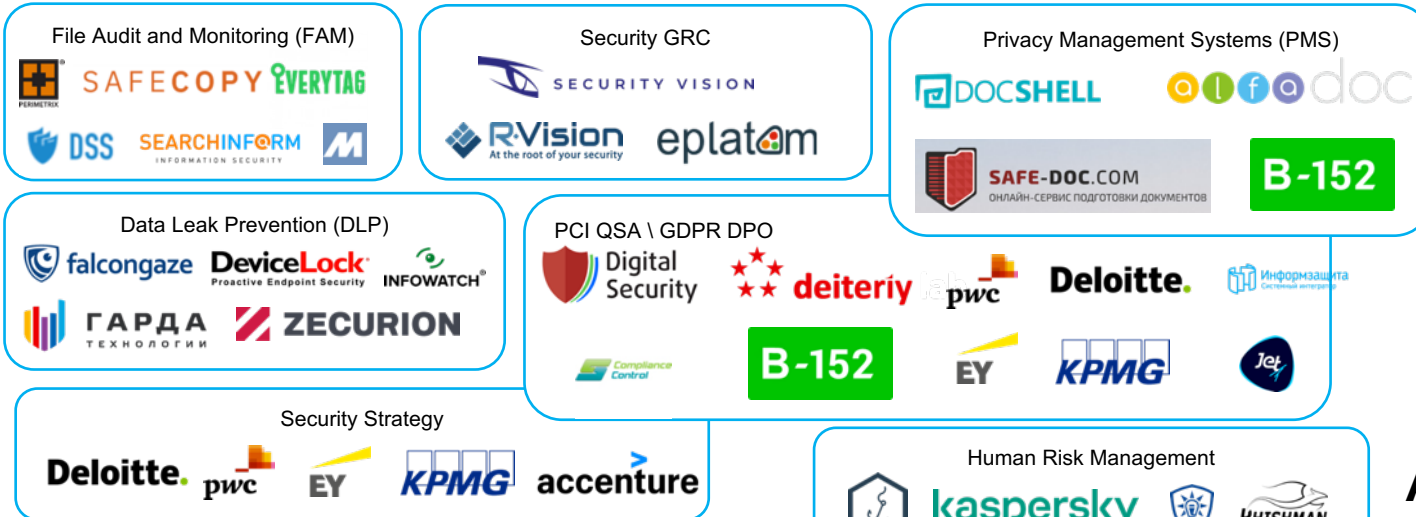
# Russian Federation: CyberLandscape

# CyberLandscape – Security Operations

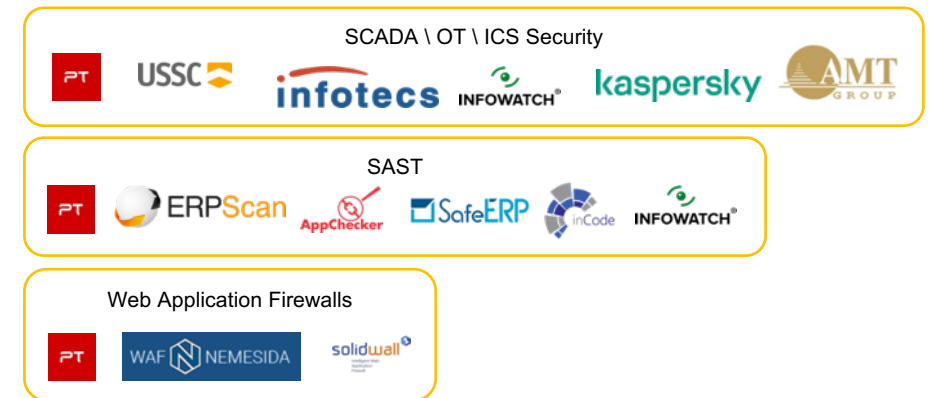


# CyberLandscape – Other Spaces

## Security Governance, Risk and Compliance Space



## Business Processes Security Space



## Anti-Fraud Space



## Identity Management Space



# CyberLandscape – Key Buyers

30+ m USD \ Y



15+ m USD \ Y



# CyberLandscape – Big Picture of Market



**Russia represents it's own  
security civilization with its  
practices facing both global  
and unique local challenges**

# Further Information

## Telegram groups and channels

### ISACA Moscow – Security:

- <https://t.me/IsacaRuSec> (channel)
- IsacaRSChat (chat)

### Full-time jobs and experts

- <https://t.me/RuSecJobs> (channel)
- <https://t.me/CyberJobsRussia> (chat)

### Contractors

- <https://t.me/CyberHireRussia> (channel)
- <https://t.me/RuCyberHire> (chat)

## More links and contacts:

- Official web page of Moscow Chapter  
<https://engage.isaca.org/moscow/home>
- Facebook group  
<https://www.facebook.com/groups/CyberJobsRussia>
- My LinkedIn  
<https://www.linkedin.com/in/bodryk/>
- My email1 alex.bodryk@isaca.org.ru
- My email2 alex@cyberlands.io