5G TECHRITORY

5G Techritory Forum, 18-19 October, 2023, Riga

State Fire and Rescue Service of Republic of Latvia

Ministry of
Education and Science
Republic of Latvia

Latvian Council of Science

Federation of Security and
Defence Industries of Latvia

Civil Security and Cyber Security
co-creation event for Horizon Europe Projects
Opening remarks

Ivars Nakurts
State fire and rescue service of Latvia
Deputy chief

Global risks ranked by severity over the long term (10 years) – World in 2033

Horizon Europe program Cluster 3 "Civil security and Cyber security"

- Resilient Infrastructure;

- Increased Cybersecurity;

- Effective management for EU external borders;

- Disaster-Resilient Society for Europe;

- Better protection for the EU and its Citizens against Crime and Terrorism;
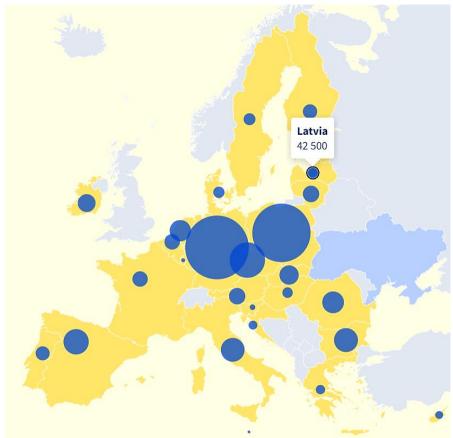
- Strengthened Security Research and Innovation

1	Failure to mitigate climate change	6	Natural resource crises
2	Failure of climate-change adaptation	7	Erosion of social cohesion and societal polarization
3	Natural disasters and extreme weather events	8	Widespread cybercrime and cyber insecurity
4	Biodiversity loss and ecosystem collapse	9	Geoeconomic confrontation
5	Large-scale involuntary migration	10	Large-scale environmental damage incidents

Risk categories   ▮ Economic   ▮ Environmental   ▮ Geopolitical   ▮ Societal   ▮ Technological

Source: World Economic Forum, Global Risks Perception Survey 2022-2023: https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf

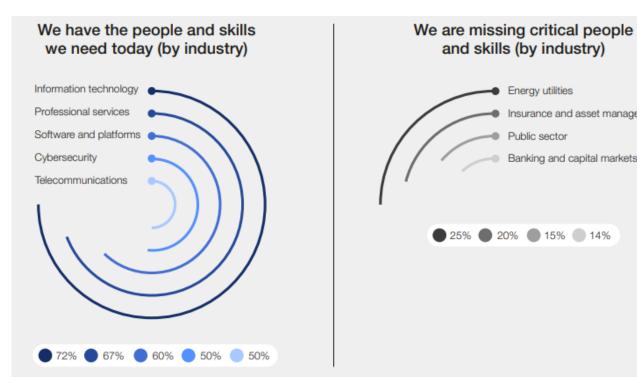**Horizon Europe program Cluster 3 "Civil security and Cyber security"**

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Geopolitical impact - Refugees from Ukraine who benefit from temporary protection in the EU

Source: https://www.consilium.europa.eu/en/infographics/ukraine-refugees-eu/

3

The cybersecurity skills gap by industry

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We have the people and skills we need today (by industry)

- Information technology
- Professional services
- Software and platforms
- Cybersecurity
- Telecommunications

● 72% ● 67% ● 60% ● 50% ● 50%

We are missing critical people and skills (by industry)

- Energy utilities
- Insurance and asset management
- Public sector
- Banking and capital markets

● 25% ● 20% ● 15% ● 14%

Horizon Europe program Cluster 3 "Civil security and Cyber security"
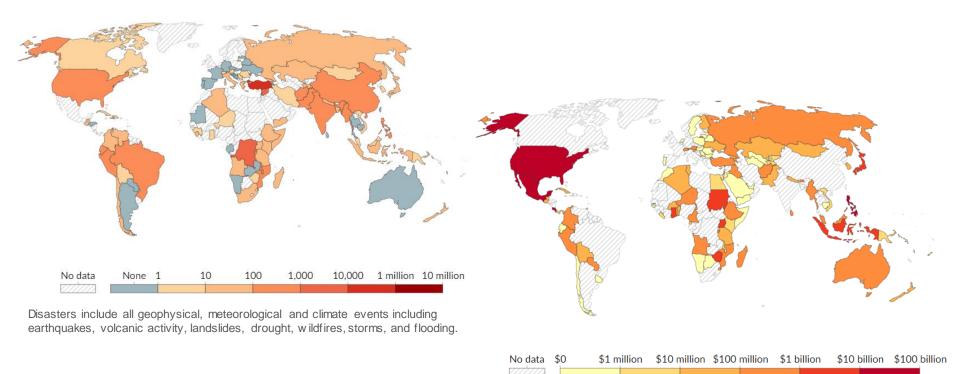
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Global risks landscape: an interconnections map

Source: World Economic Forum, Global Risks Perception Survey 2022-2023: https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf

Number of deaths from disasters, 2023

No data   None 1   10   100   1,000   10,000 1 million 10 million

Disasters include all geophysical, meteorological and climate events including earthquakes, volcanic activity, landslides, drought, wildfires, storms, and flooding.

Direct disaster economic loss, 2021

No data $0 $1 million $10 million $100 million $1 billion $10 billion $100 billion
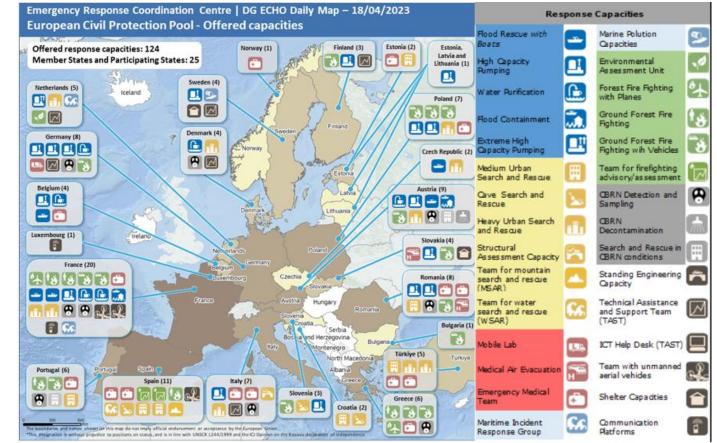
The monetary value of total or partial destruction of physical assets existing in the affected area. Direct economic loss is nearly equivalent to physical damage.

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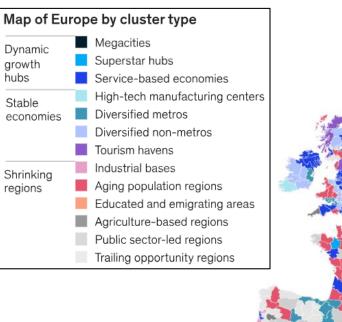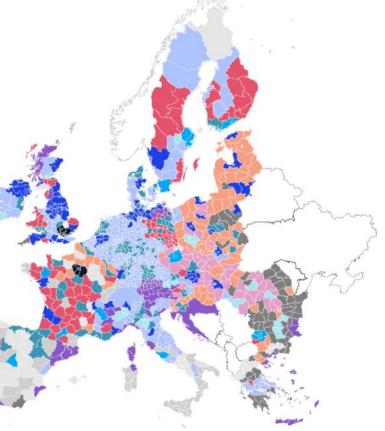## EU Civil protection Mechanism capacities - Poll of pre-defined resources

Source: https://erccportal.jrc.ec.europa.eu/ECHO-Products/Maps#/maps/4467

Consideration of automation, migration and shrinking of labor supply

Dynamic growth hubs *- home to 20 % of Europeans - the highest GDP per capita and strong innovation capabilities*

   Stable economies *- home to 50 % of Europeans - above-average GDP per capita, attracted new residents*

Shrinking regions *- home to 30 % of Europeans. The working-age shrinking because of outmigration and aging*

Map of Europe by cluster type

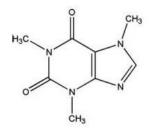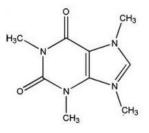| Dynamic growth hubs	■ Megacities
	■ Superstar hubs
	■ Service-based economies
Stable economies	■ High-tech manufacturing centers
	■ Diversified metros
	■ Diversified non-metros
	■ Tourism havens
Shrinking regions	■ Industrial bases
	■ Aging population regions
	■ Educated and emigrating areas
	■ Agriculture-based regions
	■ Public sector-led regions
	■ Trailing opportunity regions

Horizon Europe program Cluster 3 "Civil security and Cyber security"

- Where, how, when to start?

Fostering for national and international cooperation between government institutions, industry and academia, building consortia for Horizon Europe projects

New insight - new perspective

Theobromine

Provides consistent energy without the energy spike and crash – non addictive

Caffeine

Strong nervous system stimulant - can be addictive

Vertical Take-off and Landing Drone vs Multirotor Drone vs Fixed-wing Drone

Source: https://chocolatealchemy.com/blog/2012/11/21/ask-the-alchemist-13
Source: https://www.jouav.com/vtol-drone

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Thank you – it's your time to act!