

# Current market solutions and practitioners needs

Chair: Paolo Venturoni, European Organisation for Security (EOS)



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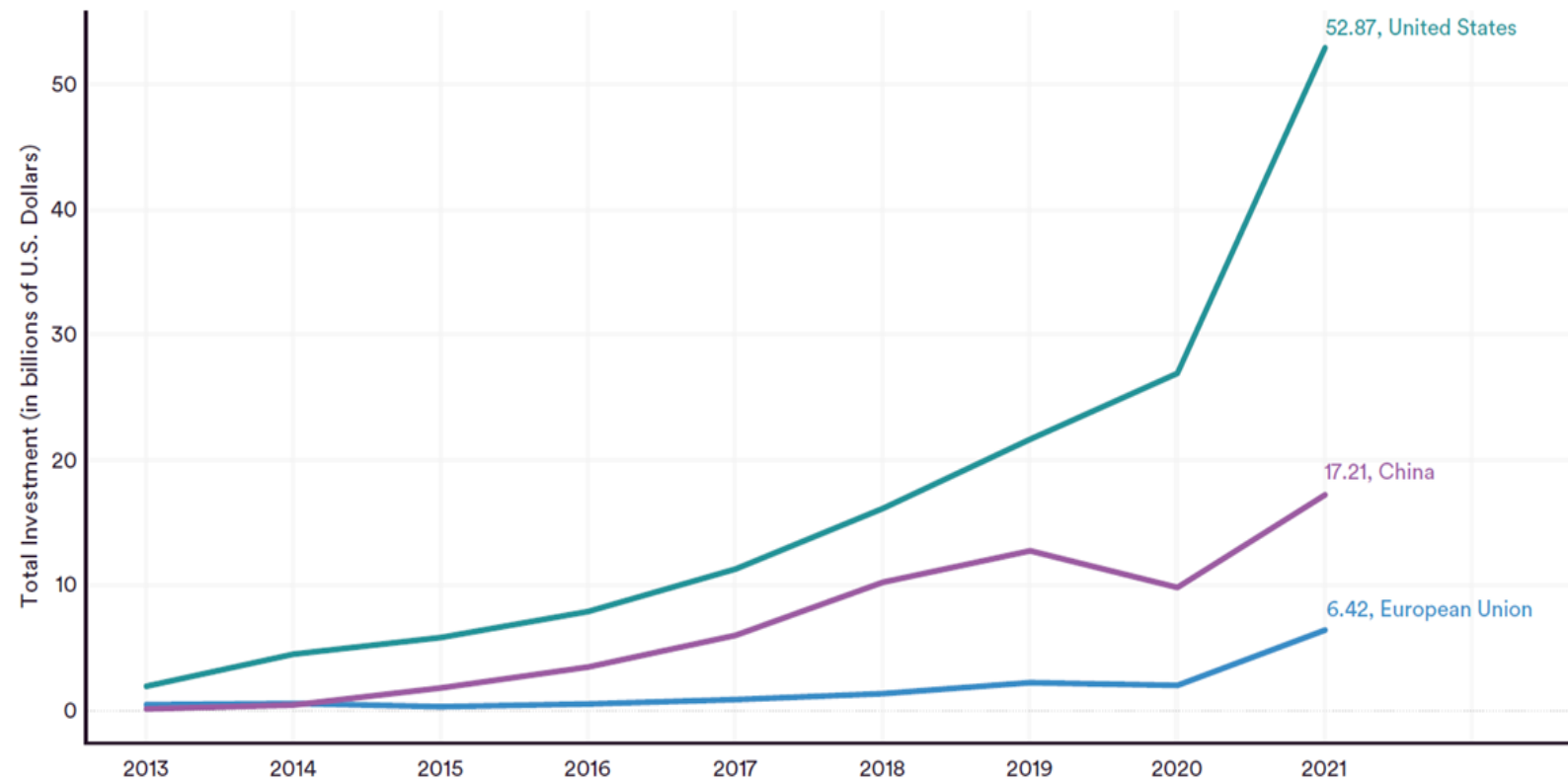


Nicolas Garcia, IDEMIA

## Private investment in AI by geographic area (Artificial Intelligence Index Report 2022 – Stanford University)

### PRIVATE INVESTMENT in AI by GEOGRAPHIC AREA, 2013–21

Source: NetBase Quid, 2021 | Chart: 2022 AI Index Report





# Center for Security Studies (KEMEA) - Activity information

1. **Identifying end-user/operational needs** and security systems requirements
2. **Legal Team** specialized in Ethics analysis and processing legal aspects of innovative technological security solutions
3. **Flight Support Team** (pilots, technicians), drones (area mapping, 3D modelling, detection)
4. **Team of spatial and statistical analysis** of geographical data and information
5. **Communication & Dissemination Team**
6. **Vulnerability & Risk assessment Team** for critical infrastructures and public spaces security
7. **Specialized Team for Planning and Evaluation** of demonstrations, pilots, table-top and field-testing exercises
8. **Team of wireless telecommunications and anti-drone solutions**
9. **Technology Team for border surveillance**
10. **Natural hazards and Disaster Risk Management Team**



- 1 Institute of International Network and the study of extremism and terrorism
- 2 Critical Infrastructure Protection
- 3 Emergency Management & Civil Protection
- 4 Cyber security



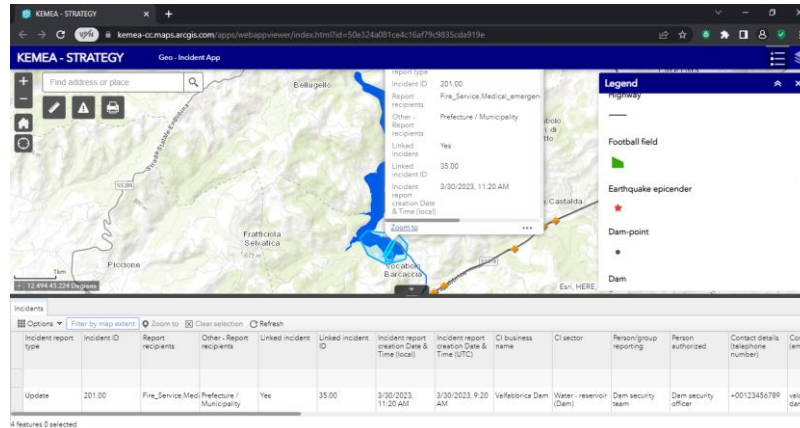
# Critical Infrastructure Protection & Procurement activities

National  
Contact Point  
for ECIs

Dir. 2008/114  
Dir. 2022/2557

Lead Procurer  
for PCP/PPI  
projects

- Pilot Coordination Center for CIP: GIS platform, national database for CIs, incident situational reporting (CWA 18024:2023)
- Table-top exercises: CI operators – emergency response organization – public authorities



- The means to put in application and make operational innovative R&D solutions – **in need for CIs resilience upgrade**
- Addressed to CI operators (PCP) & public emergency agencies (PPI) with tailor-made innovative solutions financially supported by the EC



Research: ~ 1 billion euros

Aeronautics	Space	Energy	Transportation
			
(approx. 80% of the activities, resources)			(approx. 20%)

National Space Agency: ~1.2 billion euros (national program plus ESA share)  
Project Management Agency: ~1.1 billion euros (funded projects by the federal or state governments)

## Locations and Personnel

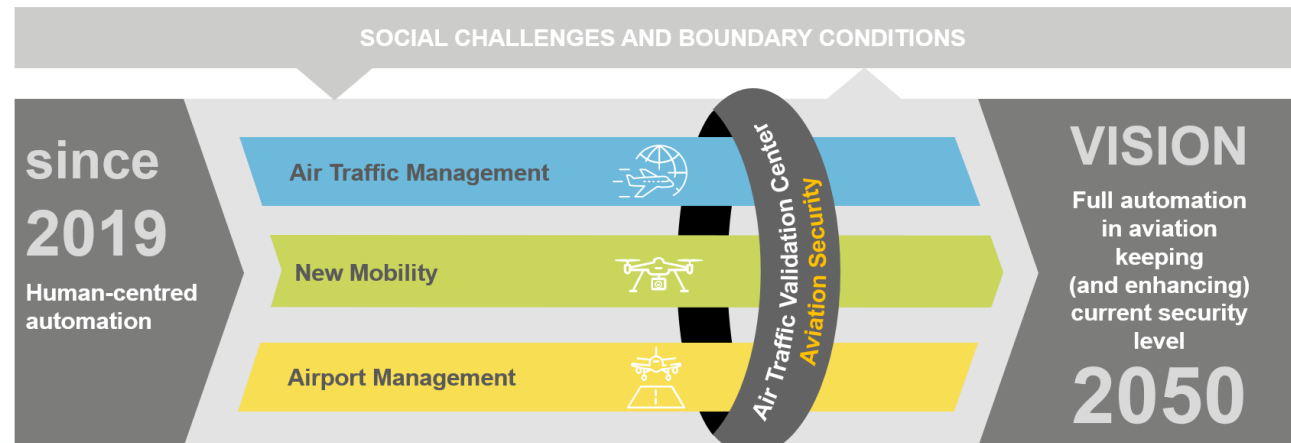
- 10,000 employees work in 55 institutes and facilities.
- Offices in Brussels, Paris, Tokyo and Washington D.C.

### Braunschweig site

- Employees: around 1200
- Area: 170,000m<sup>2</sup>
- Institutes and installations for:
  - Aerodynamics and flow technologies
  - Lightweight systems
  - Flight guidance**
  - Flight systems
  - Transportation systems
  - Flight experiments and design organisation
  - Software technology



## Research focus of the Institute of Flight Guidance



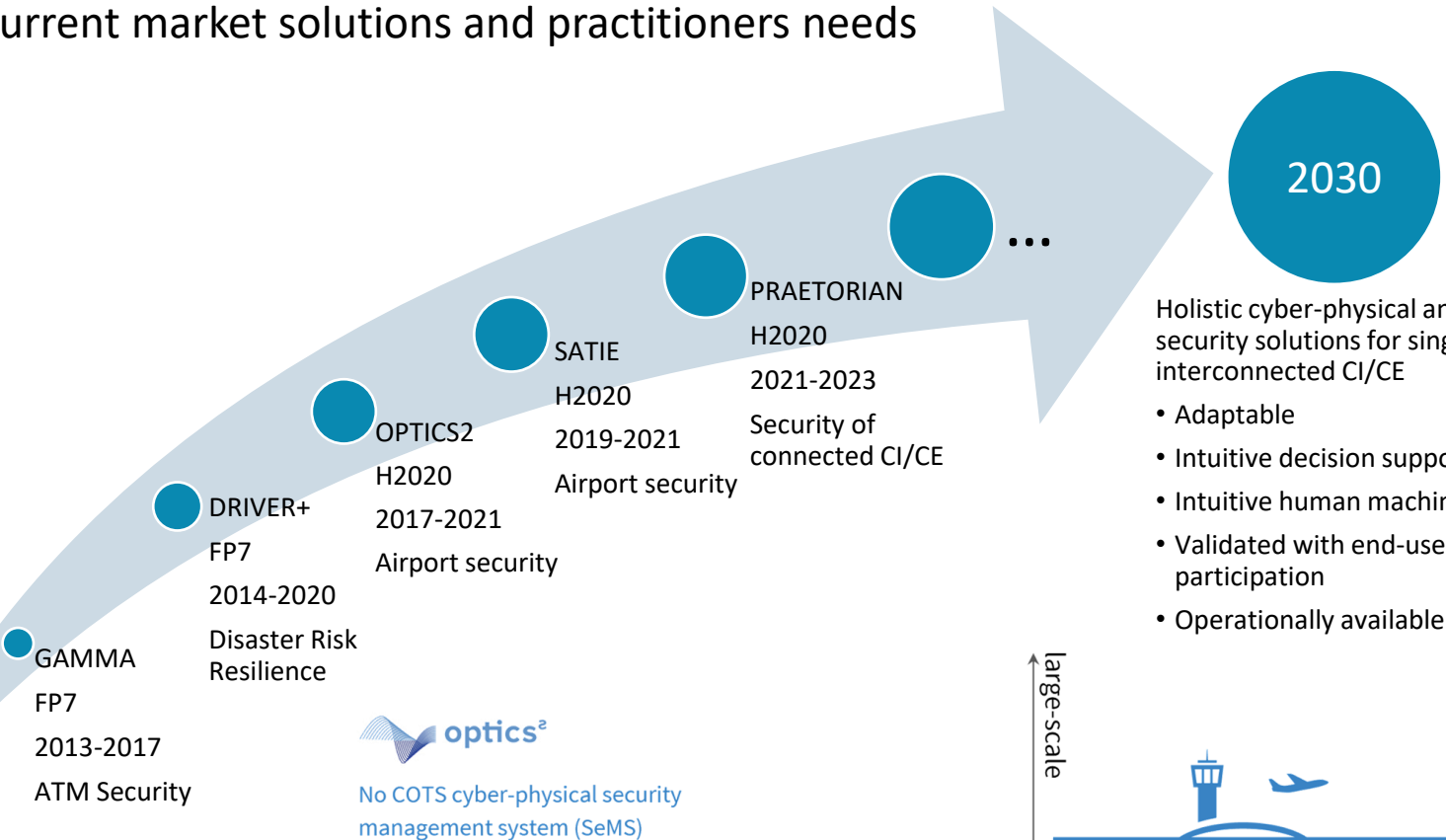
Over 30 DLR institutes contribute to development, testing and evaluation of security and defence-related technologies.

E.g.:

- Institute of Flight Guidance
- Institute for AI Safety and Security
- Institute for the Protection of Maritime Infrastructures
- Institute for the Protection of Terrestrial Infrastructures
- Institute of Technical Physics
- Responsive Space Cluster Competence Center (RSC3)
- ...

# The way to foster security of CI/CE

Current market solutions and practitioners needs



2030

Holistic cyber-physical and hybrid security solutions for single and interconnected CI/CE

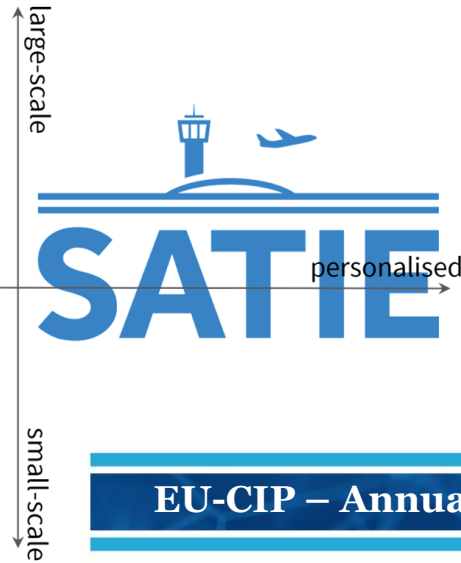
- Adaptable
- Intuitive decision support
- Intuitive human machine interfaces
- Validated with end-user participation
- Operationally available

**optics<sup>2</sup>**  
No COTS cyber-physical security management system (SeMS) operational

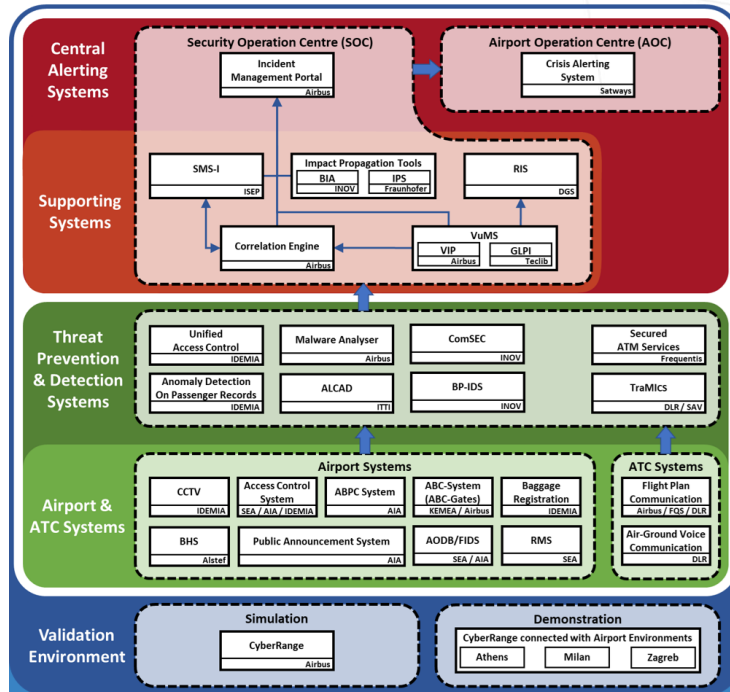
H2020 project OPTICS2 (CSA project) states:

- Common Aviation SeMS operational: Does not formally exist.
- Common Transport SeMS operational: Does not formally exist.
- Operational aviation security is one of the TOP SECURITY RESEARCH PRIORITIES

<http://www.optics-project.eu/>



## PRODUCT



## FEATURE

Modularity allows to connect any imaginable sensor as well as systems (e.g. drones)  
All phases of threat can be handled  
System is capable to „learn on the job“



## Industries We Serve

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Business Aviation



Commercial Aviation



Helicopters



Military & Defense



Space

Collins Aerospace is a leader in technologically advanced, intelligent solutions that help redefine the aerospace and defense industry.

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Driving breakthrough solutions – for today and the next generation.



Autonomous Operations



Cabin Experience



Connected Battlespace



Connected Ecosystem



Electrified Aircraft



Integrated Solutions



Structural Technologies



Sustainability



Digital & Technology Acceleration

Global presence

80,000+  
Employees

20,000+  
Engineering Workforce

250+  
Sites Globally

\$23.1B  
2022 adjusted sales

\$4B  
Invested annually

## Sales portfolio



63%  
Commercial



58%  
OEM



37%  
Defense



42%  
Aftermarket

## LOCATIONS



~20 employees



~50% Ph.D.



>20 nationalities

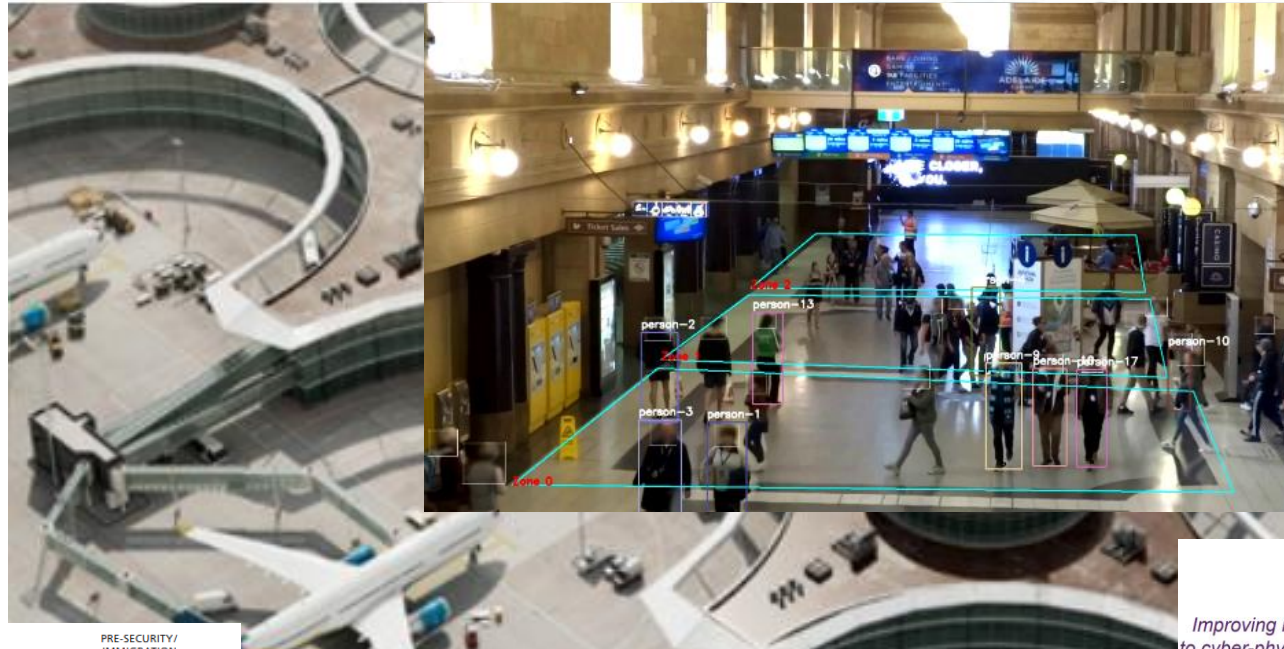


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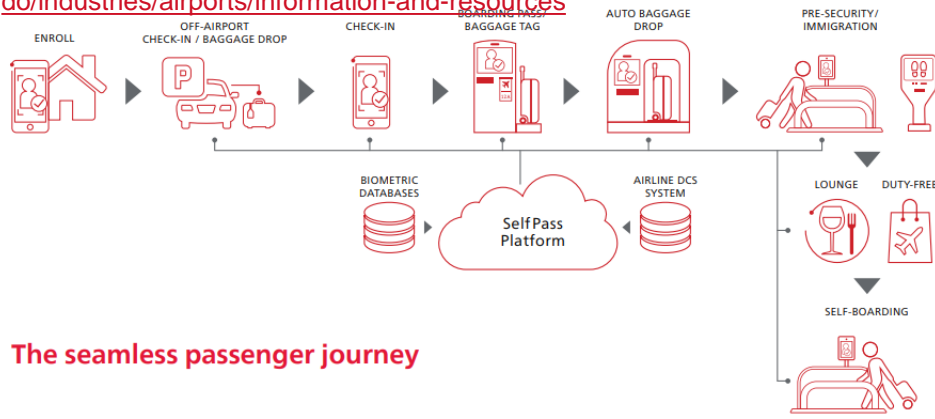
- Passenger
- Aircraft
- Airport operations

Opportunity to:

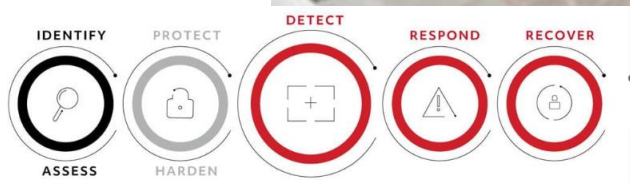
- Create a dynamic aviation ecosystem
  - Streamline curb-to-curb passenger experience
  - Accelerate turnarounds & improve operations
- > AI/ML & data for CPS ops & security



<https://www.collinsaerospace.com/what-we-do/industries/airports/information-and-resources>

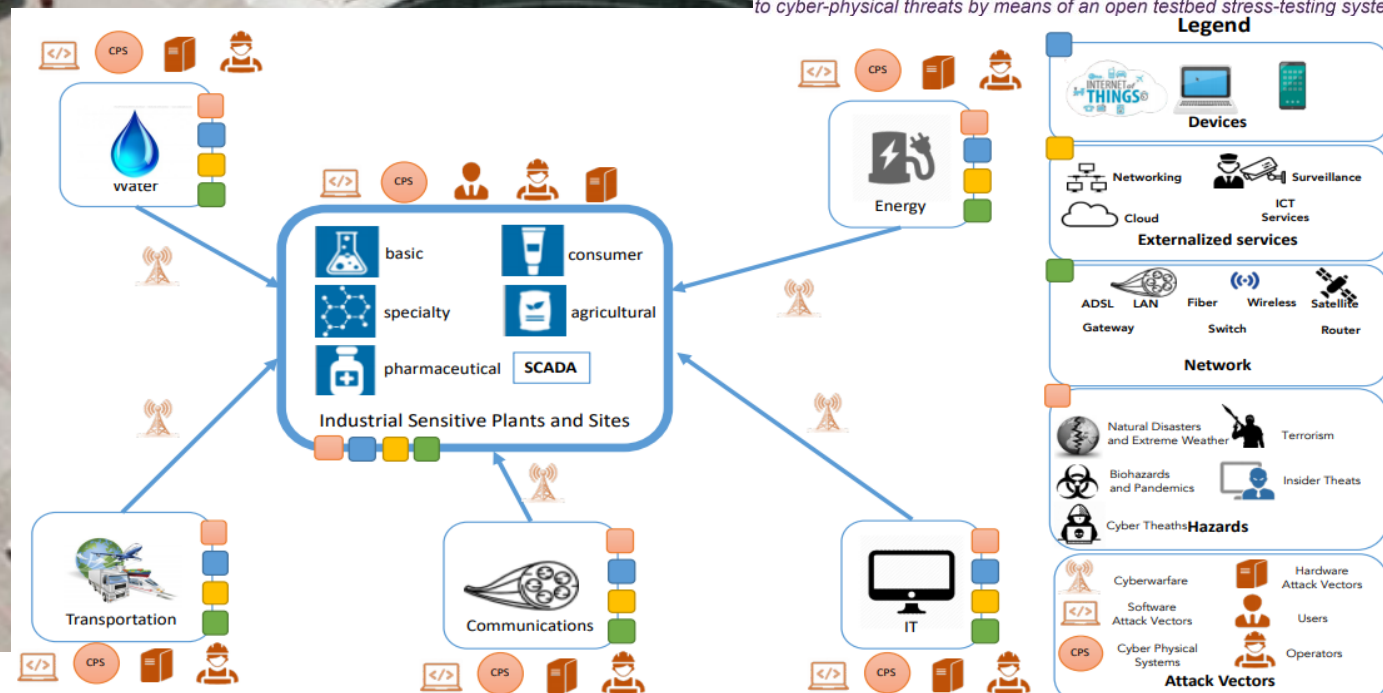


The seamless passenger journey



# INFRA STRESS

Improving resilience of sensitive industrial plants & infrastructures exposed to cyber-physical threats by means of an open testbed stress-testing system





# IDEMIA, LEADER IN IDENTITY TECHNOLOGIES



Unlock the world, make it safer

## MARKETS

- PAYMENT
- CONNECTIVITY
- IDENTITY
- TRAVEL
- ACCESS CONTROL
- PUBLIC SECURITY

## BUSINESS UNITS

- Payment Services
- Connectivity Services
- Public Security & Identity
- Identity & Security, N.A.\*

## TECHNOLOGIES

- BIOMETRICS
- CRYPTOGRAPHY
- SYSTEMS
- ANALYTICS
- SMART DEVICES

## MAJOR PLAYER

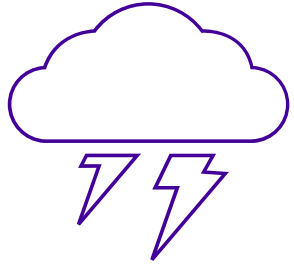
- 180+**  
countries using our technologies
- 15,000**  
employees worldwide
- €2.6B**  
in revenue in 2022

## CUSTOMERS

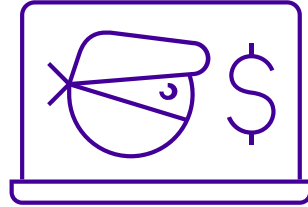
- 2,300+**  
companies
- Microsoft
- SOCIETE GENERALE
- HSBC
- vodafone
- orange™
- CHANGI airport group
- 600+**  
governments, state & federal organizations
- EU-LISA

# CYBERSECURITY

The game changer



One ransomware attack every 11 seconds (\*)



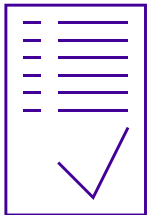
2021 cost for ransomware: € 20 billion (\*)

Country GDP in 2025 (in billion USD)\*\*

Rank	Country	GDP
1	USA	28,766
2	China	22,408
3	UE	17,264
4	Cybercrime	10,500
5	Japan	4,731



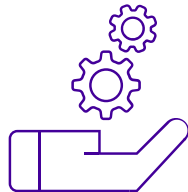
## Company policies



Protection of valuable assets  
Access Control



## Product manufacturer



Features  
Design processes  
Security by Design & by Default  
Biometrics



## Governments



Recommendations  
Regulations



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