



CitySCAPE

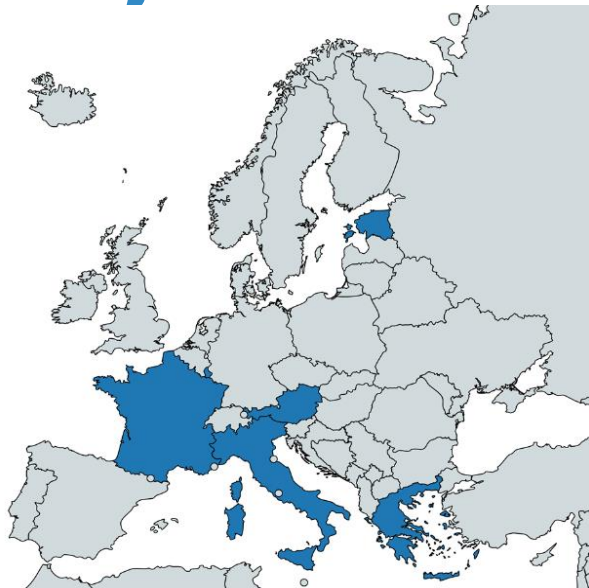
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CSET Conference – September 15, 2021

Project at a Glance



- **Call identifier:** H2020-SU-DS-2019
- **Topic:** SU-DS05-2018-2019 - Digital security, privacy, data protection and accountability in critical sectors
- **EC Funding:** 6 293 011,25 € 
- **Duration:** 36 months – 1 Sep 2020 → 31 Aug 2023
- **Consortium:** 15 partners
- **Coordinator:** Institute of Communication and Computer Systems (ICSS), Greece – Dr. Angelos Amditis (a.amditis@iccs.gr)
- **Learn more:** www.cityscape-project.eu
- **Join us:**  @EUCityscape  CitySCAPE Project



AIRBUS



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Tallinn



REPUBLIC OF ESTONIA
INFORMATION SYSTEM AUTHORITY



STAM
MASTERING EXCELLENCE

Gruppo SIGLA
esperienza ed innovazione

UNIVERSITY OF PIRAEUS
RESEARCH CENTER



AUSTRIAN
STANDARDS
Driven by Making Sense

CS
GROUP

ENGINEERING

TAL
TECH

Genova Use Case - Some details



Focus on **2 transport scenarios**:

- ✓ **Information to passengers** (*info-mobility*),
- ✓ Electronic and mobile **ticketing**

considering **electronic services** (e.g., website or mobile application) provided to the public transport users

For each scenario several micro-use cases are analyzed addressing very specific situations

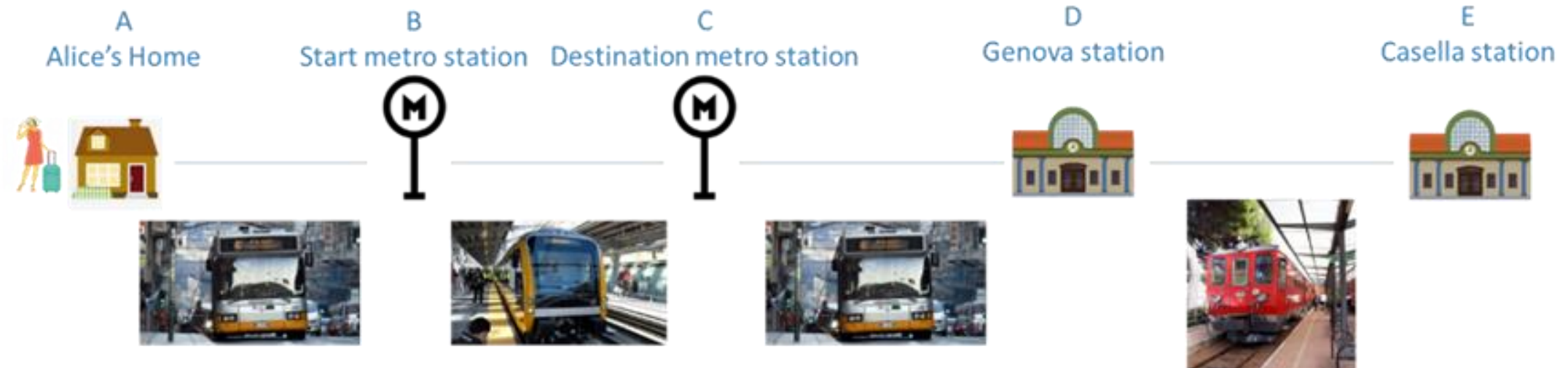
- *Info-mobility*

- ✓ Waiting time at the stop
- ✓ Service schedule
- ✓ Waiting time of the next train
- ✓ Metro Station info-mobility
- ✓ Notifications to passengers on service update

- *Ticketing*

- ✓ Ticket from the mobile app
- ✓ Validating a mobile ticket
- ✓ Ticketing – City-Pass subscription
- ✓ Validating a City-Pass subscription ticket
- ✓ Ticketing Using Urban Train

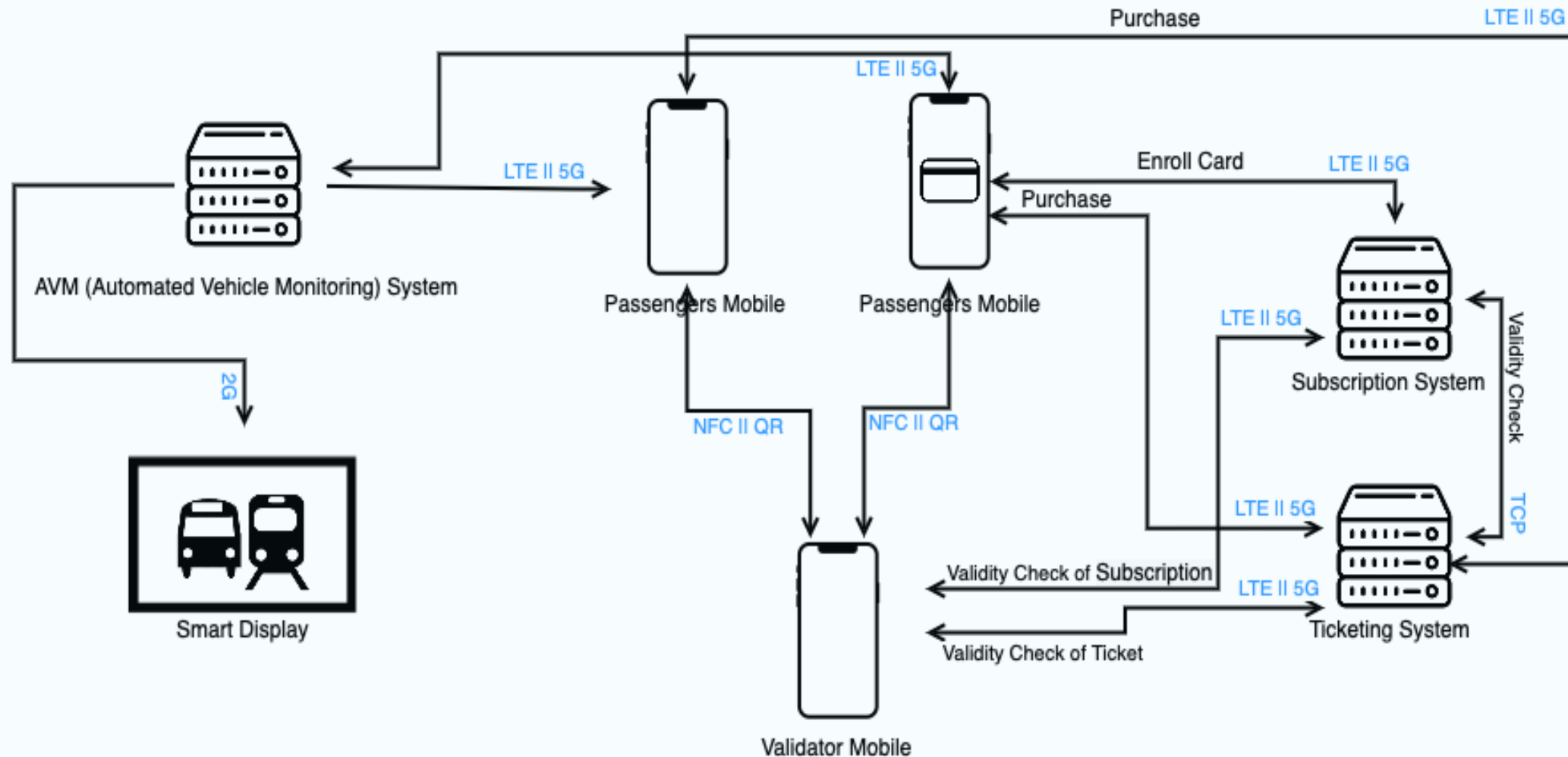
Genova Use Case - Some more details



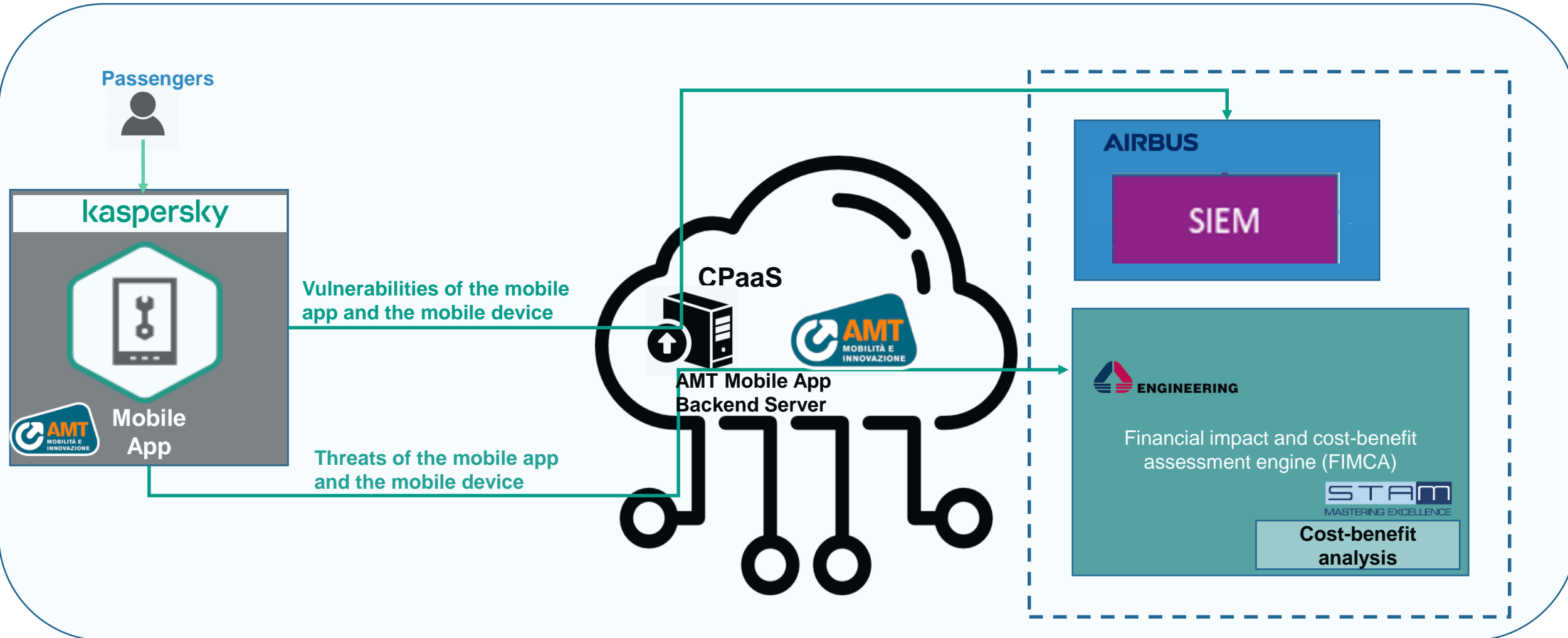
2 macro-scenarios combining all the micro-use cases

1. All the steps for the transport of a passenger **from their home in Genoa to Casella** using public transportation
2. **Re-plan scenario** – during her trip, an event of a “technical problem” disrupts the provided service, so the passenger has to reschedule and re-arrange paths

Use case infrastructure High-level Architecture



Kaspersky Mobile Security SDK and the AMT Genova Mobile App



KMS – SDK for iOS & Android

Integrating security measures in the AMT mobile apps



Assessing device

Risk Detection

- ✓ Root detector.
- ✓ Insecure settings detector.
- ✓ Unknown apps detector.*
- ✓ Malicious apps detector.*



Protecting device

Device Protection

- ✓ On-Access scanner*.



Securing connection

Web & Network Protection

- ✓ DNS spoofing checker.
- ✓ Certificate Validation.
- ✓ Wi-Fi Safety Analysis.
- ✓ Website reputation analysis.



Securing data

Data Protection

- ✓ Secure Input technology vs Keyloggers.
- ✓ Secure storage for sensitive data.



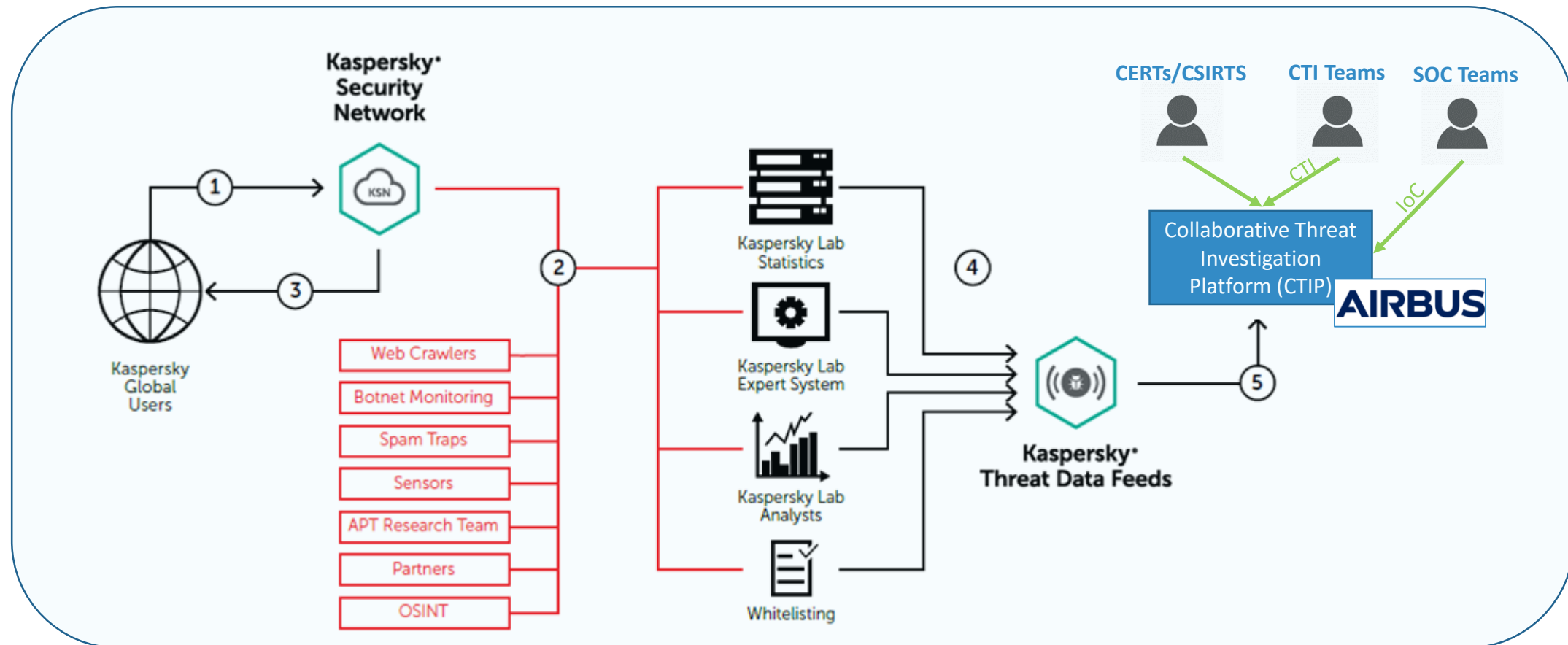
Protecting apps

Self Defense

- ✓ Protection from 3rd party exploitation*.
- ✓ Method implementation replacement detector*.
- ✓ Digital signature verification*.
- ✓ Debugging detection*.

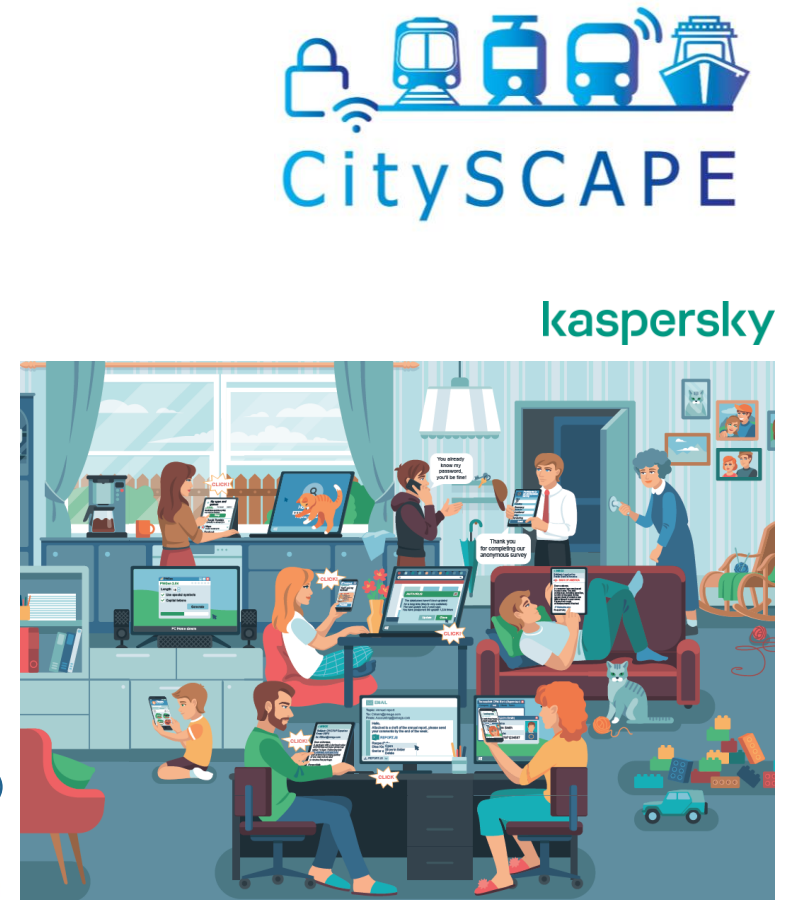
* Feature available only for Android

Kaspersky Threat Data Feeds and the CitySCAPE Collaborative Threat Investigation Platform (CTIP)



Target Audience

- ✓ Onsite edition:
 - ✓ AMT administrative area employees.
 - ✓ AMT operational area employees.
- ✓ On-line edition:
 - ✓ More than 50 regular passengers (Genoa + Tallinn).



Training for Genova Use Case



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Training employees to:

- ✓ **Prevent success of attackers** because one click is all it takes to overcome hardware and software defenses
- ✓ **Shape an organization into one where employees are part of the defense strategies**
- ✓ **Protect business** (brand image and services)



Expectations



- ✓ Prevent attacks to critical IT infrastructures and assets via an integrated risk assessment
- ✓ Defend organization against novel cyber attacks by recognize them on time
- ✓ Improve the cybersecurity awareness of the company employees
- ✓ Prevent fraud on ticketing by using innovative solutions both on the IT infrastructure and on the mobile phone

Any questions?

Thank you!

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