



HORIZON 2020

“SMart mobilLity at the European land borders”

European Innovation for smart land border mobility

The H2020 project SMILE

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Horizon 2020
European Union funding
for Research & Innovation

Project funded by the Horizon'2020 in topic “SEC-14-BES-2016”
Grant Agreement #740931

- 8th Framework Programme: research and innovation programme with nearly €80 billion of funding available over 7 years (2014 to 2020),
- 70% to 100% funding intensity,
- €3-8 million per project,
- implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.



The European Union



Area:

4,5 mln km²

Population:

507 mln

GDP :

13 300 Bn USD




GDP per Capita:

28 100 USD



Single currency:

EUR

THE SCHENGEN AREA

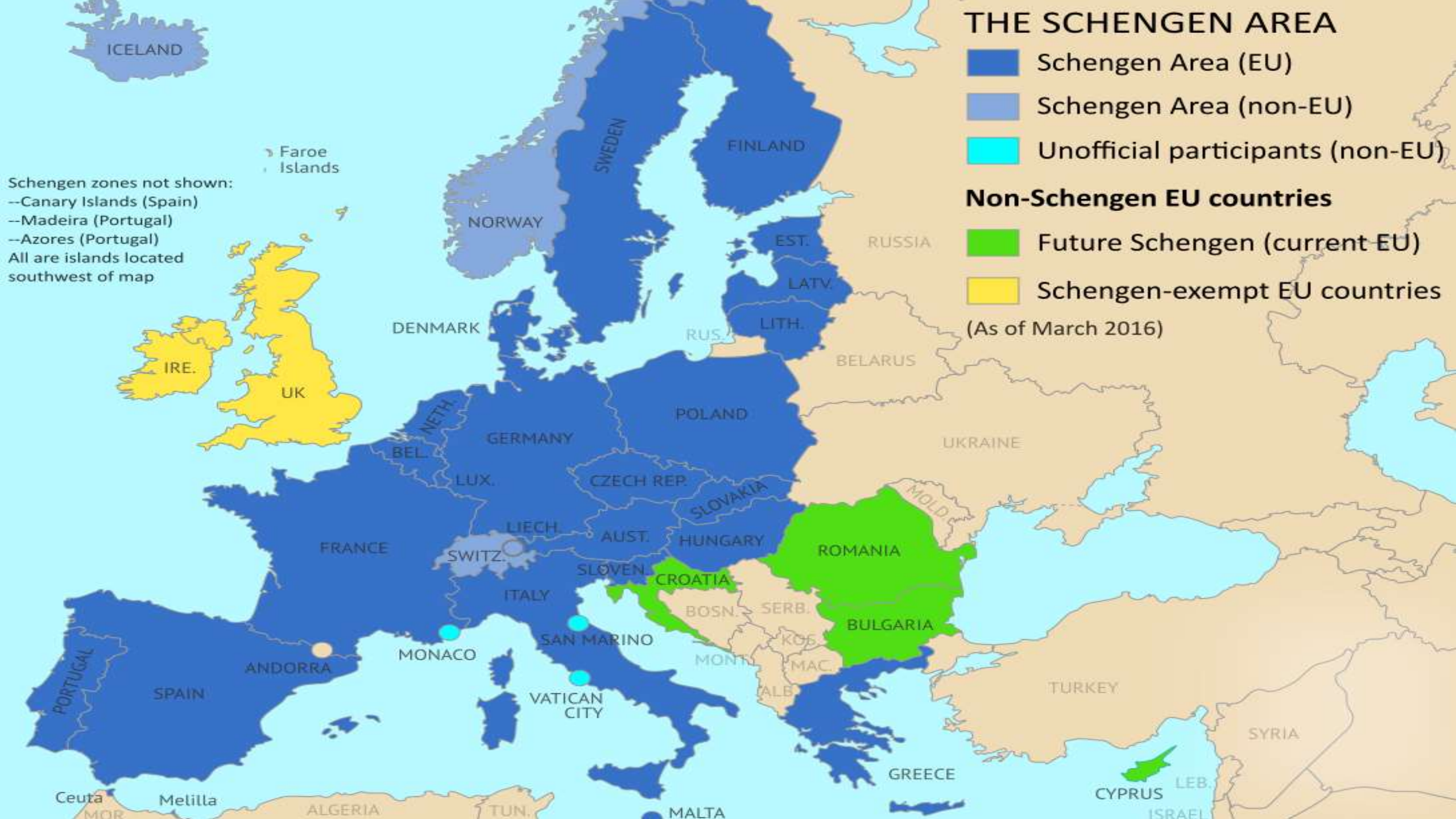
-  Schengen Area (EU)
-  Schengen Area (non-EU)
-  Unofficial participants (non-EU)

Non-Schengen EU countries

-  Future Schengen (current EU)
 -  Schengen-exempt EU countries
- (As of March 2016)

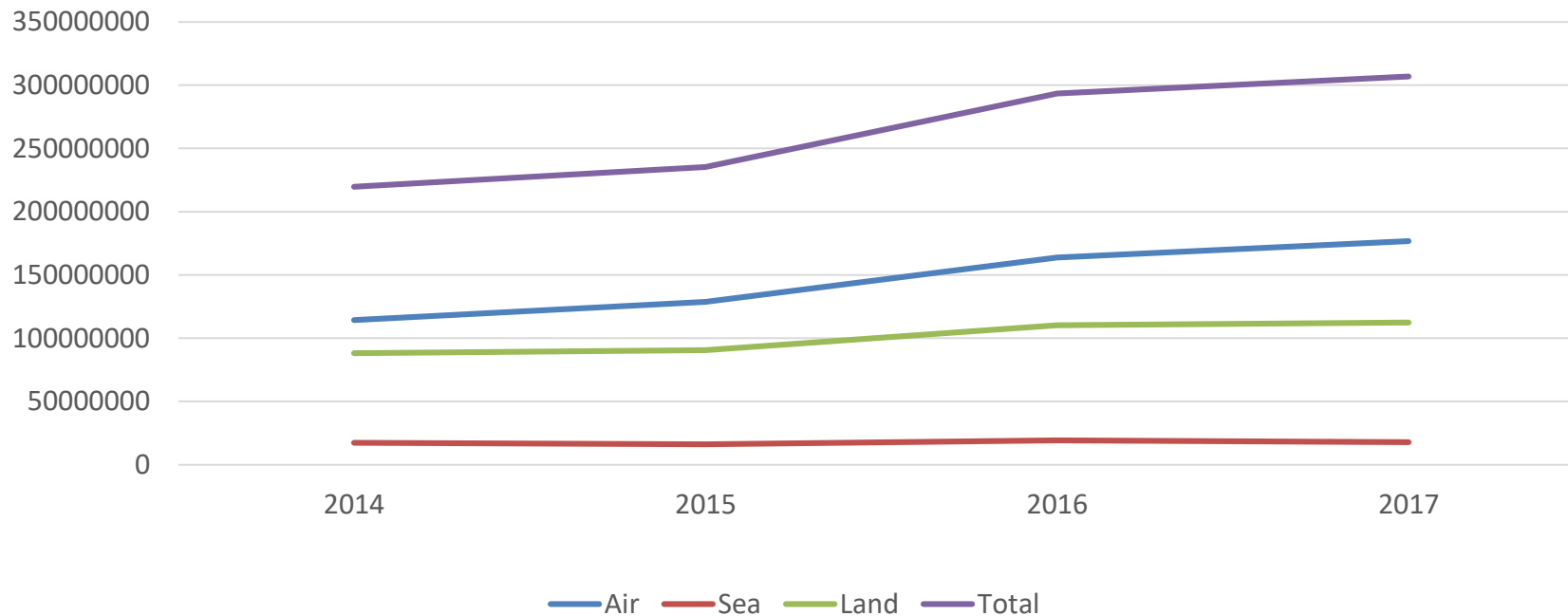
Schengen zones not shown:

- Canary Islands (Spain)
 - Madeira (Portugal)
 - Azores (Portugal)
- All are islands located southwest of map



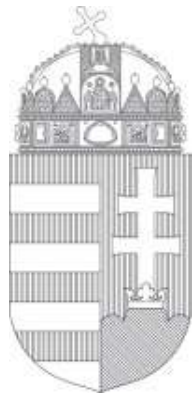
Size of regular and legal border traffic

Schengen	2014	2015	2016	2017
Air	114 379 454	128 607 844	163 802 970	176 736 561
Land	88 074 244	90 575 281	110 337 008	112 468 517
Sea	17 183 825	16 209 398	19 282 232	17 698 986
Total	219 637 523	235 392 523	293 422 210	306 904 064

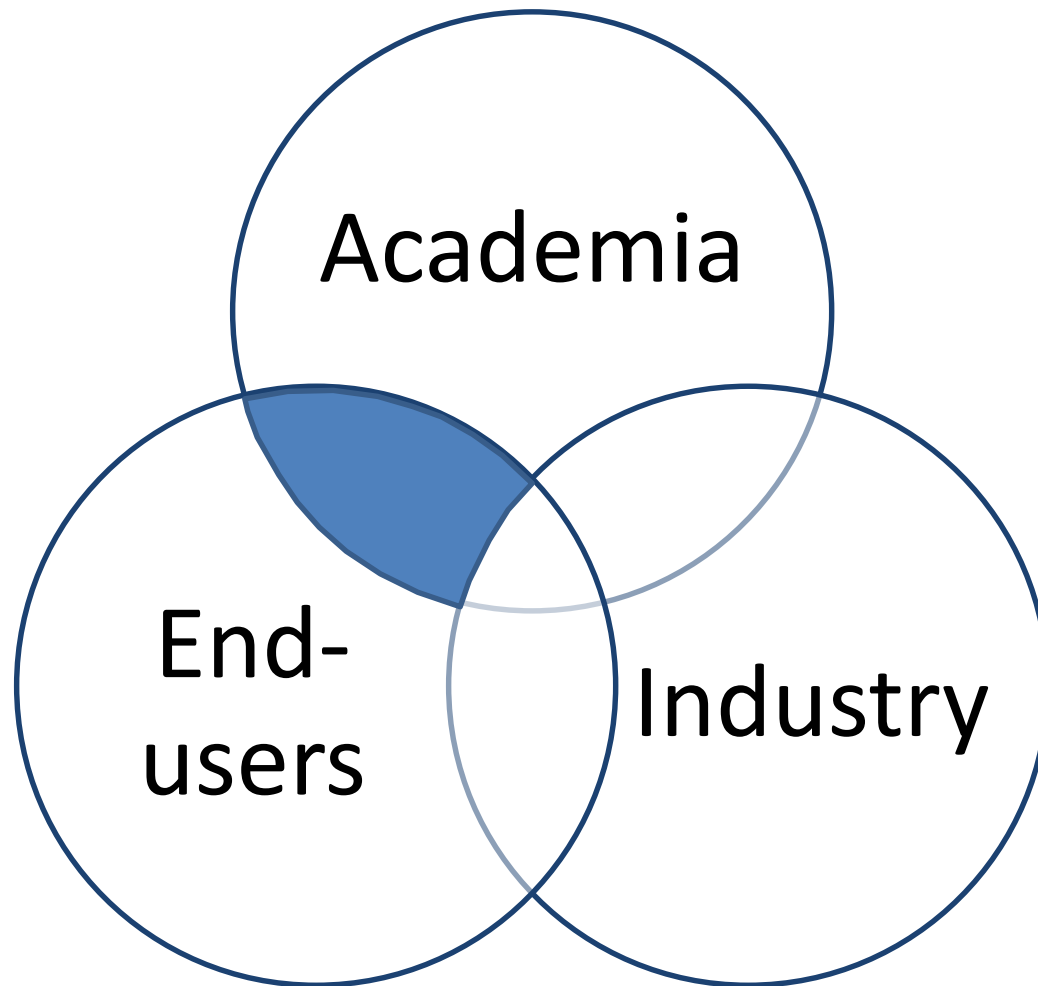




FRAN Q1 2017 report



RENĐŐRSÉG TUDOMÁNYOS TANÁCSA
SCIENTIFIC COUNCIL OF THE
HUNGARIAN NATIONAL POLICE



NEMZETI
KÖZSZOLGÁLATI
EGYETEM
A HAZA SZOLGÁLATÁBAN



NEMZETI
KÖZSZOLGÁLATI
EGYETEM
RENDESZET-
TUDOMÁNYI KAR



DEPARTMENT
OF BORDER
POLICING

Hungarian National Police

- Established nationwide in 1919.
- 46,000 uniformed officers.
- Sole general law enforcement agency in the country.
- Overall responsibility for policing.



Border security background

- Predecessor was the Border Police established in 1903;
- Border policing unit detached in 1946, rejoined the police in 2008;
- Experience in all forms of border policing.



- Member of Schengen Area since 2008
- Full Schengen border control compliance
- Evaluated regularly by the Commission
- 3500 specialized border police officers
- Annual border traffic ~53 million persons in about ~18 million vehicles
- Unique river BCP at Mohács
- All types of borders except Sch/Non-EU

- 85 BCPs (56 road, 22 rail, 6 water, 1 air)
- Air border BCP with ABC gate: Airport Budapest
- Land BCP with SmartBorders in Non-Sch/EU border relation (BCP Udvar at HU-HR)
- Land BCP with road and rail traffic (BCP Rösztke at HU-RS)
- River BCP Mohács (HU-HR-RS)



Waiting times and smuggling



Economic background

- The Schengen system yields +2,5% GDP for the Member States, this means 264 Bn USD per annum.
- Human trafficking towards EU yields 2,84 Bn USD per year.
- Estimated black market size in the EU is 2665 Bn USD.

It worths. Does it?

Project summary

- SMILE - SMart mobILity at the European land borders
- July 2017 to June 2020
- Activity: SEC-14-BES-2016 - Towards reducing the cost of technologies in land border security applications
- Work Programme Objective: Secure societies - Protecting freedom and security of Europe and its citizens
- Grant Agreement No: 740931
- Duration: 36 Months
- Coordinator: CERTH / ITI

Read the code and get to the site now!



<http://smile-h2020.eu/smile/>

@smile_h2020

<https://www.linkedin.com/company/smile-smart-mobility-at-the-european-land-borders>

15 complementary partners from 8 different European Countries, namely Bulgaria, France, Germany, Greece, Hungary, Norway, Romania, and the UK.



- Deliver a palette of low-cost technological solutions that will make the management of land border control points less resource intensive, while at the same time will contribute to the traveller's convenience without sacrificing security
- Will explore the capabilities of smart mobile devices in biometric control for low-cost but secure and trusted authentication, embedding their exploitation as a part of a multimodal biometric verification process that complements existing approaches.
- The long-term goal of the SMILE team is to provide a set of affordable and easy to be installed modules, to support the needs of EU Land Border Infrastructures.



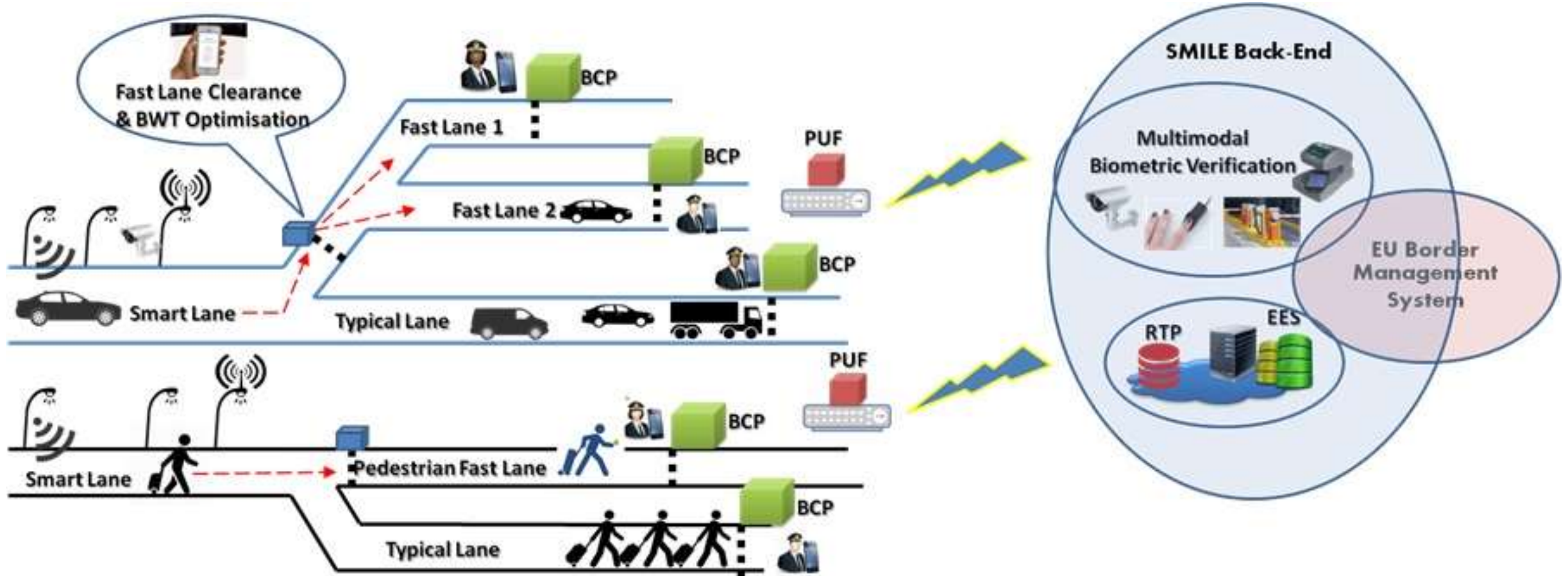
- Increased flow of people & goods at the European Land Borders, in particular with the continuously growing refugee's flows from Asia - 1.8 Million irregular border crossings at Europe's external borders at 2015 alone
- An ongoing threat to Europe's internal security due to recent terrorist attacks
- Long & unpleasant delays at borders
- Labor-intensive, time-consuming, costly border control & flow management systems

IMAGINE

- A border crossing point that could provide an integrated solution, friendly both for travellers & border officers, based on the usage of biometrics that we already use in our everyday life through our smartphones
- A solution that leverages a blend of the best existing technologies & innovations in the fields of encryption & cloud computing, which will together offer an unobstructed flow of people, robust border checks and enhanced data privacy & security

- Provide efficient, hierarchical (weak and strong) and unobtrusive, on-the-move security control
- To introduce mobile equipment and Extension of eElectronics services for BCP checks
- Robust multi-factor and multimodal authentication system for BCP cases, enhanced by soft biometrics
- To propose and develop services running on BCPs that will enable their interconnection in a secure, interoperable and secure manner
- Provide legal guidelines that should be adopted and taking into account for further designing and delivering of BCP-related technologies.
- To create a scalable and holistic paradigm for secure inner and cross-border data exchange, storage and overall handling of travellers data in a legal and ethical way both at national and European levels
- Demonstration, Validation, and Evaluation of the SMILE BCP equipment in the context of a real BCP.

SMILE Project – Concept & Approach



Thank you for your attention!

(Machine Readable contact details in the QR-code)



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