

[PRELIMINARY ACTIVITIES]

PHYSICAL ENVIRONMENT AND TERMINAL OBSERVATION

SCENARIOS DEFINITION

- High risk evacuation
- Passenger misbehaviour
- Medical emergency
- Large group in unfamiliar environment
- Controlled evacuation
- Changed security procedure

LITERATURE SELECTION

- Socio-psychological theories
- Individual differences theories
- Collective movement
- Navigational movement

DATA COLLECTION ACTIVITIES

- Passenger questionnaire
- Interview with safety and security experts
- Field work observation

ANALYSIS

VALIDATION

REVIEW

ANALYSIS

THEORETICAL FRAMEWORK

quantification of likelihood

KEY CROWD BEHAVIOURS IDENTIFICATION

- Compliance
- Tendency to argue
- Agreement with security procedures
- Walking speed
- Evacuation time
- ...

[PROCESSING THE INFORMATION]

[FINAL RESULT]



Project duration: May 2015 - November 2017



### A Coordination and Support Action of the European Commission

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### CONSORTIUM

- Project Coordinator: Deep Blue (IT)
- PROPRS (UK)
- University of Leeds (UK)
- Stichting VU-VUmc (NL)
- Varna University of Management (BG)
- Anadolu University (TR)
- Maritime Office Gdynia (PL)
- Nuovo Trasporto Viaggiatori (IT)

### THE EXTERNAL STAKEHOLDERS' GROUP

To advise the project on its theoretical perspective and to validate the results obtained, IMPACT relies on an **External Stakeholders Group** composed of selected safety and security experts from **different relevant stakeholder organizations**. The ESG comprises national health institutes, first responders, police, national and international regulators, and service providers from **different transport domains** (i.e. railways, underground, aviation, and maritime). This **mixed composition** also helps fostering the dissemination and use of the research outcomes.



# Impact of Cultural aspects in the management of emergencies in public Transport

[WWW.IMPACT-CSA.EU](http://WWW.IMPACT-CSA.EU)

# Which is the essential role played by cultural factors during emergencies in public transport systems?

## [THEORETICAL FRAMEWORK] [1]

The project has already developed a **cross-cultural and psychosocial crowd behaviour theoretical framework** for risk prevention and emergency management in the transport hub domain. This framework constitutes the basis of the project: it relies on previous research and on partners expertise.

## [ICT SIMULATION AND VALIDATION MODEL] [2]

The merge of these branches will provide an integrated model that, together with fieldwork on transport hubs, will feed the design and analysis of the agent-based computational model.



[ICT SIMULATION AND VALIDATION MODEL]

## [SUPPORTING MEASURES] [3]

The IMPACT supporting measures are:

- methodologies and tools for cultural-based risk assessment;
- guidelines for cultural-based emergency communication;
- a cultural-based multi-lingual training package for security operators and first responders.

## [COORDINATION INITIATIVES] [4]

These activities will be exploited **through coordination initiatives** involving transport stakeholders, regulators and policy makers. An **effective transfer of knowledge** to other domains, is ensured by *ad-hoc* activities.

The project aims at analysing the different cultural behaviours in order to both prevent emergencies and better manage emergency events and post-events.

Taking into consideration socio-cultural and personal peculiarities helps to improve disasters policies and practices, thus enhancing the overall security and resilience of European cities.

To better meet the needs of people of different cultures during disaster and emergencies, IMPACT needs to develop methodologies and solutions for cross-cultural emergency prevention and management. To do so, the project undertakes actions at different levels.



[THEORETICAL FRAMEWORK]



[SUPPORTING MEASURES]



[COORDINATION INITIATIVES]

