



IMPACT project

DeepBlue

Rome, 17 June 2015

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

The IMPACT project

- Title: Impact of Cultural aspects in the management of emergencies in public Transport
- Topic: DRS-21-2014 “Ethical/Societal Dimension topic 2: Better understanding the links between culture, risk perception and disaster management”
- Coordination and Support Action
- 8 partners from 6 Countries involved
- Budget: € 1.398.912,50
- Starting: 1 May 2015
- Duration: 30 months

The IMPACT Consortium

The IMPACT Consortium gathers a wide range of expertise, comprising 8 partners from 6 Countries:

- 2 SMEs (Deep Blue – IT and PROPRS – UK),
- 4 Universities (University of Leeds – UK, Free University Amsterdam – NL, International University College – BG, Anadolu University and Airport– TK),
- 1 Railway Undertaking (Nuovo Trasporto Viaggiatori – IT),
- 1 Maritime Administration (Maritime Office Gdynia – PL).



The IMPACT project

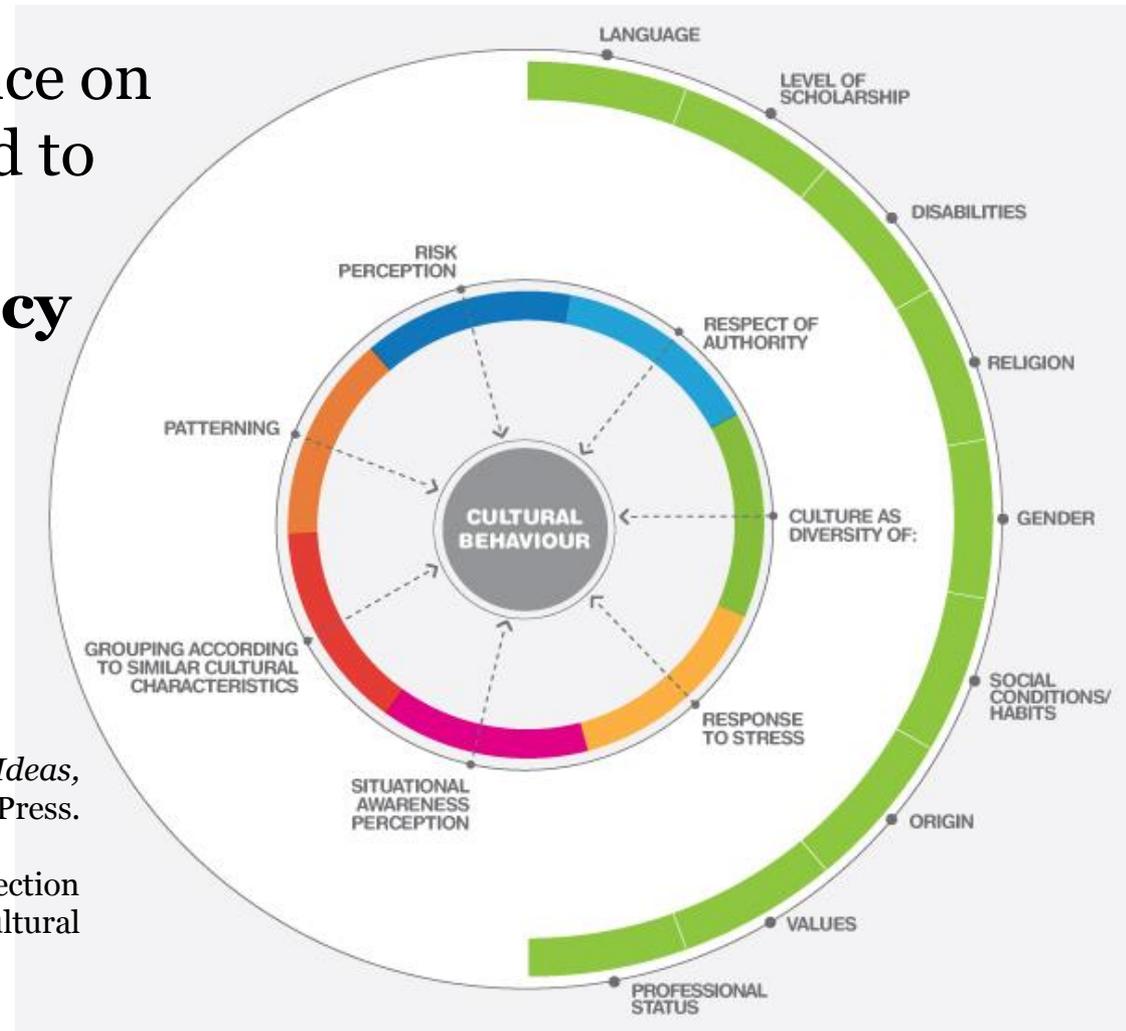
- **Transports hubs** are central parts of modern cities **and** the cornerstone of a future **completely multicultural** civic life.
- Transport hubs are very crowded environments in which many **safety** events may arise, from accidents to fire and disruptions.
- Due to their "open nature" and strategic relevance, public transport hubs are considered a major potential target for **terrorists** and **attackers**.
- **Culture** clearly plays a role in managing safety- and security-related **emergencies** in transport systems.
- IMPACT will contribute to “*better understanding the links between **culture, risk perception, disaster prevention and management** in transport hubs*”.

Objectives

- **Objective 1:** analyse the different cultural behaviours for **the prevention of emergencies** (preparedness) with particular emphasis on:
 - **Objective 1.1:** risk and situational awareness perception of the different cultural groups
 - **Objective 1.2:** preventive information to passengers provision
 - **Objective 1.3:** cooperation towards prevention of security threats
 - **Objective 1.4:** security checks, including physical inspections
- **Objective 2:** analyse the different cultural behaviours for the **management of emergency** events and the post-events with particular emphasis on:
 - **Objective 2.1:** enhanced crowd modelling and management
 - **Objective 2.2:** management of first responders to care for different cultural groups
 - **Objective 2.3:** provision of emergency information to passengers

Cultural Behaviour in Emergencies

Culture has an influence on some key factors related to personal and collective behaviour in **emergency prevention and management**



[1] Rochon, T. R. (1998). *Culture Moves: Ideas, Activism, and Changing Values*. Princeton U. Press. ISBN 0-691-01157-5

[2] UNESCO (2005). *Convention on the Protection and Promotion of the Diversity of Cultural Expressions*.



Cultural aspects influencing IMPACT's objectives:

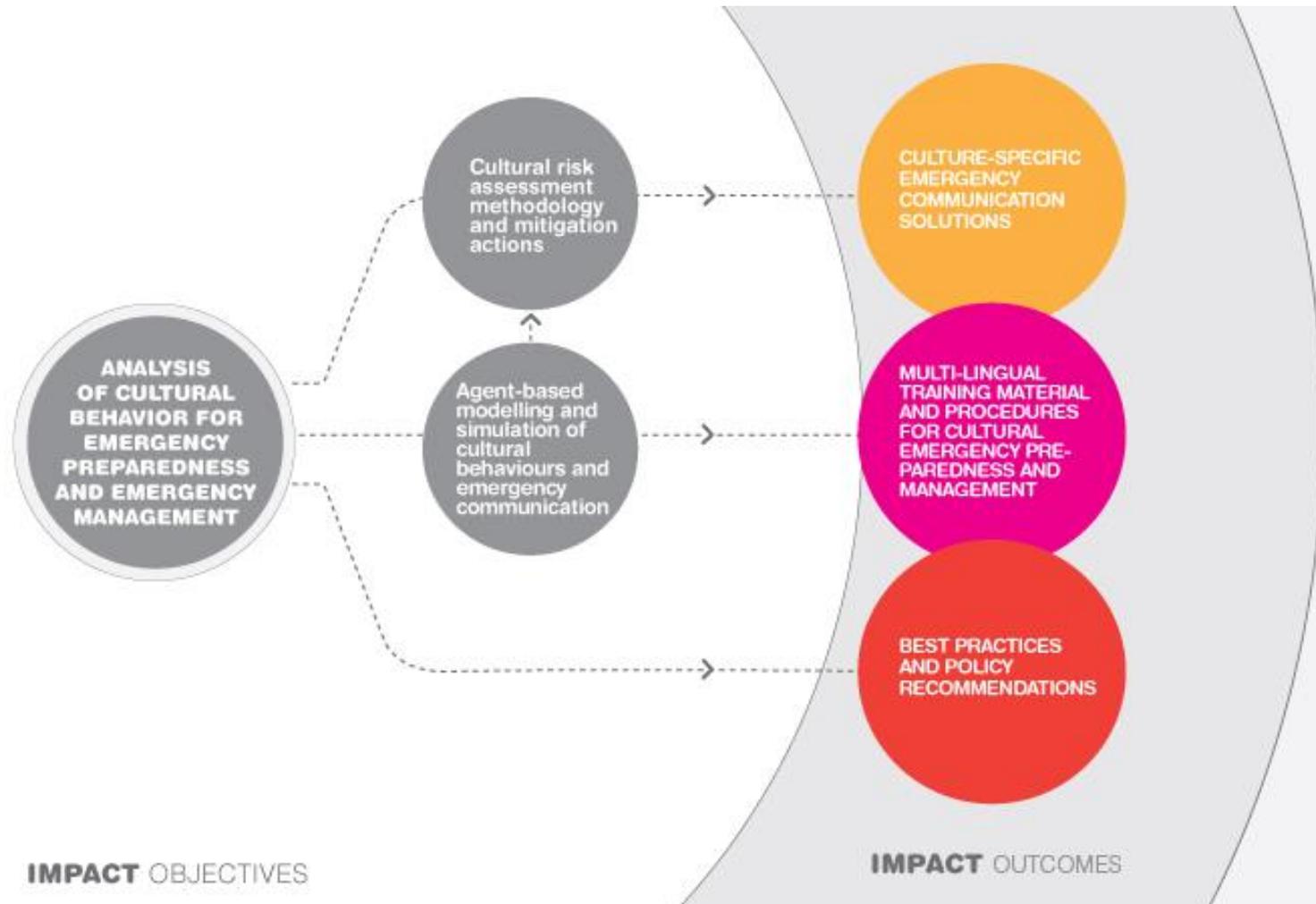
Objective	Influencing Cultural Factors
Objective 1.1: risk and situational awareness perception of the different cultural groups	Age, level of scholarship, religion, nationality
Objective 1.2: preventive information to passengers provision	Language, proxemics, age, level of scholarship, disabilities
Objective 1.3: cooperation towards prevention of security threats	Language, religion, level of scholarship and other cultural barriers
Objective 1.4: security checks, including physical inspections	Religion, level of scholarship and gender
Objective 2.1: enhanced crowd modelling and management	language, gestures, religion, nationality, age, level of scholarship, gender, contextual factors (such as travelling with family or friends, for business, etc.)
Objective 2.2: management of first responders to care for different cultural groups (focusing on religion and gender, religion and health care – e.g. blood transfusion and Jehovah's Witnesses, social condition – e.g. triage areas and illegal immigrants)	Religion and gender, religion and healthcare, social condition – e.g. triage areas and illegal immigrants)
Objective 2.3: emergency information to passengers provision	Language, gestures, age, level of scholarship, disabilities



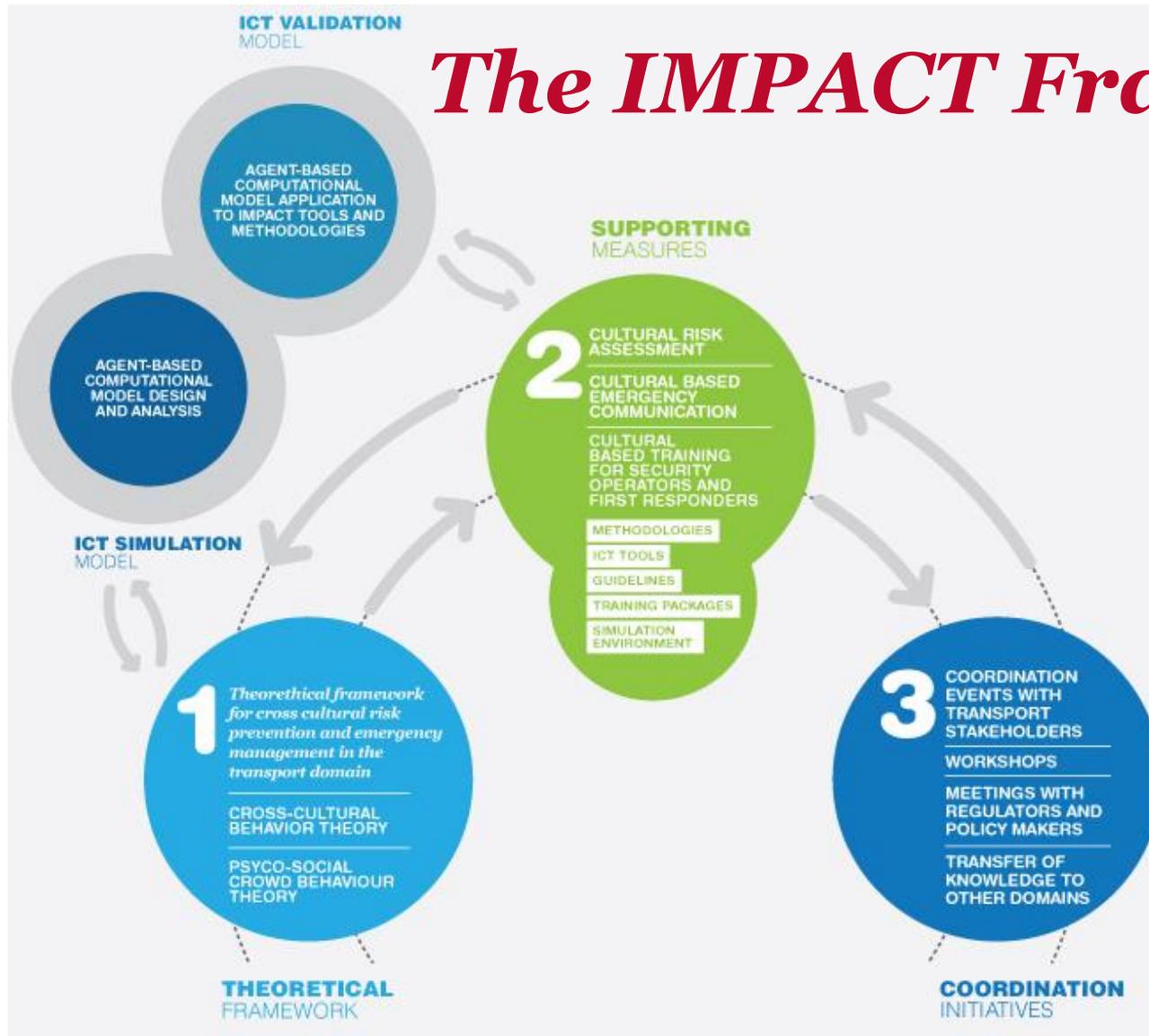
IMPACT Expected Outcomes

- **Outcome 1:** to produce a **cultural risk assessment** methodology and the associated mitigation actions for the public transport hub sector
- **Outcome 2:** to develop **agent-based computational models** to simulate and validate cultural behaviours models and cultural-specific communication solutions;
- **Outcome 3:** to identify innovative solutions that can support public transport operators in improving the **communication** with passengers through dedicated messages to the different cultural groups and other solutions to enhance the **management of emergencies** considering cultural aspects;
- **Outcome 4:** to develop dedicated **multi-lingual Computer-Based Training (CBT)** material and procedures for both public transport operators and first responders;
- **Outcome 5:** to develop and disseminate **best practices and policy recommendations** for policy makers, regulators, municipalities and public transport operators.

IMPACT Expected Outcomes



The IMPACT Framework

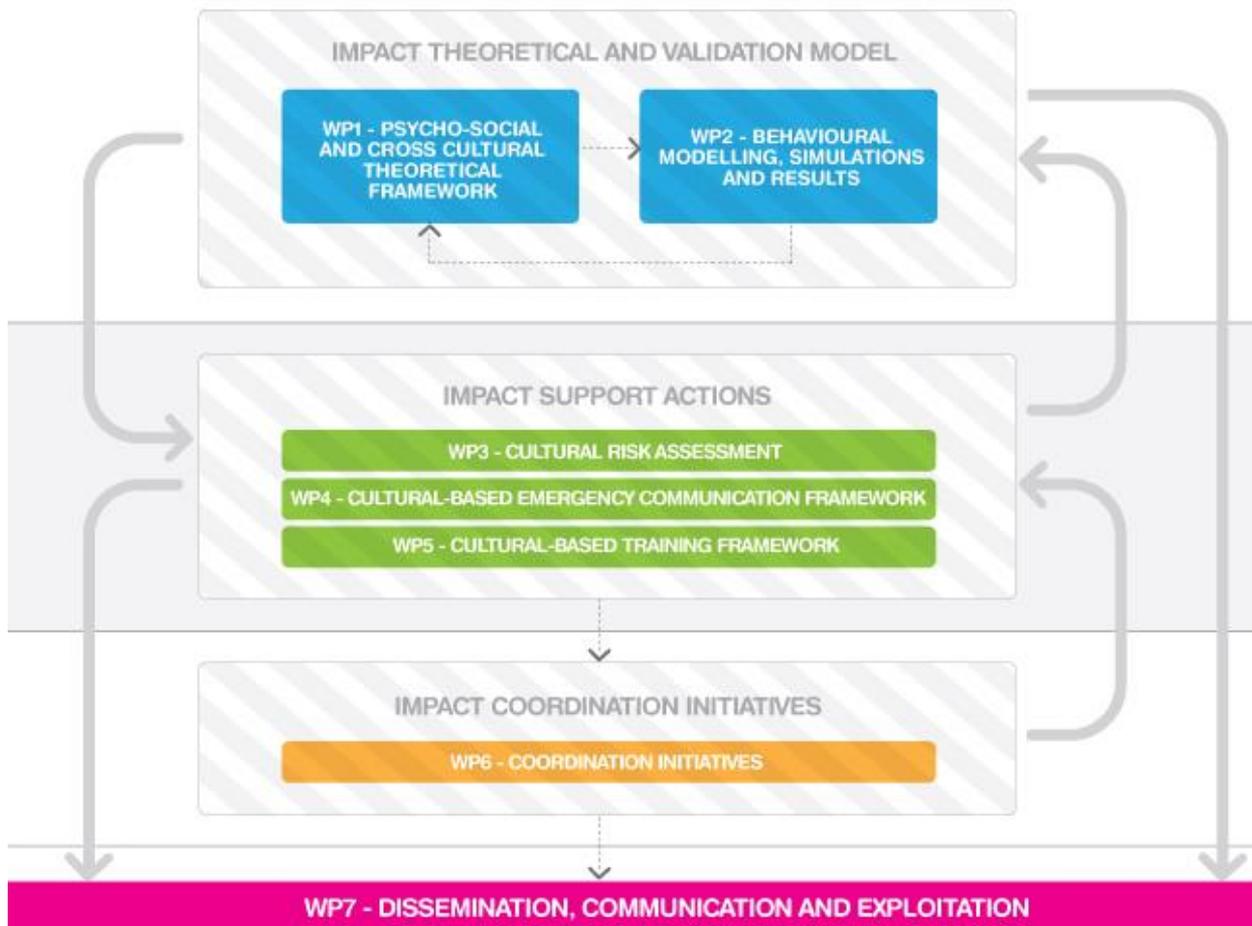


IMPACT WPs

- WP1 Cultural Crowd Characterization and Theoretical framework (UOL, M1-M18)
- WP2 Behavioural Modelling, Simulations and Results (VU, M9-M24)
- WP3 Cultural Risk Assessment (PRO, M7-M27)
- WP4 Emergency Communication (VU, M7-M27)
- WP5 Cultural-based Training Framework (DBL, M7-M27)
- WP6 Coordination Measures (AU, M13-M30)
- WP7 Dissemination, Communication and Exploitation (DBL, M1-M30)
- WP8 Project Management (DBL, M1-M30)

IMPACT WP Structure

WP8 - PROJECT MANAGEMENT





The IMPACT External Stakeholders Group

- Steer and review project activities :
 - Support the identification of relevant issues and definition of emergency scenarios
 - Evaluate and assess IMPACT Supporting Measures
 - Support the dissemination and adoption of IMPACT outcomes in the domain
- 3 Workshops: M6 (7), M18, M30
- 2-3 Additional Meetings/Conference Calls
- Reimbursed for travel and subsistence expenses



Thank you for your attention

