A Gamified Platform for Participatory Change Management in ATM Systems

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The main objective of PACAS is to better understand, model and analyse changes at different layers of the Air Traffic Management (ATM) system to support change management, while capturing how strategic and design choices influence the overall system. PACAS relies on three main pillars:

- **PILLAR #1**
  - Gamified experience

- **PILLAR #2**
  - Multi-view modelling

- **PILLAR #3**
  - Automated reasoning techniques

The validation consists of an iterative process with the active participation of an external Advisory Board (AB) of domain stakeholders throughout the whole duration of the project. The first two phases, “Requirements” and “Use case” definition have been validated through Workshops WS#0 and WS#1, along the first wireframe prototype of the platform supporting multi-view modelling. Change impact propagation has been validated in WS#2, while the final version of the platform and the multi-criteria decision analysis were validated at WS#3.

The PACAS change management process analyses change by different teams, one for each aspect (aka Key Performance Area - KPA). We support four default KPAs, namely security, safety, economic and organizational, to decide on the best solution (option) that is a trade-off.

Web-based
https://pacas.disi.unitn.it/
pacas-review/

Modular
Extendable - add new languages

Reasoning as services
Easily integrate new techniques

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DEMO PLATFORM

Security team
Safety team
Economic team
Organizational team

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Extendable - add new languages

Easily integrate new techniques

Gamified experience

Multi-view modelling

Automated reasoning techniques

PACAS OVERVIEW

PACAS PROCESS & PLATFORM

VALIDATION