



Future proofing strategies FOr RESilient transport networks against Extreme Events

H2020-MG-7-1-2017: Resilience to extreme (natural and man-made events)

Governance to improve Public Procurement Processes

David Garcia Sanchez, PhD TECNALIA

Governance to improve Public Procurement Processes

► Digital procurement

- [Tenders Electronic Daily](#)
 - Online portal publishing thousands of public procurement notices from the EU, the European Economic Area, and beyond.
- [European single procurement document and eCertis](#)
 - Self-declaration form used by companies to participate in public procurement procedures.
- [eForms](#)
 - Standard forms used by public buyers to publish procurement notices on Tenders Electronic Daily (TED).
- [eInvoicing](#)
 - European Standard for eInvoicing, situation in EU and EEA countries, collaborative space for stakeholders, standardisation, and funding.
- [Common procurement vocabulary](#)
 - Single classification system to standardise the references used to describe procurement contracts.
- [Expert groups](#)
 - Expert groups focused on the implementation of EU rules related to digital procurement, sharing good practice, and discussing future policy.
- [Emerging technologies in public procurement](#)
 - Study examining how public authorities are using new technologies when procuring goods and services.



eProcurement timeline



► Initiatives

- [Connecting Europe Facility](#)
- [Once Only Principle project \(TOOP\)](#)
- [EU eProcurement Ontology](#)
- [Digital Whistleblower project \(DIGIWHIST\)](#)
- [They Buy For You](#)
- [e-SENS](#)
- [Internal Market Information System](#)
- [Open e-PRIOR](#)



Governance to improve Public Procurement Processes



European research
for a stronger
and more resilient
multimodal transport
infrastructure.

FORESEE Governance Module

WT3 Work package descriptions

The main objective of this WP is to develop a baseline and a target Level of Service and resilience assessment by:

- Developing a guideline and defining metrics (KPIs and KRIs) to measure the Level of Service and resilience of multimodal rail and road networks.
- Developing guidelines to set target values of the Level of Service and resilience to be provided by multi-modal infrastructures.
- Integrating the measures of the Level of Service and resilience in governance and management of infrastructures.

TASK 1.3

Integration of Level service and resilience measures for governance

Deliverable D1.3 Examples of using Levels of Service and resilience in governance

This deliverable will consist in a decision-making tool for risk governance, through risk KPIs along three phases of risk management: prevention resilient design, action five levels intervention and rehabilitation in service (Task 1.3).

The Governance Module has been implemented following a BPM approach

The main objective of Business Process Management (BPMN) is to provide a standard notation understandable by all business stakeholders

- Business analysts: create and refine the processes
- Technical developers: Implementation
- Business managers: monitor processes

BPMN provides a common language, bridging the communication gap that frequently occurs during design and implementation.

BPMN diagrams are deployed in BPM Engines, and Runtime Governance Module implements a workflow engine.

Here you can access to the following applications:

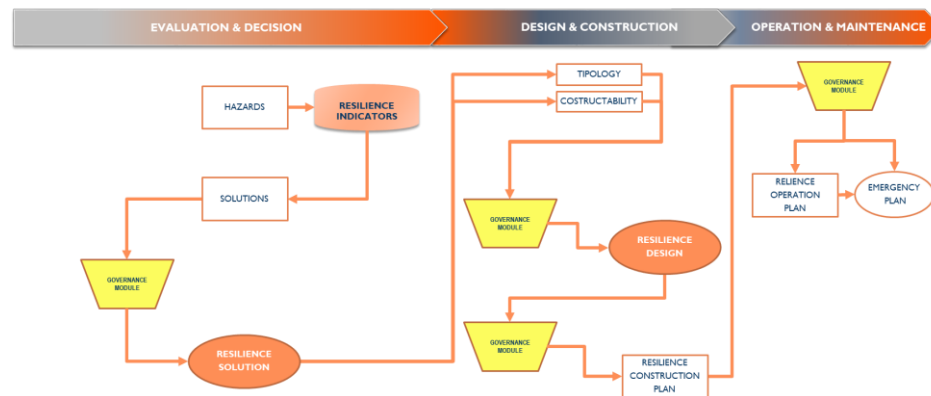
FORESEE Identity Mngament (IDM) - an Identity Management application that provides single sign-on authentication functionality for all the Flowable UI applications, and, for users with the IDM administrative privilege, it also provides functionality to manage users, groups and privileges.

FORESEE Modeler - an application that allows users with modeler privileges to model processes, forms, decision tables and application definitions.

FORESEE Task - a runtime task application that provides functionality to start process instances, edit task forms, complete tasks and query on tasks and process instances

Work package Participants:

- Cantabria University
- TECNALIA



Governance to improve Public Procurement Processes

METHODOLOGY

- ▶ **Determine hazards indicators to be faced.**
- ▶ Define service and resilience to reach.
- ▶ Define targets to reach.
- ▶ Candidates providing verifiable indicators and targets.
- ▶ Governance Module
- ▶ Selection Solution

HAZARDS

WIND



SNOW



Governance to improve Public Procurement Processes

METHODOLOGY

- ▶ Determine hazards indicators to be faced.
- ▶ **Define service and resilience to reach.**
- ▶ **Define targets to reach.**
- ▶ Candidates providing verifiable indicators and targets.
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SERVICE

RESILIENCE

TARGETS



Governance to improve Public Procurement Processes

METHODOLOGY

- Determine hazards indicators to be faced.
- Define service and resilience to reach.
- Define targets to reach.
- Candidates providing verifiable indicators and targets.
- Governance Module
- Selection Solution

				DOCUMENT						PREVIOUS DRAFT			D&C			OS&M		
				MAKING DECISION						DRAFT ALTERNATIVES			DESIGN & CONSTRUCTION			Tender OPERATOR		
				OWNER						ALTERNATIVE 1			ALTERNATIVE 2			ALTERNATIVE 3		
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Governance to improve Public Procurement Processes

METHODOLOGY

- ▶ Determine hazards indicators
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- ▶ Define targets
- ▶ Defined resilience solutions to service and targets by hazards indicators
- ▶ Governance Module
- ▶ Selection Solution

The screenshot displays the FORESEE Modeler interface, which is a web-based tool for managing workflows. The top navigation bar includes the FORESEE logo and the text 'FORESEE Modeler'. The main content area is divided into two panels. The left panel, titled 'Showing your tasks, filtered', lists various tasks such as 'Proposed draft', 'Public contract', 'Review Viability Results', 'Calculate KPIs for all options', 'Define criteria and objectives', and 'Proposed draft'. The right panel, titled 'Review Viability Results', shows details for a specific task, including the assigned user (Test Administrator), due date (No due date), and a map titled 'SELECCIÓN ALTERNATIVAS'. The map displays three alternative routes (Alternative 1, Alternative 2, and Alternative 3) and a legend. The bottom panel shows a 'Proposed draft' task with a description: 'Proposed option should go to public contract. You should create and append a DRAFT project .Case Study 3 - Montabiz viaduct and option Alternative 3'.

Governance to improve Public Procurement Processes

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sses Test Administrator sses Test Administrator

Review Viability Results

Assigned: Test Administrator Due: No due date Part of process: Evaluation and Decision - November 21st 2019 Save Complete

No people involved No content items No comments No sub tasks Show details

Project Name
Case Study 3, Solutions - Montabiz viaduct

Concordance Matrix:	a1	a2	a3
a1	0.0	0.2997	0.5333
a2	0.7333	0.0	1.0
a3	0.7333	0.7333	0.0

Discordance Matrix:	a1	a2	a3
a1	0.0	1.0	0.8
a2	1.0	0.0	0.0
a3	1.0	1.0	0.0

Credibility Matrix:	a1	a2	a3
a1	0.0	0.0	0.0
a2	0.0	0.0	1.0
a3	0.0	0.0	0.0

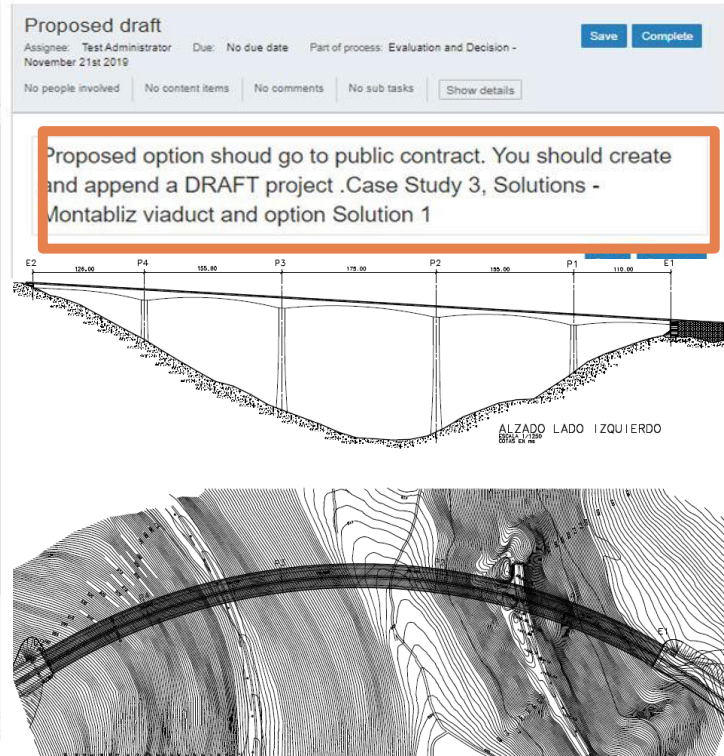
Name:
Dominant:

Legend:	
a1 →	Solution 1
a2 →	Solution 2
a3 →	Solution 3

Ranking 1st
Solution 1

Ranking 2nd
Solution 2

Ranking 3rd
Solution 3



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Tasks Processes Test Administrator

Showing your tasks, no filter applied

+ Create Task Newest first

Review tender ranking Created a few seconds ago
Results of tender process Operation and Maintenance Tender
Assigned to Test Administrator

Review tender ranking

Assignee: Test Administrator Due: No due date Part of process: Tender Process - November 21st 2019

No people involved No content items No comments No sub tasks Show details

Save Complete

Tender Identifier
Operation and Maintenance Tender

Concordance Matrix:		a1	a2	a3
a1	0.0	0.4118	0.4706	
a2	0.7847	0.0	0.8235	
a3	0.7847	0.7847	0.0	

Discordance Matrix:		a1	a2	a3
a1	0.0	1.0	1.0	
a2	0.5714	0.0	1.0	
a3	0.5714	1.0	0.0	

Credibility Matrix:		a1	a2	a3
a1	0.0	0.0	0.0	
a2	1.0	0.0	0.0	
a3	1.0	0.0	0.0	

Kernel:
Dominated:

a1	a3

Legend:

a1 →	c1
a2 →	c2
a3 →	c3

Ranking 1st
c2

Ranking 2nd
c3

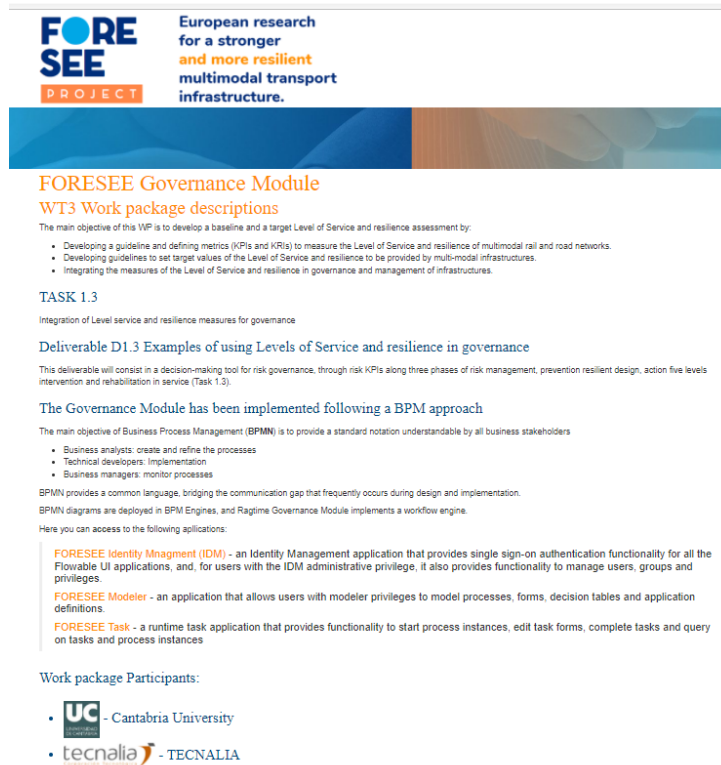
Ranking 3rd
c1



Governance to improve Public Procurement Processes

SUMMARY

- ▶ Provides effective, transparent and automatic support to governance decision-making
- ▶ Can be used by all stakeholders: in any process.
- ▶ Applicable the whole life cycle.



FORESEE PROJECT European research for a stronger and more resilient multimodal transport infrastructure.

FORESEE Governance Module WT3 Work package descriptions

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Work package Participants:

- **UC** - Cantabria University
- **tecnalia** - TECNALIA



FORESEE consortium



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