

Activity 6: E-Freight PPP Feasibility Assessment Study

Current state of the art

*E-Impact Technical Meeting
Rome, 7° November 2017*

Matteo Arena
Roberto Mencarelli

Table of Contents

1. Overview of the Grant Agreement Provisions
2. Work Plan of the PPP Feasibility Study
3. Detailed Work Plan of the PPP Feasibility Study
4. Next Steps

1. Overview GA provisions

□ Responsible partners:

- Ministero delle Infrastrutture e dei Trasporti – Implementing body:
Rete Autostrade Mediterranee (RAM), Italy
- Instytut Logistyki i Magazynowania (ILM), Poland

□ Timeframe:

- 01.03.2016 – 31.12.2017

□ Milestone:

- E-freight PPP feasibility assessment study (31.12.2017)

1. Overview GA provisions

□ PPP Feasibility Study on in a nutshell:

- determining the legal, technical and financial feasibility to promote an E-Freight in Public Private Partnership scheme;
- determining the form that the PPP might take (concession, PF, etc...);
- determining the appropriate level of risk allocation to the private sector.



Define the best Value for Money solution, comparing PPP vs. traditional procurement for E-Freight roll out

2. Work Plan of the PPP Feasibility Study

Chapters	Main Contents	Task Leader
Introduction	<i>Objectives of the Analysis and Methodology</i>	RAM and ILM
Characteristics of the E-Impact Project	<i>Definition of the 4 business cases, outcomes and results</i>	ILM
Analysis of the Project environment and demand Analysis	<i>Description of the operational context and demand analysis in the pilot locations</i>	ILM
Technical Overview of the Project	<i>Functional and technical description of the services developed</i>	ILM
Economic and Financial Analysis (incl. analysis on financial sustainability)	<i>Assumptions and scenarios, CAPEX, OPEX, possible revenues, cash flow, financial risk assessment</i>	RAM
Comparison of options with CBA	<i>CBA on the solutions designed in the study</i>	RAM
Sensitivity Analysis	<i>Testing the robustness of the study results</i>	RAM

2. Work Plan of the PPP Feasibility Study

Chapters	Timeframe												
	Months.Year	06.17	07.17	08.17	09.17	10.17	11.17	12.17	01.18	02.18	03.18	04.18	05.18
Introduction													
Characteristics of the E-Impact Project													
Analysis of the Project environment and demand Analysis													
Technical Overview of the Project													
Economic and Financial Analysis (incl. analysis on financial sustainability)													
Comparison of options with CBA													
Sensitivity Analysis													

Delivery of the first Version of the PPP Study	Feedback from E-Impact Partners	Feedback from E-Impact Pilots Report (milestone 11)	Delivery of the final Version of the PPP Study
--	---------------------------------	---	--

3. Detailed Work Plan of the PPP Feasibility Study

Chapter 1 - Characteristics of the Project

1.1 Project Overview

- Definition of the **four business cases** analyzed and implemented in the project that are the basis of the four prototypes constituents the platform (conceptual model and services offered);
- Identification of **actor interested to fruition of the services** offered by platform and of stakeholders owner of the data necessary for the functioning of the services provided;

1.2 Objectives of the Project: General and Specific

1.3 Current Situation: scenario as is

1.4 Project Result Indicators: description of the measureable benefits gained by the project implementation

1.5 Project Products Indicators: description of the tangible product obtained through the project

3. Detailed Work Plan of the PPP Feasibility Study

Chapter 2 - Analysis of the project environment and demand analysis

2.1 Socio-economic Analysis

- Subsection should include an **analysis** of the **socio-economic environment**, including the key social, economic, demographic, economic and financial data for the project, so that it is possible to understand the problems that the project should resolve;

2.2 Recipients of the project and demand analysis

- Analysis of **traffic volumes** that insist on the pilot cases for each of the platform services;
- **Declination of recipients** of the services for each pilot cases ;

2.3 SWOT Analysis

- Definition of the **SWOT Analysis** for each pilot cases;

3. Detailed Work Plan of the PPP Feasibility Study

Chapter 3 - Technical Overview of the Project

3.1 Functional and technical description of the solution

- Definition of the **conceptual model reference** to the solution, highlighting the need for interoperability with other systems and the relative feasibility and costs ;
- **Business actors** and their requirements (Sea terminals, intermodal operators, rail carrier, freight forwarders, custom offices, shipping carrier, etc..);

3.2 Description of the Services offered to users

3. Detailed Work Plan of the PPP Feasibility Study

Chapter 4 – Economic and Financial Analysis (including analysis of financial sustainability)

4.1 Basic Assumptions for Analysis

- Analysis of the **factors impacting the promotion of e-freight PPP** including: risks, legal factors and procurement models;
- Identification of **source of funding** - Analysis of options for both bank and capital markets financing, including in particular the use of EU financial instruments, especially in the case of projects with weak financial viability;
- Identification of **possible operating scenarios** to be analyzed in the feasibility study and the impacts profit and loss accounts, balance sheet and cash flow;

4.2 Scope and Structure of expenditure for each Scenario

4.2.1 Identification of the Capital Expenditure (CAPEX)

Based on the concept idea of the E-FREIGHT solution there will have to be done an estimate of the CAPEX that is necessary for the industrialisation of the pilot (task to be realized with interviews with the e-impact project partners, who are “owners” of the results of activities 1-5).

3. Detailed Work Plan of the PPP Feasibility Study

Chapter 4 – Economic and Financial Analysis (including analysis of financial sustainability)

4.2.2 Identification of Operational Expenditure

This task concentrates on the identification of the operational expenditures (OPEX), which have to be allocated for the operational and management model. The task will identify:

- a) **The corporate model and the mngt. system/responsibilities** of the operator of the E-FREIGHT solution (ex. that have to be evaluated could be: consortium of stakeholders with external ICT management, private company that manages the platform, public-private joint venture). This activity should permit to define the procedure / solutions of procurement to be used for the management of the solution E-FREIGHT;
- b) **Estimation of operational and management expenditures** of the technical part of the E-FREIGHT solution (depends on the technical solution previously identified). This estimate has to be carried out based on the CAPEX (third task).
- c) **Estimate costs of the operations.** They could be done through interviews with project partners based on the operational/ business model and on the corporate model / the responsibilities of the operator.

3. Detailed Work Plan of the PPP Feasibility Study

Chapter 4 – Economic and Financial Analysis (including analysis of financial sustainability)

4.2.3 Identification of Possible Revenues

Starting from the recognized operational/business model, this task provides the identification of general interests of the stakeholders being potential users of the e-freight platform. For each stakeholder an estimation of the revenues will be done. On this base a possible fee for clients can be estimated. Thus, the aim is to estimate the possible outputs in terms of revenues which the platform generates for every single possible user of the same. The estimation will have to be done on the basis of the services offered by the platform (outputs of the activities 1-5 e-impact).

4.2.4 Forecast of the project profit and loss account

On the basis of the identified operating scenarios (task “Identification of source of funding”) should be presented the economic, property and financial prospectuses for the management of the E-FREIGHT solution by the operator (profit and loss account, balance sheet).

4.2.5 Forecast Cash Flow

4.2.6 Indicators of the Project financial effectiveness

3. Detailed Work Plan of the PPP Feasibility Study

Chapter 4 – Economic and Financial Analysis (including analysis of financial sustainability)

4.3 Risks assessment

Assess which risks are most appropriate for transfer to the private sector, with particular attention to financing risks. On the basis of the outputs of the previous tasks will have to be checked and studied the possible financial issues linked to the realization of the project for each possible operating and management model. For the realization of such study will be carried out in particular examinations on the financial risks (in terms of impact and probability of occurrence), for every party involved directly in the project (stakeholder, public administration, operator) and it will be identified a set of possible operational scenarios that could be implemented. For each scenario shall be presented an analysis of the allocated risks between the various involved parties with special focus on the assumption of risks for the operator and on the possible subdivision of the risks between public and private.

3. Detailed Work Plan of the PPP Feasibility Study

Chapter 5 – Comparison of options with cost-benefit analysis

Based on the results of the abovementioned prospectuses and on the risk analysis of the management for each identified operating scenario should be defined that operating and management model which maximizes the ratio between benefits and costs.

Chapter 6 - Sensitivity Analysis

Chapter 7 - Materials and Documents

4. Next Steps

□ Technical Survey

The business case implementing partners will be contacted by ILM in order to provide the useful information for the completion of the first 4 Chapters of the Study.

The completion of a “stakeholder contact list” for each pilot partner will be required.

□ Drafting of the PPP Study

The first version of Chapters 1-3 has already been delivered and is currently under assessment. Undergoing the drafting of Chapter 4.

By January 2018 the preliminary version of the PPP Study will be circulated among all E-Impact partners for feedbacks.



Thank you for your Attention!

www.ramspa.it