

Work Package 2: Innovation & Fleet

D 2.0: Work Package Inception Report

Grant Agreement:	MOVE/FP7/321498/PLATINA II
(Sub)Work Package:	WP 2: Innovation & Fleet
Deliverable No:	D 2.0
Author:	WVL
Version (date):	26.06.2014

Document history

Document version (date)	Comments (changes compared to previous version)	Authorised by
09.10.2013	Integral version with input NEA, DST and WVL combined	Henk-Erik Sierink
17.10.2013	Incorporation of feedback of via donau	Henk-Erik Sierink
18.10.2013	Minor finalisation activities and approval	Andreas Bäck
29.10.2013	Incorporation of final changes following the meeting with the European Commission	Henk-Erik Sierink with input of Berthold Holtmann, and Nathaly Dasburg
30.10.2013	Minor changes and approval	Andreas Bäck
22.11.2013	Incorporation changes following kickoff	WVL/NEA/DST
29.11.2013	Acceptance and forwarding to the European Commission	Andreas Bäck
07.02.2014	Incorporation of the comments of the European Commission	Henk-Erik Sierink with input of Berthold Holtmann, and Nathaly Dasburg
08.02.2014	Acceptance and forwarding to the European Commission	Andreas Bäck
23.04.2014/7.5.2014	Incorporation of the comments of the European Commission	Henk-Erik Sierink with input of Berthold Holtmann, Andreas Bäck and Nathaly Dasburg
24.04.2014/7.5.2014	Acceptance and forwarding to the	Andreas Bäck

Document (date)	version	Comments (changes compared to previous version)	Authorised by
		European Commission	
26.6.2014		Acceptance of changes regarding SWP 2.3 and forwarding to the European Commission	Andreas Bäck

Authors of the document

Responsible organisation	Principal author
Rijkswaterstaat WVL	Henk-Erik Sierink
DST	Berthold Holtmann, Werner Kühlkamp
NEA	Martin Quispel, Sean Newton

DISCLAIMER PLATINA II is funded by the Directorate General on Mobility and Transport of the European Commission under the 7th Framework Programme for Research and Technological Development. The views expressed in the working papers, deliverables and reports are those of the project consortium partners. These views have not been adopted or approved by the Commission and should not be relied upon as a statement of the Commission's or its services' views. The European Commission does not guarantee the accuracy of the data included in the working papers and reports, nor does it accept responsibility for any use made thereof.

Table of Content

1.Work Package 2 “Innovation & Fleet”	6
a. Work Package Lead	6
b. Work Package Objectives.....	6
c. Sub Work Packages Overview	7
d. Resources	7
e. Deliverables.....	8
2.Sub Work Packages	10
a. SWP 2.1 Tools for innovation take-up.....	10
Sub-Work Package Lead.....	10
Sub-Work Package Staff.....	10
Introduction to the tasks.....	11
Important External Dates(until mid 2014)	19
Resources SWP 2.1	19
Subcontracting SWP 2.1.....	19
Other direct costs SWP2.1.....	20
Resource Planning SWP 2.1 for 1st Reporting Period (01.09.2013 – 28.02.2015).....	20
Dissemination Plan SWP 2.1	21
b. SWP 2.2 Knowledge base for innovation take-up and for internalisation of external costs.....	23
Sub-Work Package Lead.....	23
Sub-Work Package Staff.....	23

Introduction to the tasks.....	24
Important External Dates(until mid 2014)	29
Resources SWP2.2	30
Subcontracting SWP 2.2.....	30
Other direct costs SWP2.2.....	30
Resource Planning SWP 2.2 for 1st Reporting Period (1 Sep 2013 – 28 Feb 2015)	31
Dissemination Plan SWP 2.2.....	32
c. SWP 2.3 Innovation agenda and technology forecast.....	36
Sub-Work Package Lead.....	36
Sub-Work Package Staff.....	36
Introduction to the tasks.....	37
Important External Dates (until mid 2014).....	41
Resources SWP 2.3	42
Subcontracting SWP 2.3.....	43
Other direct costs SWP 2.3.....	43
Resource Planning SWP 2.3 for 1st Reporting Period (1 Sep 2013 – 28 Feb 2015)	44
Dissemination Plan SWP 2.3.....	45

1. WORK PACKAGE 2 “INNOVATION & FLEET”

a. Work Package Lead

PP Name	WPL Name	Email	Phone
Rijkswaterstaat WVL	Henk-Erik Sierink	Henk-Erik.Sierink@minienm.nl	+31 70 456 14 53

b. Work Package Objectives

WP2	Innovation & Fleet		
WP Start:	01.09.2013	WP End:	31.12.2015
<ul style="list-style-type: none"> ▪ To improve the competitiveness of inland waterway transport by fostering innovation and uptake of resource-efficient and safe solutions. ▪ To provide advice and tools to business organisations and public administrations on how to stimulate innovation take-up and to speed up the greening of the inland fleet ▪ To improve the knowledge base needed for determining the external cost performance of inland waterway transport, by review data quality and systematically identifying gaps in data and possible solutions. ▪ To detect, gather and consolidate existing research results and to define future research and innovation needs that will contribute to an improved economic, safety and environmental performance of inland waterway transport. 			

c. Sub Work Packages Overview

SWP	Title& Content	Lead	Budget [€]
SWP 2.1	Tools for innovation take-up	Henk-Erik Sierink (RWS-WVL)	94.888
SWP 2.2	Knowledge base for innovation take-up and internalisation of external costs	Nathaly Dasburg-Tromp (NEA)	70.686
SWP 2.3	Innovation agenda and technology forecast	Berthold Holtmann (DST)	147.504
Total			313.079

d. Resources

PP	Budget [€]	Person months	Personnel Costs [€]	Subcontracting [€]	Other direct costs [€]	Eligible Ind. Costs [€]
VIA	23.603	3	19.059	0	3.000	1.544
VNF	11.856	1	8.080	0	3000	776
BDB	0	0	0	0	0	0
PBV	0	0	0	0	0	0
INE	22.684	2	17.200	0	4.000	1.484
WVL	86.670	8	68.000	0	13.000	5.670
NEA	79.752	7	51.189	10000	14.000	4.563
DST	78.349	8	54.223	0	19.000	5.126

CRUP	10.164	2	6.864	0	2.636	665
STC	0	0	0	0	0	0
CERO	0	0	0	0	0	0
MAR	0	0	0	0	0	0
TOTAL	313.079	31	224.616	10.000	58.636	19.828

e. Deliverables

Del. No	SWP	Deliverable Name	Nature	Dissemination level	Due
D 2.0	-	WP2 Inception Report	R	PU	31.10.2013
D 2.1	2.1	Toolkit for innovation take up	O	PU	31.08.2014
D 2.2	2.3	Innovation platform and draft research and innovation roadmap for inland waterway transport	O	PU	31.08.2014
D 2.3	2.2	Information needs, reviewed datasets and gap analysis for providing the information basis for the determination of external costs performance in inland navigation	R	PU	31.10.2014
D 2.4	2.2	Report on the stakeholder exchange on external cost in inland navigation	R	PU	30.06.2015
D 2.5	2.3	Consolidated innovation platform and final research and innovation roadmap for inland waterway transport	O	PU	31.08.2015
D 2.6	2.1	Report on industry innovation meetings	R	PU	30.11.2015

D 2.7	-	Work package 2 Report	R	PU	31.12.2015
-------	---	-----------------------	---	----	------------

Nature: R=Report, P=Prototype, D=Demonstrator, O=Other

Dissemination level: PU=public, CO=confidential

2. SUB WORK PACKAGES

a. SWP 2.1 |Tools for innovation take-up

Sub-Work Package Lead

PP Name	SWPL Name	Email	Phone
WVL	Henk-Erik Sierink	Henk-Erik.Sierink@minienm.nl	+31 70 456 14 53

Sub-Work Package Staff

PP	Responsible	Role/Tasks	Email	Phone
WVL	Henk-Erik Sierink	SWP Coordination	Henk-Erik.Sierink@minienm.nl	+31 70 456 14 53
WVL	Anneke Bosma	General assistance	Anneke.bosma@rws.nl	+31 88 797 1211
NEA	Nathaly Dasburg-Tromp	Coordinating SWP 2.1 tasks within NEA; technical input and assistance	n.dasburg@panteia.nl	+31 79 3222371
NEA	Martin Quispel	Senior freight transport expert; technical input and assistance	m.quispel@panteia.nl	+31 79 3222356
NEA	Richard van Liere	Medior freight transport expert; technical assistance	r.van.liere@panteia.nl	+31 79 3222312

DST	Berthold Holtmann	Technical assistance	holtmann@dst-org.de	+49 203 99 369-55
DST	Werner Kühlkamp	Technical assistance	kuehlkamp@dst-org.de	+49 203 99 369-68
CRUP	Renata Kadrić	Technical input and assistance for tools for innovation take-up	kadric@crup.hr	+385 1 5392990
CRUP	Hrvoje Kotnik	Technical input and assistance for tools for innovation take-up	kotnik@crup.hr	+385 1 6413 325
VNF	Eloi Flipo		Eloi.FLIPO@vnf.fr	
INE	Karin de Schepper	Senior freight transport expert; technical input and assistance	kds@inlandnavigatio n.eu	+32 2 553 14 80

Introduction to the tasks

Challenge - The challenge for this SWP is to make a toolkit that facilitates and stimulates the innovation take-up in IWT. The slow innovation uptake in this sector is a known problem for a variety of reasons. This is particularly a problem in light of the need to green IWT and reduce the polluting emissions, such as described in the Commission Staff Working Document Greening the fleet that is accompanying the Naiades II Communication. Whereas SWP 2.3 tackles the challenges regarding Research and Innovation needs in a broader sense, covering the four areas logistics efficiency, infrastructure, vessels, education and qualification, SWP 2.1 deals with facilitating the deployment of greening possibilities that already exist.

Aim for the biggest bang for the buck - In light of the above, and in light of the limited resources available in Platina II, a clear focus is needed on innovative possibilities that have the biggest potential, and are most realistic. The biggest potential, and the most realistic options will most probably be found in the category of measures suitably for the big ships (>110mtr), since those represent only around 20% of the ships, around 80% of the pollutant emissions, and their business models can most probably better cope with the necessary investment. The same approach will be used regarding policy tools where at the start Platina II will focus on those examples that have a proven track record.

Objective - The objective is therefore to design and construct a web tool that has added value in facilitating and stimulating the innovation uptake in these selected areas (that can make a difference). If it can be demonstrated that such a web tool offers added value to both private and public

stakeholders, than this approach could serve as a template for a broader approach. For instance by including more content in the web tool. For the industry stakeholders such as skippers the web tool will offer quick insight in the possibilities of different solutions and the return on investment, based on parameters such as their ship and cargo type, operating hours, installed engine type, fuel consumption, etc. In combination with the information included from the different manufacturers and suppliers this will stimulate skippers to innovate.

For the policy tools the web tool will most probably have a separate partition for which registration and a password might prove beneficial. This part will showcase different examples of policy tools that have stimulated and facilitated innovation, as well as suggestions for accompanying policy measures.

Top down - As a first step desk research and consultation of experts within and outside of the consortium will be performed in order to identify the lessons learnt regarding innovative measures for greening of the fleet. This step will also built on earlier work in Platina I, the expert working group on emissions, including the Panteia-NEA report, etc.

The expectation is that the most promising technologies will include in particular LNG, Diesel Particulate Filters, and Selective Catalytic Reduction. Since these have been studied intensively it will be possible to include in the web-tool a simple system that will give indications on the return on investment on the basis of some rudimentary input from stakeholders.

Bottum up - In order to check the potential added value of this approach, stakeholders will have to be closely involved during the whole process. Commercial operators will be interviewed to get a clear picture of:

- the main drivers behind their investment decisions,
- the business arguments around investment decisions
- the main practical barriers
- their ideas about the necessary content of the web-tool, and the way this information is presented and made available to them.

Ship building industry, suppliers, etc, will also be interviewed, and asked whether they are interested to feature relevant innovative technologies on the same web-site (directly and/or through linking).

The resulting knowledge will be used and completed by the current policy measures to stimulate innovations, eg. the online European Funding Database for Inland Waterway transport (SWP1.2) that will be identified by consulting experts in order to complete the content for the web-tool.

Web-tool - Before starting to build the web-tool the Executive Committee will be asked to agree with / decide on the level of ambition of the toolkit (the subjects covered, the technological refinement, etc), and the main innovations that will be featured at this stage. Ideally the web-tool will be amendable / extendable, but the technical refinement will of course depend on the budget.

The core of the web-tool will be based around those innovations that are the most feasible, practicable, with the best expected return on investment, and potentially offer the biggest effect on emissions. The toolkit will furthermore contain information on the preconditions that need to be fulfilled in order to establish commercially successful innovations, financing issues and practical tips & tricks.

How the toolkit can be maintained and updated for a certain period of time, the financial cost and possible parties to take of this task will be looked into as part of this task.

After receiving feedback from within the consortium and the European Commission and revising the toolkit accordingly, stakeholders will actively be approached to give feedback to further improve its functioning.

Task 2.1.1		Toolkit for innovation take-up			
Start:	01.10.2013	End:	31.10.2015	Lead:	WVL
To do				Who	until
Perform desk research and consult the expertise within the Platina Consortium and the Steering Committee to: <ul style="list-style-type: none"> do a top-down policy research and identify the lessons learnt regarding innovative measures for greening of the fleet, including preconditions for succesful greening measures, with a strong link to the Naiades II approach, and focussing on the most promising technologies that have been studied intensively, in particular LNG, Diesel Particulate Filters (DPF), and Selective Catalytic Reduction (SCR); and create, on the basis of the strengths and weaknesses of the existing innovative measures in the selected areas, an overview of practically feasible innovations and their expected returns on investment, building on work done in Platina I, the expert working group on emissions, etc. identify ways for lowering barriers and costs related to innovation, e.g. through common platforms, standardisation, alternative designs/materials, regulatory changes etc. 				WVL, NEA, DST	15.01.2014
Perform a bottom-up analysis to discern the main drivers behind innovative investment decisions and identify the business arguments and the main practical barriers by conducting in-depth interviews and analyses in cooperation with commercial operators.				WVL, NEA, DST	01.05.2014
Consult experts in order to identify the current policy measures to stimulate innovations, eg. the online European Funding Database for Inland Waterway transport (SWP1.2).				WVL, NEA, DST	
Description of target groups, goals and functional requirements for a – partially interactive – web based toolkit on the basis of discussions with stakeholders				WVL, NEA, DST CRUP	01.03.2014
Prepare for a decision of the ExCom on the technical realisation, and level of ambition regarding the toolkit and the most promising innovations to be highlighted/addressed.				WVL	01.04.2014

Prepare technical specifications for toolkit			CRUP	01.06.2014
Construct a first version of a toolkit containing practically feasible innovations and their expected returns on investment, preconditions that need to be fulfilled in order to establish commercially successful innovations, financing issues and practical tips & tricks			CRUP	01.07.2014
Feedback from the consortium on draft toolkit			WVL, CRUP	July/August 2014
Revise toolkit accordingly			CRUP	
Feedback from the European Commission on the draft toolkit			WVL, CRUP	July/August 2014
Revise toolkit accordingly			CRUP	
Feedback from industry stakeholders on the draft toolkit			WVL, NEA, DST	July/August 2014
Options for continuing after the project the operation of the tools developed will be analysed and measures will be taken to facilitate the taking over of the operation and further development of the tools by an organisation which is not dependent upon the project.			WVL	Continuous
D 2.1 Toolkit for innovation take up				01.09.2014
Del. No	Deliverable Name	Dissemination level	Description	Due
D 2.1	Toolkit for innovation take up	PU	Overview of practically feasible innovations and their expected returns on investment, preconditions that need to be fulfilled in order to establish commercially successful innovations, financing issues and practical tips and tricks.	31.08.2014

Interactions with	Topic/Experts	Resp. for interaction
Governmental organizations	Experts of the Programme Impulse Dynamic Traffic management on the Waterways Rijkswaterstaat	WVL
Consortium	Contact expertise within the Consortium and the Steering Committee	WVL, NEA, DST, CRUP
European funding database for inland waterway transport	To investigate the current policy measures to stimulate innovations	WVL
EU project	MoVe IT! (EU FP7 project)	NEA
Research institutions	<ul style="list-style-type: none"> PIANC Deltares 	WVL, NEA, DST
Industry Stakeholders	<ul style="list-style-type: none"> Shipping companies, including lobby organisations like EBU, ESO ESC Shipbuilding industry and suppliers (like Euromot and others) Innovation organisations in member states (like EICB) 	

Task 2.1.2	Organisation of industry innovation meetings				
Start:	01.10.2013	End:	30.11.2015	Lead:	WVL
To do				Who	Until
Identify a list of potential stakeholders from business communities and public administrations				WVL and consortium partners	01.09.2014
Disseminate information about the toolkit for innovation take up to potential users				WVL, DST, NEA	01.09.2015
Set up the programme for innovation meetings, making use				WVL	01.09.2014

of existing events for maximum exposure		
Suggestions for an approach for industry cooperation on greening innovation		
Implement, evaluate and refine approach where needed	WVL	01.07.2015
Evaluate and report on innovation meetings	WVL	01.10.2015
Feedback from the consortium on draft report on industry innovation meetings	WVL and consortium partners	15.10.2015
Revise draft report where appropriate	WVL	01.11.2015
Feedback from the European Commission on the draft report on industry innovation meetings	WVL	15.11.2015
D 2.6 Report on industry innovation meetings		01.12.2015

Del. No	Deliverable Name	Dissemination level	Description	Due
D 2.6	Report on industry innovation meetings	PU	Report to describe the results of the meetings with industry and public administrations representatives as regards innovation and necessary steps towards practical application.	01.12.2015

Interactions with	Topic/Actions	Resp. for interaction
Business organizations	Commercial operators Potential investors	WVL
Governmental organizations	Experts of the Programme Impulse Dynamic Traffic management on the Waterways Rijkswaterstaat	WVL
Governmental organizations	Public administrations Regional authorities	WVL
Industry stakeholders	Innovation organisations in member states (like EICB in NL)	WVL



Important External Dates(until mid 2014)

Year	Month	Project	Topic	Resp.	Remark
2013	TBD	IDVV	Events for discussing results and uptake	WVL	
2014	TBD	IDVV	Events for discussing results and uptake	WVL	

Resources SWP 2.1

PP	SWP	Budget [€]	Person months	Personnel Costs [€]	Subcontracting [€]	Other direct Costs [€]	Eligible ind. Costs [€]
WVL	2.1	44.940	4	34.000	0	8.000	2.940
NEA	2.1	20.999	2	14.626	0	5.000	1.373
DST	2.1	18.785	2	13.556	0	4.000	1.229
CRUP	2.1	10.165	2	6.864	0	2.636	665
Total		94.888	10	69.045		19.636	6.208

Subcontracting SWP 2.1

Responsible Partner	SWP	Content of subcontract	Estimated cost [€]	Due date
		No subcontracting foreseen		

Other direct costs SWP2.1

Responsible Partner	SWP	Purpose	Estimated cost [€]
WVL	2.1	Travel cost SWP staff meetings, innovation meetings, and meetings with stakeholders	8.000
NEA	2.1	Travel cost SWP staff meetings, innovation meetings, and meetings with stakeholders	5.000
DST	2.1	Travel cost SWP staff meetings, innovation meetings, and meetings with stakeholders	4.000
CRUP	2.1	Travel cost SWP staff meetings	2.636

Resource Planning SWP 2.1 for 1st Reporting Period (01.09.2013 – 28.02.2015)

PP	SWP	Budget [€]	Person months	Personnel Costs [€] 21.500	Subcontracting [€]	Other direct Costs [€]	Eligible ind. Costs [€]
WVL	2.1	27.806	2,5	21.250		5.000	1.556
NEA	2.1	15.749	1,5	10.970		3.750	1.030
DST	2.1	14.089	1,5	10.167		3.000	922
CRUP	2.1	10.165	2	6.864		2.000	1.301
	Total	67.809	8	49.251	0	13.750	4.809

Task 2.1.1 (half of the work) will be finalized by 01.09.2014, so that dissemination can start soon after. Part of the implementation of 2.1.2 will take place after the 1st reporting period, including writing of the report on the Industry innovation meetings.

Dissemination Plan SWP 2.1

NO.	Type of activities ¹	Main leader	Title	Date/Period	Place	Type of audience ²	Size of audience	Countries addressed
1	publication	WVL	Toolkit for innovation take up	August/September 2014	Brussels WEB	Stakeholders in IWT (private as well as public); shipping industry, shipbuilding industry, suppliers		EU member states with IWT

¹ A drop down list allows choosing the dissemination activity: publications, conferences, workshops, web, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters, Other.

² A drop down list allows choosing the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias, Other ('multiple choices' is possible).

2	Innovation meetings	WVL	Innovation meetings	4th Q 2015- 3rd Q 2015	Several (to be decided)	ditto		EU member states with IWT
3	Report	WVL	Report on Industry Innovation meetings	4th Q 2015	Brussels / WEB	ditto		EU member states with IWT

b. SWP 2.2 | Knowledge base for innovation take-up and for internalisation of external costs

Sub-Work Package Lead

PP Name	SWPL Name	Email	Phone
NEA	Nathaly Dasburg-Tromp	n.dasburg@panteia.nl	+31 79 3222371

Sub-Work Package Staff

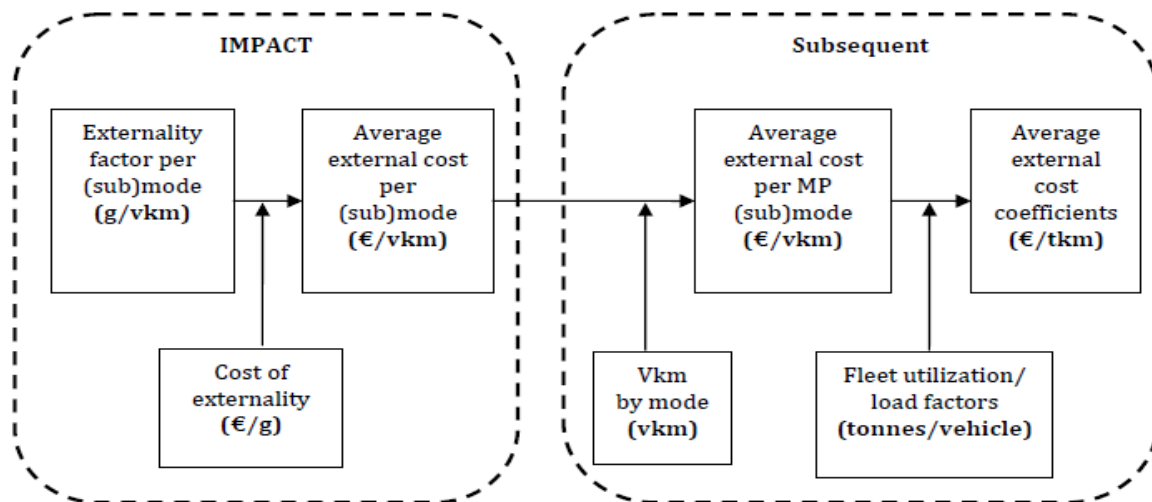
PP	Responsible	Role/Tasks	Email	Phone
NEA	Nathaly Dasburg-Tromp	SWP Coordination; technical input	n.dasburg@panteia.nl	+31 79 3222371
NEA	Martin Quispel	Senior freight transport expert; technical input and assistance	m.quispel@panteia.nl	+31 79 3222356
NEA	Richard van Liere	Medior freight transport expert; technical assistance	r.van.liere@panteia.nl	+31 79 3222312
WVL	Henk-Erik Sierink	Technical input	Henk-Erik.Sierink@minien.nl	+31 70 4561453
DST	Berthold Holtmann	Technical input	holtmann@dst-org.de	+49 203 99 369-55
DST	Werner Kühlkamp	Technical input	kuehlkamp@dst-org.de	+49 203 99 369-68

Introduction to the tasks

Research approach

The theoretical outline and the indicators used in the Handbook on External Costs of Transport³ will serve as the framework for the general assessment (see figure 1). The objective is to identify for each indicator (i.e. each block in figure 1) the underlying datasets used in different calculators, studies and projects to estimate the external costs in the IWT sector. In particular we will focus on the underlying amount of data, the geographic scope and the quality of the quantitative raw data that was used to derive the datasets.

Figure 1: General overview of the approach for the calculation of external cost coefficients based on the methodology of the ‘Handbook on estimation of external costs in the transport sector’ (IMPACT 2008)



Source: JRC (2013).

The activity will focus only on the available datasets at an *European level*. For example, the datasets used by:

- Joint Research Centre (JRC) in the Marco Polo external cost calculations;
- CE Delft in the IMPACT / STREAM study and other studies for the calculations of external costs of transport in Europe;
- PLANCO in their external costs calculations;

³ Sources:

(1) Handbook on estimation of external costs in the transport sector. Produced within the study Internalisation Measures and Policies for All external Cost of Transport (IMPACT), CE Delft, et al, 2008;
 (2) Update of the Handbook on External Costs of Transport, Ricardo-AEA, et al, 2014..

- Transport & Mobility Leuven (TML) in the TREMOVE model;
- Central Commission for the Navigation of the Rhine (CCNR) regarding fuel consumption based on CDNI data;
- EUROSTAT for datasets on: emission monitoring, tonnes transported, tonne-kilometres, vessel-kilometres, number of vessels, loading capacity, etc.;
- DG CLIMA for climate change estimations;
- DG ENVIRONMENT for air pollution estimations;
- Green Freight Europe for carbon emissions calculations;
- COFRET (EU FP7 project) for carbon footprint and greenhouse gas emissions of freight transport.

The review of the datasets will only cover those that are needed to determine the externalities air pollution and climate change.

Based on the review described above, a gap analysis will be carried out by analysing the different datasets in terms of the quality, degree of precision, reliability, representativeness and quantitative detail of the underlying datasets sources that are relevant for external costs calculations such as loading factor, fuel consumption and the emission profiles and will present a roadmap on how to overcome data gaps and deficiencies.

Expected results

The main findings and key gaps in the datasets will be presented in Deliverable 2.3 “Information needs, reviewed datasets and gap analysis for providing the information basis for the determination of external costs performance in inland navigation” in comparison with other modes of transport. This report will provide a critical review of relevant datasets for external cost calculation available at EU level and will identify the knowledge gaps.

Task 2.2.2 Expert exchange

Research approach

The main findings and key gaps in the datasets identified in Task 2.2.1 will be discussed during one Expert Workshop. The stakeholders that will be invited to the workshop will be primarily data collection experts, who will be identified during the review of the datasets (i.e. Task 2.2.1). Other possible stakeholders are experts on external cost calculations. The objective of the workshop is to identify solutions for improving the information basis and to discuss with the relevant stakeholders their implementation. The focus will be on how to improve the quality of the datasets and not on the available models.

The following items will be presented and discussed during the Expert Workshop:

- (1) presentation and discussion of main findings of Task 2.2.1;
- (2) discussion on the quality of the datasets and how to improve the information basis;
- (3) discussion on the roadmap to improve the data.

Expected results

The Deliverable 2.4 “Report on the stakeholder exchange on external cost in inland navigation” will include a review of information on the quality of the datasets; identify gaps and present a roadmap for improving the knowledge basis for the estimations of externalities.

Task 2.2.1		Review of European data sets and identification of gaps			
Start:	01.06.2014	End:	31.10.2014	Lead:	NEA
To do			who	Until	
A list of indicators for the calculation of external costs will be identified based on the Handbook on External Costs of Transport The scope of work is to study the datasets needed to calculate air pollutant emissions and emissions on climate change. In this step specific attention to the description of indicators that are needed for the calculation steps with qualitative comments and explanations on the sensitivities of these values.			NEA	30.06.2014	
Based on the list of indicators identified in the first step, a detailed review will be carried out on the currently available <i>datasets</i> on an European level used for external cost calculations in IWT. In particular attention will be paid to the type and quality of sources behind these datasets and the amount of raw data (sample size) that serves as the basis. The focus will be on the available datasets and not on the calculation models. <i>* Disclaimer: the planning is based under the assumption that the required information from external parties can be retrieved within 8 weeks.</i>			NEA	31.08.2014*	
Preparation of a draft report with main findings and key gaps in the datasets for the calculation of external cost in IWT.			NEA with support from WVL and DST	30.09.2014	
Review of the draft report			WVL and DST	15.10.2014	
Preparation of the final report. The main findings and key gaps in the datasets will need to be discussed with experts in Task 2.2.2.			NEA with support from WVL and DST	31.10.2014	
Del. No	Deliverable Name	Dissemination level	Description	Due	

D2.3	Information needs, reviewed datasets and gap analysis for providing the information basis for the determination of external costs performance in inland navigation	PU	Critical review of relevant datasets for external cost calculation available at EU level and identification of knowledge gaps	01.11.2014
------	--	----	---	------------

Interactions with	Topic	Resp. for interaction
Joint Research Centre (JRC)	Requirements for information regarding the datasets and the assumptions used in the Marco Polo external cost calculations	NEA
CE Delft	Requirements for information regarding the datasets and the assumptions used in the STREAM study and other studies for the calculations of external costs of transport in Europe	NEA
PLANCO	Requirements for information regarding the datasets and the assumptions used in their external costs calculations	NEA
Transport & Mobility Leuven (TML)	Requirements for information regarding the datasets and the assumptions used in the TREMOVE model	NEA
Central Commission for the Navigation of the Rhine (CCNR)	Requirements for information regarding fuel consumption based on CDNI data	NEA
EUROSTAT	Requirements for information regarding the datasets used in the emission monitoring and datasets on tonnes transported, tonne-kilometres, vessel-kilometres, number of vessels, loading capacity, etc..	NEA
DG CLIMA	Requirements for information regarding the datasets used for climate change estimations	NEA
DG	Requirements for information regarding the datasets used	NEA

ENVIRONMENT	for air pollution estimations	
Green Freight Europe	Requirements for information regarding the datasets and the assumptions used in the carbon emissions calculations by Green Freight Europe	NEA
COFRET (EU FP7 project)	Requirements for information regarding the datasets and the assumptions used in the calculations of carbon footprint and greenhouse gas emissions of freight transport	NEA

Task 2.2.2		Stakeholder exchange			
Start:	01.09.2014	End:	28.02.2015	Lead:	NEA
To do				who	Until
Compile draft list of experts for the workshop: - Target group: mainly data collection experts identified during Task 2.2.1 - Target size: up to 10 external experts				NEA with support from WVL and DST	01.10.2014
Contact selected stakeholders for Expert Workshop				NEA	15.10.2014
Expert Workshop on how to improve the quality of the information basis.				NEA with support from WVL and DST	End of November 2014
Preparation of a draft report for improving the knowledge basis. The recommendations will be based on the results from the Expert Workshop.				NEA with support from WVL and DST	31.12.2014
Review of the draft report				WVL and DST	31.01.2015
Preparation of the final report on the stakeholder exchange on external cost in inland navigation				NEA with support from WVL and DST	28.02.2015
Del. No	Deliverable Name	Dissemination level	Description	Due	
D2.4	Report on the stakeholder exchange on	PU	Report documenting the findings of the expert exchange on	01.03.2015	

external cost in inland navigation	external costs in inland navigation
------------------------------------	-------------------------------------

Interactions with	Topic/Actions	Resp. for interaction
Joint Research Centre (JRC)	Possible expert for Expert Workshop	NEA
CE Delft	Possible expert for Expert Workshop	NEA
PLANCO	Possible expert for Expert Workshop	NEA
Central Commission for the Navigation of the Rhine (CCNR)	Possible expert for Expert Workshop	NEA
Transport & Mobility Leuven (TML)	Possible expert for Expert Workshop	NEA
EUROSTAT	Possible expert for Expert Workshop	NEA
DG CLIMA	Possible expert for Expert Workshop	NEA
DG ENVI	Possible expert for Expert Workshop	NEA

Important External Dates(until mid 2014)

Year	Month	Project	Topic	Resp.	Remark
n.a.	n.a.	PLATINA II	Possible presentation of results during a PLATINA II event	NEA	n.a.

Resources SWP2.2

PP	SWP	Budget [€]	Person months	Personnel Costs [€]	Subcontracting [€]	Other direct Costs [€]	Eligible ind. Costs [€]
NEA	2.2	38,824	3	21,938	10,000	5,000	1,886
DST	2.2	10,462	1	6,778		3,000	684
WVL	2.2	21,400	2	17,000		3,000	1,400
	Total	70,686	6	45,716	10,000	11,000	3,970

Subcontracting SWP 2.2

Responsible partner	SWP	Content of subcontract	Estimated Costs [€]	Due date
NEA	2.2	Hiring external expertise on data collection and internalisation of external costs Subcontracting: up to 10 external experts can be subcontracted.	10,000	30.08.2014

Other direct costs SWP2.2

Responsible Partner	SWP	Purpose	Estimated cost [€]
NEA	2.2	Travel costs for SWP staff, meeting costs	5,000
DST	2.2	Travel costs for SWP staff, meeting	3,000

		costs	
WVL	2.2	Travel costs for SWP staff, meeting costs	3,000

Resource Planning SWP 2.2 for 1st Reporting Period (1 Sep 2013 – 28 Feb 2015)

PP	SWP	Budget [€]	Person months	Personnel Costs [€]	Subcontracting [€]	Other direct Costs [€]	Eligible ind. Costs [€]
NEA	2.2	38,824	3	21,938	10,000	5,000	1,886
DST	2.2	10,462	1	6,778		3,000	684
WVL	2.2	21,400	2	17,000		3,000	1,400
	Total	70,686	6	45,716	10,000	11,000	3,970

All the work in SWP 2.2. will be carried out before the end of the first Reporting Period. The activities expected from the external experts (to be subcontracted) will also be carried out before the first Reporting Period.

Dissemination Plan SWP 2.2

NO.	Type of activities ⁴	Main leader	Title	Date/Period	Place	Type of audience ⁵	Size of audience	Countries addressed
1.	Presentation of report	NEA	Information needs, reviewed datasets and gap analysis for providing the information basis for the	Pm: November 2014	WEB	Scientific Community, Industry, Policy makers		

⁴ A drop down list allows choosing the dissemination activity: publications, conferences, workshops, web, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters, Other.

⁵ A drop down list allows choosing the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias, Other ('multiple choices' is possible).

			determination of external costs performance in inland navigation					
2	Expert Workshop	NEA	Stakeholder exchange on external cost in inland navigation	November 2014	To be determined	Experts	Limited	
3	Presentation of report	NEA	Report on the stakeholder exchange on external cost in inland navigation	Pm: July 2015	WEB	Scientific Community, Industry, Policy makers		

NO.	Type of activities ⁶	Main leader	Title	Date/Period	Place	Type of audience ⁷	Size of audience	Countries addressed
1.	Presentation of report	NEA	Information needs, reviewed datasets and gap analysis for providing the information basis for the determination of external costs performance	Pm: November 2014	WEB	Scientific Community, Industry, Policy makers		

⁶ A drop down list allows choosing the dissemination activity: publications, conferences, workshops, web, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters, Other.

⁷ A drop down list allows choosing the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias, Other ('multiple choices' is possible).

			in inland navigation					
2	Expert Workshop	NEA	Stakeholder exchange on external cost in inland navigation	October 2014	To be determined	Experts	Limited	
3	Presentation of report	NEA	Report on the stakeholder exchange on external cost in inland navigation	Pm: July 2015	WEB	Scientific Community, Industry, Policy makers		

c. SWP 2.3 | Innovation agenda and technology forecast

Sub-Work Package Lead

PP Name	SWPL Name	Email	Phone
DST	Berthold Holtmann	holtmann@dst-org.de	+49 203 99 369-55

Sub-Work Package Staff

PP	Responsible	Role/Tasks	Email	Phone
DST	Berthold Holtmann	SWP-Coordination	holtmann@dst-org.de	+49 203 99 369-55
DST	Werner Kühlkamp	Senior freight transport expert; Technical input and assistance, Deputy SWP-Lead	kuehlkamp@dst-org.de	+49 203 99 369-68
VIA	Andreas Bäck	Senior Expert RIS; contributions to the SRA;	Andreas.baeck@via-donau.org	+43 50 4321-1609
VNF	To be added			
INE	Karin de Schepper	Senior freight transport expert; technical input and assistance	kds@inlandnavigation.eu	+32 2 553 14 80
WVL	Henk-Erik	Technical input	Henk-	+31 70 456 14

	Sierink		Erik.Sierink@minien m.nl	53
NEA	Nathaly Dasburg- Tromp	Coordinating SWP 2.3 tasks within NEA; technical input	n.dasburg@panteia. nl	+31 79 3222371
NEA	Martin Quispel	Senior freight transport expert; technical input	m.quispel@panteia.n l	+31 79 3222356
NEA	Harrie de Leijer	Senior freight transport expert; technical input	h.de.leijer@panteia.n l	+31 79 3222310

Introduction to the tasks

The guiding objectives for the future development of inland waterway transport are set out in the Communication of the European Commission "NAIADES II- Towards quality inland waterway transport". The vision of the Strategic Research and Innovation Agenda for Inland Waterway Transport (Navigator 2020), which was developed within the framework of PLATINA takes up the European Union's objectives. The Navigator 2020 vision identifies four interconnected action areas and related strategic objectives: logistics efficiency, infrastructure, vessels, education and qualification. The Navigator 2020 outlines for each action area, research & innovation needs, technologies/methods expected until 2020/2050 as well as the expected results and target outcome. The Navigator 2020 outlines research topics, which are proposed to be integrated in Horizon 2020 and outlines a deployment strategy.

The Navigator 2020 was prepared by PLATINA partners with input of 44 experts from 12 countries. It was published by the WATERBORNE European Technology Platform in March 2013 and is supported by the sector representatives from the European Barge Union, the European Skippers Organisations, the European Logistics Association, the European Federation of Inland Ports, and Inland Navigation Europe.

In subsequent and future versions of this document the innovation deployment dimension of the agenda needs to be enhanced and a deployment strategy needs to be prepared, which details in particular funding needs for the innovation, the expected inputs, outcomes, impacts and priorities. Additional focus is necessary, as well as the involvement and commitment of the industry, supported by appropriate industry-driven structures.

In order to obtain the commitment from industry and to have a clear focus reflected in a deployment strategy, in the next stage an inclusive platform on research and innovation will be established. This

platform will have a twofold objective. It has to organize and prepare preconditions for, and the actual implementation of research and innovation. What are the chances and possibilities of innovation implementation on the one hand and what are the barriers, hindrances and risks on the other. On the basis of this dialogue, and of the identified preconditions and ‘enabling conditions’ a deployment strategy for research and innovation will be developed. In light of their important role, the preparation of the roadmap will be a close cooperation between the European Commission and the consortium, with involvement from the industry as of the start. Important issues to be decided on are the general approach, the agenda, the stakeholders to be invited to participate both in the preparatory stage as well as in the Forum (representing the key areas logistics efficiency, infrastructure, vessels and education & qualification), the vehicles that experts and stakeholders expect to deliver the innovation for the particular subjects, etc.

Task 2.3.1 Establishment of an inclusive platform on research and innovation for inland waterway transport					
Start:	01.09.2013	End:	31.08.2014	Lead:	DST
To do				who	Until
<p>Detailing the approach for the work within SWP 2.3 and discuss this proposal with the European Commission (DG MOVE and DG Research)</p> <p>Discuss table of contents for Research and Innovation Roadmap on how to effectively deploy innovation in IWT (necessities and trends, definition of stakeholders, lessons learnt from other sectors, do’s and don’t’s, vehicles for innovation deployment, recommendations for deployment of innovation in the IWT sector – what and how)</p>				DST and SWP2.3-partners	Until May 2014
<p>Review results of PLATINA I, in particular the Navigator 2020, and identify existing international innovation schemes, relevant research activities and existing innovations related to IWT within a broad range of stakeholders dealing with research and innovation</p> <p>Review identified research and innovation topics, identify new ones if relevant and establish a framework for priority setting. Co-operative involvement of selected stakeholders of the relevant key areas to decide on the most important issues to be dealt with, that are eligible for further work, and for which a proper vehicle can be chosen. Outcome: Reflected and agreed “Comprehensive Priorities”. Develop the Draft Research and Innovation Roadmap on how to effectively deploy innovation in IWT taking into account the agreed table of contents (see</p>				DST and SWP2.3-partners	June/July 2014

above)		
Incorporate feedback of PLATINA II Executive Board Meeting in July 2014 in the Draft Research and Innovation Roadmap on how to effectively deploy innovation in IWT (Deliverable 2.2)	SWP 2.3- partners and experts	July 2014
D.2.2 Draft Research and Innovation Roadmap for inland waterway transport	DST (lead) and SWP2.3- partners	End July 2014

Del. No	Deliverable Name	Dissemination level	Description	Due
D2.2	draft Research and Innovation Roadmap for inland waterway transport	PU	Draft innovation agenda outlining future research needs, proposed research activities, as well as implementation roadmaps of ecoefficient innovations	31.8.2014

Interactions with	Topic/Experts	Resp. for interaction
Research Organisations	<ul style="list-style-type: none"> Waterborne TP 	All SWP2.3-partners
River Commission	<ul style="list-style-type: none"> Central Commission for the Navigation of the Rhine 	All SWP2.3-partners
Branch organisations	<ul style="list-style-type: none"> European Barge Union (EBU) European Skippers Organisation (ESO) 	All SWP2.3-partners

Task 2.3.2		Formulation of research and innovation roadmap for inland waterway transport			
Start:	01.09.2014	End:	31.08.2015	Lead:	DST
To do			who	Until	
Incorporate feedback of (selected) stakeholders on the Draft Research and Innovation Roadmap on how to effectively deploy innovation in IWT (vessel operators, equipment manufacturers, shipyards, dredging companies, terminal operators, ports, waterway managers, nautical and logistics institutes, etc.)			SWP 2.3-partners and experts	September 2014	
Stakeholder Meeting under the lead of the European Commission (a) to identify, reflect and consolidate topics (“Consolidated priorities”) and (b) to define their future research and deployment (e.g. private financing, Connecting Europe Facility, Horizon 2020)			SWP 2.3-partners and experts	October 2014	
Finalisation of Research and Innovation Roadmap on how to effectively deploy innovation in IWT (Deliverable 2.5).			SWP 2.3-partners and experts	Until December 2014	
D.2.5 Consolidated innovation platform and final research and innovation roadmap for inland waterway transport			DST (lead) and SWP2.3-partners	End Jan. 2015	

Del. No	Deliverable Name	Dissemination level	Description	Due
D 2.5	Consolidated innovation platform and final research and innovation roadmap for inland waterway transport	PU	Innovation agenda for the deployment of innovation and future research activities in the IWT sector	31.3.2015

Interactions with	Topic	Resp. for interaction
Industry	Waterborne TP	All SWP2.3-partners
River Commission	Central Commission for the Navigation of the Rhine	All SWP2.3-partners
Branch organisations	European Barge Union (EBU) European Skippers Organisation (ESO)	All SWP2.3-partners
Move It!	FP7-research project dealing with the modernisation of existing inland vessels (11/2011-10/2014)	DST
NEWS	FP7-project	DST
	Joint European Technology Platform Task Force on Transport Infrastructure Research	WVL

Important External Dates (until mid 2014)

Year	Month	Project	Topic	Resp.	Remark
2013	TBD	IDVV	Events for discussing results and uptake	WVL	

2014	TBD	IDVV	Events for discussing results and uptake	WVL	
------	-----	------	--	-----	--

Resources SWP 2.3

PP	SWP	Budget [€]	Person months	Personnel Costs [€]	Subcontracting [€]	Other direct Costs [€]	Eligible ind. Costs [€]
DST	2.3	49.102	5	33.890	-	12.000	3.212
VIA	2.3	23.603	3	19.059	-	3.000	1.544
INE	2.3	22.684	2	17.200	-	4.000	1.484
WVL	2.3	20.330	2	17.000	-	2.000	1.330
NEA	2.3	19.929	2	14.625	-	4.000	1.304
VNF	2.3	11.856	1	8.080	-	3.000	776
	Total	147.504	15	109.854	-	28.000	9.650

Subcontracting SWP 2.3

Responsible partner	SWP	Content of subcontract	Estimated costs [€]	Due date
		No subcontracting foreseen		

Other direct costs SWP 2.3

Responsible Partner	SWP	Purpose	Estimated cost [€]
DST	2.3	Travel costs for SWP staff, meeting costs	12.000
VIA	2.3	Travel costs for SWP staff, meeting costs	3.000
INE	2.3	Travel costs for SWP staff, meeting costs	4.000
WVL	2.3	Travel costs for SWP staff, meeting costs	2.000
NEA	2.3	Travel costs for SWP staff, meeting costs	4.000
VNF	2.3	Travel costs for SWP staff, meeting costs	3.000

Resource Planning SWP 2.3 for 1st Reporting Period (1 Sep 2013 – 28 Feb 2015)

PP	SWP	Budget [€]	Person months	Personnel Costs [€]	Subcontracting [€]	Other direct Costs [€]	Eligible ind. Costs [€]
DST	2.3	49.102	5	33.890	-	12.000	3.212
VIA	2.3	23.603	3	19.059	-	3.000	1.544
INE	2.3	22.684	2	17.200	-	4.000	1.484
WVL	2.3	20.330	2	17.000	-	2.000	1.330
NEA	2.3	19.929	2	14.625	-	4.000	1.304
VNF	2.3	11.856	1	8.080	-	3.000	776
	Total	147.504	15	109.854	-	28.000	9.650

Short explanation: All of the work is done before the end of the first reporting period.

Dissemination Plan SWP 2.3

NO.	Type of activities ⁸	Main leader	Title	Date/Period	Place	Type of audience ⁹	Size of audience	Countries addressed
1	Release of D2.2.	DST	Draft research and innovation roadmap for IWT	End July 2014	Brussels/ WEB	experts, stakeholders project partners etc.		EU member states with IWT
2	Stakeholder Meeting	DST	Innovation Platform	September 2014	e.g. Duisburg	experts		EU member states with

⁸ A drop down list allows choosing the dissemination activity: publications, conferences, workshops, web, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters, Other.

⁹ A drop down list allows choosing the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias, Other ('multiple choices' is possible).

								IWT
3	Release of D 2.5	DST	Final research and innovation roadmap for inland Waterway transport	End March. 2015	Brussels/ WEB	experts, stakeholders, project partners etc.		EU member states with IWT

