



National Access Point Coordination Organisation for Europe – Working Programme 2022

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Action requested

- ☐ To be revised by partners involved in the preparation of the document
- ☐ For review/ approval by the Core Alignment Team
- ☐ For approval by the NAPCORE Steering Committee

Abstract

This document summarises the Working Programme of the NAPCORE project for 2022.



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1. Introduction

1.1. Purpose of this document

This document constitutes the Working Programme of the NAPCORE project for the year 2022. It has been created as one of the first milestones of NAPCORE: milestone MS1.1.

The Working Programme 2022 describes all NAPCORE activities, with their early milestones and tasks to achieve those milestones. Where possible specific partners (and sometimes persons) are named as responsible for individual tasks or work items. A time plan table for each activity with a detail level of months lists each task's work items and provides an indication of when work is scheduled to take place. These tables will also form the baseline of the (yet to be created – milestone MS.1.8) Quality and Risk Management (QRM) plan, based on which a tracking of the work will happen.

1.2. General remarks on the Working Programme 2022

The Grant Agreement describes the action planned for NAPCORE and includes a milestone table with indicative dates for completion. Most of those dates have been defined over a year ago, during the preparation of the proposal for the call of the EU Commission. In the meantime, several unexpected and unforeseen issues have caused a significant delay of about half a year until the Grant Agreement has been signed compared to the initially planned time of signature, which is the official beginning of the project. Nevertheless, all partners agreed, that we should not waste time doing nothing related to the goals we want to reach with NAPCORE, and instead already start with most of the work that we intended to start with. However, due to the uncertainty given due to the delay in the signature of the Grant Agreement, some resources (partner staff and subcontracting) were and still are not yet available to a degree that is necessary for the timeline planned in the initial milestone table of the Grant Agreement. For this reason, some of the milestones have been rescheduled and postponed a few months.

The following NAPCORE Working Programme 2022 now considers all delays accordingly and presents an ambitious but reasonable planning for the first phase of the NAPCORE project.

2. Secretariat S.1 “Project management and administration”

2.1. Scope of the Activity for 2022

2.1.1. Main objectives of the activity

The activity encompasses all project management related tasks. This includes mainly managing the project's reporting requirements, the consolidation of annual working programs, financial controlling, the management of risks and quality as well as the external contact to the European Commission and the internal alignment between all consortium partners and activities.

2.1.2. Milestones

With the submission of this consolidated Working Programme to the Steering Committee, Milestone MS.1.1 has already been achieved in time.



MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification	External Milestone
MS.1.1	S.1.1	Working Programme 2022	12/2021	Working Programme submitted to Steering Committee	X

The following table lists the other milestones for S.1 that are due in 2022 and those milestones where the work already starts in 2022. The milestone due dates have been slightly altered compared to their completion date, due to the project's late start and the fact that the Project Progress Reports are due within 60 days after the end of the reporting periods on the 31 December each year, so by roughly the 1st of March in the following year. Milestones related to the Progress Reports have thus been updated with an indicative date of completion in February in the corresponding years.

MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification	External Milestone
MS.1.4	S.1.1	Project Progress Report 2021	12/2021 2/2022	Project Progress Report submitted to Steering Committee	X
MS.1.12	S.1.3	Core Alignment Team report of main activities and decisions	11/2021 2/2022	Chapter on Core Alignment Team activities and discussions in Project Progress Report	
MS.1.2	S.1.1	Working Programme 2023	11/2022 12/2022	Working Programme submitted to Steering Committee	X
MS.1.5	S.1.1	Project Progress Report 2022	11/2022 2/2023	Project Progress Report submitted to Steering Committee	X
MS.1.8	S.1.1	Quality and Risk Management (QRM) Plan	2/2022 3/2022	QRM Plan	X
MS.1.9	S.1.2	NAPCORE – EU Commission communication summary	11/2022 2/2023	Chapter on communication with EU Commission in Project Progress Report	
MS.1.13	S.1.3	Core Alignment Team report of main activities and decisions	11/2022 2/2023	Chapter on Core Alignment Team activities and discussions in Project Progress Report	

As MS.1.12, MS.1.13 and MS.1.9 are internal milestones and “just” parts of the Progress reports, S.1 has the following three milestones in 2022:

- Project Progress Report 2021 (by February 2022) → MS.1.4 and MS.1.12
- Quality and Risk Management Plan (by March 2022) → MS.1.8
- Working Programme 2023 (by December 2022) → MS.1.2



Additionally, the work on the Project Progress Report 2022 (MS.1.5, MS.1.9 and MS.1.13) will commence in the end of 2022.

As new milestones, the following extra internal milestones have been defined for the financial statements as part of the Progress Reports as required by the Grant Agreement:

MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification	External Milestone
MS.1.16	S.1.1	Financial Statement 2021	2/2022	Financial Statement 2022 as part of Progress Report 2021	
MS.1.17	S.1.1	Financial Statement 2022	2/2023	Financial Statement 2022 as part of Progress Report 2022	
MS.1.18	S.1.1	Financial Statement 2023	2/2024	Financial Statement 2022 as part of Progress Report 2022	
MS.1.19	S.1.1	Financial Statement 2024	2/2025	Financial Statement 2022 as part of Progress Report 2024	

2.1.3. Tasks

S.1 has three tasks with responsibilities for the following milestones in 2022 and beginning of 2023:

Task number	Task	Responsible for MS
Task S.1.1	Project management and controlling, quality and risk management	MS1.4, MS.1.2, MS.1.5, MS1.8, MS.1.16-19
Task S.1.2	Single-Point-of-Contact for the European Commission	MS.1.9
Task S.1.3	Internal alignment	MS.1.12, MS.1.13

Commented [CG(1)]: All of them are not for 2022-2023

Commented [HT2R1]: MS.1.1.18 and 19 are indeed irrelevant here and could be left out of this table. They were included for completeness. MS.1.16 and 17 are relevant for 2022, as they either are completed in 2022 or start in 2022.

2.1.4. Overview of partner participation

All partners are active at least as Followers with a small budget in task S.1.1.

Only DE-BAS as S.1 lead, General Secretary and Project Coordinator as well as the Deputy General Secretary and H.1 lead (AT/ AT-ATE) are active in Task S.1.2.

All Activity, WG and SWG chairs are active in Task S.1.3.

2.1.5. General S.1 organisational structure and working mode

Main organisational entity for S.1 is the Core Alignment Team (CAT) as project management team. Chaired by the General Secretary with the Deputy General Secretary as deputy. In the CAT, all Activity and (S)WG chairs are members and generally involved in the management of NAPCORE.

A Project Secretariat, subcontracted by DE-BAS as Project Coordinator and General Secretary, supports the management of the project in various, mostly administrative aspects.

Commented [CG(3)]: Who is it?

Commented [HT4R3]: In the Progress Report for 2021 this will be more explicitly stated. It's "Rupprecht Consult".



Partners who do not have a chair position are Followers of S.1. Whereas there will be only few S.1 meetings for all partners including the Followers (virtual meetings/ webinars only), the CAT meets often. It is foreseen in 2022 for the CAT to meet:

- On a bi-weekly rhythm (every other week) virtually using MS Teams
- Depending on COVID-related restrictions also a few times (up to 4 times) in physical meetings (or hybrid)

The physical meetings should ideally be in combination with other events, e.g. the NAPCORE Multi-Day-Event in November 2022 or at conferences or other events, where other NAPCORE related activities (e.g. SCOM Meeting or NAPCORE presentations) take place (see H.3 Working Programme for possible events).

2.2. Task S.1.1 “Project management and controlling, quality and risk management”

This is the main task of the secretariat: making sure that the project is managed and running according to the requirements of the Grant Agreement and further agreements between the consortium partners and the EU Commission. This task includes:

- preparation, consolidation, finalisation and submission of the financial reports
- monitoring the expenses versus the budget
- review and monitor the project status
- milestone monitoring
- consolidation of the project’s annual work programme from all activities
- plan, manage and monitor incoming and outgoing deliveries
- change management: anticipate, evaluate and manage changes in project structure, project participation, budget allocation changes, leadership appointments etc.
- escalation management: resolve escalated issues
- risk management: Create, monitor and update risk management plan
- identify and mitigate project risks
- analyse project deficiencies and needs
- quality management: set up and monitor quality assurance guidelines
- minute taking of project meetings of the Core Alignment Team
- setup, generate and manage procedures, templates and tools to support above tasks (including the initial creation of a NAPCORE “brand” with logo, design, colour scheme etc.)
- setup, operation and management of a project management/ document/ collaboration platform
- provision of a virtual meeting (and webinar) solution to enable planned and ad-hoc virtual meetings of project partners (internally and with external partners)

All applicants will be active in this task to fulfil their obligations relating to their respective financial reporting and general project management tasks.

2.2.1. Work Items

Work Item S.1.1.1: Financial Reporting

Inputs: <ul style="list-style-type: none"> • Every partner’s own financial records 	➡	Actions: <ul style="list-style-type: none"> • Create financial statements • Submit to Project Coordinator • Check and validate financial statements for validity 	➡	Outputs: <ul style="list-style-type: none"> • Financial Statements as required by Grant Agreement (MS.1.16-19)
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	<ul style="list-style-type: none"> • Identify missing supporting documents and records • Consolidate the financial reports into a joint financial report 		
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Work Item S.1.1.2: NAPCORE Project Management

<u>Inputs:</u> <ul style="list-style-type: none"> • Internal and external milestones • Progress Reports and financial statements • CAT Meetings • Quality and Risk management plan (MS.1.8) 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • monitor the expenses versus the budget • milestone and project status monitoring • risk identification and tracking • escalation management • setup and generate project templates, procedures and tooling • operate and support project collaboration tools 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • QRM Plan (MS.1.8) • Topics for CAT meetings
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Work Item S.1.1.3: Progress reporting

<u>Inputs:</u> <ul style="list-style-type: none"> • Requirements for progress reporting from Grant Agreement • Input from all partners • Input from all Activity chairs 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • Track submissions for progress report • Consolidate submissions to create a consolidated NAPCORE project progress report 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • Project Progress Report (MS.1.4-7)
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Work Item S.1.1.4: Creation of the consolidated NAPCORE Working Programme

<u>Inputs:</u> <ul style="list-style-type: none"> • Previous Working Programme • Risk Tracking • CAT decisions, meeting minutes 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • Create Working Programme for each Activity/ (S)WG • Review and align Working Programmes • Consolidate into join Working Programme 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • Project Working Programme (MS.1.1-3)
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2.2.2. Dependencies and external relations

This task has only internal dependencies and relations (here towards all Activities/ (S)WGs as well as all partners), as this task is focused on the internal management of the project. External connections are managed via Task S.1.2 or via the Core Alignment Team Task S.1.3.



2.2.3. Partner participation

S.1 chair DE-BASt will be active, supported by the subcontracted Project Secretariat. Those partners, that are chairing Activities and/ or (S)WGs are active as well, due to their additional project management related work and requirements (e.g. relating to the Working Programme or Activity risk tracking). Since all partners have obligations towards financial reporting, all partners have allocated budget for resources spent on creating their financial reports or other general project management related tasks.

2.3. Task S.1.2 “Single-Point-of-Contact for the European Commission”

The General Secretary is the single point of contact (with the Deputy Secretary General as secondary/ backup contact) for representatives of the European Commission and DG MOVE in relation to this project. The Secretary General will manage the relationship and steer contractual arrangements with the European Commission as well as the reporting of finalised milestones and other required project documentation to the European Commission. The Deputy General Secretary might support the General Secretary with certain tasks and/ or on occasion.

2.3.1. Work Items

Work Item S.1.2.1: Communications with the European Commission

Inputs: <ul style="list-style-type: none"> • Decisions of the SCOM • Decisions of the CAT • External Milestones of the Activities/ (S)WGs 	➔	Actions: <ul style="list-style-type: none"> • Communication or meetings with the Project Officer of the EU Commission • Communications or meetings with other EU Commission staff 	➔	Outputs: <ul style="list-style-type: none"> • Notes/ minutes from meetings and calls • Feedback from the European Commission
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Work Item S.1.2.2: Preparation of content for Project Progress Report

Inputs: <ul style="list-style-type: none"> • Notes/ Minutes from meetings and calls with the European Commission 	➔	Actions: <ul style="list-style-type: none"> • Write summary of EU Commission meetings, discussions 	➔	Outputs: <ul style="list-style-type: none"> • Chapter on communication with EU Commission in Project Progress Report
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2.3.2. Dependencies and external relations

NAPCORE internal connections exist mainly to the Steering Committee via H.1, H.2 for actions needed from and recommendations towards the European Commission and the CAT team.

The external connection is to the European Commission.

2.3.3. Partner participation

In this task only DE-BASt and to a limited extent AT-ATE are active.



2.4. Task S.1.3 “Internal alignment”

The Core Alignment Team is responsible for the internal alignment of all stakeholders and activities. The team consists of the Secretariat activity leads and the Working Group leads of the project.

In (at least) monthly (mostly virtual) meetings the Core Alignment Team will get together, report each other on finished, ongoing and planned activities, important developments, challenges and issues. The team will discuss and align actions to be taken. The General Secretary is chairing the Core Alignment Team.

2.4.1. Work Items

Work Item S.1.3.1: Core Alignment Team Meetings

Inputs: <ul style="list-style-type: none"> • Via chairs of all NAPCORE Activities and (S)WGs 	➡	Actions: <ul style="list-style-type: none"> • Write meeting minutes • Identify issues to be addressed and track them • Discuss options to resolve • Decide on actions to take 	➡	Outputs: <ul style="list-style-type: none"> • Meeting minutes including documentation of decisions
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Work Item S.1.3.2: Preparation of Core Alignment Team content for Project Progress Report

Inputs: <ul style="list-style-type: none"> • CAT Meeting Minutes 	➡	Actions: <ul style="list-style-type: none"> • Write summary of CAT actions, meetings, discussions, challenges and decisions 	➡	Outputs: <ul style="list-style-type: none"> • Chapter on Core Alignment Team activities and discussions in Project Progress Report
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2.4.2. Dependencies and external relations

As the Core Alignment Team is the project management body and consists of the chairs of all NAPCORE Activities and (S)WGs, the internal dependencies are of course to all the Activities and Working Groups.

External relations are limited, but could consist of dedicated meetings with the Advisory Board and possibly and if needed with representatives from the European Commission.

2.4.3. Partner participation

The chairs of all NAPCORE Activities and (S)WGs are members of the Core Alignment Team and active in this task.

ID	Activity	Lead	CAT Member
S.1	Project Management	DE-BASt	Timo Hoffmann
H.1	SCOM support	AT-ATE	Damaris Gruber
H.2	Identification of action needed	NL	Tiffany Vlemmings
H.3	Dissemination, outreach activities, training	IT	Francesco De Vito
1	NAP & NB Platform strategy and governance	DE-BASt	Timo Hoffmann
2	Interoperability and level of service of NAPs	PT-IMT	Ricardo Tiago
3	NAP content and accessibility	GR	Evangelos Mitsakis
4	Data Exchange Standards	FR	Estelle Sturtzer
4.1	SWG DATEX II	NL	Bard de Vries
4.2	SWG TN-ITS	ERTICO	Frank Daems
4.3	SWG Multimodal Data	ITxPT	Emmanuel de Verdalle
4.4	SWG Metadata	DE-BASt	Peter Lubrich
5	National Bodies and compliance assessment	AT-ATE	Damaris Gruber



2.5. S.1 Time planning for 2022

Tasks and Work Items	Task Leads	(Milestone number and) Date	Target achievement/ Outcome	Contributing partners	2022															
Task S.1.1: Project management and controlling, quality and risk management					1st quarter			2nd quarter			3rd quarter			4th quarter						
Work Item S.1.1.1: Financial Reporting	DE-BAST	MS.1.16 2/22 MS.1.17 2/23	Financial Statements	all	x	x	x								x	x	x			
Work Item S.1.1.2: NAPCORE Project Management	DE-BAST	Throughout MS.1.8 3/23	QRM Plan	-	x	x	x	x	x	x	x	x	x	x	x	x	x			
Work Item S.1.1.3: Progress reporting	DE-BAST	MS.1.4 2/22 MS.1.5 2/23	Project Progress Reports	all	x	x	x								x	x	x			
Work Item S.1.1.4: Creation of the consolidated NAPCORE Working Programme	DE-BAST	MS.1.2 12/22	Working Programme	all											x	x	x			
Task S.1.2: Single-Point-of-Contact for the European Commission					1st quarter			2nd quarter			3rd quarter			4th quarter						
Work Item S.1.2.1: Communications with the European Commission	DE-BAST	throughout	Feedback from EC	AT-ATE	x	x	x	x	x	x	x	x	x	x	x	x	x			
Work Item S.1.2.2: Preparation of content for Project Progress Report	DE-BAST	MS.1.9 2/23	Chapter on communication with the EC	AT-ATE													x			
Task S.1.3: Internal alignment					1st quarter			2nd quarter			3rd quarter			4th quarter						
Work Item S.1.3.1: Core Alignment Team Meetings	DE-BAST	throughout	Meeting minutes, assigned task lists	AT-ATE, NL, IT, PT-IMT, GR, FR, NL, ERTICO, ITxPT	x	x	x	x	x	x	x	x	x	x	x	x	x			
Work Item S.1.3.2: Preparation of Core Alignment Team content for Project Progress Report	DE-BAST	MS.1.4 2/22 MS.1.5 2/23	Chapter on CAT activities for Project Progress Report	AT-ATE, NL, IT, PT-IMT, GR, FR, NL, ERTICO, ITxPT	x	x											x			



3. Horizontal Activity H.1 “Steering Committee Support (SCS)”

3.1. Scope of the Activity for 2022

3.1.1. Main objectives of the Activity

The Activity supports the Steering Committee, as the main decision body of NAPCORE, in all of its Tasks in order to achieve harmonised Steering Committee Members decisions.

Furthermore, the Activity will set up and manage the Advisory Board, which should provide extra non-binding strategic advice and expertise.

3.1.2. Milestones

Note to Milestone MH.1.3: In the Grant Agreement the indicative date of completion is 03/2022. As currently a delay is expected, the new date of completion is set to 05/2022.

MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification	External Milestone
MH.1.1	H.1.1	Steering Committee Meeting	09/2021	Steering Committee Meeting minutes	
MH.1.2	H.1.1	Steering Committee Meeting	12/2021	Steering Committee Meeting Minutes	X
MH.1.3	H.1.3	Advisory Board is set up	05/2022	Advisory Board approved by Steering Committee	X
MH.1.4	H.1.1	Steering Committee Meeting	06/2022	Steering Committee Meeting minutes	X
MH.1.5	H.1.1	Steering Committee Meeting	12/2022	Steering Committee Meeting minutes	X
MH.1.6	H.1.2	Mid-term report on strategic exchange, cooperation or collaboration with externals and identification of further recommendations	12/2022	Report available and approved by Steering Committee	X

3.1.3. Time plan

Task	2021												2022												2023												2024																							
	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12															
H.1.1	MH.1.1 🔴 MH.1.2 🔴												MH.1.4 🔴												MH.1.5 🔴												MH.1.7 🔴 MH.1.8 🔴												MH.1.9 🔴 MH.1.11 🔴											
H.1.2																									MH.1.6 🔴																								MH.1.10 🔴											
H.1.3													MH.1.3 🔴																																															

3.1.4. Active/ following partners

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	HE	UITP
L	F		F	F	F	A	F	F	F		
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
A	A	F	A	F	F	F	A	F	F		
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
F	A	F	F	F	F		F	F	F		

L = activity/ task leader, A = active contributor/ partner, F = follower



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3.1.5. Responsibilities

- (1) Activity/ task leader = AT-Deputy General Secretary (AustriaTech):
 - Leading the activity and the individual tasks
 - Representing H.1 in CAT
 - Responsible for management, task and milestone fulfilment
- (2) Active contributor/ partner = DE, CZ, FR, GR, IT & NL:
 - Support H.1
 - Co-working for H1.2 & H1.3 and taking over specific responsibilities
 - Review of/ discussion on decision points
 - Support setting up the Advisory Board
- (3) Follower
 - Act as interface and support between the national SC Member and H.1
 - Limited participation
 - Reviewing of documents
 - Attendance in selected virtual meetings

3.2. Task H.1.1 Operational support for Steering Committee

3.2.1. Main objectives of the Task

Task H.1.1 encompasses the management of the Steering Committee in terms of the members list, as well as setting up and managing the Terms of Reference and monitoring their fulfilment/ adherence. Beyond that, it consists of the preparation of decision points, the support of the execution and post-preparation of Steering Committee meetings in close cooperation with the chairperson. This also includes to take-up follow-up actions requested by the Steering Committee.

Note: The Milestones within Task H.1.1 are the Steering Committee Meetings themselves. Within the Grant Agreement at least two Steering Committee Meetings are fixed per year, but four are intended (virtual or physical). Therefore, some Steering Committee Meetings have no Milestone number.

3.2.2. Dependencies and external relations

Dependencies with the Core Alignment Team (CAT): Activity/ WG/ SubWG-Leaders bring/ propose decision points and supporting documents, which will be discussed and strategically aligned with NAPCORE objectives, before going into H.1.



Working programme 2022



3.2.3. Work Programme 2022

Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2022											
										1	2	3	4	5	6	7	8	9	10	11	12
										1st quarter	2nd quarter	3rd quarter	4th quarter								
H1.1	2nd NAPCORE Steering Committee Meeting	Discussion and strategic alignment on all decision points in the CAT	CAT	AT	MH1.2	Steering Committee Meeting	Approved decision points and supporting documents for the 2nd SCOM	09.11.2021	16.11.2021												
		Elaboration of agenda as well as preparation of decision points and supporting documents	H1 Active Partners; NAPCORE Chairperson	AT	MH1.2	Steering Committee Meeting	Draft agenda, decision points and supporting documents for the 2nd SCOM	18.11.2021	29.11.2021												
		Send out agenda and decision points to SCOM	Steering Committee Members; CAT	AT	MH1.2	Steering Committee Meeting			29.11.2021												
		2nd NAPCORE Steering Committee Meeting	Steering Committee Members; CAT	AT; NAPCORE Chairperson	MH1.2	Steering Committee Meeting	Decision on all points		14.12.2021												
		Elaboration of minutes	NAPCORE Chairperson	AT	MH1.2	Steering Committee Meeting	Send out of elaborated meeting minutes	14.12.2021	01.01.2022												
		Approval of meeting minutes	Steering Committee Members	AT	MH1.2	Steering Committee Meeting	Steering Committee Meeting minutes are approved	01.01.2022	14.01.2022												
	3rd NAPCORE Steering Committee Meeting (physical)	Organisation of a physical Steering Committee Meeting: location, equipment, catering and local contact person	Contact person from H1 Active Partners as organisational support	AT	No MS # in GA		Location with the necessary equipment for the execution of the Steering Committee meeting is organised	01.12.2021	09.03.2022												
		Discussion and strategic alignment on all decision points in the CAT	CAT	AT	No MS # in GA		Approved decision points and supporting documents for the 3rd SCOM	01.02.2022	08.02.2022												
		Elaboration of agenda as well as preparation of decision points and supporting documents	H1 Active Partners; NAPCORE Chairperson	AT	No MS # in GA		Draft agenda, decision points and supporting documents for the 3rd SCOM	10.02.2022	23.02.2022												
		Send out agenda and decision points to SCOM	NAPCORE Chairperson	AT	No MS # in GA				23.02.2022												
		3rd NAPCORE Steering Committee Meeting	Steering Committee Members; CAT	AT; NAPCORE Chairperson	No MS # in GA		Decision on all points		09.03.2022												
		Elaboration of minutes	NAPCORE Chairperson	AT	No MS # in GA		Send out of elaborated meeting minutes	09.03.2022	23.03.2022												
		Approval of meeting minutes	Steering Committee Members	AT	No MS # in GA		Steering Committee Meeting minutes are approved	23.03.2022	06.04.2022												
	4th NAPCORE Steering Committee Meeting	Discussion and strategic alignment on all decision points in the CAT	CAT	AT	MH1.4	Steering Committee Meeting	Approved decision points and supporting documents for the 4th SCOM	17.05.2022	24.05.2022												
		Elaboration of agenda as well as preparation of decision points and supporting documents	H1 Active Partners; NAPCORE Chairperson	AT	MH1.4	Steering Committee Meeting	Draft agenda, decision points and supporting documents for the 4th SCOM	27.05.2022	07.06.2022												
		Send out agenda and decision points to SCOM	NAPCORE Chairperson	AT	MH1.4	Steering Committee Meeting			07.06.2022												
		4th NAPCORE Steering Committee Meeting	Steering Committee Members; CAT	AT; NAPCORE Chairperson	MH1.4	Steering Committee Meeting	Decision on all points		21.06.2022												
		Elaboration of minutes	NAPCORE Chairperson	AT	MH1.4	Steering Committee Meeting	Send out of elaborated meeting minutes	21.06.2022	05.07.2022												
		Approval of meeting minutes	Steering Committee Members	AT	MH1.4	Steering Committee Meeting	Steering Committee Meeting minutes are approved	05.07.2022	19.07.2022												
	5th NAPCORE Steering Committee Meeting (physical)	Organisation of a physical Steering Committee Meeting: location, equipment, catering and local contact person	Contact person from H1 Active Partners as organisational support	AT	No MS # in GA		Location with the necessary equipment for the execution of the Steering Committee meeting is organised	01.07.2022	27.09.2022												
		Discussion and strategic alignment on all decision points in the CAT	CAT	AT	No MS # in GA		Approved decision points and supporting documents for the 5th SCOM	23.08.2022	30.08.2022												
		Elaboration of agenda as well as preparation of decision points and supporting documents	H1 Active Partners; NAPCORE Chairperson	AT	No MS # in GA		Draft agenda, decision points and supporting documents for the 5th SCOM	02.09.2022	13.09.2022												
		Send out agenda and decision points to SCOM	NAPCORE Chairperson	AT	No MS # in GA				13.09.2022												
		5th NAPCORE Steering Committee Meeting	Steering Committee Members; CAT	AT; NAPCORE Chairperson	No MS # in GA		Decision on all points		27.09.2022												
		Elaboration of minutes	NAPCORE Chairperson	AT	No MS # in GA		Send out of elaborated meeting minutes	27.09.2022	11.10.2022												
		Approval of meeting minutes	Steering Committee Members	AT	No MS # in GA		Steering Committee Meeting minutes are approved	11.10.2022	25.10.2022												
	6th NAPCORE Steering Committee Meeting	Discussion and strategic alignment on all decision points in the CAT	CAT	AT	MH1.5	Steering Committee Meeting	Approved decision points and supporting documents for the 6th SCOM	08.11.2022	15.11.2022												
		Elaboration of agenda as well as preparation of decision points and supporting documents	H1 Active Partners; NAPCORE Chairperson	AT	MH1.5	Steering Committee Meeting	Draft agenda, decision points and supporting documents for the 6th SCOM	18.11.2022	30.11.2022												
		Send out agenda and decision points to SCOM	NAPCORE Chairperson	AT	MH1.5	Steering Committee Meeting			30.11.2022												
		6th NAPCORE Steering Committee Meeting	Steering Committee Members; CAT	AT; NAPCORE Chairperson	MH1.5	Steering Committee Meeting	Decision on all points		14.12.2022												
		Elaboration of minutes	NAPCORE Chairperson	AT	MH1.5	Steering Committee Meeting	Send out of elaborated meeting minutes	14.12.2022	01.01.2023												
		Approval of meeting minutes	Steering Committee Members	AT	MH1.5	Steering Committee Meeting	Steering Committee Meeting minutes are approved	01.01.2023	14.01.2023												



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3.3. Task H.1.2 Strategic support for the Steering Committee

3.3.1. Main objectives of the Task

Interaction with relevant stakeholders (projects, platforms and associations, as well as relevant individual companies) on behalf of the Steering Committee and preparing necessary cooperation agreements or deals in this regard.

Activity H.1 will also prepare and support the exchange and the discussions between the Steering Committee and the Advisory Board.

3.3.2. Dependencies and external relations

- In cooperation with the General Secretary engage with different stakeholders on behalf of the Steering Committee or represent the Steering Committee on requested occasions.
- Relations with WG 1:
 - Preparation of harmonised Steering Committee inputs for the EC in cooperation with WG1.
 - Support of WG1 in the development of a long-term governance structure for NAP/ NB platform.



3.3.3. Work Programme 2022

Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2022											
										1	2	3	4	5	6	7	8	9	10	11	12
										1st quarter			2nd quarter			3rd quarter			4th quarter		
H.1.2	Setting up cooperation agreements	Identify suitable links to relevant stakeholders	H.1 Active Partners	AT	Input to MH.1.6			Continuous task													
		Get in contact with the related stakeholders and discuss possible content of a cooperation agreement	H.1 Active Partners	AT	Input to MH.1.6			Continuous task													
		Set up cooperation agreements		AT	Input to MH.1.6			Continuous task													
		Signature process		AT	Input to MH.1.6			Continuous task													
	Engage/mobilise external relationships	Identify opportunities for engagement with relevant stakeholders on behalf of the SCOM	H.1 Active Partners	AT	Input to MH.1.6			Continuous task													
		Support the organisation and preparation of engagements with relevant stakeholders and the Advisory Board		AT	Input to MH.1.6			Continuous task													
	Mid-term report on strategic exchange, cooperation or collaboration with externals and identification of further recommendations	Collect the activities of the other subtasks		AT	MH.1.6																
		Identify recommendations for the engagement of the Steering Committee with externals	H.1 Active Partners	AT	MH.1.6		Recommendations for the engagement of the Steering Committee with externals														
		Create a template with the structure of MH.1.6		AT	MH.1.6		Template with the structure of MH.1.6														
		Write the MH.1.6 report		AT	MH.1.6		MH.1.6 report														
	Preparing Mid-term MH.1.6 report as decision point for the 6th Steering Committee Meeting	Discussion on mid-term MH.1.6 report as decision points in the CAT	CAT	AT	Input to MH.1.6		Approved mid-term MH.1.6 report as decision point for the 6th SCOM	08.11.2022	15.11.2022												
		Elaboration of mid-term MH.1.6 report as decision point	H.1 Active Partners; NAPCORE Chairperson	AT	Input to MH.1.6		Send out mid-term MH.1.6 report as decision points for the 6th SCOM	18.11.2022	30.11.2022												
		6th NAPCORE Steering Committee Meeting	Steering Committee Members	AT; NAPCORE Chairperson	Input to MH.1.6		Decision on mid-term MH.1.6 report		14.12.2022												
		Approval of meeting minutes and mid-term MH.1.6 report	Steering Committee Members	AT	Input to MH.1.6		Steering Committee Meeting minutes and mid-term MH.1.6 report approved	01.01.2023	14.01.2023												
	Mid-term MH.1.6 report finalised	Report available and approved by Steering Committee	Steering Committee Members	AT	MH.1.6	Mid-term report on strategic exchange, cooperation or collaboration with externals and identification of further recommendations			14.01.2023												

Note on MH.1.6 mid-term report: due to the decision process schedule of the 6th Steering Committee Meeting, the official approval will be in Q1/2023.



3.4. Task H.1.3 Setting up and management of the Advisory Board

3.4.1. Main objectives of the Task

Set up of the Advisory Board in order to advise the NAP/ NB platform in the definition of strategic objectives, business and technical aspects. The size and members of the Advisory Board will be defined in cooperation with the EU Commission services. Once the Advisory Board is set up, it will be supported by Activity H.1 for membership management, meeting organisation and preparation of minutes.

Note: As pointed out in the milestone overview, the new date of completion for MH.1.3. “Advisory Board is set up” is foreseen for 05/2022. Therefore, the activities within this task were adapted according to this new completion date.

3.4.2. Dependencies and external relations

- Coordination with EU Commission on composition and size of Advisory Board.



3.4.3. Work Programme 2022

Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2022												
										1	2	3	4	5	6	7	8	9	10	11	12	
										1st quarter			2nd quarter			3rd quarter			4th quarter			
H.1.3	Determination of requirements of the Advisory Board and list of potential members	Scan ITS Directive and Delegated Regulations on necessary sectors/geographical coverage for Advisory Board, in conjunction with scope of NAPCORE	H.1 Active Partners	AT	Input to MH.1.3		List of necessary sectors /geographical coverage for Advisory Board															
		Definition of requirements/tasks/expected advice of the Advisory Board (according to findings from ITS World Congress 2021 and coordination with EU Commission)	H.1 Active Partners	AT	Input to MH.1.3		Defined requirements/tasks/expected advice from the Advisory Board															
		Alignment and narrow down of sectors /geographical coverage and discussion on requirements for Advisory Board in the CAT	CAT	AT	Input to MH.1.3		Reconciled list sectors and geographical coverage for Advisory Board															
		Based on the received feedback a list of potential organisations/members from the reconciled sectors is elaborated.	H.1 Active Partners	AT	Input to MH.1.3		List of potential organisations/members per reconciled sector															
		Discussion on organisations/members of Advisory Board in the CAT	CAT	AT	Input to MH.1.3		Reconciled list of potential organisations/members per reconciled sector															
	Set up of Advisory Board	The size and members of the Advisory Board will be discussed with the EU Commission	EC, General Secretary	AT	Input to MH.1.3		EC approved list of organisations/members for the Advisory Board															
		Suitable candidates for the Advisory Board are going to be addressed properly	H.1	AT	Input to MH.1.3		Candidates for the Advisory Board are invited															
	Preparing Advisory Board members list as decision point for the 4th Steering Committee Meeting	Discussion and strategic alignment on Advisory Board as decision points in the CAT	CAT	AT	Input to MH.1.3		Approved list of Advisory Board members as decision point for the 4th SCOM	17.05.2022	24.05.2022													
		Elaboration of Advisory Board as decision point	H.1 Active Partners; NAPCORE Chairperson	AT	Input to MH.1.3		Send out members list of Advisory Board as decision points for the 4th SCOM	27.05.2022	07.06.2022													
		4th NAPCORE Steering Committee Meeting	Steering Committee Members	AT; NAPCORE Chairperson	Input to MH.1.3		Decision on Advisory Board		21.06.2022													
		Approval of meeting minutes and Advisory Board	Steering Committee Members	AT	Input to MH.1.3		Steering Committee Meeting minutes and Advisory Board are approved	05.07.2022	19.07.2022													
	Advisory Board is set up	Advisory Board approved by Steering Committee	Steering Committee Members	AT	MH.1.3	Advisory Board is set up			19.07.2022													



4. Horizontal Activity H.2 “Identification of actions needed”

4.1. Scope of the Activity for 2022

4.1.1. Main objectives of the Activity

The activity aims at reviewing all activities throughout the project runtime, identify missing elements and formulate recommendations for further action in the related ITS domain.

The activities described in the NAPCORE GA are based on past experiences of the project beneficiaries in deploying the Delegated Regulations A, B, C and E and mandatory National Access Points and Assessment Bodies. Well-known challenges and need for enhancements found their place in the current set of NAPCORE Activities and Working Groups.

However, it is safe to say that when executing the NAPCORE tasks, new findings will emerge that are not yet addressed within the NAPCORE project scope. These findings may arise from internal activities or have their origin outside due to the dynamic context the project is operating in. This Activity is responsible for identifying gaps and needs to be taken up in future activities (in or outside NAPCORE). The final result will be an addressed set of recommendations.

4.1.2. Milestones

Though this activity has independent Milestones, the results will be incorporated in the Projects’ Yearly Progress reporting.

Milestone	Description	Indicative date of completion	MOV
MH2.1	Actions needed and recommendations reported in Project Progress Report 2022	11/2022	Chapter in Project Progress Report 2022 submitted to Steering Committee
MH2.2	Actions needed and recommendations reported in Project Progress Report 2023	11/2023	Chapter in Project Progress Report 2023 submitted to Steering Committee
MH2.3	Actions needed and recommendations reported in Final Project Report	11/2024	Chapter in Final Project Report submitted to Steering Committee

4.1.3. Tasks

Task number	Task Description	Product
H2.1	Identification of gaps, or missing elements	Yearly “Actions needed” reports (2022, 2023, 2024)
H2.2	Recommendations for further action	Yearly “Recommendations” reports (2022, 2023, 2024)

Both tasks will be performed throughout the entire Project runtime, providing yearly reports in 2022, 2023 and 2024. These reports will be combined and incorporated as a chapter in the Projects’ Yearly Progress Reports.



4.1.4. Generic overview of partner participation

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	NH	UITP
A	F			F	F	A	F	F	F		F
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
A	F	A	A	F	F		A	A	F		F
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
F	L	F	F	F	A		A	F	F		

- 1 lead
- 10 active partners
- 18 following partners
- 8 not participating partners

More detailed participation levels per partner and task are given in the following chapters.

4.1.5. Generic time plan

Year/ Quarter	2021		2022				2023				2024			
Task	3	4	1	2	3	4	1	2	3	4	1	2	3	4
H.2.1		Work plan				MH2.1				MH2.2.				MH2.3
H.2.2		Work plan				MH2.1				MH2.2.				MH2.3

4.2. General H2 organisational structure and working mode

4.2.1. Approach

The Activity (H2) will be organised by the Activity leader together with two tasks leaders (Activity management team). The work will start by setting up a work plan (this plan), detailing the tasks and work items, identifying expected results, formulating a realistic time plan and allocation of responsibilities. The proposed work plan is expected to be approved by the SCOM meeting in December 2021.

For the managing of the Activity, ensuring the provision of the yearly results, a task-related meeting scheme will be set-up (see detailed planning). If necessary, the Activity leader will initiate additional meetings.

The related tasks will be organised by the Task leaders. Together with the allocated Active Partners this team will execute the work as stated in the work plan. The main job of both tasks is monitoring, identifying, analysing and concluding. Again, a task-related meeting scheme will be set-up (see detailed planning). When necessary, the task leader may decide to adapt the scheme.

In general, it is foreseen to have most meetings online. Physical meetings may be organised during the NAPCORE multi-day events.



4.2.2. Roles and descriptions

Activity H2 Leader: is responsible for the coordination of Activity H2, the organisation of the work and the timely production of results. This in cooperation with the Task Leaders. The Activity H2 leader ensures the set-up and execution of the work plan and supervise its execution, ensures the production of the yearly reports and preparation of the Milestone approvals by SCOM, coordinate the cooperation with related Activities and Working Groups and participate in the Core Alignment Team to ensure coordination of the interdependencies.

Task Leader: is responsible for the coordination of a specific task within this Activity. This in cooperation with the Activity H2 Leader and Active Partners. The task leader will ensure the organisation of the work and the timely production of results, ensure the collection and analysis of the relevant information, ensure the execution of the task related work programme and provide input to the yearly reports for the specific task.

Active partners: participate in all task meetings; comply to the organisation of the work as described in the work plan and provide input where responsible using their capacities and expertise, contribute to and review the yearly reports.

Following partners: are requested to observe the most important work results and be ready to review selected results or drafts at the direction of the Activity or task leader. Following partners are not expected to participate in the regular Activity/ task meetings. The Activity leader will organise dedicated bi-annual meetings to enable followers to monitor progress and contribute to the results.

4.3. Task 2.1 “Identification of gaps, or missing elements”

4.3.1. Main objectives of the Task

Working Groups and the Core Alignment Team will identify topics throughout the project runtime that are not (yet) covered by this project’s scope and yearly working programs or other, external parties and projects. These gaps could be NAP data content related, NAP interoperability related but also with regards to legislation, business models or funding needs. Another source for actions will come from outside of the project such as the revision of the ITS Directive and its Delegated Regulations, the Common European data space and funding programs. For this, external innovation monitoring and interaction with stakeholders and other Platforms needs to be a continuous effort to detect relevant developments that call for consideration and action.

4.3.2. Work programme

The expected main result of this task is a yearly document with a structured/ categorised list of topics and gaps to be addressed within NAPCORE or else.

It is proposed that this list is a living document that can continuously be adjusted in accordance with (future) findings. For this, a copy of the list will be easily accessible for all beneficiaries via the NAPCORE share-point.

The so-called “Master_list_Gaps” will be held and managed by the task leader. Related Milestones MH2.1/ 2.2/ 2.3 are based on the 1 September status of the Master_list_Gaps in each project year. This to ensure a timely start of task H2.2 to meet the Milestones deadline.

Also, in the first project year, it is not expected that substantial set of gaps are identified. This mainly because other WGs are also expected to be in their initial phases. Therefore, for the year 2022, it is



proposed to mainly focus on the creation of templates and the selection and structuring criteria. All gaps that pop-up in NAPCORE WGs, so from the internal inputs only, can then be listed and structured accordingly. Gap-identification activities from external sources will only be performed in 2023 and 2024.

During the work, new needs for work-items, or alternative approaches may pop-up. This will then be discussed and decided in the task and/ or activity meetings. Also, in the years 2023 and 2024 the created templates may be adjusted as seen fit.

Generic workflow task H2.1:

Inputs:	→	Actions:	→	Outputs:
Internal <ul style="list-style-type: none"> • WG 1: ongoing • WG 2: overview of gaps and actions needed (6/2022) • WG 3: Data content existing gaps (6/2022) • WG 3: data quality assessment report (3/2023) • WG 4: change requests (12/'21, '22, '23) • WG 4: Inventory future work/ net topics (12/'22, '23, '24) • WG 4: Report on gaps, overlaps standards for multimodal data exchange (11/'23) • WG 5: Strategies and actions to address (12/'22) • CAT meetings External <ul style="list-style-type: none"> • EU policy papers/ EU website • Mobility Data Space concepts and documents • Revised ITS Directive and DR's • Sustainable and Smart Mobility Strategy 2020 • European Data Strategy • H2020/ CEF funded projects • Other Platforms (CCAM, C-Roads, MaaS Alliance, ...) • other 	→	Actions: <ul style="list-style-type: none"> • Create template for the list of relevant internal and external sources and topics (Policy/ action, innovation, WG, relation to NAPCORE/ NAP/ NB also: relevance, stakes and stakeholders, contact persons) • Define "Gap" criteria • Define criteria for structuring/ categorising Gaps • Identify internal gaps (other WGs) • Identify gaps based on external sources (Meeting representatives from the EU Commission, Interview/ talk with relevant stakeholders (EC, Advisory board, MS etc.) • Create list of "Gaps" and structure them 	→	Outputs: <ul style="list-style-type: none"> • Template for listing relevant sources and topics • List of gap identification criteria (relevance, for who) • List of gap structuring criteria (priorities, recipient) • Yearly document with a structured/ categorised list of further topics and gaps to be addressed within NAPCORE and/ or else

4.3.3. Proposed overview of partner participation

For the year 2022 the following partners are responsible for the execution of the stated activities.

Task leader/ task	Active	Follower
2022: NL 2023: NL 2024: NL	AT, CZ, FR, DE-AB, GR, IT, LV, RO, SI	BE, HR, CY, DK, EE, FI, DE-Bast, GR-EG, HU, LT, LU, MT, PL, PT, ES, SE, UITP, ITxPT
Create template for the list of relevant internal and external sources and topics.	Task leader (NL) + AT + IT	-
Define "Gap" criteria	GR + RO	-
Define criteria for structuring/ categorising Gaps	CZ + LV	-
Identify/ monitor internal gaps (other WGs) <ul style="list-style-type: none"> monitor WG1 monitor WG2 monitor WG3 monitor WG4 monitor WG5 monitor CAT/ SCOM 	RO SI LV FR AT NL	-
Identify gaps based on external sources	n/a in 2022	-
Create list of "Gaps" and structure them	Task leader + AT, FR, CZ	
Review Gap list	All	All
Participate in task meetings	All	-
Participate in bi-annual progress meetings (combined task/ activity meeting)	All	All

4.3.4. Dependencies and external relations

The following Working Groups and teams will produce input for this task:

- WG 1: Ongoing
- WG 2: Overview of gaps and actions needed (6/2022)
- WG 3: Data content existing gaps (6/2022)
- WG 3: Data quality assessment report (3/2023)
- WG 4: Change requests (12/'21, '22, '23)
- WG 4: Masterclass program (6/'22, '23, '24)
- WG 4: Inventory future work/net topics (12/'22, '23, '24)
- WG 4: Report on gaps, overlaps standards for multimodal data exchange (11/'23)
- WG 5: Outcome of the Task 5.5. Continuous evaluation, progress monitoring and improvement of Compliance Assessment (yearly)

The timely production of these contributions lies with the responsible WG. The allocated participants monitor this production and will raise flags when necessary. In coordination with the CAT, it was decided that by WG identified Gaps are first brought to H2 for listing and structuring. The resulting overview will then be taken up in H2.2 and brought to the SCOM or CAT for final a decision.



Also, the SCOM and CAT meetings throughout the project may provide relevant input or the up-take of specific elements in this task. The Activity Leader will participate in the CAT meetings to ensure proper take-up when appropriate.

The results of this task form the input of task H2.2. This calls for a coordinated detailed planning for this Activity. In section 4 of this work plan this will be detailed.

4.4. Task 2.2 “Recommendations for further action”

4.4.1. Main objectives of the Task

Based on the information identified in H2.1, the topics will be evaluated and prioritised. Then recommendations will be formulated towards further actions that should be undertaken. Appropriate measures and action descriptions are generated and prepared for internal distribution back to the WGs or external stakeholders. These recommendations can cover a wide range of actions, for instance:

- **Proposals for new actions funded by the EC/ CINEA**
- Proposals for new regulations
- Proposals for new harmonisation activities
- Proposals for further research

Task H2.2 will consider alignment, confirmation and/ or endorsement of these proposal with/ from relevant stakeholders in order to avoid conflicting actions/ needs. It is not foreseen that H2.2 monitors follow-up.

4.4.2. Work programme

The expected main result of this task is a yearly document with a structured/ categorised list of formulated recommendations and actions, addressed to NAPCORE internal WG's and/ or external stakeholders. It is proposed that this list is a living document that can continuously be adjusted in accordance with (future) findings. For this, a copy of the list will be easily accessible for all beneficiaries via the NAPCORE SharePoint.

The so-called “Master_list_recommendations” will be held and managed by the task leader. Related Milestones MH2.1/ 2.2/ 2.3 are based on the 1 November status of the Master_list_recommendations in each project year. This to ensure proper take up in the Milestone approval process.

Also, in the first project year, it is not expected that a substantial set of gaps are identified. This mainly because other WGs are also expected to be in their initial phases. Therefore, the need for analysis will be limited.

Also, for the year 2022, it is proposed to mainly focus on analysing and structuring criteria. All the in H2.1 identified gaps can then be analysed. Based on the planning of task H2.1, external gap-analysis will only be performed in 2023 and 2024.

During the work, new needs for work-items, or alternative approaches may pop-up. This will then be discussed and decided in the task and/ or activity meetings. Also, in the years 2023 and 2024 the created criteria may be adjusted as seen fit.

Commented [CG(5)]: This should be aligned with corresponding calls, e.g. next CEF calls.

Commented [HT6R5]: Yes, indeed. It would be helpful if we would get an overview of timings/plans for those calls to be able to align. This would need to be on the agenda of our regular meetings.



Generic workflow task H2.2:

<u>Inputs:</u> <ul style="list-style-type: none"> Yearly document with a structured/ categorised list of further topics and gaps to be addressed within NAPCORE and/ or else (reference date 1 September) 	➔	<u>Actions:</u> <ul style="list-style-type: none"> Define criteria for analysing the identified “gaps” Analyse and assess the gaps and formulate appropriate recommendations and actions per gap Define criteria for categorising recommendations and actions Categorise appropriate recommendations and actions 	➔	<u>Outputs:</u> <ul style="list-style-type: none"> List of criteria for analysing gaps List of criteria for categorising recommendations and actions Yearly document with a structured/ categorised list of formulated recommendations and actions, addressed to NAPCORE internal WG’s and/ or external stakeholders.
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4.4.3. Proposed overview of partner participation

Task leader/task	Active	Follower
2022: DE-AB 2023: AT 2024: FR	AT, CZ, FR, DE-AB, GR, IT, LV, NL, RO, SI	BE, HR, CY, DK, EE, FI, DE-Bast, GR-EG, HU, LT, LU, MT, PL, PT, ES, SE, UITP, ITxPT
Define criteria for analysing the identified “gaps”	GR, RO	-
Analyse and assess the structured/ categorised gaps and formulate recommendations	Task leader + RO, SI, LV ...	-
Review appropriate recommendations and action per gap or category of gaps	All	All
Define criteria for categorising recommendations and actions	IT, NL	-
Categorise appropriate recommendations and actions and create yearly document with a structured/ categorised list of formulated recommendations and actions	Task leader + RO, SI, LV	-
Review Yearly document with a structured/ categorised list of formulated recommendations and actions	All	All
Participate in task meetings	All	-
Participate in bi-annual progress meetings (combined task/ activity)	All	All

4.4.4. Dependencies and external relations

The activities in this task are highly dependent on the production of results in task H2.1. It is because the basis of the H2.2 activities is the H2.1 List of structured/ categorised gaps to be addressed in the future. Furthermore, the production of the results in H2.1 is substantially dependent on the production of results of other WGs, which will only be available during summer (or even later) next year. It is therefore two deadlines are set: The H2.1 “Master_list_Gaps” dated 1 September, is the



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basis for the work in H2.2. Also, it was decided that the external sources are to be taken into account starting 2023.

The timely production of all relevant contributions lies at the responsible WG/ Task Leaders. The H2.2 task leader that monitors this will raise flags when necessary.



This project has received funding from the European Commission's Directorate General for Transport and Mobility under Grant Agreement no. MOVE/B4/SUB/2020-123/SI2.85223



4.5. Detailed planning

Because of the interdependencies with other WGs, we have to create an iterative process between all involved tasks. This means that the setting up of the templates, criteria for identifying, structuring, analysing and prioritising and search for sources already needs to be finished substantially in the first part of each year, allowing the listing, analysing, prioritising and formulating measures to take part in the second half of the year.

H2: Identification of action needed					
Active Partners	Level	Organisation Name of active partner or Implementing Body	Main Contact Name/ secondary contact name	Main Contact E-Mail Address	Main Contact Phone Number
DE-BAST	F	Bundesanstalt für Straßenwesen (BAST)	Timo Hoffmann	hoffmannt@bast.de	+49 2204 43-5506
DE-AB	A	Die Autobahn GmbH des Bundes	Stephanie Kleine	Stephanie.Kleine@autobahn.de	?
AT	A	AustriaTech	Damaris Gruber Martin Böhm Tobias Schleser Wolfgang Kernstock	damaris.gruber@austriatech.at Martin.boehm@austriatech.at Tobias.schleser@asfinag.at Wolfgang.kernstock@asfinag.at	+43 1 26 33 444-36
BE	F	Federal Public Service Mobility and Transport	Mélisa Blot	melisa.blot@mobilite.fgov.be	+32 2277 3171
HR	F	tbd.	tbd.	tbd.	tbd.
CY	F	University of Cyprus - The KIOS Research and Innovation Centre of Excellence (CY-KIOS)	Madiha Shahzad	shahzad.madiha@ucy.ac.cy	+357 977 01089
CZ	A	Ministry of Transport	Martin Pichl	martin.pichl@mdcr.cz	+420 225 131 395
DK	F	Danish Road Directorate	Christian von Huth	crvh@vd.dk	+45 7244 3499
EE	F	Estonian Transport Organisation	Teet Eomäe	Teet.Eomae@transpordiamet.ee	+372 5127947
FI	F	Traffic Management Company Fintraffic Ltd	Mika Ahvenainen	mika.ahvenainen@fintraffic.fi	+358 40 720 4393
FR	A	Ministère des transports	Estelle STURTZER	estelle.sturtzer@developpement-durable.gouv.fr	+33 6 50 70 14 21
GR	A	Centre for Research and Technology Hellas	Dr. Evangelos Mitsakis	emit@certh.gr	+30 2310498459





HU	F	Hungarian Public Roads	András Selmeczy	cef@kozut.hu	+36300194629
IT	A	Ministero delle infrastrutture e della mobilità sostenibili	Francesco De Vito	francesco.devito@mit.gov.it	+39 06 4412 6736
LV	A	Latvian State Roads	Boriss Jelisejevs	boriss.jelisejevs@lvceli.lv	+371 65071240
LT	F	Lithuanian road administration	Edmundas Zvirblis	edmundas.zvirblis@lakd.lt	+370 618 34 617
LU	F	Ministère de la Mobilité et des Travaux publics	Gil Georges	Gil.georges@mob.etat.lu	+352 247 84468
NL	L	National Road Data Portal	Tiffany Vlemmings	Tiffany.vlemmings@ndw.nu	+31652570841
MT	F	Authority for Transport in Malta	Laura Sue Mallia	laura-sue.mallia@transport.gov.mt	+356 25554565
MT	F	Authority for Transport in Malta	Emma Cassar	Emma.cassar@transport.gov.mt	+356 25554559
PL	F	tbd.	tbd.	tbd.	tbd.
PT	F	tbd.	tbd.	tbd.	tbd.
RO	A	National Company of Road Infrastructure Administration (NCRIA)	Lucian Ilina	lucian.ilina@andnet.ro	+40 767 983 396
SI	A	Ministry of infrastructure, Slovenia	Vesna Uršič-Krulej	vesna.ursic-krulej@gov.si	+386 1 478 8171
ES	F	Dirección General de Tráfico (DGT)	Marta Martínez Cámara	mmcamara@dgt.es	
SE	F	Swedish Transport Administration	Anna Johansson Jacques	anna.johansson-jacques@trafikverket.se	+46 10 1234 936
ITxPT	F	Information Technology for Public Transport	Emmanuel De Verdalle	emmanuel.de-verdalle@itxpt.org	+33 6 25 03 59 06
UITP	F	UITP	Daria Kuzmina	daria.kuzmina@uitp.org	+32 2 433 31 59

Commented [FE(7)]: To be replaced by whom?

Commented [HT8R7]: As of submission date of the WP this was still accurate. Currently NL is looking for the replacement. (At least) Temporarily this role will be filled by Ronald Jorna.

Commented [HT9R7]: The new lead for H.2 will likely be Annet van Veenendaal. Missing is a final confirmation by NL, which we expect any day now.

Commented [HT10R7]: Confirmed. In our internal lists this is updated of course.



5. Horizontal Activity H.3 “Dissemination, outreach activities, training”

5.1. Scope of the Activity

Activity H.3 covers the project’s dissemination and outreach activities, having the objective to make all achievements and results available to Member States and stakeholders inside and outside the Action, including the European Commission. This activity encompasses the dissemination of results, benefits, best practices and lessons learned with users, Member States and stakeholders via various channels such as a website, social media, newsletters, digital materials as well as the participation and organisation of relevant events. Of note, three multi-day events (in 2022, 2023 and 2024) will be organised to disseminate the NAPCORE results and to enable the networking and cooperation with stakeholders and the community.

Further, in support to the Working Groups, the Activity H3 provides an active support for the operational level, through the organisation of trainings, tutorial and didactical advice dedicated to experts and/ or users using virtual courses or on-site trainings.

5.1.1. Main objectives of the activity

The main objectives for H3 “Dissemination, outreach activities, training” are:

- “inform on the project” so that NAPCORE can be “recognisable” by the NAP community as well as by external stakeholders
- promote and highlight exhaustively on outcomes and achievements
- identify and develop appropriate communication tools (website, newsletters, brochures etc)
- establish a link to other European initiatives and organisations/ stakeholders
- identify and improve relationship and communication with external stakeholders
- improve internal communication
- enable NAP users to use NAPs and their data by offering trainings and dedicated workshops

5.1.2. Overview of milestones for 2022

Compared with the list of milestones in the description of the Action in the Grant Agreement, there is a slight change in the milestones deadline: MH.3.2 from 02/2022 to 04/2022, MH.3.3 from 05/2022 to 11/2022 and MH.3.4 from 05/2023 to 11/2023.

MS number	Milestone	Date
MH.3.1	Communication plan	3/2022
MH.3.2	Website goes live	4/2022
MH.3.3	First NAPCORE Multi-Day Event	11/2022
MH.3.4	Second NAPCORE Multi-Day Event	11/2023
MH.3.5	Final NAPCORE Multi-Day Event	11/2024
MH.3.6	Outreach and Training Plan	3/2022
MH.3.7	2022 Dissemination activity report (separate or as part of project progress report)	11/2022
MH.3.8	2023 Dissemination activity report (separate or as part of project progress report)	11/2023
MH.3.9	2024 Dissemination activity report (separate or as part of project progress report)	12/2024

The description of the milestones can be found in the corresponding task and work item descriptions working towards the milestones.



5.1.3. Tasks

H.3 will have three tasks:

Task number	Task	Responsible for MS
Task H.3.1	Dissemination	MH.3.1 MH.3.2 MH.3.7 MH.3.8 MH.3.9
Task H.3.2	Events	MH.3.3 MH.3.4 MH.3.5
Task H.3.3	Training and user support	MH.3.6

For 2022:

- Task H.3.1 will work to complete and reach the Milestones MH3.1, MH3.2 and MH.3.7.
- Task H.3.2 will work to complete and reach Milestone MH.3.3.
- Task H.3.3 will work to complete and reach Milestone MH.3.6.

5.1.4. Overview of partner participation

A dedicated team, to work on communication strategies, to reflect on the effective communication tools and to prepare the participation in events, is needed to guarantee the distribution of information and project results for a large Action like NAPCORE.

So, participants and their role in H3 Activity are reported in the table:

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	NH	UITP
F	F			A	A	A	F	F	F		A
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
A	A	F	A	F	A		L	F	F		A
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
F	A	A	F	F	A	F	A	F	F	F	

More detailed participation levels per partner and task are given in the following chapters.

5.1.5. General H.3 organisational structure and working mode

The role of the LEADER consists of:

- managing H.3 Activity and coordinating all actions
- representing the group during Steering Committee
- being responsible for the accomplishment of tasks H.3.1 – H.3.2 and H.3.3
- being responsible for the achievement of the milestones fixed
- being the first contact for any questions concerning H3 topics



Together with the leader of the Activity, ACTIVE partners act supporting H.3:

- planning and developing tasks H.3.1 – H.3.2 and H.3.3
- achieving the Milestones fixed

FOLLOWER participants will be able to participate in the activities in a limited fashion, e.g. reviewing and commenting documents or attending selected virtual meetings.

5.2. Task H.3.1 “Dissemination”

All dissemination activities, also concerning events and trainings, are covered by this task. A comprehensive communication plan is developed to define the communication channels and to plan main products and their timeline. This will include a website (regular, portal, wiki...), social media channels, newsletters, digital documents (as brochures and promotional flyers), articles on professional newspapers and magazines or other.

Dissemination reports will be created yearly to report on all dissemination activities and on the main progresses in collaboration with WGs.

5.2.1. Work Items

Work Item H.3.1.1: Communication plan

<u>Inputs:</u> <ul style="list-style-type: none"> • Communication Plan 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • Focus in the text all the activities to develop • Consider and report all main topics involved in the activity • Collection of contributions from partners • Individuation of roles per task in relation to the participation in H3 – Active or Follower • Set deadlines for every milestone • Mention possible social media tools to be used 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • NAPCORE Communication Plan and following update
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Work Item H.3.1.2: Website

<u>Inputs:</u> <ul style="list-style-type: none"> • Website goes live 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • List the dissemination materials to be possibly used as: press releases, articles on magazines, newsletters etc • Provide information on NAPCORE events and workshops • Mention links to other European projects 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • NAPCORE Website online
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	<ul style="list-style-type: none"> • Public deliverables • Report useful links • Complete calendar of official project events or project related events 	
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Work Item H.3.1.3: Social Media

<u>Inputs:</u> <ul style="list-style-type: none"> • LinkedIn • YouTube • Twitter (tbc) 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • Produce contents to be spread • Share links to articles, posts or videos • Inform on webinars, events, achievements and all kind of news that could be of interest for the group 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • Launch of social media • Dissemination through these tools about the work achieved by partners related to the Action • Information on possible webinars/ conferences
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Work Item H.3.1.4: Other dissemination

<u>Inputs:</u> <ul style="list-style-type: none"> • Digital brochures • Newsletters • Articles in magazines 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • Provide a synthesis of the achieved results in a user-friendly language • Creation of a brochure template • Publication and wide dissemination of a newsletter three times a year (depending on the activities carried out in the Action and on key events for example) • Preparation of specific technical papers and/ or interviews on the NAPCORE project and its developments, which could be published in specialised international magazines • Translation in English language of publications on national magazines, provided from the involved Beneficiary • Creation, on the NAPCORE Website, of a devoted section with a collection of published papers 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • 2022 Dissemination activity report • Disseminate the most important elements and achievements of the project • Structures to be used, if requested, by all Member States to translate and customize the digital brochures and to inform the stakeholders in their country about their national NAP initiatives • Provide digital news on the progress of the project and on relevant common initiatives • Spread information on European and Worldwide initiatives concerning NAPs • Highlight the main information and achievements of the project
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5.2.2. Dependencies and external relations

Concerning the cooperation and interaction with other Working Groups, H.3.1 Activity is connected with:

- H.1 Steering Committee Support (SCS) – cooperation with H.3 for Newsletters
- WG.1 – interconnection for outreach activity and dissemination towards stakeholders
- WG.5 – H.3 will support the group as communication experts
- CEREMA for the dissemination
- WG leaders CAT – providing suggestions to H.3.

5.2.3. Partner participation

Partner	Role	Responsible person	Contribution
Italy	Task Leader	Francesco De Vito	
Hungary	A	András Selmeczy	Written brochure or web-based articles, social media posts
Cyprus	A	Madiha Shahzad	Preparation of papers on different EU and other conferences
Czech Republic	A	Petr Bureš	Active preparation of the printed material leaflet / brochures content, graphical design.
ITxPT	A	Anastasia Founta	Revision of relevant documents and proposition of some ideas Coordination with DATA4PT social media, website, wiki page
Romania	A	Andreea VOICU	Feedback on brochure/ flyer content and graphical design Input to the graphical design for newsletters and content Input to the NAPCORE website design and content Updating the YouTube channel
Germany (BAST)	A	Timo Hoffmann	Preparation of papers and presentations for various conferences Preparation of articles in magazines or other publications Review of prepared material before dissemination Creation of NAPCORE video
Belgium	F	Mélisa Blot	Work of editing (for both printed and digital media)
UITP	A	Charlotte van Hek	Feedback on content and/ or design Revision of relevant documents and proposition of some ideas Coordination with DATA4PT social media and website
Greece	A	Evangelos Mitsakis	Writing a digital brochure or a flyer Contribution to documents, as the Training Plan Contribution to the update of website content
Croatia	A	Irena Čačić	Creating NAPCORE posts on social media (LinkedIn), Contributing to editing the NAPCORE website

5.3. Task H.3.2 “Events”

Both the participation in relevant industry and stakeholder events as well as the organisation and management of own events will be covered by this task. The goal is to ensure interaction with stakeholders, experts, data providers, data users and related communities to create and keep open an information channel in both directions: in and out.

The PSA plans to organise multi-day physical (or virtual depending on possible future COVID-related travel and meeting restrictions) events that cover project meetings, conference sessions, industry/ community workshops, trainings and more.



5.3.1. Work Items

Work Item H.3.2.1: NAPCORE Multi-Day Events

Inputs: <ul style="list-style-type: none"> • First NAPCORE Multi-Day Event 	➔	Actions: <ul style="list-style-type: none"> • Organisation of the event, planning sessions • Present the results so far achieved • Take a glance into the future • Discuss current and future policies concerning the strategies promoted by the European Commission 	➔	Outputs: <ul style="list-style-type: none"> • Proceedings of the event: publication, articles, highlights, news • Share experiences and good practices, together with external stakeholders, to reinforce European cooperation
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Work Item H.3.2.2: Other events

Inputs: <ul style="list-style-type: none"> • Organisation and management of own events • Attending industry and stakeholder conferences 	➔	Actions: <ul style="list-style-type: none"> • Organise project meetings, conference sessions, industry/ community workshops, trainings and more • Promote and present the project and the achievements 	➔	Outputs: <ul style="list-style-type: none"> • Ensure interaction with stakeholders, experts, data providers, data users and related communities to create and keep open an information channel in both directions: in and out.
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5.3.2. Dependencies and external relations

Concerning the cooperation and interaction with other Working Groups, H.3.2 Activity is connected with all Working Groups in relation to the organisation of events.

5.3.3. Partner participation

Partner	Role	Responsible person	Contribution
Italy	Co-Task Leader - A	Francesco De Vito	Hosting a multi-day event – November 2024
Hungary	Co-Task Leader - A	András Selmeczy	Hosting a multi-day event – November 2023 Hosting a meeting/ workshop
France	Co-Task Leader - A	French Ministry of Transport	Hosting a multi-day event - November 2022 Hosting the Datex II forum - November 22 (in collaboration with WG4.1) Hosting and organizing 3 trainings (together with WGs) concerning: <ol style="list-style-type: none"> 1. DATEX II 2. the discovery of NAPS for local authorities, 3. the sharing of open source tools for quality check of GTFS and the translation of GTFS to NETEX Help with adult education (Capacity building, Seminars for professionals)

Commented [CG(11)]: Nothing for TN-ITS?

Commented [HT12R11]: ERTICO as SWG4.1TN-ITS lead has no dedicated budget in H.3. However, TN-ITS will be, as basically _all_ other NAPCORE (S)WGs, considered and consulted when events are planned. So even if this is not specifically listed with an active member or as dedicated topic, it does not mean that TN-ITS is forgotten or will not be considered.

Commented [DF13R11]: A specific event for TN-ITS is not scheduled. New opportunities will be evaluated with SW4.2 Leader. Of course, we would be delighted to contribute to the realization of TN-ITS GO Final event.



Partner	Role	Responsible person	Contribution
ITxPT	A	Anastasia Founta	Organisation of sessions to present subWG4.3. results together with DATA4PT events Participation in international events/ conferences representing subWG4.3
Romania	A	Andreea VOICU	Growing the LinkedIn community after trainings and dissemination events/ post videos from YouTube Channel and inform about events
Germany (BAST)	A	Timo Hoffmann	Participation in international events/ conferences representing NAPCORE Organisation of sessions etc. during the multi-day events
UITP	A	Charlotte van Hek/ Daria Kuzmina	Participation in international events/ conferences representing NAPCORE Finding liaisons and promoting NAPCORE at UITP events
Greece	A	Evangelos Mitsakis	Hosting a physical meeting/ workshop/ training
Malta	A	Emma Cassar	Organise a technical workshop on NAP addressing local mobility service providers
Croatia	A	Irena Čačić	Hosting physical meeting/workshop – March 2023

5.4. Task H.3.3 “Training and user support”

The general goal of this task is to enable NAP users to use the NAPs and their data by offering specific (e.g. for novice user, for expert interface developers) trainings both in digital (via webinars) and physical modes. Support will be provided for specific trainings that WGs will develop for content providers (to access the NAP), NAPs and NBs themselves in order to disseminate best practices and harmonisation opportunities.

An outreach plan will define the concrete actions to be performed towards the following general objectives:

- Development of training concepts and a training plan for selected target groups together with Working Groups
- Organisation of trainings and workshops, together with the Working Groups
- Didactical settings of trainings
- Coordination of the platform experts in adapting consolidated training tools to national conditions/ language and in the execution of trainings at national level
- Training of the trainer and industry experts to build up expertise across Europe
- Adaptation of trainings according to on-going and consolidated experiences of pan-European trainings (feedback from experts and users)
- The “content” of the trainings will be developed by the Working Groups.

5.4.1. Work Items

Work Item H.3.3.1: Training Concept

Inputs: <ul style="list-style-type: none"> • Training plan 	➔	Actions: <ul style="list-style-type: none"> • Planning and organisation of trainings and workshops, together with the Working Groups • Didactical settings of trainings 	➔	Outputs: <ul style="list-style-type: none"> • Outreach and Training Plan (MH.3.6)
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Commented [FE(14)]: Which NAP or NAP-type? As they can be very different...

Commented [HT15R14]: Indeed, and the training will need to consider this. How exactly is not clear yet but will be once the more detailed planning will be conducted.

Commented [DF16R14]: NAPs under Del.Reg. 885, 886, 962 and 1926.



		<ul style="list-style-type: none"> • Organisation podcast/ YouTube training facilities 	
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Work Item H.3.3.2: Training Management

<u>Inputs:</u> <ul style="list-style-type: none"> • Training organisation 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • Establishing trainings and master classes • Development of training concepts and a training plan for selected target groups together with Working Groups 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • Development of a series of training during the action
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5.4.2. Dependencies and external relations

Concerning the cooperation and interaction with other Working Groups, H.3.3 Activity is connected with:

- WG.3 – task 3.5 concerns the development of training material and the execution of training events
- WG.4 – collaboration for the organisation of trainings
- CEREMA for NAP training course

5.4.3. Partner participation

Partner	Role	Responsible person	Contribution
NL	Task Leader - A	Michelle Fransen	Organizing the DATEX II trainings and master classes Development of training concepts and a training plan for selected target groups together with Working Groups Organisation of trainings and workshops, together with the Working Groups Didactical settings of trainings Organisation podcast/ YouTube training facilities Planning trainings together with other Groups
Romania	A	Lucian ILINA	Hosting a physical meeting or workshop/ training
Hungary	A	András Selmeczy	Contribution for Training and user support
Cyprus	A	Madiha Shahzad	Contribution for training and user support Support the organization for NAP training and workshops/webinars
Czech Republic	A	Petr Bureš	Support for the training organisation
ITxPT	A	Anastasia Founta	Development of training concepts and training plan about subWG4.3 Support to the organisation of the trainings and workshops and management of the training material concerning subWG 4.3
Germany (BAST)	A	Timo Hoffmann	Development of overarching training concepts Contribution for training and user support
UITP	A	Daria Kuzmina	Coordination with Data4PT Co-organisation of subWG4.3 trainings and workshops
Greece	A	Evangelos Mitsakis	Organisation of a training or workshop
Croatia	A	Irena Čačić	Organizing workshops and trainings for local stakeholders and authorities

Commented [CG(17)]: Nothing on TN-ITS?

Commented [DF18R17]: realization of TN-ITS trainings and master classes is being discussed with SW4.2 Leader.

Commented [FE(19)]: 4.3?

Commented [HT20R19]: yes. Typo.

Commented [DF21R19]: Yes, sorry.



5.5. H.3 Time planning for 2022

Tasks and Work Items	Task Leads	(Milestone number and) Date	Target achievement/ Outcome	Contributing partners	2022							
Task H.3.1:					1st quarter		2nd quarter		3rd quarter		4th quarter	
Communication plan	Italy	MH.3.1 12/2021	NAPCORE Communication Plan	See Partner participation	x							
Website goes live	Italy	MH.3.2 4/2022	NAPCORE Website online	See Partner participation	x	x	x	x				
2022 Dissemination activity report (separate or as part of project progress report)	Italy	MH.3.7 11/2022	Drafting of report on Dissemination activity	See Partner participation							x	x
Task H.3.2:					1st quarter		2nd quarter		3rd quarter		4th quarter	
First NAPCORE Multi-Day Event	France	MH3.3 11/2022	<ul style="list-style-type: none"> Share experiences and good practices, together with external stakeholders, to reinforce European cooperation Proceedings of the event: publication, articles, highlights, news 	See Partner participation			x	x	x	x	x	x
Task H.3.3:					1st quarter		2nd quarter		3rd quarter		4th quarter	
Outreach and Training Plan	The Netherlands	MH3.6 03/2022	Outreach and Training Plan (MH.3.6)	See Partner participation	x	x	x					



6. Working Group 1 “NAP & NB platform strategy and governance”

6.1. Scope of the Working Group

6.1.1. Main objectives of the activity

WG 1 is dealing with all issues concerning the long-term set up of the National Access Points and National Bodies harmonisation as well as with considering foreseeable future and upcoming requirements, challenges or developments that NAPs and NBs will face. The NAPs and NBs need to reflect on recent and future developments having implications on either their scope, functionality or operational level. Moreover, the position and role of the NAPs/ NBs in European policies will be analysed and the embedding within relevant policies will be promoted. Additionally, the strategy of the NAP/ NB platform concerning other mobility data related players as well as within the European Mobility Data Space will be developed.

6.1.2. Milestones

Compared with the list of milestones in the description of the action in the Grant Agreement, there is a slight change in the milestone name of M1.2 from “Develop a common strategy and recommendations for long-term governance for cooperation with global players” to “Develop strategic position and a common strategy for cooperation with global players and related activities”. The work on the long-term governance will however be already started with Task 1.3 working towards milestone 1.3.

Commented [CG(22): Please explain why this change.

Commented [HT23R22]: During the first WG1 meeting all participating partners agreed, that it does make more sense to have one dedicated Milestone each for EU-related activities (M1.1), other activities/stakeholders (M1.2) and then the general long-term governance of the platform (M1.3). The way it was initially phrased in the GA was deemed as being too much overlapping and confusing. Even though we have now this clear focus of each MS, there will be close relations between them and the necessary alignment between them will be given.

MS number	Milestone	Date
M1.1	Develop strategic position and a common strategy for EU policies and developments	10/2022
M1.2*	Develop strategic position and a common strategy for cooperation with global players and related activities	10/2022
M1.3	Develop strategy and structure for future long-term governance of the NAP/ NB platform	12/2023
M1.4	Long-term governance structure is implemented	12/2024

The description of the milestones can be found in the corresponding task and work item descriptions working towards the milestones.

6.1.3. Tasks

WG1 will have three tasks:

Task number	Task	Responsible for MS
Task 1.1	Strategy towards EU policies and developments	M1.1
Task 1.2	Strategy towards stakeholders and activities (non-EU policy related)	M1.2
Task 1.3	NAPCORE Platform Self-governance	M1.3, M1.4

For 2022, Task 1.1 and Task 1.2 will work to complete and reach the milestones M1.1 and M1.2 respectively. Task 1.3 will start with a first work item, preparing M1.3 to be completed in 2023.



6.1.4. Overview of partner participation

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	NH	UITP
A	A		F	A	F	A	F	F	F		A
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
A	L		A		F	F	A	A	F	F	
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
A	A	F	A	A	A	F	F	A		A	F

More detailed participation levels per partner and task are given in the following chapters.

6.1.5. General WG1 organisational structure and working mode

Task Leaders:

Each of the tasks will be the responsibility of active partners of the WG: the Task Leaders. They will decide on the working mode, i.e. assign works to other WG partners, set-up meetings, check (interim) deadlines, edit and approve the outputs.

It is expected that the Task Leaders will report in the WG1 working meetings, giving a status on the progress, planned steps and potential bottlenecks.

Task members (active and followers):

All other WG 1 and task members will contribute to the progress of the individual Work Items, using their capacities and expertise, upon the request by the Task Leaders and/ or the WG Leader.

“A”ctive participation in the WG and its tasks denotes an activity level that entails active and continues participation in meetings and frequent and extensive contributions towards the WG and task goals.

“F”ollowers are requested to observe the most important work results and be ready to read and comment selected results or drafts. Following partners are welcome to join meetings of the WG or the individual tasks.

WG leader:

The WG Leader will supervise the individual outputs by the Work Items, and cooperate with the Task Leaders to ensure a smooth progress of the entire WG.

Meetings in 2022:

- It is foreseen to have virtual WG1 meetings at least once a month.
- Additional (virtual) WG1 and/ or task meetings can be organised.
- At least one physical meeting is foreseen in 2022 (possibly during the NAPCORE multi-day event)



6.2. Task 1.1 “Strategy towards EU policies and developments”

The NAPs and NBs need to take up recent and future developments on EC level having implications on either their scope, functionality or operational level. Additionally, in order to increase the importance of the NAPs and NBs they need to develop their strategic position towards EU policies and the European Mobility Data Space and should get involved properly. The results of the Task will be relevant for setting up the sustainable long-term governance structure (Task 1.3).

Specific focus will be laid on the revision of the ITS Directive and the related Delegated Regulations. New requirements, deriving thereof need to be considered and addressed during the duration of the NAPCORE as well as when planning for the long-term governance of the NAP/ NB platform.

Additionally, embedding the NAPs and NBs in EU policies like the Green Deal, European Data Strategy, Sustainable and Smart Mobility Strategy, etc. will increase the visibility and role of the NAPs in the EU mobility data policy. Therefore, the relevant EU policies should be identified and NAPCORE should contribute appropriately.

The NAP/ NB platform also needs to locate itself within the European Mobility Data Space. Hereto the key functions and benefits of the European Mobility Data Space will be collected, a possible ecosystem will be drafted and the potential role of the NAPs within this ecosystem will be defined.

The NAPs and National Bodies also should find a common way to approach related EU legislation like the INSPIRE directive, the PSI directive, GDPR or others.

While WG1 intends to finish with task 1.1 with a first common strategy towards EU policies and developments by September 2022, it is intended to revisit the task in 2023, to review and assess if adjustments in the strategy need to be made. Further information on how this will be planned and achieved will be documented in next year’s NAPCORE Working Programme 2023.

6.2.1. Work Items

Work Item 1.1.1: Create a prioritised list of current and future EU policies and developments to consider

Inputs:	→	Actions:	→	Outputs:
<ul style="list-style-type: none"> • EU website • Mobility Data Space Concepts and documents • ... 		<ul style="list-style-type: none"> • Create template for the list - not only of the development/ policy/ action, but also: relevance, stakes “why is this relevant for you as beneficiary/ partner”), players/ contact persons,... • Finding sources for relevant EU policies and developments (e.g. previous work by other projects or groups) • Meeting representatives from the EU Commission • Interview/ talk with stakeholders that are familiar with EU developments 		<ul style="list-style-type: none"> • Document with a structured and prioritised list of relevant EU policies and developments

Commented [FE(24)]: What does this mean concretely? Made aware? Or do they need to adapt to recent and future developments?

Commented [HT25R24]: Both: the NAPs and NBs need to be aware of them and if needed adapt to them (but with NAPCORE in a hopefully much more harmonized manner). Furthermore, “take up” also means something along the lines of: “..consider those developments and, if necessary, get involved to shape and adjust those developments as needed and as possible...”.



	<ul style="list-style-type: none"> • Advisory Board involvement • Seek MS input in relation to EU policies • Define criteria for prioritisation 		
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Work Item 1.1.2: Develop strategy options for NAPCORE

<u>Inputs:</u> <ul style="list-style-type: none"> • Output from Work Item 1.1.1 (list of relevant EU policies and developments) 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • Definition of Scope and Content of “strategy” • Discussion of benefits (and downsides), relevance, demand, necessity of a common strategy • Analysis of possible strategic options • Definition of approach on common strategy development • Finding communalities in the stakes/ relevance for the beneficiaries relating to specific developments => goals of NAPCORE for all partners (and explicit non-goals) • Analysing the benefits and downsides of the various options • Finding differences and similarities of goals from the EU Commission and the NAPs/ MS • Creation of an overview of challenges for policy deployment/ implementation in the MS 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • Set of various strategies or strategic scenarios • Overview of challenges related to the various EU policies and developments
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Work Item 1.1.3: Create first NAPCORE strategic plan for EU policies and developments

<u>Inputs:</u> <ul style="list-style-type: none"> • Output of Work Items 1.1.1 and 1.1.2 	➡	<u>Actions:</u> <ul style="list-style-type: none"> • Select challenges that can be tackled and benefits gained with/ using NAPCORE considering the communalities in the goals of the beneficiaries 	➡	<u>Outputs:</u> <ul style="list-style-type: none"> • NAPCORE strategic plan for EU policies and developments
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	<ul style="list-style-type: none"> Select the strategy options for the individual EU policies and developments 		
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6.2.2. Dependencies and external relations

Task 1.1 will be conducted in close cooperation with Horizontal Activity H.1 (Task H.1.2) in preparing strategic decision points for the Steering Committee and also forwarding the harmonised Steering Committee input to the EU Commission with regards to open consultation. Therefore, externally, this task will also require a strong connection to the EU Commission.

Another strong internal dependency is with Horizontal Activity H.2 (Identification of action needed) and a weaker connection with WG3 (Task 3.1: Data content requirements arising from current and future developments).

6.2.3. Partner participation

Task Group 1.1		
Role	Partner	Name
A	AT-ASFINAG	Tobias Schleser
A	AT-ASFINAG	Gottfried Allmer
A	AT-ASFINAG	Peter Meckel
A	AT-ATE	Damaris Anna Gruber
A	AT-ATE	Kalojan Daskalow
A	AT-ATE	Martin Böhm
A	BE	Mélisa Blot
A	CZ	Martin Pichl
A	CZ	Zoltán Horváth
A	CZ	Petr Bureš
A	DE-BAST	Timo Hoffmann
A	DK	Sine Dyreborg
A	GR	Maria Stavara
A	GR	Chrysostomos Mylonas
A	GR	Evangelos Mitsakis
A	NPRA	Kjell-Erik Eilertsen
A	NPRA	Mette Hendbukt
A	PT	Ricardo Tiago
A	RO	Irina Ionescu
A	RO	Adela Mihut
F	CY	Madiha Shahzad
F	DK	Charlotte Holstrøm
F	ES	Lina María Gaviria Orjuela
F	ES	Marta Martínez Cámara
F	FEDRO	Valentino Scarcia
F	LT-LAKD	Edmundas Zvirblis
F	MT	Laura Sue Mallia
F	MT	Emma Cassar
F	NL	Tiffany Vlemmings
F	PT	Daniela Carvalho
F	UITP	Daria Kuzmina



6.3. Task 1.2 “Strategy towards stakeholders and activities (non-EU policy related)”

This task will serve to monitor existing and upcoming projects, activities or initiatives in the mobility data and data exchange domain outside of the EU policy related activities, to consider or incorporate relevant or valuable results, via regular liaisons. Stakeholders within the NAP/ NB environment and their role will be identified. Additionally, specific focus will be set on the cooperation with global players and on the impacts of emerging technologies for delivering input to Task 1.3.

Global players in the mobility data area both public and private will be addressed concerning the availability and accessibility of mobility data (safety related data in particular) by jointly starting discussions to identify potential for cooperation.

Impacts of emerging technologies (e.g. AI, 5G, Big Data, linked open data...) and mobility concepts (e.g. CCAM, MaaS ...) will be analysed with regard to their influences on the NAP operation in order to set up a future-proof concept for the long-term NAP/ NB governance.



While WG1 intends to finish with task 1.2 with a first common strategy towards non-EU policy related stakeholders and activities by September 2022, it is intended to revisit the task in 2023, to review and assess if adjustments in the strategy need to be made. Further information on how this will be planned and achieved will be documented in next year’s NAPCORE Working Programme 2023.

6.3.1. Work Items



Work Item 1.2.1: Create a prioritised list of related stakeholders and activities to consider

<p><u>Inputs:</u></p> <ul style="list-style-type: none"> • Outcome from H.1 – Task.1.3.: Preselection list of important Sectors/ organisations for the Advisory Board • EU and non-EU projects and initiatives of different stakeholders (e.g., MaaSAlliance, UITP, MobilityData, Data for Road Safety, EU-EIP, etc) • Experiences from each country – which activities have been done and what has been successfully achieved. 	<p>➡</p> <p><u>Actions:</u></p> <ul style="list-style-type: none"> • Create template for the list - not only of the stakeholders and activities, but also: relevance, stakes “why is this relevant for you as beneficiary/ partner”), players/ contact persons, ... • Finding experiences/ contact persons for stakeholders and developments (e.g. previous work by other projects or groups) • Interview/ talk with stakeholders • Advisory Board/ expert group involvement • Seek MS input • Define criteria for prioritisation • Define stakeholder groups 	<p>➡</p> <p><u>Outputs:</u></p> <ul style="list-style-type: none"> • Document with a structured and prioritised list of relevant stakeholders, stakeholder groups and activities
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Work Item 1.2.2: Develop strategy options for NAPCORE

<u>Inputs:</u> <ul style="list-style-type: none"> • Output of Work Item 1.2.1 	 <u>Actions:</u> <ul style="list-style-type: none"> • Overview of challenges in NAP/ NB relations with stakeholders or stakeholder groups • Finding communalities in/ common areas of stakes/ relevance for the beneficiaries (relating to specific stakeholder groups) => goals of NAPCORE for all partners • Analysing the benefits and downsides of the various strategy options • Creation of an overview of possible strategies towards stakeholders 	 <u>Outputs:</u> <ul style="list-style-type: none"> • Set of various strategies or strategic scenarios • Overview of challenges/ benefits related to the various stakeholder groups or activities
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Work Item 1.2.3: Create first NAPCORE strategic plan towards stakeholders and activities

<u>Inputs:</u> <ul style="list-style-type: none"> • Output of Work Item 1.2.1 and 1.2.2 	 <u>Actions:</u> <ul style="list-style-type: none"> • Select challenges that can be tackled and benefits gained with/ using NAPCORE considering the communalities in the goals of the beneficiaries • Select the strategy options for the individual stakeholder groups and activities 	 <u>Outputs:</u> <ul style="list-style-type: none"> • NAPCORE strategic plan towards stakeholders and activities
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6.3.2. Dependencies and external relations

Several dependencies and external relations can be defined. NAPCORE-internally there is specifically:

- Horizontal Activity H.1 (Task H.1.3) from the process of setting up the Advisory Board will also serve to provide input on the identification of relevant stakeholders for Task 1.2.
- WG5
- For dissemination and outreach to external parties, H.3 will be another NAPCORE-internal relation/ connection.

Externally, this task requires a strong connection to the Advisory Board/ Expert Group as well as the stakeholder groups, that will be identified in Work Item 1.2.1.



6.3.3. Partner participation

Task Group 1.2		
Role	Partner	Name
A	BE	Mélisa Blot
A	DE-BAS	Timo Hoffmann
A	DK	Sine Dyreborg
A	ES	Marta Martínez Cámara
A	ES	Lina María Gaviria Orjuela
A	GR	Maria Stavara
A	GR	Chrysostomos Mylonas
A	GR	Evangelos Mitsakis
A	NL	Tiffany Vlemmings
A	RO-ITS	Mihai Niculescu
A	UITP	Daria Kuzmina
F	DK	Charlotte Holstrøm
F	FEDRO	Valentino Scarcia
F	FINTRAFFIC	Mika Ahvenainen
F	LT-LAKD	Edmundas Zvirblis
F	MT	Laura Sue Mallia
F	MT	Emma Cassar
F	NPRA	Kjell-Erik Eilertsen
F	NPRA	Mette Hendbukt
F	PT	Ricardo Tiago
F	PT	Daniela Carvalho

6.4. Task 1.3 “Future and sustainable governance structure of the NAP/ NB platform”

Based on the results of the Tasks 1.1 and 1.2, WG3 and in strong cooperation with Activity H.1 Steering Committee Support a future and sustainable long-term governance structure of the NAP/ NB platform will be developed. For this, the national needs and requirements concerning the long-term governance structure and national NAP/ NB strategies will be taken into consideration. New requirements and experiences, arising during the NAPCORE runtime will be considered properly and continuously reviewed. A strategic and operational implementation plan for harmonised European wide operation will be set up and will form the basis for the overall governance structure, considering future management, financing, membership opportunities and connection to external actors.

Within the set-up of the long-term governance structure, the demonstration of commitment and buy-in from all concerned stakeholders will be worked on in order to ensure the implementation of the Working Group results.

Key application areas, where NAPs will play a key role will be identified and new business models will be analysed in cooperation with WG3 and considered if appropriate, e.g. they meet the ethical criteria of the European strategy for data and AI: respect for personal data, user rights and digital sovereignty.

Task 1.3 is only starting in the end of 2022 with a preparatory work item (1.3.1). The main goal of task 1.3 (“ensuring a sustainable long-lasting platform self-governance”) will only be implemented and achieved in 2023 and 2024. Further information on the detailed work plan for this task will be detailed out in the NAPCORE Working Programme 2023.



6.4.1. Work Items

Work Item 1.3.1: Create draft of options for future, sustainable governance structure

Inputs: <ul style="list-style-type: none"> • Milestones 1.1 and 1.2.1 	➔	Actions: <ul style="list-style-type: none"> • Taking into consideration the strategic plans, come up with possible options for long-term self-governance • Benchmark/ review in other domains how similar challenges have been approached. 	➔	Outputs: <ul style="list-style-type: none"> • First draft of options for a future governance structure
---	---	---	---	--

6.4.2. Dependencies and external relations

The Advisory Board/ Expert Group will provide non-binding strategic advice on the different options for the development of a sustainable governance structure.

6.4.3. Partner participation

Task Group 1.3		
Role	Partner	Name
A	AT-ASFINAG	Tobias Schleser
A	AT-ASFINAG	Gottfried Allmer
A	AT-ASFINAG	Peter Meckel
A	AT-ATE	Damaris Anna Gruber
A	AT-ATE	Kalojan Daskalow
A	AT-ATE	Martin Böhm
A	CZ	Martin Pichl
A	CZ	Zoltán Horváth
A	DE-BAST	Timo Hoffmann
A	ES	Marta Martínez Cámara
A	ES	Lina María Gaviria Orjuela
A	GR	Maria Stavara
A	GR	Chrysostomos Mylonas
A	GR	Evangelos Mitsakis
A	NL	Tiffany Vlemmings
A	HR	Ivica Jujnović
A	HR-CESTE	Irena Čačić
A	RO - NCRIA	Carmen Petrișor
A	RO - NCRIA	Gabriel Radu
A	UITP	Daria Kuzmina
A	CZ	Petr Bureš
F	BE	Mélisa Blot
F	CY	Madiha Shahzad
F	DK	Thomas Bergstedt
F	FEDRO	Valentino Scarcia
F	FINTRAFFIC	Mika Ahvenainen
F	LT-LAKD	Edmundas Zvirblis
F	MT	Laura Sue Mallia
F	MT	Emma Cassar
F	PT	Ricardo Tiago
F	PT	Daniela Carvalho



6.5. WG 1 Time planning for 2022

Tasks and Work Items	Task Leads	(Milestone number and) Date	Target achievement/ Outcome	Contributing partners	2022															
Task 1.1: Strategy towards EU policies and developments					1st quarter		2nd quarter		3rd quarter		4th quarter									
Work Item 1.1.1: Create a prioritised list of current and future EU policies and developments to consider	AT- ASFINAG, AT-ATE, BE, CZ, DE- BAsT, DK, GR, RO, PT, NPRA	4/22	Document with a structured and prioritised list of relevant EU policies and developments	AT-ASFINAG, AT-ATE, BE, CZ, DE-BAsT, DK, GR, NO/ NPRA, PT, RO, CZ, CY, DK, ES, FEDRO, LT-LAKD, MT, NL PT, UITP	x	x	x	x												
Work Item 1.1.2: Develop strategy options for NAPCORE		6/22	- Set of various strategies or strategic scenarios - Overview of challenges related to the various EU policies and developments				x	x	x	x	x	x								
Work Item 1.1.3: Create first NAPCORE strategic plan for EU policies and developments		M1.1 10/22	NAPCORE strategic plan for EU policies and developments								x	x	x	x	x					
Task 1.2: Strategy towards stakeholders and activities (non-EU policy related)					1st quarter		2nd quarter		3rd quarter		4th quarter									
Work Item 1.2.1: Create a prioritised list of related stakeholders and activities to consider	BE, DE- BAsT, DK, ES, GR, NL, RO-ITS, UITP	4/22	Document with a structured and prioritised list of relevant stakeholders, stakeholder groups and activities	BE, DE-BAsT, DK, ES, GR, NL, UITP, DK, FEDRO, FINTRAFFIC, LT-LAKD, MT, NPRA, PT	x	x	x	x												
Work Item 1.2.2: Develop strategy options for NAPCORE		6/22	- Set of various strategies or strategic scenarios				x	x	x	x	x	x								



7. Working Group 2 “Interoperability and level of service of NAPs”

7.1. Scope of the Working Group

7.1.1. General description

The Working Group 2 aims at defining minimum conditions and coordination efforts for the development and evolution of the NAPs in order to enhance the compatibility and interoperability of the features (access, management, look & feel etc.). This Working Group will also enhance the harmonisation of the levels of service of the NAPs, take account of the existing architecture of the NAPs in the Member States and develop common European NAP architecture while building upon the existing approaches and investments. Best practice demonstrators, i.e. with higher levels of interoperability and improved levels of service of NAPs as they exist in Member States, will be described and developed in this WG with input from the project partners.

7.1.2. Interactions with other WGs

Maintaining close cooperation with the different WGs is critical to ensure consistency and alignment across the NAPCORE project. The figure below shows the main interactions of WG2 with the other WGs'. WG2 is expected to work closely together with WG3 and WG4 for complementarity and in order to avoid overlapping or duplication of activities, in particular when it comes to the description of scope and the need to harmonise requirements and common definitions.

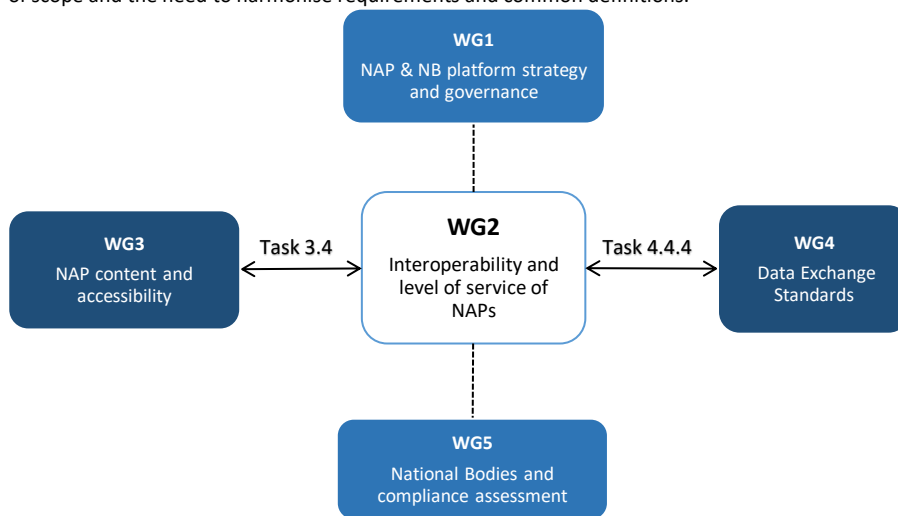


Figure 1 – WG2 main interactions with other WGs.

7.1.3. General Principles and Structure

- Each Active Contributor will take part in the efficient implementation of the Activity, and to co-operate, perform and fulfil, promptly and on-time, all of its obligations within Activity 6 as described in the Grant Agreement (and the Consortium agreement), as may be reasonably required from it and in a manner of good faith.
- Each Active Contributor will execute their tasks based on the roles that were assigned to them in the Grant Agreement, unless changes have been proposed to and accepted by the Core Alignment Team.



Commented [MOVE26]: 'maintain' may sound contradictory with 'develop' here

Commented [HT27R26]: yes. "maintain" can be deleted

Commented [MOVE28]: Not very clear, what does it exist? The high levels of interoperability or improved levels of service? That's what it is aimed to achieved?

Commented [HT29R28]: No, the NAPs, that are already existing shall be improved to better facilitate interoperability etc.

Commented [MOVE30]: With develop you mean tested? Good to clarify

Commented [HT31R30]: better defined below. Real demonstrators will be developed and tested.

- Each Active Contributor is expected to inform relevant partners of NAPCORE of any significant information, fact, problem or delay likely to affect the Activity.
- Each Active Contributor shall promptly provide all information reasonably required by the Activity Management Team to carry out its tasks.
- Each Active Contributor shall take reasonable measures to ensure the accuracy of any information or materials it supplies to the other Participants.
- Active Contributors will plan, implement and execute their tasks as they see fit when it comes to tasks that have no dependencies to tasks of other Participants. However, they must conform to the overall Activity planning and deliver on time.

7.1.4. WG2 Participants

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	HE	UITP
A	A	F	F	A	A	A	A	F	A	F	F
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
A	A		A	F	A		A	F	A	F	A
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
F	A	F	A	L	A	F	A	F	F	A	

L = Activity/ task leader, A = Active contributor, F = Follower

- (1) Activity/ task leader = PT - (IMT - Institute for Mobility and Transport):
 - Leading the activity and the individual tasks
 - Representing WG2 in CAT
 - Responsible for management, task and milestone fulfilment
- (2) Task leader:
 - Leading the individual tasks
 - Responsible for management, task and milestone fulfilment
- (3) Active contributor/ partner:
 - Support WG2 Activity and Tasks
 - Co-working in T2.1, T2.2, T2.3 and T2.4 and taking over specific responsibilities in execution of tasks
- (4) Follower
 - Act as interface and support between the Member State and WG2
 - Limited participation
 - Supporting collection of information from Member States
 - Reviewing of documents
 - Attendance in selected meetings

Partner	Roles and responsibilities in this task	Names
AT	Active contributor	Benjamin Witsch Celina Kiene
AT (ASFINAG)	Follower	Tobias Schleser Wolfgang Kernstock Martin Nemec Peter Meckel
BE	Active contributor	Jasper Beernaerts Mélisa Blot Laura Kupers
BE-FL	Follower	Nele Dedene
CY	Active contributor	Madiha Shahzad



Partner	Roles and responsibilities in this task	Names
		George Christou Rodolfo Silva
CZ	Active contributor	Petr Bureš Filip Týc
DE-BAST	Active contributor	Holger Drees Peter Lubrich
DK	Active contributor	Thomas Bergstedt Christian von Huth Thomas Mark de Laine
EE	Follower	
FI	Active contributor	Mika Ahvenainen Jaakko Rintamäki
FR	Active contributor	Philippe MEUNIER Benoît QUEYRON
GR	Active contributor	Evangelos Mitsakis Chrysostomos Mylonas Maria Stavara
HU	Active contributor	András Selmeczy Manuel Gressai
HR	Active contributor	
IE		
IT	Active contributor	Ilaria De Biasi Alessandro Anzit Isidoro Cecon Enrico Ferrante Marco Comerio Alessio Carenni Mario Scrocca
LU	Follower	
LT	Active contributor	Edmundas Zvirblis Andrius Teskevicius Tomas Antanavicius
NL	Active contributor	Jan Maarten van den Berg Nuno Rodrigues
MT	Follower	Laura Sue Mallia Emma Cassar
PL	Active contributor	Ziemowit Cyndrowski Tomasz Karnafel
PT	Activity leader	Ricardo Filipe Zarco Tiago Ligia Conceição Pedro Barradas Rui Gomes
RO	Active contributor	
SI	Active contributor	
ES	Follower	
SW	Follower	Jonas Petersson
HE	Follower	Steve Narroway Daniel Cullern
UITP	Follower	Daria Kuzmina
ITxPT	Active contributor	Emmanuel De Verdalle Anastasia Founta
NPRA	Active contributor	Hilde Austlid Kenneth Sørensen Brede Dammen



7.2. Task 2.1 “Levels of service of NAPs”

7.2.1. Objective

A uniform description of Level of Service (Types) of NAPs Architecture.

7.2.2. Time plan

year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Task 2.1															

7.2.3. Milestones

MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification	External Milestone
M2.1	2.1	Typology of NAPs based on the description of levels of service and assessment of associated costs and benefits	08/2022	Report	X
M2.2	2.1	Overview of gaps and actions needed	08/2022	Report	
M2.3	2.1	Presentation of the Annual Work Plan 2022	12/2021	Work Programme	
M2.5	2.1	Presentation of the following Annual Work Plan 2023	10/2022	Work Programme	
M2.8	2.1	Presentation of the following Annual Work Plan 2024	10/2023	Work Programme	



7.2.4. Organisational structure at task level

#	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follow er
2.1	Levels of service of NAPs	M2.1 Typology of NAPs based on the description of levels of service and assessment of associated costs and benefits M2.2 Overview of gaps and actions needed	NL	M2.1, M2.2	GR	AT CY CZ DE-BASt DK FI FR GR HU IT LT NL PL PT SI ITxPT RO-ITS RO-NCRIA	BE-FL EE HR IE LU MT RO RO- RRA RO-ELSOL ES SW HE UITP NPRA
2.1		M2.3 Presentation of the Annual Work Plan 2022 M2.5 Presentation of the following Annual Work Plan 2023 M2.8 Presentation of the following Annual Work Plan 2024	PT	M2.3, M2.5, M2.8	-	PT	-

Commented [MOVE32]: Of levels of service and data typology?

Commented [RG33R32]: yes, they seem to be inter-related. The level of service is associated not only to the type of service offered but also to the available data typology

This WG2 leader (PT) will be responsible for:

- Maintaining and updating the WG2 Work Plan (M2.3; M2.5; M2.10);
- Determining the work planning and organisation and the type and frequency of meetings. It is expected that only unanimously accepted proposals will be handed over to other NAPCORE Working Groups (and its Task Forces);
- Promoting dissemination events;
- Cooperating with other platforms and other pilots and projects dealing with NAPs deployment.
- Managing an up-to-date list of contacts for key stakeholders.

7.2.5. Contributions per partner in Task 2.1

Partner	Roles and responsibilities in this task	Names
AT	Active partner	Benjamin Witsch
BE-FL	Follower	Nele Dedene
CY	Active partner	Madiha Shahzad Rodolfo Silva
CZ	Active contributor	Petr Bureš Filip Týc
DE-BASt	Active partner	Peter Lubrich
DK	Active contributor	Christian von Huth
EE	Follower	
FI	Active partner	Mika Ahvenainen Jaakko Rintamäki
FR	Active partner	



This project has received funding from the European Commission's Directorate General for Transport and Mobility under Grant Agreement no. MOVE/B4/SUB/2020-123/SI2.85223

Partner	Roles and responsibilities in this task	Names
GR	Active contributor and Co-Leader of Task 2.1	Evangelos Mitsakis Chrysostomos Mylonas Maria Stavara
HU	Active contributor	András Selmeczy
HR	Follower	
IE	Follower	
IT	Active partner	Ilaria De Biasi
LT	Active partner	Edmundas Zvirblis Andrius Teskevicius Tomas Antanavicius
LU	Follower	
NL	Active contributor and Leader of Task 2.1	Nuno Rodrigues
MT	Follower	Laura Sue Mallia Emma Cassar
PL	Active partner	Ziemowit Cyndrowski Tomasz Karnafel
PT	Active contributor	Lígia Conceição Rui Gomes
RO-ITS	Active partner	Mihai Niculescu
SI	Active contributor	
ES	Follower	
SW	Follower	
HE	Follower	
UITP	Follower	Daria Kuzmina
ITxPT	Active partner	
NPRA		

7.2.6. Work items

In this task a uniform description of Level of Service (Types) of NAPs Architecture will be developed and described based on the collection and assessment of current NAP state of practices, ambitions and needs, followed by joint elaboration of Level of Services definitions and recommendations for implementations. The following Work items will be performed:

Work item 2.1.1: NAP state of practices, ambitions and needs

A desk research and MS consultation on NAP state of practices will be performed based on the collection of current experiences from Member States NAP pre-studies, NAP reference architectures, NAP impact assessments, etc.

Activities:

The desk research and consultation will consist of:

- (1) Identification and contact of each MS representative to support info collection.
- (2) Definition of a structured list of topics and subjects to be assessed by MS including:
 - a. Overview of existing functionalities, capabilities, technical interfaces, etc.
 - b. Current definitions of NAP Level Services by Member States.
 - c. Member States practices regarding access to data under terms and conditions, via the NAPs.
 - d. State of practice on NAPs sustainability models (e.g. local language barriers, search functionality, guest/ registration, ...).
 - e. Assessment of costs and benefits of the different NAP architectures.
- (3) Provide each MS with a structured list of topics and collect input.



- (4) Analysis (pre-assessment) and harmonisation of the collected information into a structured format.
- (5) Organisation of workshop(s) for the validation and assessment of the NAP state of practices, ambitions and needs.

Outcomes:

Overview of existing functionalities, capabilities, technical interfaces, etc. of the NAPs at European level (in cooperation with WG3)

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.1.1						x									

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
NL	NL	GR	CZ, GR, HU, NL, PT, AT, DE	CY, MT

Work item 2.1.2: NAP Levels of Services definitions

NAP Levels of Services definitions will be developed based on the results of 2.1.1 and the identified typology (types/ architectures). The resulting sub task will define several fixed levels of service of NAPs (i.e. Register, Data Portal, Market Place or Clearing House). Member States can express ambitions and needs aligned to these levels. The work will build on the EU EIP support document Common Features and Level of Service, and will result in a further elaboration of the document.

Activities:

- (1) Workshop(s) to review EU EIP documents and identify complementary characteristics or topics of the NAP Level of Service definition including the following perspectives:
 - a. Technological substance (e.g., cloud-like, metadata repository-like, etc.)
 - b. Identification of centralised/ decentralised/ hybrid operations
 - c. Security requirements
 - d. Connectivity requirements
 - e. User management requirements
 - f. Visibility rules
 - g. Governance structure
 - h. Monitoring & Analytic requirements
 - i. Added value requirements
 - j. (Compliance assessment requirements)
 - k. Accounting (or not) for the existence of Mobility Data Space
- (2) Definition of criteria for assessing and ranking NAPs level of service
- (3) Development of draft report "Typology of NAPs based on the description of levels of service and assessment of associated costs and benefits"
- (4) Review of draft report by Member States representative
- (5) Completion of the report "Typology of NAPs based on the description of levels of service and assessment of associated costs and benefits"



Outcomes:

Typology of NAP types/ architectures based on the description of levels of service and assessment of associated costs and benefits

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.1.2						x									

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
NL	NL	GR	CZ, GR, HU, NL, PT, AT, IT, CY	MT, ES

Work item 2.1.3: Listing of gaps and actions towards interoperability of Level of Services*Activities:*

- (1) Workshop for identification and listing of gaps & action needed regarding interoperability (technical, legal, and **organisational interoperability**) and level of service for the adoption of NAPs by the different Member States.
- (2) Development of recommendations for stepwise approach to support Member States the road mapping into more complex NAP architectures
- (3) Development of a first layout of potential European NAP or federation of European NAPs (in cooperation with WG1 and subWG4.4)
 - a. Technological substance (e.g., cloud-like, metadata repository-like, etc.)
 - b. Identification of centralised/ decentralised/ hybrid operations
 - c. Security requirements
 - d. Connectivity requirements
 - e. User management requirements
 - f. Visibility rules
 - g. Governance structure
 - h. Monitoring & Analytic requirements
 - i. Added value requirements
 - j. **(Compliance assessment requirements)**
 - k. Accounting (or not) for the existence of Mobility Data Space

Commented [MOVE34]: It would be interesting to qualify (maybe not necessarily here, but in the document as a whole) about what type of interoperability we refer. It would be important to address, both organizational interoperability (e.g., across national administration or between MS), but also between NAP and data providers (including all relevant stakeholders that provide and access to the data)

Commented [RG35R34]: We will take this comment into account during the work of the task

Commented [FE(36): Why is this between brackets?

Commented [RG37R36]: It was a typo, thank you

Outcomes:

- (1) Overview of gaps, shortcomings, barriers and actions needed
- (2) First layout of potential European NAP or federation of European NAPs (in cooperation with WG1 and subWG4.4)

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.1.3						x									

Organisational structure (for 2022)

This project has received funding from the European Commission's Directorate General for Transport and Mobility under Grant Agreement no. MOVE/B4/SUB/2020-123/SI2.85223

Work item lead	report lead	Task Co-Lead	Active	Follower
NL	NL	GR	CZ, DK, GR, HU, NL, PL, PT, AT, IT, CY	MT, ES

Work item 2.1.4: Repository of documents of experiences with the preparation and deployment of individual NAPs

This task will facilitate the storage and accessibility to relevant documents capturing experiences with the preparation and deployment of individual NAPs. The repository will be managed by a NAPCORE organisation, nominated by the Activity Management Team.

Activities:

The organisation will setup a process for collection, storage and access to the documents. The initial set of documents will include the desk research material and the tasks results. This task will also conclude to the drafting of a position paper/ executive summary regarding the various European approaches towards NAPs level of service.

Outcomes:

Repository of documents of experiences with the preparation and deployment of individual NAPs

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.1.4															

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
GR	GR		GR, PT, DE	AT, MT

7.2.7. Dependencies and external relations

- Cooperation with WG3 on the overview of existing functionalities, capabilities, technical interfaces, etc. of the NAPs at European level
- WG1 strategy for the NAPCORE platform and its position of NAP in Mobility Data Space
- Cooperation with WG1 and subWG4.4 first layout of potential European NAP or federation of European NAPs
- Inputs from DATA4PT project
- Developments from task 2.1 to task 2.4:
 - The definition of Levels of Service – M2.1 and M2.2 due to 08/2022

7.2.8. Challenges and Risks

- Dependency on the WG1 strategy and NAPCORE definition
- Heterogeneous NAP implementations and roadmaps from each Member States: how to define and realise interoperability
- Constant evolvement of new (European) strategies, concepts and innovations and the impact on NAP

7.3. Task 2.2 “Definition of requirements concerning data standards, reference profiles and metadata and support tools”



7.3.1. Objective

Improve data interoperability by defining common data standards, reference profiles and metadata as well as requirements for them.

7.3.2. Time plan

year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Task 2.2															

7.3.3. Milestones

MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification	External Milestone
M2.4	2.2	A list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to SWGs on standardisation and/or standardisation organisations.	06/2022	Report	X
M2.7	2.2	An updated list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to SWGs on standardisation and/or standardisation organisations.	12/2023	Report	X

7.3.4. Organisational structure at task level

#	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follower
2.2	Definition of requirements concerning data standards, reference profiles and metadata and support tools	<p>M2.4 Report - A list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to subWGs on standardisation and/or standardisation organisations.</p> <p>M2.7 An updated list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to subWGs on standardisation and/or standardisation organisations.</p>	PT	M2.4, M2.7	DE-BASt	AT CY CZ DE-BASt FI FR GR HU IT NL PL PT ITxPT RO-ITS RO-NCRIA	BE DK EE HR IE LT LU MT RO RO-RRR RO-ELSOL SI ES SW HE UITP NPRA

7.3.5. Contributions per partner

Partner	Roles and responsibilities in this task	Names
AT	Active contributor	Benjamin Witsch Celina Kiene
BE	Follower	Mélisa Blot



Partner	Roles and responsibilities in this task	Names
BE-FL		
CY	Active partner	Madiha Shahzad Rodolfo Silva
CZ	Active contributor	Petr Bureš Filip Týc
DE-BAS	Active partner and (Co-)Leader of Task 2.2	Peter Lubrich
DK	Follower	Thomas Bergstedt Thomas Mark de Laine
EE	Follower	
FI	Active partner	Mika Ahvenainen Jaakko Rintamäki
FR	Active partner	
GR	Active contributor	Evangelos Mitsakis Chrysostomos Mylonas Maria Stavara
HU	Active contributor	András Selmeczy
HR	Follower	
IE	Follower	
IT	Active partner	Marco Comerio Mario Scrocca
LT	Follower	Edmundas Zvirblis
LU	Follower	
NL	Active contributor	Nuno Rodrigues
MT	Follower	Laura Sue Mallia Emma Cassar
PL	Active partner	Ziemowit Cyndrowski Tomasz Karnafel
PT	Active contributor and Leader of Task 2.2	Lígia Conceição Rui Gomes André Rehberg
RO-ITS	Active partner	Mihai Niculescu
SI		
ES	Follower	
SW	Follower	
HE	Follower	
UITP	Follower	Daria Kuzmina
ITxPT	Active partner	
NPRA	Follower	Hilde Austlid

7.3.6. Work items

In this task a definition of requirements concerning data standards, reference profiles and metadata and support tools will be developed. The following Work items will be performed:

Work item 2.2.1: Identification of gaps and list of requirements

Activities:

- (1) Comparison of existing requirements of data standards (WG4's subWG4.3 Transmodel, SIRI, and NeTEx, and WG4's DATEX II), open data, reference profiles, and metadata.
- (2) Identification of requirements and shortcomings of data standards (WG4's subWG4.3 Transmodel, SIRI, and NeTEx, and WG4's DATEX II), reference profiles, and metadata.



- (3) Handover of prioritised lists of requirements, shortcomings, and recommendations for data standards (WG4's subWG4.3 Transmodel, SIRI, and NeTEx, and WG4's DATEX II), reference profiles, and metadata to WG3, WG4, and standardisation bodies (EC, CEN, ISO, etc.).

Outcomes:

- (1) A list of requirements concerning (the use of) data standards, open data, reference profiles and metadata, developed on a regular annual basis, to be handed over to subWGs on standardisation and/ or standardisation organisations, taking data quality into account.
- (2) Provide recommendations (e.g. position papers) on standardisation gaps to EC, CEN, ISO, etc.
- (3) Recommendations for WG4 and Steering Committee (act. 1.3) concerning standards to be used and reference profiles.

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.2.1					x						x				

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
PT	PT	DE-Bast	AT, FR, GR, IT, NL, PT, CY	DK, BE, MT, LT

Work item 2.2.2: Analysis of possible implications deriving from the “common EU data space” and the “mobility data space”

Activities:

Look into possible implications from the developments of the ‘common EU data space’ and ‘mobility data space’.

Outcomes:

Outputs will be used in sub task 2.4.5.

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.2.2															

Organisational structure (for 2023 and 2024)

Work item lead	report lead	Task Co-Lead	Active	Follower
PT	PT	ITxPT	AT, ITxPT, IT, PT, DE	CY, BE, MT, NL

Work item 2.2.3: Interoperability and support

Activities:



- (1) Identification of basic and recommended reference data sets supported by member states for service interoperability.
- (2) Identification of basic and recommended delivery processes supported by member states for service interoperability.
- (3) Creation and maintenance of technical artefacts and support tools for NAP relevant standards and NAP development (such as the tools developed for DATEX UVAR m2m readable formats).
- (4) Inventory and prioritisation of short comings concerning (the use of) data standards, reference profiles and metadata, + link with CEN TC278 WG3 (ITS Public Transport where are specified TRANSMODEL/ SIRI/ NeTex) for recommendations on standardisation gaps, hampering the interoperability of NAPs, in collaboration with SWG4.3.

Outcomes:

- (1) Provide a list of recommended and basic reference data sets supported by member states for service interoperability.
- (2) Provide a list of recommended and basic delivery processes supported by member states for service interoperability.
- (3) Make available Support Tools for NAPs (e.g. UVARBox), in cooperation with WG4 on standardisation and with NAPCORE Secretariat for centralised dissemination.

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.2.3															

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
PT	PT	DE-Bast	AT, CZ, FR, NL, PT, ITxPT	CY, BE, MT, LT, NPRA

7.3.7. Dependencies and external relations

- Developments from task 2.2 to task 2.4:
 - A list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to WGs on standardisation and/ or standardisation organisation – M2.4 due to 06/2022.
 - Outputs from Work item 2.2.2 will be used in sub task 2.4.5

7.4. Task 2.3 “NAP architecture”

This work plan adopts similar structure to WP1 with tasks defined by its inputs, activities and outputs. As of now detailed time planning is missing, just the outputs are clustered by years.

For all subtask there is a draft of workload for 2022 provided, however this is only an educated guess that has a wide range of variance. The reason is that not only outputs contribute to workload, but also some activities in subtasks span over more years so it is difficult to assess their workload contribution at the moment.

7.4.1. Objective

NAP Architecture is a critical part of the NAP backbone, defining how NAPs are developed, maintained and operated. The architecture defines a functional view where main functionality (3

Commented [CG38]: This is also very much linked with Work item 2.2.2, and actions performed within the Mobility data space in terms of recommendations for the evolution of its components, including NAPs.

Commented [RG39R38]: yes, agreed



different types for NAP) is laid out, physical architecture defining how the NAP should be implemented together with dataflows at respective interfaces and standards / procedures to be applied at those interfaces. In Organizational / enterprise view it defines the interrelationship between stakeholders / organizations between themselves and between physical objects, it defines roles, set ups the template agreements etc.

Objective: Maintain the NAP reference architecture and assess the degree of interoperability in the NAP architecture and how it should be harmonized. Identify new requirements through use case analysis to ensure secure and private data exchange for all aspects of interoperability.

7.4.2. Time plan

year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Task 2.3															

7.4.3. Milestones

MS #	Milestone description	Indicative date of completion	Means of verification
M2.9	Harmonisation of EU NAP architectures and first layout of potential NAP federation	12/2023	Report
M2.11	NAP reference architecture	06/2024	Report

7.4.4. Organisational structure at task level

#	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follower
2.3	NAP architecture	M2.9 Harmonisation of EU NAP architectures and first layout of potential NAP federation M2.11 NAP reference architecture	CZ	M2.9, M2.113	AT	AT CY CZ DE-BAST FI FR GR HU HR LT NL PL PT RO-ITS RO-NCRIA SI ITxPT NPRA	BE DK EE IE IT LU MT ES SW HE UITP

7.4.5. Contributions per partner

Partner	Roles and responsibilities in this task	Names
AT	Active contributor	Benjamin Witsch



Partner	Roles and responsibilities in this task	Names
	and Co-Leader of Task 2.3	
BE	Follower	Mélisa Blot
BE-FL		
CY	Active contributor	Madiha Shahzad George Christou Rodolfo Silva
CZ	Active contributor and Leader of Task 2.3	Petr Bureš
DE-BAS	Active contributor	Holger Drees
DK	Follower	Thomas Bergstedt
EE	Follower	
FI	Active partner	Mika Ahvenainen Jaakko Rintamäki
FR	Active contributor	
GR	Active contributor	Evangelos Mitsakis Chrysostomos Mylonas Maria Stavara
HU	Active partner	András Selmeczy
HR	Active contributor	
IE	Follower	
IT	Follower	Marco Comerio
LT	Active partner	Edmundas Zvirblis Andrius Teskevicius Tomas Antanavicius
LU		
NL	Active partner	Nuno Rodrigues
MT	Follower	Laura Sue Mallia Emma Cassar
PL	Active partner	Ziemowit Cyndrowski Tomasz Karnafel
PT	Active contributor	Lígia Conceição César Neves André Rehberg
RO-ITS	Active contributor	Mihai Niculescu
SI	Active contributor	SI
ES	Follower	
SW	Follower	
HE	Follower	
UITP	Follower	Daria Kuzmina
ITxPT	Active contributor	
NPRA	Active contributor	Kenneth Sørensen

7.4.6. Work items

The task is split into five Work Items. Each Work Item consists of inputs, actions and outputs, which feed into each other. Some tasks have intertask dependencies.

Work item 2.3.1 Work plan definition and task alignment

Inputs	Actions	Outputs
Other WPs outputs CAT recommendations Yearly outputs from subtasks of WG2 Project FRAME NEXT materials	2021 + Develop annual work plan 2022 + Develop annual work plan	2021: + set up of work plan 2022: + report: key findings on NAP operators targets on Architecture



This project has received funding from the European Commission's Directorate General for Transport and Mobility under Grant Agreement no. MOVE/B4/SUB/2020-123/SI2.85223

	+ Discuss what we want to achieve with NAP Architecture, how it is going to be used, what shall be put focus on (processes, interoperability, NAP federation possibility, etc. 2023 onwards Analyse task interdependencies Analyse dependencies with other WPs. Liaise and report and govern the task.	+ report: roadmap for development of NAP architectures + Annual work plan update 2023 Annual work plan update
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Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.3.1			x				x				x				

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
CZ	CZ	AT	AT, CZ,DE,GR,HU,NL,PT	CY, DK, MT, BE

Work item 2.3.2 Analysis of common elements in NAP architectures



Inputs	Actions	Outputs
Analyses of level of services (task 2.1) Analyses of standards needed (task 2.2) best practices from demonstrators. Analyses on demand Problem solutions from demonstrator work	2022: + Set common structure for NAP architecture analysis + Identify and compare current NAP architectures + Identify additional requirements from each key application area + Define where and how a common NAP reference architecture should be able to support NAP operators and users. 2023 onwards Define necessary changes of FRAME Architecture to reach the requested level of service interoperability Review new developments in B2B and B2G mobility data sharing/exchange domain and supported data delivery processes from the NAP Review new developments in the field of ITS data security and privacy	2022 + report: detailing architectures and requirements and use of it + report: draft recommendations for NAP FRAME architecture 2023 report: new developments review (mobility, data sharing and data security) report: recommendations for NAP FRAME architecture M2.9 Harmonisation of EU NAP architectures and first layout of potential NAP federation 2024 update of M2.9

Commented [MOVE40]: It would be interesting to enquire on the cost (e.g. running and maintaining a NAP)?

Commented [MOVE41R40]: On the AFs side we see that for some MS it is better to go for a model where a platform gather and cleans the data. That should be explored (what are MS doing?)

Commented [RG42R40]: ok, agreed. We will explore that

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.3.2							x				x			x	

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
CZ	CZ	AT	AT, CZ, DE, GR, NL,PT, CY	IT, NL, DK, MT, BE, NPRA



Work item 2.3.3 Development of the NAP model architectures

Inputs	Actions	Outputs
Architecture developed by FRAME Project Architecture developed by US DOT EU-EIP support materials recommendations and analyses from (task 2.3.1) Analyses of level of services (task 2.1) Analyses of standards needed (task 2.2) best practices from demonstrators. Input from ISO and CEN standardization activities	2022: none 2023 onwards: Development of user needs and functional requirements Development of common architecture for <u>different levels of NAP</u> (i.e., physical view with interfaces, standards, organizational view, roles, agreements, responsibilities) Development of specific architectures per delegated regulations with feedback from demonstrators Development of output architecture materials	2022: none 2023 + report: functional reqs and user needs + draft of 3 model architectures, including draft outputs 2024 + Milestone M2.11 harmonized architecture

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.3.3											x		x		

Expected workload in 2022: none

Organisational structure (for 2023 and 2024)

Work item lead	report lead	Task Co-Lead	Active	Follower
CZ	CZ	AT	AT, CZ, DE, GR, PT, CY	IT, NL, DK, MT, BE, NPRA

Work item 2.3.4 Support the NAP Architecture user community

Inputs	Actions	Outputs
Previous activities in task 2.3 Materials developed by FRAME Project Materials developed by other parties (i.e. Arc-IT the US national ITS architecture) EU-EIP support materials	2022: none 2023 onwards: Update of the methodology materials for architecture use and creation Support the use of architecture tools between project members Creations of the content of architecture presentation, webinars and leaflets maintaining simple architecture related website (github/gitlab) analysis of use of NAP architecture and community feedback	2022: none 2023 set up of website NAP architecture + requirements webinar methodology for architecture creation, user guide. methodology for architecture use, user guide NAP architectures levels, tools and desired outputs webinar 2024 report: use of NAP architecture Harmonised NAP architecture webinar

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.3.4										x				x	



Expected workload in 2022: none

Organisational structure (for 2023 and 2024)

Work item lead	report lead	Task Co-Lead	Active	Follower
TBD in 2022	TBD in 2022	TBD in 2022	CZ, TBD in 2022	CY, DE, DK, MT, BE

Work item 2.3.5 Maintenance of the NAP Architecture tools

Inputs	Actions	Outputs
Tools and approaches from FRAME project Tools from DATEX II projects EU-EIP support materials Webinars and Architect community help Tools and approaches by US DOT in architecture creation	2022: + Review of the available tools for architecture description + Creating tool maintenance plan and methodology 2023 onwards Hosting of the architecture development tools in a source code repository Maintaining issue tracker and developer community testing tools for development and description of architecture. Getting user feedback on the tool use. Further development of tools based on user experience.	2022 + report: tools review, issues and progress review. + development plan 2023 + set up of development site report: issues and progress report (user feedback) draft documentation 2024 report: issues and progress report (user feedback) user documentation

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.3.5							x				x			x	

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
AT	AT	CZ	TBD in 2022	CY, DE, DK, MT, BE

7.4.7. Dependencies and external relations

Cooperation with Task 2.1 (requirements, NAP level of services) and Task 2.2 (standards and interfaces). Reporting to WP1 decisions about NAP architecture implementation

7.5. Task 2.4 “NAP service interoperability demonstrators”

Interoperability is hardly ever as simple as plug-n-play, especially in high complexity projects such as the NAP. Ensuring interoperability requires a bottom-up approach from the level of the standards to the ITS service roll-out. Considering the different NAP architectures and the different policy and priorities taken amongst the Member States, looking into best practices and lessons learned from the more advanced NAPs in Europe can provide others with valuable insights for their own NAP evolution roadmap. The purpose of Task 2.4 is not about deployment or piloting, rather to understand how to better enable cross border interoperability and how to ensure continuity of ITS Services. Looking into



different options, while fostering Member States cooperation around topics of common interest, Task 2.4 is designed to support those concepts to come to life, by developing the demonstrators.

7.5.1. Objective

To showcase experiences and best approaches on real-world use of the NAP reference architecture information to support interoperability and continuity of ITS Services.

7.5.2. Time plan

year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Task 2.4															

7.5.3. Milestones

MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification	External Milestone
M2.6	2.4	A first demonstrator with real-world use of data and different Levels of Service – 1st round	06/2023	NAP demonstrators operational	X
M2.10	2.4	At least two further demonstrators with real-world use of data and different Levels of Service – 2nd round	12/2024	NAP demonstrators operational	X

7.5.4. Organisational structure at task level

#	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follower
2.4	NAP service interoperability demonstrators	M2.6 A first demonstrator with real-world use of data and different Levels of Service – 1st round M2.10 At least two further demonstrators with real-world use of data and different Levels of Service – 2nd round	PT	M2.6, M2.10	NL	AT BE CZ DE-BAST DK FI FR GR HU HR NL PL PT RO-ITS RO-NCRIA SI ITxPT NPRA	EE IE IT LU MT ES SW HE UITP LT CY

7.5.5. Contributions per partner

Partner	Roles and responsibilities in this task	Names
AT	Active partner	Benjamin Witsch
BE	Active contributor	Jasper Beernaerts Laura Kupers

Commented [MOVE43]: It is not 100% what will imply a demonstrator. It is mentioned 'is not about deployment or piloting, rather to understand how to better enable cross border interoperability and how to ensure continuity of ITS Services'. As a demonstrator one could understand the 'piloting' testing of a concrete example.

Commented [MOVE44R43]: Perhaps these demonstrators should be a combination of both. A deep understanding of examples and possibilities, and the concrete development/testing of a use case.
From AFs, we would like to explore the example/possibilities for the subsequent testing of a EU data gateway from the MS NAPs

Commented [RG45R43]: At the present time, these alternatives are still open for discussion inside the WG. The team is not excluding any possibility for the demonstrators and a concrete definition of what will be done is part of the ongoing work



Partner	Roles and responsibilities in this task	Names
BE-FL		
CY	Follower	Madiha Shahzad Rodolfo Silva
CZ	Active contributor	Petr Bureš
DE-BAS	Active contributor	Peter Lubrich
DK	Active contributor	Thomas Bergstedt
EE	Follower	
FI	Active contributor	Mika Ahvenainen Jaakko Rintamäki
FR	Active contributor	
GR	Active contributor	Evangelos Mitsakis Chrysostomos Mylonas Maria Stavara
HU	Active partner	András Selmeczy
HR	Active contributor	
IE	Follower	
IT	Follower	
LT	Follower	Edmundas Zvirblis
LU	Follower	
NL	Active contributor and Co-Leader of Task 2.4	Nuno Rodrigues
MT	Follower	Laura Sue Mallia Emma Cassar
PL	Active partner	Ziemowit Cyndrowski Tomasz Karnafel
PT	Active contributor and Leader of Task 2.4	Lígia Conceição César Neves André Rehberg
RO-ITS	Active partner	Mihai Niculescu
SI	Active contributor	
ES	Follower	
SW	Follower	
HE	Follower	
UITP	Follower	Daria Kuzmina
ITxPT	Active contributor	
NPRA	Active contributor	Kenneth Sørensen Brede Dammen

7.5.6. Work items

In this task, NAP service interoperability demonstrators will be developed. The following Work items will be performed:

Work item 2.4.1: Interoperability support of the NAP demonstrators

This is a horizontal Work item that will develop activities throughout the NAPCORE project.

Activities:

- (1) Conceptualisation of the NAP demonstrators (during 2022)
- (2) Support, monitoring and validation of the development of Interoperable NAP demonstrators in Work items 2.4.1, 2.4.2, 2.4.3 and 2.4.4.
- (3) Assess the opportunity to develop common NAPs by two or more Member States on selected specific datasets (e.g. for cross-border data).

Commented [CV(46)]: The issue of cross-border data registration is only mentioned in the work item. It is an issue that has been reported several times in MMTIS Expert groups by different Member States and it would be useful to find a more short-term solution to this.

Commented [RG47R46]: ok, we will look into this and present some findings, if possible, however cross-border data registration seems to be broad and difficult enough to prescribe a short-time solution. Finally, this issue needs an agreement and will from two or more MS to pursue this objective



- (4) Evaluation and assessment of these interoperability demonstrators, lessons learnt, recommendations.

Outcomes:

Lessons learnt, recommendations on road mapping the evolution of simpler NAP architectures into more complex ones, considering data structure, technology, etc. for marketplaces and clearing houses.

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.4.1															

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
CZ	CZ	PT	CZ, DK, FI, GR, NL, PL, PT, ITxPT; BE, AT, NRPA, DE	CY, MT, LT

Work item 2.4.2: Interoperable NAP demonstrator with real world use of the NAP information

This Work item represents the development of the first demonstrator with real-world use of data and different Levels of Service (M2.6).

Activities:

- (1) Definition and Operationalisation of interoperability demonstrators that make real world use of the NAP information to test scenarios, e.g. cross-border, intermodal scenarios, a mix of urban and inter-urban environments, or continuity of services based upon already harmonised data sets or stable data profiles (e.g. UVAR)

Outcomes:

The first interoperable demonstrator with real-world use of data and different Levels of Service (Reinforcing collaboration with T2.1)

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.4.2										x					

Organisational structure (for 2022)

Work item lead	report lead	Task Co-Lead	Active	Follower
PT	PT		DE, DK, NL, PT ITxPT, BE, AT,	CY, MT, LT, ES

Work item 2.4.3: Interoperable NAP demonstrator of a marketplace or clearing house NAP

This work item represents the development of the second demonstrator with real-world use of data and different Levels of Service (M2.6).



Activities:

- (2) Definition and Operationalisation of interoperability demonstrators to test the development of a marketplace or clearing house NAP.

Outcomes:

The second interoperable demonstrator with real-world use of data of a marketplace or clearing house NAP and different Levels of Service (Reinforcing collaboration with T2.1)

Subtask duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Subtask 2.4.2															x

Organisational structure (for 2023 and 2024)

subtask lead	report lead	Task Co-Lead	Active	Follower
NL	TBD		TBD, DE	CY, AT, MT

Work item 2.4.4: Interoperable NAP demonstrator with Metadata

This Work item represents the development of the third demonstrator with real-world use of data and different Levels of Service (M2.6).

Activities:

- (3) Definition of concepts/ requirements for interoperability implementations, e.g. the Metadata aggregator (federation of metadata), in cooperation with subWG4.4.
- (4) Contribute with Task 4.4.4 on a conceptual work (pre-study, IT framework), that will occur early 2023.

Outcomes:

The third interoperability demonstrators with real-world use of data with metadata aggregator and different Levels of Service (Reinforcing collaboration with T2.1)

Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.4.2															x

Organisational structure (for 2023 and 2024)

Work item lead	report lead	Task Co-Lead	Active	Follower
DE	TBD		AT	CY, MT, LT

Work item 2.4.5: European Access Point (EAP)*Activities:*

Elaborate concept and (optional) interoperability demonstrator of a European Access Point (EAP), allowing visibility of NAP datasets from multiple countries in one platform. As prime dataset candidates for such demonstrator - Safety Related Traffic Information or the UVARs, expected soon to be in the scope of the RTTI Delegated Regulation.

Commented [CG(48)]: Please include also AF recharging points, see recent meeting NAPCORE/IDACS/Commission

Commented [MOVE49R48]: A simple line for the WP could be: A common data EU access point would be explored and piloted as an entry point to access the data from the 27 Member States' NAPs for alternative fuels. The design of such a demonstrator could be the basis of a future evolution of the European Alternative Fuels Observatory (EAFO).

Commented [RG50R48]: AF recharging points should be included. the scope of the EAP in this task needs to be discussed between the MS and, eventually, in a future Steering Committee



Work item duration and report times (x):

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Work item 2.4.2															x

Organisational structure (for 2023 and 2024)

Work item lead	report lead	Task Co-Lead	Active	Follower
DK	TBD		TBD	CY, AT, MT, LT

7.5.7. Dependencies and external relations

- Developments from task 2.2:
 - A list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to subWGs on standardisation and/ or standardisation organisation – M2.4 due to 06/2022.
- Developments from task 2.1:
 - The definition of Levels of Service – M2.1 and M2.2 due to 08/2022
- Developments from task 3.4:
 - Data Exchange Vision to be streamlined with the WG2 cross-border demonstrator activities-M3.14.
- Developments from task 4.4.4:
 - A conceptualisation for a cross-border metadata registry, resulting in a WG2 planned demonstrator.

7.6. WG2 Milestones

Next, the different milestones are presented in tabular form, with dates and description.

MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification	External Milestone
M2.1	2.1	Typology of NAPs based on the description of levels of service and assessment of associated costs and benefits	8/2022	Report	X
M2.2	2.1	Overview of gaps and actions needed	8/2022	Report	
M2.3	2.1	Presentation of the Annual Work Plan 2022	12/2021	Work Programme	
M2.4	2.2	A list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to subWGs on standardisation and/ or standardisation organisations.	6/2022	Report	X
M2.5	2.1	Presentation of the following Annual Work Plan 2023	10/2022	Work Programme	
M2.6	2.4	A first demonstrator with real-world use of data and different Levels of Service – 1st round	6/2023	NAP demonstrators operational	X
M2.7	2.2	An updated list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to	12/2023	NAP demonstrators operational	X



MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification	External Milestone
		subWGs on standardisation and/ or standardisation organisations.			
M2.8	2.1	Presentation of the following Annual Work Plan 2024	10/2023	Work Programme	
M2.9	2.3	Harmonisation of EU NAP architectures and first layout of potential NAP federation	12/2023	Report	X
M2.10	2.4	At least two further demonstrators with real-world use of data and different Levels of Service – 2nd round	12/2024	NAP demonstrators operational	X
M2.11	2.3	NAP reference architecture	06/2024	Report	

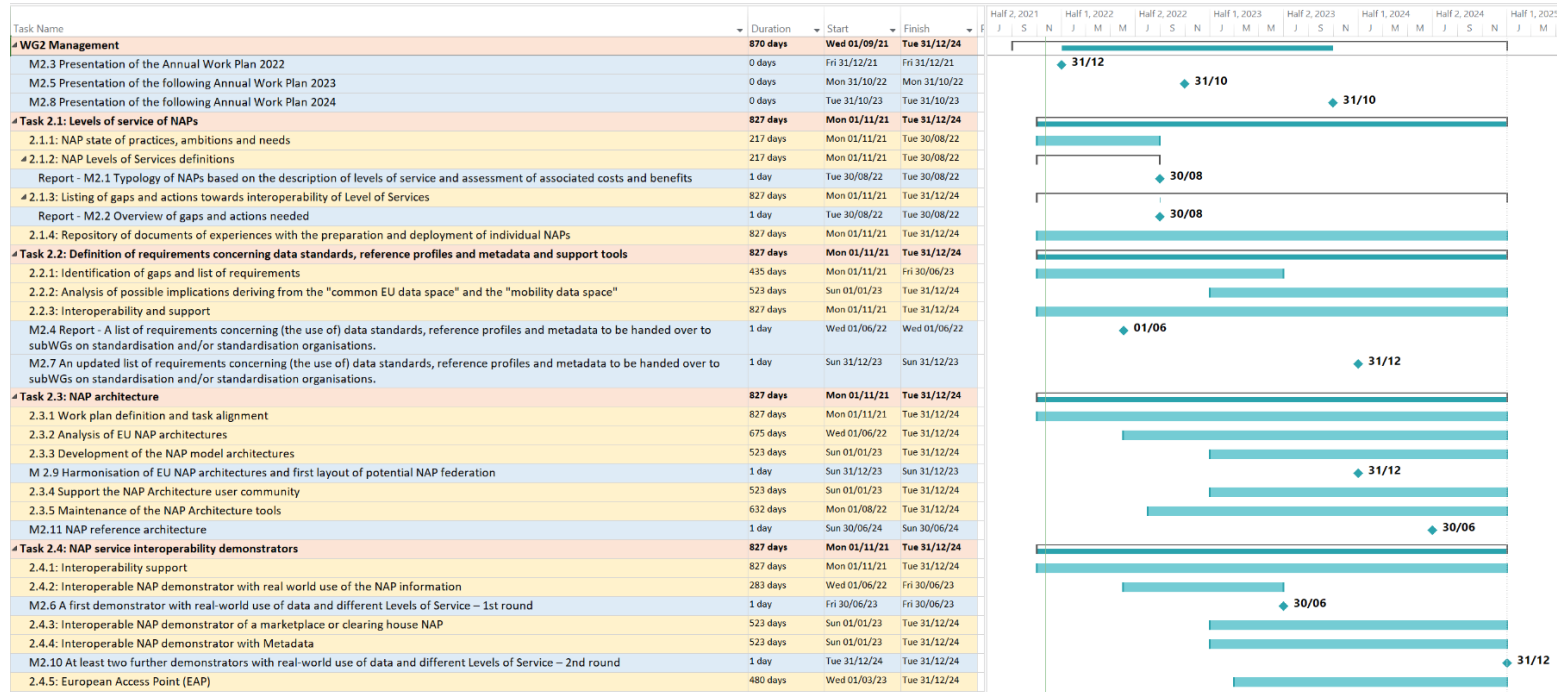


	Support & contribute: ++										Support & Observe: +										Support: 0 Follower										Neutral: N				Object: --			
	Active																																					
TOPIC	AT	BE	BE-FL	BG	CY	CH	CZ	DE	DK	ES	EST	FI	FR	GR	HU	HR	IRE	IT	LV	LT	LU	MT	NL	NO	PO	PT	RO	SE	SK	SL	UK	UITP	ITxPT					
WG2 – Interoperability and level of service of NAPs	A	A	F	F		A	A	A	A	F	F	A	A	A	A	A		A	F	A	F	F	A	A	A	L	A	F	F				F	A				
M2.3 Presentation of the Annual Work Plan 2022																										++												
M2.5 Presentation of the following Annual Work Plan 2023																										++												
M2.8 Presentation of the following Annual Work Plan 2024																										++												
Task 2.1: Levels of service of NAPs														CL										L														
2.1.1: NAP state of practices, ambitions and needs			0			0	++		+	0		+	+	++		++		+	+				++	0	+	++	++	0				0	+					
2.1.2: NAP Levels of Services definitions		+	0			+	++		+	0		+	+	++		++		+	+				++	0	+	++	++	0				0	+					
Report - M2.1 Typology of NAPs based on the description of levels of service and assessment of associated costs and benefits																																						
2.1.3: Listing of gaps and actions towards interoperability of Level of Services		+	0			+	++	+	++			+	+	++		++		+	+				++	0	++	++	++	+				+	+					
Report - M2.2 Overview of gaps and actions needed																																						
2.1.4: Repository of documents of experiences with the preparation and deployment of indicators		+	0			0		0				0	+	++		+		0	0				+	0	0	++	+	0				0						
Task 2.2: Definition of requirements concerning data standards, reference profiles and metadata and support tools								CL																		L												
2.2.1: Identification of gaps and list of requirements		++	0			+	+	+	0			+	++	++		+		++		0			++	+	+	++	++	+	0			+	++					
2.2.2: Analysis of possible implications deriving from the "common EU data space" and the "mobile data space"						0										+		+							++	++	++	++				0	++					
2.2.3: Interoperability and support		++	0			0	++	+	0			0	++	+	+	0	0		0	0			++	+	0	++	++	+	0			0	++					
M2.4 Report - A list of requirements concerning the use of data standards, reference profiles and metadata to be handed over to subWGs on standardisation and/or standardisation organisations.																																						
M2.7 An updated list of requirements concerning the use of data standards, reference profiles and metadata to be handed over to subWGs on standardisation and/or standardisation organisations.																																						
Task 2.3: NAP architecture		CL					L																															



7.8. Overall WG2 time plan

The following Gantt diagram illustrates the detailed Work items and activities.





7.9. 2022 WG2 time plan

ACTIVITY	From	Until	Months															
			set/21	out/21	nov/21	dez/21	jan/22	fev/22	mar/22	abr/22	mai/22	jun/22	jul/22	ago/22	set/22	out/22	nov/22	dez/22
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
WG2 meetings	01/09/2021	31/12/2024																
M2.3 Presentation of the Annual Work Plan 2022	16/12/2021	16/12/2021																
M2.5 Presentation of the following Annual Work Plan 2023	31/10/2022	31/10/2022																
M2.8 Presentation of the following Annual Work Plan 2024	30/10/2023	30/10/2023																
Task 2.1: Levels of service of NAPs																		
Work item 2.1.1: NAP state of practices, ambitions and needs	01/11/2021	30/08/2022																
Work item 2.1.2: NAP Levels of Services definitions	01/11/2021	30/08/2022																
Report - M2.1 Typology of NAPs based on the description of levels of service and assessment of associated costs and benefits	30/08/2022	30/08/2022																
Work item 2.1.3: Listing of gaps and actions towards interoperability of Level of Services	01/11/2021	31/12/2024																
Report - M2.2 Overview of gaps and actions needed	30/08/2022	30/08/2022																
Work item 2.1.4: Repository of documents of experiences with the preparation and deployment of individual NAPs	01/11/2021	31/12/2024																
Task 2.2: Definition of requirements concerning data standards, reference profiles																		
Work item 2.2.1: Identification of gaps and list of requirements	01/11/2021	30/06/2023																
Work item 2.2.2: Analysis of possible implications deriving from the "common EU data space" and the "mobility data space"	01/01/2023	31/12/2024																
Work item 2.2.3: Interoperability and support	01/11/2021	31/12/2024																
M2.4 Report - A list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to subWGs on standardisation and/or standardisation organisations.	01/06/2022	01/06/2022																
M2.7 An updated list of requirements concerning (the use of) data standards, reference profiles and metadata to be handed over to subWGs on standardisation and/or standardisation organisations.	31/12/2023	31/12/2023																
Task 2.3: NAP architecture																		
Work item 2.3.1 Work plan definition and task alignment	01/11/2021	31/12/2024																
Work item 2.3.2 Analysis of EU NAP architectures	01/06/2022	31/12/2024																
Work item 2.3.3 Development of the NAP model architectures	01/01/2023	31/12/2024																
M 2.9 Harmonisation of EU NAP architectures and first layout of potential NAP federation	31/12/2023	31/12/2023																
Work item 2.3.4 Support the NAP Architecture user community	01/01/2023	31/12/2024																
Work item 2.3.5 Maintenance of the NAP Architecture tools	01/08/2022	31/12/2024																
M2.11 NAP reference architecture	30/06/2024	30/06/2024																
Task 2.4: NAP service interoperability demonstrators																		
Work item 2.4.1: Interoperability support	01/11/2021	31/12/2024																
Work item 2.4.2: Interoperable NAP demonstrator with real world use of the NAP information	01/06/2022	30/06/2023																
M2.6 A first demonstrator with real-world use of data and different Levels of Service – 1st round	30/06/2023	30/06/2023																
Work item 2.4.3: Interoperable NAP demonstrator of a marketplace or clearing house NAP	01/01/2023	31/12/2024																
Work item 2.4.4: Interoperable NAP demonstrator with Metadata	01/01/2023	31/12/2024																
M2.10 At least two further demonstrators with real-world use of data and different Levels of Service – 2nd round	31/12/2024	31/12/2024																
Work item 2.4.5: European Access Point (EAP)	01/03/2023	31/12/2024																



7.10. WG2 meeting schedule for 2022

NAPCORE WG2 meetings Date + Time (CET)
12/01/2022 10:00-11:30
09/02/2022 10:00-11:30
15/03/2022 10:00-11:30
06/04/2022 10:00-11:30
11/05/2022 10:00-11:30
08/06/2022 10:00-11:30
13/07/2022 10:00-11:30
14/09/2022 10:00-11:30
12/10/2022 10:00-11:30
09/11/2022 10:00-11:30
14/12/2022 10:00-11:30



8. Working Group 3 “NAP content and accessibility”

8.1. Introduction

The current working plan defines and describes the roadmap for the elaboration of the WG3 tasks. It provides an overview of the WG3 tasks and sub-tasks, including their starting and due date as well as the responsibilities of involved participants. The WG3 working plan is dependent on other related WGs' working plans, thus this document is to streamline the interdependencies with relevant activities to those of WG3.

8.2. Information from the proposal

The main objective of “WG3: NAP content and accessibility” led by Greece (Applicant 14-GR) is to assess and enhance the content and accessibility of European National Access Points (NAPs). Specifically, the activities of WG3 will contribute to the harmonisation of European NAPs content, taking into consideration developments and future progress in the ITS domain. The activities will also facilitate the fair, trusted, and enhanced accessibility to ITS-related data through the investigation of aspects related to data availability (technical and procedural), data quality, data reuse and data visualisation. Its specific objectives are as follows:

- (1) Support Member States towards a common understanding on the current and future content of European NAPs considering existing, planned, and foreseen European legislative and technological developments.
- (2) Monitor and assess the availability of ITS-related data at both national and Pan-European NAP level.
- (3) Identify data gaps and provide guidelines to mitigate these gaps.
- (4) Set a robust framework for and bring into practice the evaluation of European NAP platforms' data quality.
- (5) Investigate commonly accepted frameworks and technical options to achieve fair, trusted, and enhanced accessibility to ITS-related data through European NAPs.
- (6) Create added value visualisation tools to be used by NAP operators, data providers, and data consumers.
- (7) Support the enhanced use of NAPs in key application areas of priority and added value for EU Member States.
- (8) Align the achievements on the NAP content and accessibility level with the remaining activities and needs of the project, including training.

WG3 is organised under five main tasks (and sub-tasks):

- Task 3.1: Data content requirements arising from current and future developments
- Task 3.2: European NAPs data quality
 - Subtask 3.2.1 Quality Frameworks
 - Subtask 3.2.2 Guidance & best practices for quality assessment
 - Subtask 3.2.3 Quality certification for NAP datasets
- Task 3.3: Data access and reuse
 - Subtask 3.3.1 Technical options for data visualisation
 - Subtask 3.3.2 Terms and conditions of data reuse (incl. data pricing)
 - Subtask 3.3.3 Implications of GDPR
- Task 3.4: Data Exchange Vision
- Task 3.5: Training for NAP content and accessibility

Commented [CG(51)]: General comment: it is key that reports on availability of data allow not only a raw understanding of which data is available, but also how this fits with the requirements from EU legislation. For instance, if for data type XX, the requirement is that if data XX exists on the TEN-T, it should be accessible on the NAP, we should understand if all data XX on the TEN-T is accessible on the NAP or only 40%. Or on the contrary, if more data is accessible than legally required (e.g. in this case, data would be accessible beyond TEN-T).

Commented [MC52R51]: Yes we fully agree and for that reason we will include spatial coverage indicators in the next versions of the survey. The values of these indicators will be classified following the TEN-T's notation.



The WG3 milestones are:

Milestone ID	Description	Due date	Means of verification
M3.1	Data content requirements, existing gaps, data dictionaries and supporting material	Jun.2022	Report available and handed over to Steering Committee
M3.2	First report on NAP data availability	Mar.2022	Report available and handed over to Steering Committee
M3.3	Second report on NAP data availability	Sep.2022	Report available and handed over to coordinator
M3.4	Third report on NAP data availability	Mar.2023	Report available and handed over to coordinator
M3.5	Fourth report on NAP data availability	Sep.2023	Report available and handed over to coordinator
M3.6	Fifth report on NAP data availability	Mar.2024	Report available and handed over to coordinator
M3.7	Final report on NAP data availability	Dec.2024	Report available and handed over to Steering Committee
M3.8	Data quality assessment framework and processes	Mar.2023	Report available and handed over to Steering Committee
M3.9	Report on pilot data quality certifications	Jun.2024	Report available and handed over to coordinator
M3.10	Technical options for data visualisation	Dec.2024	Report available and handed over to coordinator
M3.11	Terms and conditions for data reuse (incl. GDPR implications)	Jun.2024	Report available and handed over to Steering Committee
M3.12	European NAPs added value scenarios in key application areas	Dec.2024	Tools and report available and handed over to coordinator
M3.13	Final training material for NAP content and accessibility and training events' completion	Dec.2024	Report available and handed over to coordinator

Commented [CG(53)]: Need to be aligned with calls.

Commented [MC54R53]: Sorry, we cannot fully understand this comment. If possible provide us with a clarification.

Commented [GD55R53]: I expect this refers to the CEF calls on data collection.

Commented [HT56R53]: If so (I would also assume so): yes, we are open for aligning this as much as possible. We are, however, in need for consolidated information of all/most of the relevant activities and timeplans from the Commission. This can be a general topic of one of our next joint calls between the CAT and DG MOVE.

The work to be carried out within WG3 will be under the responsibility of each Task leader. The task leaders of WG3 are shown in the table below.

Task ID	Leading participant
3.1	RO
3.2	DE-BASt
3.3	GR
3.4	GR
3.5	GR

8.3. Terminology

The following table provides an overview and explanation of terms utilised in the remainder of the current document.

Term	Description
NAP best practices	Content of European NAPs that are considered as more advanced and provide added value to the ITS data exchange ecosystem
Data content requirements	Required content of European NAPs
Data categories	Thematic groups of European data content in line with the requirements of existing legislation augmented with new developments in the field
Data catalogues	List of data types classified based on the adopted data categories
Data dictionaries	Collection of names, definitions, attributes, suggested structure, and examples of European NAP content in line with the identified requirements



Term	Description
Data quality framework	An appropriate structure and set of concepts (incl. criteria, requirements, KPIs) for assessing NAP data quality.
Quality certification framework	An appropriate structure and set of processes for performing data quality certification in European NAPs.
Fair pricing	A reasonable value for the charges applied in non-open datasets of European NAPs.
Key application areas	Thematic areas of increased priority in which NAP data can be proved useful and enable the provision of impactful services.
Added value scenarios	Blueprints of tools and analysis approaches for exploiting data of European NAPs.

8.4. Task 3.1 “Data content requirements arising from current and future developments”

8.4.1. Expected results and planning

No.	Expected results/ outcomes	Associated milestone	Starting date	Due date
ER3.1.1	Identification of requirements and gaps in terms of data content of the European NAPs	M3.1	11/2021	06/2022
	Collect information from existing legislation related to ITS including planned revisions		11/2021	02/2022
	Identify European NAP best practices and collect relevant information		11/2021	02/2022
	Collect information from new developments in the field of mobility and ITS		11/2022	02/2022
	Identify requirements for new data types		02/2022	04/2022
	Get feedback from NAP data availability monitoring		03/2022	04/2022
	Perform gap analysis		04/2022	05/2022
	Suggest gap mitigation strategies		05/2022	06/2022
ER3.1.2	Development of supporting material for ensuring harmonised data publications at European level (e.g. data dictionaries)	M3.1	03/2022	06/2024
	Define data categories and data types		04/2022	05/2022
	Develop new data catalogues and data dictionaries		05/2022	06/2024
ER3.1.3	Periodical reporting to the European Commission on the data availability of European NAPs	M3.2-M3.7	11/2021	12/2024
	Define the structure of a template for NAP data availability monitoring		11/2021	12/2021
	Put the template into effect (1 st iteration of data availability monitoring)		01/2022	03/2022
	Revise the content of the template		04/2022	05/2022
	Put the template into effect (2 nd iteration of data availability monitoring)		06/2022	09/2022
	Revise the content of the template		10/2022	12/2022
	Put the template into effect (3 rd iteration of data availability monitoring)		01/2023	03/2023
	Revise the content of the template		04/2023	05/2023
	Put the template into effect (4 th iteration of data availability monitoring)		06/2023	09/2023

Commented [CG(57)]: Need to prioritize as well. Priority to be given to data required by legislation. Without of course neglecting emerging needs from the service providers.

Commented [MC58R57]: We fully agree, the gaps will be primarily assessed based on the requirements of the Delegated Regulations.



No.	Expected results/ outcomes	Associated milestone	Starting date	Due date
	Revise the content of the template		10/2023	12/2023
	Put the template into effect (5 th iteration of data availability monitoring)		01/2024	03/2024
	Revise the content of the template		04/2024	06/2024
	Put the template into effect (final iteration of data availability monitoring)		07/2024	12/2024

Commented [CG(59)]: If the template is revised every 6 months, how can we assess the evolution?

Commented [MC60R59]: It is indeed challenging. However, we can assess the evolution in the second survey of each year. This may also allow an assessment of how NAPCORE impacts on the content of NAPs across Europe.

8.4.2. Approach

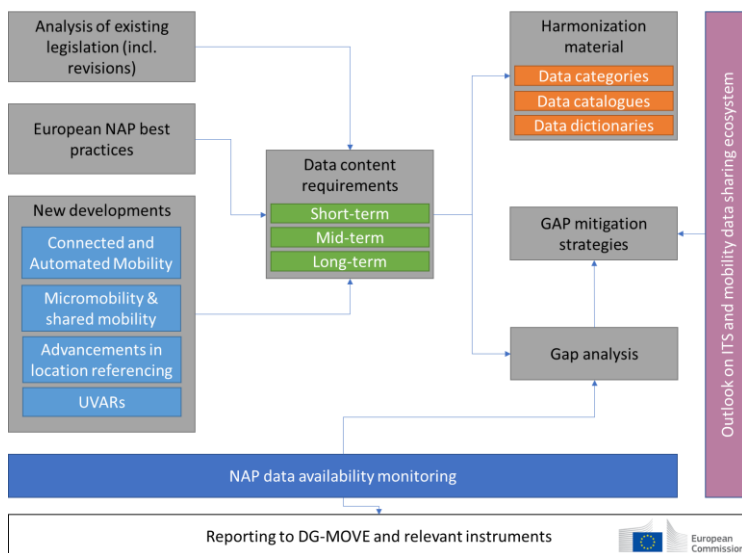
General Principles and Structure

Task 3.1 supports the fulfilment of the first three objectives of WG3 (Section 2). This will be implemented along three activities:

- Review and analysis of existing legislation for ITS, i.e., the ITS Directive and supplementing Delegated Regulations. Attention will be paid on the identification of new requirements and new data categories that result from the current implemented revision of Delegated Regulation no. 962/2015 (provision of EU-wide real-time traffic information services), as well as the impact assessment study for the revision of the ITS Directive. The Open Data Directive, including its related Delegated Regulations and the INSIPRE Directive will also be considered.
- Review and analysis of the content of European NAPs, including best practices.
- Review and analysis of existing literature and new developments that are currently discussed in relevant consortia and fora and included in the results of relevant projects, in the light of key application areas for NAP data. The domains to be analysed will include connected and automated mobility, micromobility and shared mobility, advanced methods for location referencing, as well as urban vehicle access restrictions.

Commented [CG(61)]: It should have limited impact. See reference to the ITS Directive in the Open data Directive.

Commented [MC62R61]: Limited attention will be paid on the Open Data Directive. Our initial intention was to assess whether legislation beyond the ITS domain impacts (or not) on NAPs.



As shown in the figure above, the data content requirements will be defined in three time horizons (short-, medium- and long-term), responding to the need for defining mid- and long-term strategic



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objectives, and will be used to formulate supportive material in the form of data categories, catalogues and dictionaries, in an effort to support harmonised NAP contents and data publications among all EU Member States. Moreover, the analysis will lead to the identification of data gaps in each EU Member State's NAP supplemented with a comprehensive identification of important data holders that may be approached by NAP operators, in order to enrich the content of their platform. As part of this analysis a report that will be updated on a 6-month basis will be drafted, supporting DG-MOVE and other relevant EC bodies or agencies on monitoring the data availability of European NAPs. The report will be initially based on the existing related template of the European ITS Platform (EU EIP) and it will be gradually extended to cover additional key performance indicators. The data availability of each NAP will also be visualised on-line in the project's website by using state-of-the-art visualisation tools.

Organisational structure

Task 3.1 will be coordinated by the Task 3.1 leader. Besides, the outcomes of this task will be supervised by the leader of WG3. The progress of the activities related to Task 3.1 will be discussed during the monthly meetings of WG3. Any necessary adjustments of this frequency for the needs of Task 3.1 will be decided jointly by Task 3.1 leader and WG3 leader.

The participants that will contribute more to the planned activities are those that have been indicated as "Active" participants. "Following" participants will be kept informed about its outcomes. Given the peculiarities of the current task, i.e., the need to monitor data availability across European NAPs, following participants are also tasked to ensure that the relevant templates are smoothly filled in by the party responsible for administrating the NAP of their country.

A specific participant is tasked with supporting Task leader by keeping a record of the main outputs and results of Task 3.1 to be communicated to the NAPCORE's Core Alignment Team and the leaders of the remaining WGs, placing special emphasis on those that are identified as interdependent with WG3. This participant, titled as "Liaison" will belong to those indicated as "Active" in the current task.

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	NH	UITP
A	F		F	A	A	A	F	F	A		A
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
A	F	F	A	F	A	F	F	A	A	F	A
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
A	F	F	F	A	L	F	F	A	F	A	F

Task 3.1 Liaison: AT

8.4.3. Dependencies and external relations

There is a high dependency between the results of Task 3.1's activities and the activities of WG4, in the sense that the identified data content requirements may trigger the need for developing new or updating existing data exchange standards and metadata schemes, thus adapting the relevant roadmaps and requirements planned to be drafted/ identified in the context of WG4. Furthermore, WG4 can provide input to the definition of data categories and the process for NAP data availability monitoring (including relevant templates and KPIs).



8.4.4. Contributions per partner

Role	Roles and responsibilities in this activity	Names
WG3 leader	<ul style="list-style-type: none"> Organises WG3 meetings Jointly (with Task 3.1 Leader) decides adjustments in the frequency of WG3 meetings based on the needs of Task 3.1 Provides comments and feedback on the WG3 milestones associated with Task 3.1. Organises internal meetings with the task leader and liaison. Communicates the results of Task 3.1 to the NAPCORE's Core Alignment Team. 	Dr. Evangelos Mitsakis, Chrysostomos Mylonas
Task 3.1 leader	<ul style="list-style-type: none"> Provides feedback about the progress of Task 3.1 during WG3 meetings by consolidating the input and contributions of all active and following participants. Communicates with WG3 leader about any necessary and related to Task 3.1 decisions to be taken. Informs all participants of Task 3.1 about the decisions taken in WG3 level. Main responsible for the milestones of Task 3.1 (incl. NAP data availability reports). 	Mihai Niculescu
Liaison	<ul style="list-style-type: none"> Responsible for recording minutes related to Task 3.1 during WG3 meetings. Records in a monthly basis the main outcomes and results of Task 3.1. 	Benjamin Witsch
All active members	<ul style="list-style-type: none"> Participate in WG3 meetings and may be requested to provide a presentation in a topic related to Task 3.2. Contribute to the analysis of relevant legislation, NAP best practices and new developments in ITS and mobility data sharing domain. Contribute to the identification NAPs' data content requirements. Contribute to the drafting of data catalogues and dictionaries. Contribute to gap analysis and the identification and analysis of gap mitigation strategies. Contribute to the preparation of the templates through which NAP data availability will be monitored. Responsible for ensuring that the specified templates will be filled in with information about the NAP of their country. 	Ref. to excel master plan
All following members	<ul style="list-style-type: none"> Participate in WG3 meetings. Provide information upon request. Respond to e-mails. Facilitate data availability monitoring in their country. Optionally review milestones and reports of Task 3.1. 	Ref. to excel master plan

8.5. Task 3.2 "European NAPs data quality"

8.5.1. Expected results and planning

No.	Expected results/ outcomes	Associated milestone	Starting date	Due date
ER3.2.1	Establishment or advancement of data quality frameworks	M3.8	11/2021	03/2023
	Review existing data quality frameworks		11/2021	03/2022
	Identify and analyse gaps considering emerging technologies and new data types		03/2022	06/2022
	Identify and analyse the needs of all actors involved in the ITS value chain		02/2022	06/2022



No.	Expected results/ outcomes	Associated milestone	Starting date	Due date
	Set the scope of the new or advanced data quality frameworks		05/2022	07/2022
	Provide the layout and contents of a data quality framework to be considered in compliance assessment processes		06/2022	10/2022
	Elaborate new or advanced data quality frameworks		08/2022	03/2023
ER3.2.2	Guidelines for assessing data quality in European NAPs	M3.8	08/2022	03/2023
	Identify and analyse best practises in data quality assessment		08/2022	09/2022
	Discuss collected evidence with experts and practitioners		09/2022	10/2022
	Pilot application of data quality framework involving selected datasets from European NAPs		08/2022	10/2022
	Exploit derived knowledge and provide guidelines for the assessment of data quality in European NAPs		10/2022	02/2023
	Make any necessary adjustments in the adopted data quality framework		02/2023	03/2023
ER3.2.3	Definition of a quality certification process and provision of certificates to selected NAP publications	M3.9	04/2023	06/2024
	Identify requirements for neutral and harmonised quality certification		04/2023	06/2023
	Discuss identified requirements with WG5 dealing with National Body processes		06/2023	07/2023
	Update the list of requirements based on the acquired input		07/2023	09/2023
	Set the layout, processes, and procedures for neutral and harmonised quality certification		09/2023	11/2023
	Discuss the quality certification framework with WG5 dealing with National Body processes		11/2023	12/2023
	Update the quality certification framework based on the acquired input		12/2023	01/2024
	Handover quality certification framework to WG5 for pilot application		01/2024	02/2024
	Exploit derived knowledge and identify the content of data quality reports to be submitted by all Member States to DG-MOVE and other relevant instruments		02/2024	03/2024
	Finalise the quality certification and quality assessment framework		03/2024	06/2024

8.5.2. Approach

General Principles and Structure

Task 3.2 supports the fulfilment of the fourth objective of WG3 (Section 2). This will be achieved by a sequence of activities oriented: a) to set up a data quality assessment framework, b) clarify how this



This project has received funding from the European Commission's Directorate General for Transport and Mobility under Grant Agreement no. MOVE/B4/SUB/2020-123/SI2.85223

framework can be practically applied, and c) to utilise this framework for the provision of quality certificates. These activities will be carried out in three subtasks.

Subtask 3.2.1 "Quality Frameworks"

It includes the establishment of generic Quality Frameworks for various ITS domains, containing agreements and definitions for quality criteria and (minimum) requirements (i.e., covering aspects such as geographic coverage, timeliness, latency, position accuracy, and error level). These frameworks will build upon the outcomes of the EU EIP platform in this topic (i.e., Quality Frameworks for all ITS Directive's priority services and C-ITS services) considering that these outcomes may need further validation and maturity. Besides, other frameworks need to be newly established, e.g., for emerging data categories, such as UVAR, or for emerging technologies, such as vehicle-generated data. The data categories to be covered by the Quality Framework will be identified in the context of Task 3.1. Apart from reviewing current achievements in the data quality field and identifying the existing gaps, the preparatory works of the current subtask, oriented to set the scope of the Quality Frameworks to be established, will include the identification and analysis of the relevant needs of all actors involved in the ITS value chain (including but not limited to e.g., public and private data providers or relevant associations).

Subtask 3.2.2 "Guidance & best-practices for quality assessment"

Efficient ways how to assess individual NAP datasets have not been explored on a wide basis, i.e., there is a lack of experience and common understanding on how to apply the Quality Frameworks in practice, e.g., by NAP operators or by the National Bodies. This subtask will involve best-practice research and practitioners' exchange, in order to provide guidelines how to introduce, monitor and enforce Quality Assessment, regarding NAP datasets at individual organisations, accounting also for differences in the application of related standards. The guidelines will be accompanied with pilot assessments of selected, real-life NAP data sets, to prove and demonstrate the identified Quality Assessment methods. Such pilot assessments will consider as many European partners as possible, to get a full picture of the quality state-of-play. The outcomes from such assessment will be also used as a feedback loop to the above-mentioned Quality Frameworks, i.e., the Frameworks will be validated and eventually updated upon the assessment results.

Subtask 3.2.3 "Quality certification for NAP datasets"

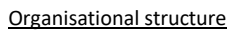
This subtask will concretise and formalise the above-mentioned Quality Assessment methods, as a model for a neutral and harmonised Quality Certification process. The Quality Certification will allow neutral parties (i.e., a party other than the data provider) to sufficiently and comparably assess NAP datasets, for the compliance with specific data quality requirements. In addition, explicit Quality Certificates may be provided, which may demark "high-quality" NAP data sets. The certification process will be targeted at the assessment procedures of National Bodies, so that the results of this task will be taken into consideration by WG5 dealing with the harmonisation of National Bodies processes, placing special emphasis on compliance assessment. In particular, subtask 3.2.3 will provide a guideline about Quality certifications, whereas WG5 will apply this guideline and, potentially, provide a validation back to subtask 3.2.3. Finally, on the same basis and building upon relevant discussions among the Member States, the contents of data quality reports to be submitted by each EU Member State to DG-MOVE and other relevant instruments of the European Commission will be agreed.

Commented [CG(63)]: Please explain.

Commented [MC64R63]: This should be rephrased as "any other interested department of EC the responsibilities of which are related to some extent with mobility services and ITS".

Commented [HT65R63]: *should be _understood_ as "...





The participants that will contribute more to the planned activities are those that have been indicated as “Active” participants. “Following” participants will be kept informed about its outcomes.

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	NH	UITP
A	A		F	F	F	A	F	A	A		A
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
A	L	F	A	F	A	F	F		A	A	A
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
A	F	F	F	F	A	F	F	F	F	F	F

8.5.3. Dependencies and external relations

 This project has received funding from the European Commission's Directorate General for Transport and Mobility under Grant Agreement no. MOVE/B4/SUB/2020-123/SI2.85223

WG4 for data quality assessment/ certification developments (e.g., relevant frameworks and experiences from TRANSMODEL).

8.5.4. Contributions per partner

Role	Roles and responsibilities in this activity	Names
WG3 leader	<ul style="list-style-type: none"> Organises WG3 meetings Jointly (with Task 3.2) decides adjustment in the frequency of WG3 meetings based on the needs of Task 3.2 Provides comments and feedback on the WG3 milestones associated with Task 3.2. Organises internal meetings with the task leader and liaison. Communicates the results of Task 3.2 to the NAPCORE's Core Alignment Team. 	Dr. Evangelos Mitsakis, Chrysostomos Mylonas
Task 3.2 leader	<ul style="list-style-type: none"> Provides feedback about the progress of Task 3.2 during WG3 meetings by consolidating the input and contributions of all active and following participants. Communicates with WG3 leader about any necessary and related to Task 3.2 decisions to be taken. Informs all participants of Task 3.2 about the decisions taken in WG3 level. Main responsible for the milestones of Task 3.2. 	Peter Lubrich
Liaison	<ul style="list-style-type: none"> Responsible for recording minutes related to Task 3.2 during WG3 meetings. Records in a monthly basis the main outcomes and results of Task 3.2. 	Petr Bureš
All active members	<ul style="list-style-type: none"> Participate in WG3 meetings and may be requested to provide a presentation in a topic related to Task 3.2. Contribute to analysis of existing data quality frameworks Contribute to the needs assessment of actors involved in the ITS ecosystem concerning data quality Contribute to the scoping and elaboration of the suggested data quality framework Support and facilitate the pilot application of the suggested quality framework Contribute to the determination of guidelines and processes for introducing, monitoring, and enforcing data quality assessment in European NAPs Contribute to the identification of requirements for neutral & harmonised quality certification Contribute to the determination of the layout, processes, and procedures for neutral & harmonised quality certification Contribute to the determination of the content of the data quality reports to be submitted by each Member State to DG-MOVE and other relevant instruments. 	Ref. To excel master plan
All following members	<ul style="list-style-type: none"> Participate in WG3 meetings. Provide information upon request. Respond to e-mails. Optionally review milestones and reports of Task 3.2. 	Ref. To excel master plan

8.6. Task 3.3 “Data access and reuse”

8.6.1. Expected results and planning

No.	Expected results/ outcomes	Associated milestone	Starting date	Due date
ER3.3.1	Technical options for NAP data visualisation	M3.10	04/2022	06/2023
	Review best practices in data visualisation considering adopted data categories		04/2022	06/2022
	Collect information from NAP operators, data providers, and consumers		05/2022	07/2022
	Identify data visualisation requirements		07/2022	09/2022
	Review existing (open source) tools and libraries for data visualisation		09/2022	11/2022
	Demonstrate new technical options for harmonised NAP data visualisation per adopted data category		11/2022	06/2023
ER3.3.2	Terms and conditions of data reuse	M3.11	11/2021	01/2023
	Review and analyse licensing and copyright principles for data reuse		11/2021	02/2022
	Identify and analyse licensing and copyright needs of data providers and consumers		12/2021	03/2022
	Define requirements for data reuse distilled into specific categories (e.g., openly accessible data, data provided under contract, data provided with charge)		03/2022	05/2022
	Review and analysis of existing (open) licenses for data reuse		05/2022	06/2022
	Assess the extensibility of existing (open) licenses to cover identified requirements		06/2022	07/2022
	Design and develop references licenses for the case		07/2022	01/2023
ER3.3.3	Methodology supporting data valuation and fair pricing	M3.12	01/2023	06/2024
	Review and analyse existing frameworks and principles for data valuation and pricing		01/2023	03/2023
	Identify and analyse the perspective of data providers and get feedback regarding the cost of data provision		02/2023	04/2023
	Identify and analyse the perspective of data consumers and get feedback regarding the potential use of data		02/2023	04/2023
	Assess how data quality should be mapped in data valuation and pricing processes		04/2023	06/2023
	Design and develop a draft method/model for NAP data valuation and pricing		06/2023	09/2023
	Apply the draft method/model to selected NAP datasets		09/2023	11/2023
	Discuss derived results with experts, NAP operators, data providers, and data consumers		11/2023	01/2024
	Refine and adapt the developed method/model for NAP data valuation and pricing		01/2024	06/2024



No.	Expected results/ outcomes	Associated milestone	Starting date	Due date
ER3.3.4	<i>Implications of the General Data Protection Regulation (GDPR) on the operation of the European NAPs</i>	<i>M3.11</i>	<i>01/2022</i>	<i>06/2024</i>
	GPPR principles		01/2022	08/2022
	Implications for the operation of NAPs		02/2022	10/2022
	Suggest requirements for GDPR compliance		10/2022	06/2024

8.6.2. Approach

General Principles and Structure

Task 3.3 supports the fulfilment of the fifth and sixth objective of WG3 (Section 2). Its workflow is divided into three subtasks, as described below.

Subtask 3.3.1 “Technical options for data visualisation”

This subtask will identify technical options accompanied by a set of reference tools that may be used by all European National Access Points (NAPs) to visualise their data and improve their understanding and added value potential. For this purpose, a common vision among NAPCORE participants should be achieved with the aim of concluding to technical options that will fit to all existing needs and NAP use purposes. Additionally, the technical options should be elaborated based on the defined data categories (Task 3.1) and other data type distinctions, concerning, for instance, the content of data (e.g., safety-related, traffic-related, multimodal, weather-related), their temporal context (i.e., real-time, historical, static), and the transport modes covered. The steps to be taken include the review and analysis of best practices in data visualisation considering the data categories and data type distinctions mentioned above, the collection of data visualisation needs of data providers and consumers, the consolidation of the acquired input in the form of data visualisation requirements, and the analysis of open-source solutions and libraries that can fulfil these requirements. The derived technical options will be demonstrated in the form of operational prototypes accompanied by the appropriate documentation.

Subtask 3.3.2 “Terms and conditions of data reuse (incl. data pricing)”

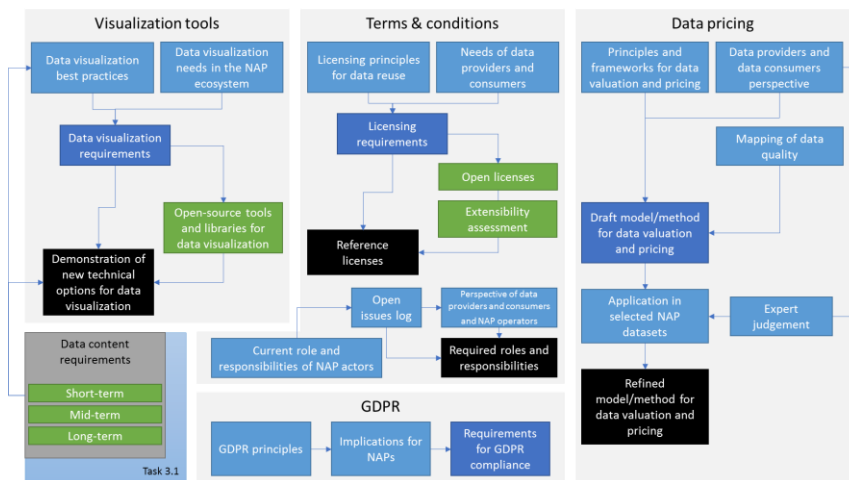
Since there are various approaches across Europe in the realm of NAP data availability, this subtask will elaborate the terms and conditions of NAP data reuse. A first topic of concern constitutes the definition of reference licenses for NAP data reuse. The steps to be taken for this purpose include the review and analysis of generic licensing principles, the collection of the needs of NAP data providers and consumers, the consolidation of the acquired input in the form of licensing requirements and the analysis of existing (open) licensing frameworks that can be used as a prototype for fulfilling these requirements. A second topic of concern constitutes the clarification of the operational procedures of European NAPs placing special emphasis on the clarification of the roles and responsibilities of NAP operators, data providers, and data consumers. The steps to be taken include the identification of the current roles and responsibilities of these actors in each European NAP, the recording of any challenges and open issues and their resolution following a participatory approach. A final topic of concern for this subtask, building upon the premise that data hosted on/ provided through European NAPs are not always out of charge, is the development of a method/ model supporting data valuation and fair pricing. This method/ model will consider a) suggested principles and key factors for data valuation and pricing, b) the perspective of both data providers (e.g., related to the cost of data provision and the number of potential users) and data consumers (e.g., related to potential



value of services that may be based on NAP data), and c) the quality of provided data based on the framework suggested in Task 3.2.

Subtask 3.3.3 “Implications of GDPR”

This subtask will address and analyse GDPR in the context of NAPs. The first step to be taken is the full understanding and clarification of existing regulations. The second step includes the identification and full understanding of the implications of GDPR for NAPs operations. These implications along with a recording of how GDPR is currently addressed in European NAPs (best practice research) will enable the definition of requirements for GDPR compliance on behalf of NAPs.



Organisational structure

Task 3.3 will be coordinated by the Task 3.3 leader. The progress of the Task 3.3 activities will be discussed during the monthly meetings of WG3. This frequency may be adjusted based on the needs of Task 3.3.

The participants that will contribute more to its planned activities are those that have been indicated as “Active” participants. “Following” participants will be kept informed about its outcomes.

A specific participant is tasked with supporting Task leader by keeping a record of the main outputs and results of Task 3.3 to be communicated to the NAPCORE’s Core Alignment Team and the leaders of the remaining WGs, placing special emphasis on those that are identified as interdependent with WG3. This participant, titled as “Liaison” will belong to those indicated as “Active” in the current task.

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LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
F	F	F	F	F	A	F	F	F		A	F

Task 3.3 Liaison: UITP

8.6.3. Dependencies and external relations

There is a dependency between the results of Task 3.3's activities related to terms and conditions for data reuse and the implications of GDPR on European NAP operation with the activities of WG5 dealing with National Bodies processes.

8.6.4. Contributions per partner

Role	Roles and responsibilities in this activity	Names
WG3 leader & Task 3.3 leader	<ul style="list-style-type: none"> Organises WG3 meetings Adjusts the frequency of WG3 meetings based on the needs of Task 3.3 Organises internal meetings with the liaison of Task 3.3. Communicates the results of Task 3.3 to the NAPCORE's Core Alignment Team. Provides feedback about the progress of Task 3.3 during WG3 meetings by consolidating the input and contributions of all active and following participants. Informs all participants of Task 3.3 about the decisions taken in WG3 level. Main responsible for the milestones of Task 3.3. 	Dr. Evangelos Mitsakis, Chrysostomos Mylonas
Liaison	<ul style="list-style-type: none"> Responsible for recording minutes related to Task 3.3 during WG3 meetings. Records in a monthly basis the main outcomes and results of Task 3.3. 	UITP
All active members	<ul style="list-style-type: none"> Participate in WG3 meetings. May be requested to provide a presentation in a topic related to Task 3.2. Contribute to analysis of existing data quality frameworks Contribute to the needs assessment of actors involved in the ITS ecosystem concerning data quality Contribute to the scoping and elaboration of the suggested data quality framework Support and facilitate the pilot application of the suggested quality framework Contribute to the determination of guidelines and processes for introducing, monitoring, and enforcing data quality assessment in European NAPs Contribute to the identification of requirements for neutral & harmonised quality certification Contribute to the determination of the layout, processes, and procedures for neutral & harmonised quality certification 	Ref. To excel master plan



Role	Roles and responsibilities in this activity	Names
	<ul style="list-style-type: none"> Contribute to the determination of the content of the data quality reports to be submitted by each Member State to DG-MOVE and other relevant instruments. 	
All following members	<ul style="list-style-type: none"> Participate in WG3 meetings. Provide information upon request. Respond to e-mails. Optionally review milestones and reports of Task 3.3. 	Ref. To excel master plan

8.7. Task 3.4 “Data Exchange Vision”

8.7.1. Expected results and planning

No.	Expected results/ outcomes	Associated milestone	Starting date	Due date
	Technical demonstration of NAP added value scenarios	M3.12	04/2022	12/2024
	Define key applications areas		04/2022	06/2022
	Define prioritised use cases per key application area		06/2022	08/2022
ER3.4.1	Identify data requirements		08/2022	11/2022
	Define data collection mechanism		09/2022	01/2023
	Detailed design and pilot implementation of highly prioritised use cases		01/2023	06/2024
	Summarise identified best practices and next steps		06/2024	12/2024

8.7.2. Approach

General Principles and Structure

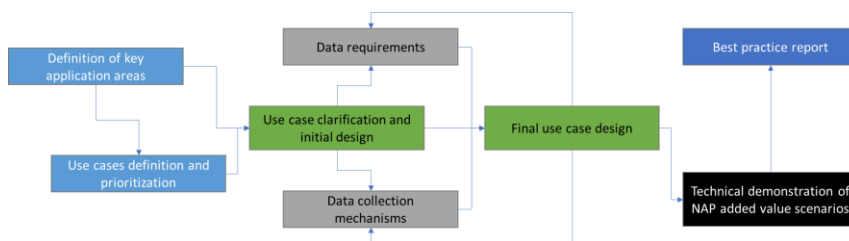
Task 3.4 supports the fulfilment of the seventh objective of WG3 (Section 2). This will be carried out by following the steps described below:

- The first prerequisite step for supporting the enhanced use of NAPs in key application areas, is the definition and clarification of these areas/ domains. In this context, each applicable domain will be analysed and elaborated under discussion and communication among all active participants. To finalise the application areas, the interests of each active partner will be examined and assessed with realistic criteria. Some first examples concerning the application areas are: a) multimodal traffic operations (incl. Cooperative Intelligent Transport Systems), b) road safety, c) urban mobility & MaaS, d) Logistics & supply chain and e) transport policy support.
- The next step will be the definition of use cases per application area. It is expected that at least one use case will be assigned to each application area. Examples of use cases associated with the application areas mentioned above include the use of NAPs as: a) virtual national traffic management centres, b) tools to provide centralised information to the C-ITS ecosystem, c) use of neutral MaaS-related data aggregators, d) national platforms supporting logistics and freight transport data exchange and operations, and e) policy supporting transport observatories. Additional use cases may be accepted after discussion among active participants.
- For the operationalisation and technical demonstration of the concept of each use case, a next prerequisite step constitutes the identification of the data that will be taken as input by the adopted technical strategies and methodologies in each use case. Therefore, this step revolves



around the definition of data requirements and the development of required mechanisms for data collection.

- The next step will be the conceptual design of the identified use cases that involves their detailed scoping and the determination of their involved actors, basic/ alternate flow, and high-level requirements. Subsequently, building upon the derived results, further actions will be taken on the implementation of these use cases, which may conclude to the demonstration of certain tools and technical solutions utilizing data from NAPs. For instance, the prioritised use cases may conclude to the demonstration of dashboards to visualise KPIs associated with each use case or other structured information related, inter alia, to traffic monitoring, weather conditions, road safety, and multimodal transport services. Along these lines, the understanding of each use case scenario will be doable and clear. Furthermore, other use cases may focus on the execution of targeted case studies utilizing data from NAPs. Such case studies can involve the assessment of the impact of enforced transport policies or weather-related events.
- The final step will be the capitalisation of the derived knowledge from the implemented use cases to provide best practices to the NAP ecosystem and other implications involving the content and quality of data provided by/ through NAPs.



Organisational structure

Task 3.4 will be coordinated by the Task 3.4 leader. The progress of the activities related to Task 3.4 will be discussed during the monthly meetings of WG3. This frequency may be adjusted based on the needs of Task 3.4.

The participants that will contribute more to its planned activities are those that have been indicated as “Active” participants. “Following” participants will be kept informed about its outcomes and provide feedback upon request.

A specific participant is tasked with supporting Task leader by keeping a record of the main outputs and results of Task 3.4 to be communicated to the NAPCORE’s Core Alignment Team and the leaders of the remaining WGs, placing special emphasis on those that are identified as interdependent with WG3. This participant, titled as “Liaison”, will belong to those indicated as “Active” in the current task.



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LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
F	A	F	F	F	A	F	F	F		F	F

Task 3.4 Liaison: HR

8.7.3. Dependencies and external relations

There is a high dependency of the results of Task 3.4's activities with the activities of WG1, considering that the strategy and sustainable governance structure of NAP/ NB platform will be structured around the key application areas of NAPs and will be guided in the long-run by the best practices derived from the implementation and technical demonstration of priority use cases and added value scenarios.

Additionally, there is a high interrelation of Task 3.4's activities with the analysis of functional domain developments included in WG4's activities. Therefore, there is an increased need to communicate the derived results and any identified requirements to the aforementioned (sub)WG.

8.7.4. Contributions per participant

Role	Roles and responsibilities in this activity	Names
WG3 leader & Task 3.4 leader	<ul style="list-style-type: none"> Organises WG3 meetings Adjusts the frequency of WG3 meetings based on the needs of Task 3.4 Organises internal meetings with the liaison of Task 3.4. Communicates the results of Task 3.4 to the NAPCORE's Core Alignment Team. Provides feedback about the progress of Task 3.4 during WG3 meetings by consolidating the input and contributions of all active and following participants. Inform all participants of Task 3.4 about the decisions taken in WG3 level. Main responsible for the milestones of Task 3.4. 	Dr. Evangelos Mitsakis, Chrysostomos Mylonas
Liaison	<ul style="list-style-type: none"> Responsible for recording minutes related to Task 3.4 during WG3 meetings. Records in a monthly basis the main outcomes and results of Task 3.4. 	HR
All active members	<ul style="list-style-type: none"> Participate in WG3 meetings. May be requested to provide a presentation in a topic related to Task 3.4. Contribute to the definition of key application areas and associated use cases. Contribute to the prioritisation of the identified use cases. Contribute to the design of use cases (incl. the determination of data requirements and data collection mechanisms) that are deemed of high relevance in their country. Contribute to the implementation of technical demonstrators. 	Ref. To excel master plan



Role	Roles and responsibilities in this activity	Names
All following members	<ul style="list-style-type: none"> Contribute to the drafting of best practice reports and the analysis of implications at the side of NAP data content and quality. Participate in WG3 meetings. Contribute to the prioritisation of the identified use cases. Provide information upon request. Respond to e-mails. Optionally review milestones and reports of Task 3.4. 	Ref. To excel master plan

8.8. Task 3.5 “Training for NAP content and accessibility”

8.8.1. Expected results and planning

No.	Expected results/ outcomes	Associated milestone	Starting date	Due date
ER3.5.1	Training material	M3.13	01/2023	06/2024
	Identify training purpose.		01/2023 01/2024	02/2023 02/2024
	Identify and categorise the recipient(s) of the training material and understand their knowledge background.		01/2023 01/2024	03/2023 03/2024
	Collect key outputs from Task 3.1 to 3.4.		03/2023 03/2024	05/2023 05/2024
	Define the format of training material.		04/2023 04/2024	05/2023 05/2024
	Develop the training material.		04/2023 04/2024	06/2023 06/2024
ER3.5.2	Support of training events	M3.13	02/2023	12/2024
	Identify the purpose of each event.		02/2023 02/2024	03/2023 03/2024
	Determine the target audience.		03/2023 03/2024	05/2023 05/2024
	Decide the training methods to be followed.		05/2023 05/2024	06/2023 06/2024
	Adjust the training material to the needs of the event.		06/2023 06/2024	07/2023 07/2024
	Develop the training programme and interactive content.		07/2023 07/2024	09/2023 09/2024
	Support training execution.		09/2023 09/2024	12/2023 12/2024

8.8.2. Approach

General Principles and Structure

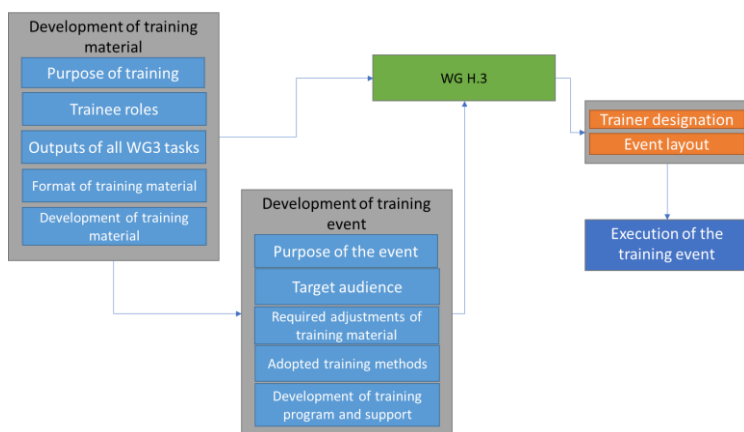
Task 3.5 supports the fulfilment of the last objective of WG3 (Section 2). The main objective of this task focuses on the development of training material and training events including key outcomes of the technical activities of WG3 (Task 3.1-3.4), thus providing active support to training activities of the NAPCORE project. The current task will be carried out following the approach described below.

For a training material to be successful, it is important to determine the main training purposes to be addressed. Once the training purpose is determined, it is important to identify and categorise the recipient(s) of the training material as a means of adjusting the provided level of technical details.



One step further is the collection of key outputs of all tasks of WG3 (Task 3.1-3.4). Subsequently, the format of the training material should be decided according to the identified training purpose and the role, specific needs, and expectations of the material's recipient(s). The adopted training format may be differentiated based on whether a training event will be held physically or virtually. By that means, the achievements of WG3 will be set for use by the H.3 designated trainer.

The second result of Task 3.5 is the support/ organisation of training event(s), using the developed training material. The analysis of the purpose of the events is needed. Both the target audience and the description of the required skills of the trainer should be identified properly. As such, WG H.3 will be able to indicate the suitable person for the position of the trainer. Furthermore, the training methods and strategies to be followed should be decided, and therefore the training material should be adapted to meet the needs of the trainees. The next step will be the development of the training program and any required interactive content (e.g., quizzes based on smartphone apps). The training program will concentrate on reinforcing the interest of the participants and inspire the engaged audience.



Organisational structure

Task 3.5 will be coordinated by the Task 3.5 leader. The progress of the activities related to Task 3.5 will be discussed during the monthly meetings of WG3.

The participants that will contribute more to its planned activities are those that have been indicated as “Active” participants. “Following” participants will be kept informed about its outcomes and provide feedback upon request.

A specific participant is tasked with supporting Task leader by keeping a record of the main outputs and results of Task 3.5 to be communicated to the NAPCORE’s Core Alignment Team and the leaders of the remaining WGs, placing special emphasis on those that are identified as interdependent with WG3. Further, this participant will be responsible for organizing any required meetings with H.3 participants. This participant, titled as “Liaison” will belong to those indicated as “Active” in the current task.



AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	NH	UITP
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Task 3.5 Liaison: CY

8.8.3. Dependencies and external relations

There is a high dependency of Task 3.5's results with the activities of WG H.3 and especially with the activities of Task H.3.3. Specifically, Task 3.5 will lead to the development of training material and training events consolidating the knowledge derived by the entirety of WG3's activities, while in the context of Task H.3.3 these training events will be executed and supported from a logistics point of view.

8.8.4. Contributions per participant

Role	Roles and responsibilities in this activity	Names
WG3 leader & Task 3.5 leader	<ul style="list-style-type: none"> Organises WG3 meetings Adjusts the frequency of WG3 meetings based on the needs of Task 3.5 (if deemed necessary) Organises internal meetings with the liaison of Task 3.5. Communicates the results of Task 3.5 to the NAPCORE's Core Alignment Team. Provides feedback about the progress of Task 3.5 during WG3 meetings by consolidating the input and contributions of all active and following participants. Informs all participants of Task 3.5 about the decisions taken in WG3 level. Main responsible for the milestones of Task 3.5. 	Dr. Evangelos Mitsakis, Chrysostomos Mylonas
Liaison	<ul style="list-style-type: none"> Responsible for recording minutes related to Task 3.5 during WG3 meetings. Records in a monthly basis the main outcomes and results of Task 3.5. Communicates with WG H.3 concerning the needs of training events. 	CY
All active members	<ul style="list-style-type: none"> Participate in WG3 meetings. May be requested to provide a presentation in a topic related to Task 3.5. Contribute to the development of training material. Contribute to the development of training events. 	Ref. To excel master plan
All following members	<ul style="list-style-type: none"> Participate in WG3 meetings. Provide information upon request. Respond to e-mails. Optionally review milestones and reports of Task 3.5. 	Ref. To excel master plan



8.9. Organisational tasks

The workflow of WG3, in compliance with the remaining WGs of the NAPCORE project, includes organisational tasks associated with the yearly update of the WG3 work plan and the provision of inputs to the NAPCORE's yearly progress reports. These tasks are the following:

- OT1: WG3 work plan 2021/2022 (current document)
- OT2: WG3 work plan 2022/2023 (update)
- OT3: WG3 work plan 2023/2024 (update)
- OT4: Contribution of WG3 to Project Progress Report 2021
- OT4: Contribution of WG3 to Project Progress Report 2022
- OT4: Contribution of WG3 to Project Progress Report 2023
- OT4: Contribution of WG3 to Project Progress Report 2024

8.10. Dissemination needs of WG3

All WG3 activities are expected to lead to important results that should be disseminated as a means of ensuring and strengthening their impact, outreach, and visibility. The following table provides an indication on how important results of WG3 can ideally be disseminated.

Expected result	Associated task	Dissemination means
Data categories and data dictionaries	Task 3.1	<ul style="list-style-type: none"> • Publication of relevant wikis in the NAPCORE website
NAP data availability monitoring	Task 3.1	<ul style="list-style-type: none"> • Publication of periodic results in the NAPCORE website using state-of-the-art visualisation tools (e.g., interactive maps)
NAP data quality frameworks	Task 3.2	<ul style="list-style-type: none"> • Publication of quality packages and guidelines in the NAPCORE website • Execution of technical workshops • Publication of key results in scientific congresses, symposiums, and journals
NAP visualisation technical options	Task 3.3	<ul style="list-style-type: none"> • Publication of links to technical demonstrators in the NAPCORE website and social media
NAP data valuation and pricing techniques	Task 3.3	<ul style="list-style-type: none"> • Publication of white papers in the NAPCORE website and other targeted websites • Execution of technical workshops • Publication of key results in scientific congresses, symposiums, and journals
NAP added value scenarios	Task 3.4	<ul style="list-style-type: none"> • Publication of links to technical demonstrators in the NAPCORE website and social media • Publication of white and best practice papers in the NAPCORE website and other targeted websites • Execution of technical workshops • Publication of key results in scientific congresses, symposiums, and journals
Training material for NAP content and accessibility	Task 3.5	<ul style="list-style-type: none"> • Development of relevant open courses

8.11. Time plan

	Title and Description of Activities/Action	Responsibilities/ Roles	Lead	Milestone number	Target achievement/Outcome	2021								2022			
						Nov.	Dec.	1st quarter	2nd quarter	3rd quarter	4th quarter						
Task 3.1: Data content requirements arising from current and future developments	Data content requirements	AT,HR,CY,CZ,FI,UI,TP,FR,GR,HU,LU,LT,LT,PT,PT,LU,PT,ES,NPRA	RO	M3.1	Identification of requirements and gaps in terms of data content of the European NAPs												
	Gap analysis and mitigation			M3.1													
	NAP data types, categories and dictionaries			M3.1													
	First periodical NAP data availability report			M3.2	Periodical reporting to the European Commission on the data availability of European NAPs												
	Second periodical NAP data availability report			M3.3													
	Third periodical NAP data availability report			M3.4													
	Fourth periodical NAP data availability report			M3.5													
	Fifth periodical NAP data availability report			M3.6													
	Final periodical NAP data availability report			M3.7													
Task 3.2: European NAPs data quality	Existing data quality frameworks gaps	AT,BE,CZ,EE,FI,UI,TP,FR,GR,HU,IT,ERTIC,OJ,TxPT,NL,RO	DE-BAST	M3.8	Establishment of a data quality framework												
	Actors needs			M3.8													
	Scoping of data quality frameworks			M3.8													
	Elaboration of data quality frameworks			M3.8	Guidelines for assessing data quality in European NAPs												
	Best practices, quality assessment and export input			M3.8													
	Pilot application of data quality framework			M3.8													
	Provision of guidelines and adaptation			M3.8													
	Requirements for neutral quality certification			M3.9													
	Interact with WG5 and update requirements			M3.9													
	Layout, processes and procedures for quality certification			M3.9	Definition of a quality certification process and provision of certificates to selected NAP publications												
Task 3.3: Data access and reuse	Interact with WG5 and update processes and requirements	AT,HR,CY,CZ,DK,EE,FI,UI,TP,DE,BAST,IT,RO,NPRA	GR	M3.9													
	Handover quality certification framework to WG5 and update the outputs of the current task			M3.9													
	Best practices in data visualization and NAP actors perspectives			M3.10	Technical options for NAP data visualization												
	Data visualization requirements			M3.10													
	Review existing tools and libraries			M3.10													
	New technical options for NAP data visualization			M3.10	Terms and conditions of data reuse												
	Licensing principles and needs of NAP actors			M3.11													
	Requirements for data reuse			M3.11													
	Open licences and extensibility assessment			M3.11	Methodology supporting data valuation and fair pricing												
	Reference licences			M3.11													
Task 3.4: Data Exchange Vision	Principles of data providers and consumers for data valuation and pricing	HR,CY,CZ,FI,UI,TP,DE,BAST,IT,RO,NPRA	GR	M3.12													
	Data quality mapping			M3.12	Implications of the General Data Protection Regulation (GDPR) on the operation of the European NAPs												
	Draft method/model for data valuation and pricing			M3.12													
	Pilot application, discussion and adaptation of developed method/model			M3.12													
	GDPR principles and implications for NAPs			M3.11	Technical demonstration of NAP added value scenarios												
	Requirements for GDPR compliance			M3.11													
	Application areas and prioritized use case			M3.12													
	Data requirements and collection mechanisms			M3.12	Support of training events												
	Design and implication of prioritized use cases			M3.12													
	Best practices and future steps for NAP added value extraction			M3.12													
Task 3.5: Training for NAP content and accessibility	Training purpose and trainees identification	CY,CZ,DE,BAST,NL,RO	GR	M3.13	Training material												
	Key outputs collection (WG3)			M3.13													
	Format and training material development			M3.13													
	Event purpose and target audience			M3.13	Support of training events												
	Training methods and material adaptation			M3.13													
	Develop and support training programme			M3.13													
Organizational Tasks	OT1: WG3 work plan 2021/2022 (current document)	All	GR	-	-												
	OT2: WG3 work plan 2022/2023 (update)			-	-												
	OT3: WG3 work plan 2023/2024 (update)			-	-												
	OT4: Contribution of WG3 to Project Progress Report 2021			-	-												
	OT4: Contribution of WG3 to Project Progress Report 2022			-	-												
	OT4: Contribution of WG3 to Project Progress Report 2023			-	-												
	OT4: Contribution of WG3 to Project Progress Report 2024			-	-												



Working programme 2022



	Title and Description of Activities/Action	Responsibilities/ Roles	Lead	Milestone number	Target achievement/Outcome	2023			
						1st quarter	2nd quarter	3rd quarter	4th quarter
Task 3.1: Data content requirements arising from current and future developments	Data content requirements	AT,HR,CY,CZ, FI,UI,TP,FR,GR,HULL VLT,ITxPT,LU,PT,ES, NPRA	RO	M3.1	Identification of requirements and gaps in terms of data content of the European NAPs				
	Gap analysis and mitigation			M3.1					
	NAP data types, categories and dictionaries			M3.1	Supporting material for harmonized data publications at European level				
	First periodical NAP data availability report			M3.2					
	Second periodical NAP data availability report			M3.3					
	Third periodical NAP data availability report			M3.4	Periodical reporting to the European Commission on the data availability of European NAPs				
	Fourth periodical NAP data availability report			M3.5					
	Fifth periodical NAP data availability report			M3.6					
	Final periodical NAP data availability report			M3.7					
Task 3.2: European NAPs data quality	Existing data quality frameworks gaps	AT,BE,CZ,EE,FI,UI,TP, FR,GR,HULL,ERTIC O,ITxPT,NL,RO	DE-BAST	M3.8	Establishment of a data quality framework				
	Actors needs			M3.8					
	Scoping of data quality frameworks			M3.8					
	Elaboration of data quality frameworks			M3.8					
	Best practices, quality assessment and export input			M3.8					
	Pilot application of data quality framework			M3.8	Guidelines for assessing data quality in European NAPs				
	Provision of guidelines and adaptation			M3.8					
	Requirements for neutral quality certification			M3.9					
	Interact with WG5 and update requirements			M3.9	Definition of a quality certification process and provision of certificates to selected NAP publications				
	Layout, processes and procedures for quality certification			M3.9					
Task 3.3: Data access and reuse	Best practices in data visualization and NAP actors perspectives	AT,HR,CY,CZ,DK,EE, UI,TP,DE, BAS,LT,RO,NPRA	GR	M3.10	Technical options for NAP data visualization				
	Data visualization requirements			M3.10					
	Review existing tools and libraries			M3.10					
	New technical options for NAP data visualization			M3.10					
	Licensing principles and needs of NAP actors			M3.11	Terms and conditions of data reuse				
	Requirements for data reuse			M3.11					
	Open licences and extensibility assessment			M3.11					
	Reference licences			M3.11					
	Principles of data providers and consumers for data valuation and pricing			M3.12	Methodology supporting data valuation and fair pricing				
	Data quality mapping			M3.12					
Task 3.4: Data Exchange Vision	Draft method/model for data valuation and pricing	HR,CY,CZ,FI,UI,TP,DE, BAS,LT,RO,NPRA	GR	M3.12					
	Pilot application, discussion and adaptation of developed method/model			M3.12					
	GDPR principles and implications for NAPs			M3.11	Implications of the General Data Protection Regulation (GDPR) on the operation of the European NAPs				
	Requirements for GDPR compliance			M3.11					
	Application areas and prioritized use case			M3.12	Technical demonstration of NAP added value scenarios				
	Data requirements and collection mechanisms			M3.12					
	Design and implication of prioritized use cases			M3.12					
	Best practices and future steps for NAP added value extraction			M3.12					
Task 3.5: Training for NAP content and accessibility	Training purpose and trainees identification	CY,CZ,DE- BAS,LT,RO	GR	M3.13	Training material				
	Key outputs collection (WG3)			M3.13					
	Format and training material development			M3.13					
	Event purpose and target audience			M3.13	Support of training events				
	Training methods and material adaptation			M3.13					
	Develop and support training programme			M3.13					
Organizational Tasks	OT1: WG3 work plan 2021/2022 (current document)	All	GR	-	-				
	OT2: WG3 work plan 2022/2023 (update)			-	-				
	OT3: WG3 work plan 2023/2024 (update)			-	-				
	OT4: Contribution of WG3 to Project Progress Report 2021			-	-				
	OT4: Contribution of WG3 to Project Progress Report 2022			-	-				
	OT4: Contribution of WG3 to Project Progress Report 2023			-	-				
	OT4: Contribution of WG3 to Project Progress Report 2024			-	-				



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	Title and Description of Activities/Action	Responsibilities/ Roles	Lead	Milestone number	Target achievement/Outcome	2024			
						1st quarter	2nd quarter	3rd quarter	4th quarter
Task 3.1: Data content requirements arising from current and future developments	Data content requirements	AT,HR,CY,CZ, FI,UI,TP,FR,GR,HULL V,LT,ITxPT,LU,PT,ES, NPRA	RO	M3.1	Identification of requirements and gaps in terms of data content of the European NAPs				
	Gap analysis and mitigation			M3.1					
	NAP data types, categories and dictionaries			M3.1	Supporting material for harmonized data publications at European level				
	First periodical NAP data availability report			M3.2					
	Second periodical NAP data availability report			M3.3					
	Third periodical NAP data availability report			M3.4	Periodical reporting to the European Commission on the data availability of European NAPs				
	Fourth periodical NAP data availability report			M3.5					
	Fifth periodical NAP data availability report			M3.6					
	Final periodical NAP data availability report			M3.7					
Task 3.2: European NAPs data quality	Existing data quality frameworks gaps	AT,BE,CZ,EE,FI,UI,TP, FR,GR,HULL,ERTIC O,ITxPT,NL,RO	DE-BAST	M3.8					
	Actors needs			M3.8	Establishment of a data quality framework				
	Scoping of data quality frameworks			M3.8					
	Elaboration of data quality frameworks			M3.8					
	Best practices, quality assessment and export input			M3.8	Guidelines for assessing data quality in European NAPs				
	Pilot application of data quality framework			M3.8					
	Provision of guidelines and adaptation			M3.8					
	Requirements for neutral quality certification			M3.9					
	Interact with WGS and update requirements			M3.9	Definition of a quality certification process and provision of certificates to selected NAP publications				
	Layout, processes and procedures for quality certification			M3.9					
Task 3.3: Data access and reuse	Interact with WGS and update processes and requirements	AT,HR,CY,CZ,DK,EE, UI,TP,DE, BAS,LT,RO,NPRA	GR	M3.9					
	Handover quality certification framework to WGS and update the outputs of the current task			M3.9					
	Best practices in data visualization and NAP actors perspectives			M3.10					
	Data visualization requirements			M3.10	Technical options for NAP data visualization				
	Review existing tools and libraries			M3.10					
	New technical options for NAP data visualization			M3.10					
	Licensing principles and needs of NAP actors			M3.11	Terms and conditions of data reuse				
	Requirements for data reuse			M3.11					
	Open licences and extensibility assessment			M3.11					
	Reference licences			M3.11					
Task 3.4: Data Exchange Vision	Principles of data providers and consumers for data valuation and pricing	HR,CY,CZ,FI,UI,TP,DE, BAS,LT,RO,NPRA	GR	M3.12					
	Data quality mapping			M3.12	Methodology supporting data valuation and fair pricing				
	Draft method/model for data valuation and pricing			M3.12					
	Pilot application, discussion and adaptation of developed method/model			M3.12					
	GDPR principles and implications for NAPs			M3.11	Implications of the General Data Protection Regulation (GDPR) on the operation of the European NAPs				
	Requirements for GDPR compliance			M3.11					
	Application areas and prioritized use case			M3.12					
	Data requirements and collection mechanisms			M3.12	Technical demonstration of NAP added value scenarios				
	Design and implication of prioritized use cases			M3.12					
Task 3.5: Training for NAP content and accessibility	Best practices and future steps for NAP added value extraction	CY,CZ,DE, BAS,LT,RO,NPRA	GR	M3.12					
	Training purpose and trainees identification			M3.13	Training material				
	Key outputs collection (WG3)			M3.13					
	Format and training material development			M3.13					
	Event purpose and target audience			M3.13					
	Training methods and material adaptation			M3.13	Support of training events				
	Develop and support training programme			M3.13					
Organizational Tasks	OT1: WG3 work plan 2021/2022 (current document)	All	GR	-	-				
	OT2: WG3 work plan 2022/2023 (update)			-	-				
	OT3: WG3 work plan 2023/2024 (update)			-	-				
	OT4: Contribution of WG3 to Project Progress Report 2021			-	-				
	OT4: Contribution of WG3 to Project Progress Report 2022			-	-				
	OT4: Contribution of WG3 to Project Progress Report 2023			-	-				
	OT4: Contribution of WG3 to Project Progress Report 2024			-	-				



9. Working Group 4 “Data Exchange Standards”

9.1. Introduction

The work plan constitutes the roadmap for the elaboration of tasks under WG4. It includes the scheduled tasks and due dates.

The alignment activities depend on the sub working groups SWG4.1, 4.2, 4.3 and 4.4. They are described below.

The interactions with other working groups are important too, namely with H2, H3, WG1, WG2, WG3, in particular for demonstrations and the organisation of forums. The aim of this document is to identify these interactions.

9.2. Information from the proposal

The WG4 aims to the development and enhancement of standards and the alignment between current EU actions and the enablement of harmonisation. In this respect, it establishes coordination between the different data standards approaches and defines a common roadmap for data standardisation and publication.

In particular considering the current and future needs in the framework of data standards in EU mobility data exchange the following subWGs are formed:

- (1) SubWG 4.1: DATEX II
- (2) SubWG 4.2: TN-ITS
- (3) SubWG 4.3: Multimodal data
- (4) SubWG 4.4.: Metadata

The alignment challenge is addressed through a common Task between all subWGs, where all subWGs will co-design the roadmap for data standards analysis towards harmonisation. In combination with other activities under SWGs, the identification of complementary actions needed (e.g. conversion, choice of one specification/ standard etc.) to enable interoperability in EU is another key aspect of WG4.

Coordination Task: Alignment and harmonisation of data standards

Coordination of WG4 as a whole including the interaction and harmonisation between the different SWG's (SWG4.1, SWG4.2, SWG4.3, SWG4.4) aiming at harmonising standards over the different domains.

Coordination and harmonising WG4 aiming at the creation of an interoperable ecosystem including the required consensus and governance of information cross standards. The main objectives of the task are:

- Monitor yearly programmes and progress
- Harmonise standards
- Prevent double work
- Identify black spots (need for actions)
- Consensus building and prioritisation

The coordination between the subWGs is established through the following activities and the active contribution of the four subWGs:

- Identification of data standards ecosystem



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Commented [CG(66)]: We have currently an issue with parking standard(s), with conflicting views between Datex and Transmodel groups. This needs to be identified in the WP 2022 and there needs to be specific action undertaken to address this issue, with a clear roadmap.
Please consider this as high priority.

Commented [V(67R66)]: It is on top of the agenda for work to be taken up in 2022.

Commented [HT68R66]: Yes, we are seeking to set up a NAPCORE Ambassador (or Ambassador team) for this topic to facilitate addressing this issue with a high priority

- Roadmap for harmonisation

Coordination meetings and systematic exchange between the subWGs in respect to their progress on the implementation of the roadmap is included.

Task 4.0.1: Identification of data standards ecosystem

This task aims to:

- identify topics for harmonisation
- define the actors involved and the initiatives/ actions that take place

Task 4.0.2: Roadmap for harmonisation

Based on the results of subtask T4.0.1 a clear roadmap will be defined to be followed by the subWGs to enable harmonisation. The roadmap will define the work method and the topics, actions and milestones of the WG4. Priorities on the areas or Working Groups and initiatives that require more attention and active participation of each sub WG will be set. Roadmap updates will take into consideration intermediate results of carried out work under SWGs and will define the scope of the work of each of the sub WGs.

Each Working Group will contribute to the identification of the ecosystem and provide their input for the definition of roadmap. SubWGs activities, objectives and contribution to the harmonisation task are presented in detail in the following sections.

9.3. Task 4.0.1 “Identification of data standards ecosystem”

9.3.1. Expected results and planning

Nr.	Expected results	Due dates
M.4.0.1	Ecosystem described and role of standards in relation to services documented	6/2022
	Constitution of a dedicated task force	1/2022
	Definition of the scope of the study	2/2022
	Collection of inputs from different experts	3/2022
	Consolidation of all contributions at task force level	4/2022
	Review between working group and sub working groups leaders	5/2022
	Finalisation and submission of the documented cartography	6/2022

9.3.2. Approach

General Principles and Structure

The objective is to deliver an overview of existing standards, recommended by the EU and/ or used by the NAPs (NAP-centric approach), with examples and an indication of the links between the standards. This overarching activity will be conducted in parallel with regulatory developments, and may have an influence on the regulatory evolutions.

To tackle the issue of collecting the existing expertise:

- For standards and services covered by WG4 and SWG 4.1, 4.2, 4.3, 4.4:
 - Knowledge to be found inside the working group and sub-working groups.
- For standards and services NOT covered by WG4 and SWG 4.1, 4.2, 4.3, 4.4:
 - Workshop to be organised with relevant experts.



- With individual contributions:
 - Online creative mapping of the complex ecosystem to be proposed.

Organisational structure

A task force will be set up to carry out the analysis and propose a report. It will be made up of experts identified within WG4 and SWG 4.1, 4.2, 4.3 et 4.4.

The task is coordinated by the working group and sub working groups leaders.

Dependencies and external relations

There are strong interconnexions with WG2 “interoperability and level of service of NAPs” (goal of a common architecture of the NAPs and their services, evolving regulatory requirements having an impact on the standards) and WG3 “NAP content and accessibility” (production of a data & services catalogue/ dictionary in connection with SWG4.4).

Contributions per partner

Contributions to the task will be organised by the main actors from SWG4.1 to 4.4 (i.e. FR, NL, ERTICO, ITxPT, DE-BASt). If necessary, these actors will name or invite other experts to support the task.

9.4. Task 4.0.2 “Roadmap for harmonisation”

9.4.1. Expected results and planning

Nr.	Expected results	Due dates
M.4.0.2	Roadmap for harmonisation tasks incl. qualitative impact assessment	12/2022
	Constitution of a dedicated task force	07/2022
	Development of a methodology to identify harmonisation priorities	08/2022
	Collection of qualitative impact assessments	9/2022
	Consolidation of all recommendations	10/2022
	Review between working group and sub working groups leaders	11/2022
	Finalisation and submission of the milestones	12/2022

9.4.2. Approach

General Principles and Structure

To identify harmonisation priorities:

- Review of former studies and existing tools:
 - On standards and actions necessary to enable NAP services.
 - On mapping methodology for comparison of standards.
- Identification of harmonisation priorities:
 - Based on interviews with experts.
 - Liaison with other working groups.



Organisational structure

A task force will be set up to carry out the analysis and propose a report. It will be made up of experts identified within WG4 and SWGs 4.1, 4.2, 4.3 and 4.4.

The task is coordinated by the working group and sub working groups leaders.

Dependencies and external relations

There are strong interconnexions with H2 “identification of action needed” (recommendations for the governance structure of standardisation, proposal for an upgrading process for standardisation activities), H3 “dissemination, outreach activities, training” (demonstration of performance of standards on specific use cases, priorities for implementation support of standards) and WG1 “NAP & NB platform strategy and governance” (as for H2, guidance on NAPs services offers, harmonisation of the use of standards).

Contributions per partner

Contributions to the task will be organised by the main actors from SWG4.1 to 4.4 (i.e. FR, NL, ERTICO, ITxPT, DE-BASt). If necessary, these actors will name or invite other experts to support the task.



10. Sub Working Group 4.1 “DATEX II”

10.1. Scope of the Sub Working Group for 2022

SWG 4.1 in general covers the continuation of the DATEX II work and integration with the standardisation activities with the scope of the NAP’s.

From this perspective the following specific objectives are defined:

- Involve the non-traditional DATEX II stakeholders in the governance
- Organise liaison and collaboration with other custodians of relevant standards in the domain
- Reach out to new domains to help them standardise according to (EU, national, regional, programme etc.) policies
- Harmonisation between Member States’ profiles
- Continuation of the DATEX II Support (e.g., website, docs portal, ...)
- Educate and train DATEX II users/ experts in the different user levels and user groups among Europe, open to public and private organisations
- Host and maintain an international network of experts on functional and technical level that is capable of delivering required standards
- Maintain and further develop DATEX II standards

10.1.1. Milestones

MS #	Responsible Task	Milestone description	2021	2022				
			Q4	Q1	Q2	Q3	Q4	
M4.1.100	4.1.1	Change requests for relevant parts of DATEX II for alignment of agreed topics (yearly updated)	x	m				
M4.1.101	4.1.1	Change requests for relevant parts of DATEX II for alignment of agreed additional topics						x
M4.1.103	4.1.1	Initiation of STAB	x		m			
M4.1.200	4.1.2	Updated DATEX II Rules of Procedure incl. governance of RRP's and RSP's	x	m				
M4.1.201	4.1.2	Progress report 2021	x	m				
M4.1.202	4.1.2	Workplan 2022	x					
M4.1.203	4.1.2	Progress report 2022						x
M4.1.204	4.1.2	Workplan 2023						x
M4.1.300	4.1.3	Existing material handed over from DATEX II PSA and embedded in project	x					
M4.1.301	4.1.3	DATEX II user forum			x			
M4.1.306	4.1.3	D2 Academy running and used	x					
M4.1.307	4.1.3	Masterclass DATEX II Programme			x			
M4.1.311	4.1.3	DATEX II webtool supporting full RAV scope			x			
M4.1.312	4.1.3	Report on provided support, dissemination, education and training	x	m				
M4.1.313	4.1.3	Report on provided support, dissemination, education and training						x
M4.1.400	4.1.4	Version 3.3 with accompanying RRP's and RSP's			x			
M4.1.401	4.1.4	Version 3.4 with accompanying RRP's and RSP's						x
M4.1.404	4.1.4 & 4.1.6	Standardisation proposals (either direct or via ITS rolling workplan) 2022	x					
M4.1.405	4.1.4 & 4.1.6	Standardisation proposals (either direct or via ITS rolling workplan) 2023					x	
M4.1.408	4.1.4	Roadmap Harmonised profiles						x
M4.1.500	4.1.5	Change requests on methodology		x				
M4.1.501	4.1.5	Impact assessment on content models		x				
M4.1.502	4.1.5	Change requests on models					x	
M4.1.503	4.1.5	Inventory taking of future work						x
M4.1.600	4.1.6	User requirements on identified topics		x				
M4.1.601	4.1.6	Standardisation proposals (either direct or via ITS rolling workplan)					x	
M4.1.602	4.1.6	User requirements on identified topics						x
M4.1.604	4.1.6	Annual inventory of new topics						x

The milestones that require SCOM-endorsement are *M4.1.405 & M4.1.601 Standardisation proposals*.

Commented [CG(69)]: Specific attention should be brought to the extension of RTTI specifications to the local level, with new actors in particular at urban level.

Commented [V(70R69)]: This is well understood. The extended scope and impact of the RTTI revision leads to several work items in the different tasks. It touches all: standards, profiles, specific usecase support and training and support of different stakeholder communities.

Commented [HT71R69]: Also for the new RTTI revision, we intend to set up an Ambassador to manage the cross-activity nature of this topic.



All other milestones are contributing to that or are actions, activities, developments to support the DATEX II user community. All this work is reflected by the annual workplan or its underpinning plans.

10.1.2. Active/ following partners

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	NHUK	UITP
A		A	F	F	A	A	F	F	F	A	
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
A	A		A	A	F		A	F			
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NO	FEDRO
F	L	F	F	A	A	F	A	F	A	A	F

Active partners:

Partner	Organisation Name of active partner or Implementing Body
DE-BAS	Bundesanstalt für Straßenwesen (BAST)
AT	ASFINAG
BE-FL	Flemish government (Agentschap Wegen en Verkeer)
CY	University of Cyprus - The KIOS Research and Innovation Centre of Excellence (CY-KIOS)
CZ	Roads and Motorways Directorate of the Czech Republic
FR	Cerema
GR	Centre for Research and Technology Hellas
GR-EG	Egnatia Odos SA
IT	Autostrade per l'Italia S.p.A.
NL	National Road Traffic Data Portal (SWG Lead)
PT	Armis
RO	Electronic solutions (ELSOL)
SI	Ministry of Infrastructure, Slovenia
SE	Swedish Transport Administration
NHUK	Mott MacDonald (for National Highways)
NPRA	Norwegian Public Roads Administration

Almost all other member states participating in NAPCORE (all except IE and LT) are represented by a Following partner in this SWG. The coordinator of these countries organises their participation accordingly by identifying persons with fitting expertise to interpret and participate adequately in what is going on in the different tasks of SWG 4.1.

Responsibilities

Active members: participate and contribute to the work that is agreed in the CMB in order to:

- support the use of DATEX II based datasets in the NAP ecosystem
- support the operational traffic management domain with required standards deployed in the required technology platforms.

Commented [CG(72)]: What is it?

Commented [FE(73R72)]: Change Management Board



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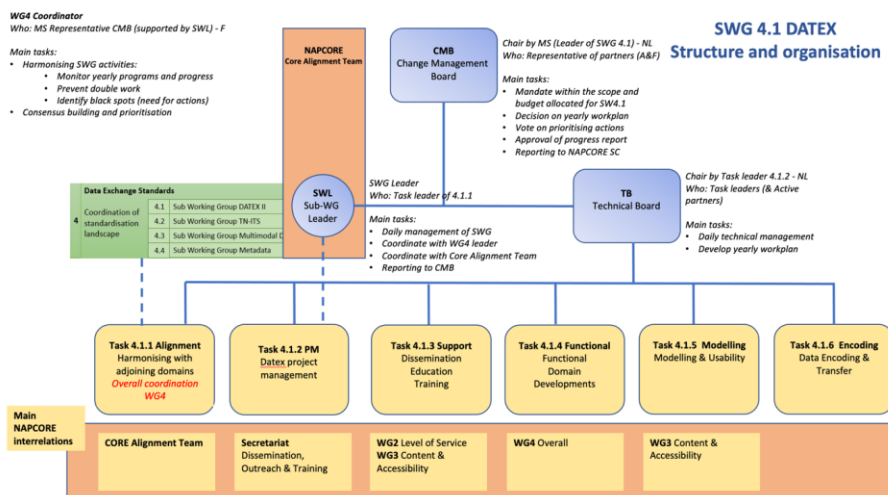
Following members: have the ability to participate in any meeting of the SWG. Their contributions are appreciated especially to the requirement collection activities that are ongoing in the different tasks. The decision making of the allocation of resources and prioritisation of tasks is done by the active members of the CMB and TB.

The following structure safeguards the governance of DATEX II, within the scope and governance structure of NAPCORE. The CMB has mandate to update and modify the DATEX II workplan within the given scope, milestones and budgets. New working items can be added to tasks under the following conditions:

- At least 3 Member States have interest and will actively contribute
- One Member State will take the WI lead
- There are no consequences for the allocated, overall DATEX II budget within NAPCORE.

Commented [CG(74)]: This needs to be done in coherence with 4.0.

Commented [V(75R74)]: Yes, that is the idea of the WG 4 taskforce to come with a joint approach. This is managed by task 4.1.1 in this SWG and will lead to proposed actions in this SWG.



- Change Management Board - CMB
 - Chaired by leading Member State NL
 - Consists of representatives of the participating active and following partners of the SWG
 - Define the requirements and priorities regarding the annual Workplan to be proposed by the Technical Board
 - Approves the annual progress report and Workplan
 - Mandate within the scope of the DATEX II SWG and the defined milestones and budgets
- Sub Working Group Leader - SWGL
 - Monitoring technical and financial progress and milestones
 - Chaired by leading member state NL
 - Daily management, administration, communication, ...
 - Reporting to the CMB, including deviations and suggested mitigation actions related to the workplan
- Technical Board – TB
 - TB is chaired by SWGL
 - Consisting of Task leaders and active Member States



- TB is responsible for quality of technical/ content
- Prepare annual progress report and draft Workplan

10.2. Task 4.1.1 “Alignment and harmonisation”

10.2.1. Main objectives of the Task

Create an interoperable ecosystem

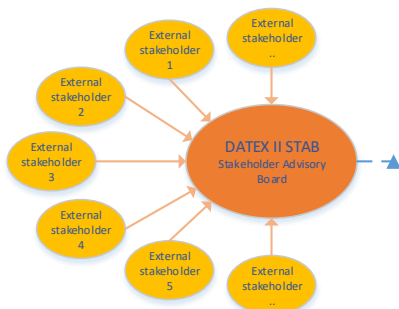
Contribute to the overall coordination of activities and workplan of WG4 as a whole and participate in activities to achieve consensus, harmonise standards, prevent double work and identify black spots (need for actions) among the standards in WG 4 scope. Further detailing is in WG 4 workplan

Actions will be taken to ensure liaison and harmonisation within the DATEX II value chain on the prioritised subjects to other road traffic service related data standards like C-ITS, TPEG, Sensoris etc.

For the latter the DATEX II Stakeholder Advisory Board will be continued and convene on an annual basis.

The way the DATEX II STAB relates to the NAPCORE Advisory Board is managed through tight cooperation between the two responsible WG's. DATEX II STAB will focus on DATEX II as a tactical enabler in the traffic management domain, whereas NAPCORE AB has a strategic orientation to traveller services in general. There will be overlaps and these will strengthen both.

Stakeholder Advisory Board



Detailed chart of the Stakeholder Advisory Board

10.2.2. Organisational structure

Active Partners:

AT	CZ	DE	FR	GR	GR-EG	HR	IT	NL	NO	PT	RO	SE	SL	NHUK
----	----	----	----	----	-------	----	----	----	----	----	----	----	----	------

Task lead: France

Deputy: Italy

10.2.3. Dependencies and external relations

Dependencies: WG 4 as a whole

External actors: TISA, CAR2CAR, C-ROADS, APDS, EPA, IDACS

Commented [CG(76)]: Please see previous comment on parking standards.

Commented [V(77R76)]: It is on top of the agenda for work to be taken up in 2022.

Commented [CG(78)]: Please check wording, this is unclear + we cannot put on the same level the two entities.

Commented [GD79R78]: I would totally not regard the Advisory Boards being on the same level; NAPCORE Advisory Board is on a higher level, speaking of broader level of view on different topics and different sectors, whereas the DATEX II Advisory Board is only focussing on DATEX II topics.

Commented [V(80R78)]: The DATEX II STAB is oriented towards the road-traffic domain and the alignment with e.g. C-ITS and other road-traffic and traffic management related organisations on a tactical level. whereas the Napcore AB will address the high level strategic issues of napcore. This is complementary and not competing.



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10.2.4. Work Programme 2022

			2021	2022			
			Q4	Q1	Q2	Q3	Q4
MS #	Responsible Task	Milestone description					
M4.1.100	4.1.1	Change requests for relevant parts of DATEX II for alignment of agreed topics (yearly updated)	x	m			
M4.1.101	4.1.1	Change requests for relevant parts of DATEX II for alignment of agreed additional topics					x
M4.1.103	4.1.1	Initiation of STAB	x	m			



Working programme 2022



Task	Subtasks	Title and Description of Activities/Action	Responsibilities/ Roles/Participants	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2021												2022											
										4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12			
4.1.1 - Alignment and harmonisation	4.1.1.1 - Creating an interoperable ecosystem	Collection of information on international initiatives and international actors	AP & F	FR	M 4.0.1	Ecosystem described and role of standards in relation to services documented in NAP context	Inputs for standardisation landscape	Dec-2021	Feb-2022									x	x	x	x												
		Collects input from follower and active members for national initiatives and actors	AP & F				Inputs for standardisation landscape	Dec-2021	Feb-2022									x	x	x	x												
		Consolidation of inputs	AL				Consistent inputs for M.4.0.1	Mar-2022	Apr-2022									x	x	x													
		Participate in WG 4 taskforce	AL + dep				Draft of SGW4.3 for M.4.0.1	May-2022	May-2022													x											
		Updates after WG4 review	AL + dep				Final contribution for M.4.0.1	Jun-2022	Jun-2022																x								
		formulate changerequests stemming from M.4.0.1	AL + dep	FR	M.4.1.100		Change requests for relevant parts of DATEX II for alignment of agreed topics (yearly updated)																										
	4.1.1.2 - Contribution to the definition of roadmap for harmonisation	Setup of priorities on the areas or working groups and initiatives that require more attention and active participation of SWG 4.1	AP & F	FR	M 4.0.2	Roadmap for harmonisation tasks incl. qualitative impact assessment	Identification of priorities related to SWG4.3	Feb-2022	May-2022										x	x	x	x											
		Consolidation of inputs	AL + dep				Consistent inputs for M.4.0.2	Apr-2022	Apr-2022												x												
		Participate in WG 4 taskforce	AL + dep + A				Draft of SGW4.3 for M.4.0.2	May-2022	May-2022													x											
		Updates after WG4 review and delivery to WG4 leader	AL + dep				Final contribution for M.4.0.2	Jun-2022	Jun-2022															x									
		Review of priorities on the areas or working groups and initiatives that require more attention and active participation of SWG 4.1	AP & F	FR	M 4.0.3	Update of Roadmap for harmonisation tasks incl. qualitative impact assessment	Update of priorities related to SWG4.1	Jul-2022	May-2023																	x	x	x	x	x	x		
		Consolidation of inputs	AL + dep				Consistent inputs for M.4.0.3	Apr-2023	Apr-2023																								
		Deliver to WG4 leader SWG 4.3 input	AL + dep				Draft of SGW4.1 contribution for M.4.0.3	May-2023	May-2023																								
		Updates after WG4 review and delivery to WG4 leader	AL + dep				Final contribution for M.4.0.3	Jun-2023	Jun-2023																								
	4.1.1.3 - Harmonisation in road traffic ecosystem	Collection of information on international initiatives and international actors	AP & F	FR				Dec-2021	Apr-2022										x	x	x	x	x	x	x	x	x	x	x	x			
		Collects input from follower and active members for national initiatives and actors	AP & F																														
		Consolidation of inputs	AL																														
		Organise STAB	AL + SWGL	SWGL	M4.1.103	Initiation of STAB	STAB meeting annually	Mar-2022	Jun-2022																								
		Identify harmonisation tasks addressing vehicle-, traffic- and travel related definitions addressing same physical concept	AP	FR				Jul-2022	Oct-2022																								
		formulate changerequests	AP	FR	M4.1.101	Change requests for relevant parts of DATEX II for alignment of agreed additional topics	Change requests for relevant parts of DATEX II for alignment of agreed additional topics (yearly updated)	Nov-2022	Nov-2022																						x		
	Collaborate in TISA joint Working Group	AP	FR		v4.0 of SRTI document	full bi-directional SRTI alignment between D2/AlertC/TPEG/DENM/IVI/SENSORIS	Jan-2022	Dec-2022											x	x	x	x	x	x	x	x	x	x	x	x			



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10.3. Task 4.1.2 “Management and coordination”

10.3.1. Main objectives of the Task

Task 4.1.2 is the placeholder for all managerial tasks of the SubWorkingGroup 4.1 DATEX II.

It is the administrative placeholder where all partners (both active and follower) can claim their travel and attendance costs.

10.3.2. Organisational structure

The organisational structure is described in section 10.1.2 of this document. This paragraph addresses the way each activity is organised and working.

The subWorkingGroup DATEX II is working Agile due to the partly unforeseeable developments of requirements in the environment of SWG.

In agile terms all Tasks are Areas.

Each Area has EPICs, which are a thematical grouping of Work Items.

Work Items deliver the required output.

Each work item is either initiated because it is:

- mentioned in the grant agreement
- approved by the CMB (with at least 3 countries actively contributing, and fitting in one of the EPICs defined in the inventory taking phase of the project.)

The planning cycle of SWG 4.1 in agile terms:

- Planning increments of 1 year (corresponding with the annual workplan period)
- Sprints of 3 months (quarters)

The CMB functions as Business owner weighing the interests among the two lines of interest that this SWG has to serve.

The Task leaders own the Epics in their tasks and keeps a backlog of user stories to be refined by the work items.

Each work item has a work item leader, acting as product owner of the work item.

The Technical Board acts as Release Train manager and steers the prioritisation of WI in the tasks and planning based on the priorities defined by the CMB. There is strong interaction between the tasks within this subWorkingGroup. The Technical Board manages the adequate management of the aligned work uptake in the respective tasks. On monthly basis the progress is monitored and registered in the tooling used.

The CMB convenes twice a year to decide whether the uptake of new standardisation work identified and assessed by the responsible work item shall be done within the scope of the NAPCORE programme, or be put on the ITS Rolling workplan for the next year(s). A third meeting for the CMB can be organised to discuss the strategic epics and the risk management for DATEX II as a whole.

Quarterly each task does a refinement of the work items in the backlog, both addressing the detailing of the work, as well as the commitment of personalised resources to the work item in the sprint(s) required to deliver the defined output.

Commented [CG(81)]: Is it only that?

Commented [V(82R81)]: Fortunately not. This task takes up the DATEX II strategic issues:

- maintain the DATEX II strategy and vision of the DATEX II role in the ITS ecosystem with regard to data provision and support of traffic management processes.
- determine on the annual workplan, monitor and adapt the plan where needed, working towards a coherent set of datastandards supporting the NAP related datasets and the support of road traffic management.
- DATEX II governance in a wider ecosystem of standards both within and outside scope of delegated regulations,
- relation with CEN and ISO,
- Risk management

It the placeholder for the CMB meetings and work.

Commented [CG(83)]: Is this part relevant for a WP?

Commented [V(84R83)]: Probably not. Though we included this in order to give the reader and understanding of this new way of managing this (sub) project.

Commented [CG(85)]: Which one?

Commented [V(86R85)]: 4.1

Commented [CG(87)]: Please, avoid un-explained acronyms.

Commented [V(88R87)]: epics are large themes overarching several topics that need to be managed in a coherent way, done by the epic owner.

Commented [HT(89R87)]: It is by the way not an acronym but rather meant as the literal word "epic" as it is used in the agile development domain (definition e.g. here: <https://www.atlassian.com/agile/project-management/epics>).

Commented [CG(90)]: Which one?

Commented [V(91R90)]: In the preparation of the proposal, we took inventory of topics that need to be

Commented [CG(92)]: Please explain.

Commented [V(93R92)]: Delegated regulations related dataset on one hand and support of traffic management

Commented [CG(94)]: How are the task leaders designated?

Commented [V(95R94)]: on a voluntary basis, approved by the CMB. It is quite an organic process, where the

Commented [CG(96)]: Were tasks not called areas?

Commented [V(97R96)]: to be corrected! Tnx

Commented [CG(98)]: ?

Commented [V(99R98)]: there are a lot of interdependencies between different tasks. the TB manages

Commented [CG(100)]: Which one?

Commented [V(101R100)]: We use the MS-teams environment and AzureDevOps to register and manage our

Commented [CG(102)]: On which basis is this decided?

Commented [V(103R102)]:



Quarterly the TB convenes to plan the next sprints and discuss issues (could be content related) in the tasks

In the beginning of Q4 the CMB convenes to discuss and decide upon the workplan proposed for the next year.

During Q2 the CMB convenes to receive a progress report and discuss prioritisation issues of running and new items that have appeared on the backlog of the TB.

10.3.3. Dependencies and external relations

CMB member are supposed to handle the two types of interest of the NAP related developments and have a proper understanding both managerial as policy wise of the balance between NAP related work on DATEX II and Traffic management supporting work on DATEX II.

10.3.4. Work Programme 2022

The delivery of the milestones in the workplan are joint responsibility of

- SWG lead
- TB lead
- Task leaders

			2021	2022			
			Q4	Q1	Q2	Q3	Q4
MS #	Responsible Task	Milestone description					
M4.1.200	4.1.2	Updated DATEX II Rules of Procedure incl. governance of RRP's and RSP's	x	m			
M4.1.201	4.1.2	Progress report 2021	x	m			
M4.1.202	4.1.2	Workplan 2022	x				
M4.1.203	4.1.2	Progress report 2022					x
M4.1.204	4.1.2	Workplan 2023					x

10.4. Task 4.1.3 "Support Dissemination education and training"

10.4.1. Main objectives of the Task

This task will provide DATEX II user support, deliver content for education and training and take care of information provision and knowledge dissemination (e.g. DATEX II forum, websites, newsletters etc) incl. the actual training etc. The logistics and organisation will be done by the NAPCORE Secretariat.

10.4.2. Organisational structure

Active partners:

AT	CZ	DE	ES	FR	GR	GR_EG	HR	IT	NL	NO	PT	RO	SE	SL	NHUK
----	----	----	----	----	----	-------	----	----	----	----	----	----	----	----	------

Task lead: Netherlands

Deputy: France

Partners have identified the work items in the workplan to which they will actively contribute, follow or just observe. This is too detailed for the workplan.

Commented [CG(104)]: Please see previous comment on need to address the local level, following revision of RTTI specifications.

Commented [V(105R104)]: We will take that up

Commented [HT106R104]: This take up is not only in SWG4.1 but also, via the dedicated Ambassador across all activities.



10.4.3. Dependencies and external relations

Strong relation with H3 that does the actual organisation of workshops, training sessions etc.

Input expected from WG2 with regard to use case specific RSP's in Q2.

10.4.4. Work Programme 2022

MS #	Responsible Task	Milestone description	2021				2022			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
M4.1.300	4.1.3	Existing material handed over from DATEX II PSA and embedded in project	x							
M4.1.301	4.1.3	DATEX II user forum				x				
M4.1.306	4.1.3	D2 Academy running and used	x							
M4.1.307	4.1.3	Masterclass DATEX II Programme				x				
M4.1.311	4.1.3	DATEX II webtool supporting full RAV scope				x				
M4.1.312	4.1.3	Report on provided support, dissemination, education and training	x	m						
M4.1.313	4.1.3	Report on provided support, dissemination, education and training								x

Commented [CG(107)]: ?

Commented [V(108R107)]: Recommended Service Profiles. We make a distinction between Recommended Reference Profiles that support the minimum requirements for the datacategories in the DR's and more extensive profiles, based on usecases from specific domains.



[illegible]

10.5. Task 4.1.4 “Functional Domain Development”

10.5.1. Main objectives of the Task

The activities in this task are addressing the following topics:

- Adapt the DATEX II standard according to the functional demands stemming from the operational implementation of the Delegated Regulations 885 (Truck parking), 886 (SRTI), 1926 (MMTIS) and 962 (RTTI) in the Member States.
Support Member States by providing and maintaining Recommended Reference Profiles for each data-category in the delegated regulations.
This will be done based on requirements coming from WG 2 and the revision of the delegated regulations as such, which will lead to new datasets to standardise.
- The scope of operation of DATEX II is wider than data provision to the NAPs. It is an important tool in the creation of a standardised Traffic Management ecosystem of collaborating traffic and travel management services. Support Member States by providing and maintaining Recommended Service Profiles for each use case in the EU-EIP reference handbook.
 - Maintain the existing DATEX II standards and publishing annual updates of revised parts by processing and implementing user feedback.

To support both kinds of implementations, generic activities have been defined. The required new or updated DATEX II standards and accompanying Reference Profiles for the EU regulations will be provided through specific sub activities. The process will be as follows:

- requirement collection to determine the minimum viable product in user stories.
- creating European consensus about modifications
- managing the implementation of the agreed modifications to the content models through either:
 - submitting proposals for new (parts of) standards ITS-rolling workplan towards CEN
 - drafting and submitting updates of standardised parts to CEN
 - maintaining the existing (parts of the) standards according to the CEN revision scheme.
 - publishing the updated parts

10.5.2. Organisational structure

Active partners:

A	BE-	C	C	D	F	G	GR-	H	I	N	N	P	R	S	S	NHU
T	FL	Y	Z	E	R	R	EG	R	T	L	O	T	O	E	L	K

Task lead: Portugal

Deputy: Germany and Netherlands

Partners have identified the work items in the workplan to which they will actively contribute, follow or just observe. This is too detailed for the workplan.

The process of managing the workload, output and outcomes of this task is provided in Task 3.

10.5.3. Dependencies and external relations

Input is expected from WG2 on the requirements regarding the support of data types mentioned in the delegated regulations. Being either new publications, or recommended reference profiles.

Commented [FE(109)]: Why only operational? Can also be to prepare for future implementation of revised DRs.

Commented [V(110R109)]: As soon as we see a stable set of requirements in the revision process we can start the work. THOUGH it must be mentioned that some MS have difficulties assigning resources to work on topics that have no formal status (yet)



Also, the requirements stemming from the harmonisation and alignment taskforce in WG4 level is supposed to land here and lead to integrated standardisation proposals.

10.5.4. Work Programme 2022

			2021	2022			
			Q4	Q1	Q2	Q3	Q4
MS #	Responsible Task	Milestone description					
M4.1.400	4.1.4	Version 3.3 with accompanying RRP's and RSP's			x		
M4.1.401	4.1.4	Version 3.4 with accompanying RRP's and RSP's					x
M4.1.404	4.1.4 & 4.1.6	Standardisation proposals (either direct or via ITS rolling workplan) 2022	x				
M4.1.405	4.1.4 & 4.1.6	Standardisation proposals (either direct or via ITS rolling workplan) 2023				x	
M4.1.408	4.1.4	Roadmap Harmonised profiles					x



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10.6. Task 4.1.5 “Modelling and usability”

10.6.1. Main objectives of the Task

The DATEX II standards are based on a Methodology of design. This way all DATEX II standards and its consecutive parts will follow the same design patterns and conceptual data modelling approach. Within the scope of this programme, it is foreseen that new requirements on the usability, both in the conceptual as well as the technical domain, have to be served by DATEX II. These new developments require evolution and extension of the Methodology, in order to safeguard a systematic, reliable and sustainable development of the standards.

10.6.2. Organisational structure

Active partners

CZ	DE	FR	GR	GR-EG	HR	IT	NL	NO	PT	RO	SE	SL	NHUK
----	----	----	----	-------	----	----	----	----	----	----	----	----	------

Task lead: Germany

Deputy: National Highways UK

Partners have identified the work items in the workplan to which they will actively contribute, follow or just observe. This is too detailed for the workplan.

The process of managing the workload, output and outcomes of this task is provided in Task 3.

The work process for each work item is:

- requirement collection
- creating European consensus about modifications of methodology
- defining and managing the implementation of the agreed modifications to the content models by means of proposals for updates on existing parts in subtask maintenance of standards in task 4.1.4

10.6.3. Dependencies and external relations

Apart from the input stemming from the traffic management community (to be collected by the task self) input is expected from WG2 on the requirements regarding the support of datatypes mentioned in the delegated regulations. Being either new publications or new exchange concepts like linked data, simplified publications, and trust and authenticity requirements.

There are very tight relationships between methodology work items and work items in task 4.1.6 Encoding and transfer, as technology and content have interdependencies that should be managed in cooperation.

Also, the requirements stemming from the harmonisation and alignment taskforce in WG 4 level is supposed to land here and lead to harmonised methodologies improving an interoperable ecosystem.



10.6.4. Work Programme 2022

			2021	2022			
			Q4	Q1	Q2	Q3	Q4
MS #	Responsible Task	Milestone description					
M4.1.500	4.1.5	Change requests on methodology		x			
M4.1.501	4.1.5	Impact assessment on content models		x			
M4.1.502	4.1.5	Change requests on models				x	
M4.1.503	4.1.5	Inventory taking of future work					x



Working programme 2022



Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles/Participants	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2021												2022																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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4.1.5 - modeling and usability	4.1.5.1 - Methodology adjustments on new requirements	determine methodology adjustments to support: - historical datasets - D2 light publications - (linked) open data publications - metadata - filtering and querying of datasets	All active WI partners work on the content development and requirement engineering	DE	M4.1.500	Change requests on methodology		Jul-2022																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</



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10.7. Task 4.1.6 “Encoding and transfer”

10.7.1. Main objectives of the Task

Where task 4.1.4 addresses the data-structure of the information to be exchanged, this task addresses the way the data is transferred. There are two topics to address here:

- the exchange technologies that are required and evolving
- the exchange patterns in case of information exchange between systems with additional requirements on top of the simple data provision. Especially trust and data security require additional features in the standards.

10.7.2. Organisational structure

Active partners

CZ	DE	FR	GR	GR-EG	IT	NL	NO	PT	RO	SE	SL	NHUK
----	----	----	----	-------	----	----	----	----	----	----	----	------

Task lead: Italy

Deputy: Sweden

Partners have identified the work items in the workplan to which they will actively contribute, follow or just observe. This is too detailed for the workplan.

The process of managing the workload, output and outcomes of this task is provided in Task 3.

The work process for each work item is:

- requirement collection
- creating European consensus about modifications on DATEX II Exchange in combination with required content model modifications (taking methodology constraints into account)
- managing the implementation of the agreed modifications to the respective standardised parts through either:
 - drafting and submitting updates of standardised parts to ISO as part of task 4.1.4
 - maintaining the existing (parts of the) standards according to the ISO revision scheme.
 - putting the required standardisation assignment on the Rolling Workplan
 - publishing the updated parts
 - developing and publishing user support materials

10.7.3. Dependencies and external relations

Apart from the input stemming from the traffic management community (to be collected by the task self) input is expected from WG 2 on the requirements regarding the support of datatypes mentioned in the delegated regulations. Being either new publications or new exchange concepts like linked data, simplified publications, and trust and authenticity requirements.

There are very tight relationships between methodology work items and work items in task 4.1.5 methodology and usability, as technology and content have interdependencies that should be managed in cooperation.

Also, the requirements stemming from the harmonisation and alignment taskforce in WG 4 level is supposed to land here and lead to harmonised exchange approaches improving an interoperable ecosystem.



10.7.4. Work Programme 2022

			2021	2022			
			Q4	Q1	Q2	Q3	Q4
MS #	Responsible Task	Milestone description					
M4.1.600	4.1.6	User requirements on identified topics		x			
M4.1.601	4.1.6	Standardisation proposals (either direct or via ITS rolling workplan)				x	
M4.1.602	4.1.6	User requirements on identified topics					x
M4.1.604	4.1.6	Annual inventory of new topics					x



 This project has received funding from the European Commission's Directorate General for Transport and Mobility under Grant Agreement no. MOVE/B4/SUB/2020-123/SI2.85223

11. Sub Working Group 4.2 “TN-ITS”

11.1. Scope of the Sub Working Group for 2022

The activities in SWG 4.2 will take advantage of the pre-existing knowledge and expertise of the TN-ITS association, which has already resulted in operational road data sharing services in several Member States (MS) and pilot services in 9 other MS, and will focus on the specification and further elaboration of the TN-ITS standard. This SWG in general covers partly the continuation of the TN-ITS work and focuses on the integration with the standardisation activities within the scope of the NAP's. Building on the work that has been done in the previous PSA CEF project 'TN-ITS GO', where in this new NAPCORE project following priorities are set, with specific focus on the local level, as DR 2015/1962 is revised to address this local level, in particular for traffic regulations.

- prepare extensions and enhancements of the TN-ITS stakeholder network services - both from public and private side,
- continue to develop and promote the TN-ITS technical specifications, by safeguarding harmonisation between MS, and in interaction with other custodians of relevant standards in the domain, with a specific focus on bidirectional data/ information exchange between public and private stakeholders,
- provide feedback on TN-ITS standardisation work to ensure uptake of findings and needs identified by NAPCORE stakeholders,
- enhance the reliability of the TN-ITS data chain & data trust to enable new emerging applications or functional domains (in agreement of EU policies, cfr. revision of the ITS Directive), e.g. Connected and Cooperative Automated Mobility domain,
- engage the EU Member States community of experts in defining strategy & growth of the TN-ITS services and its assessment, capable of delivering required standards,
- promote knowledge dissemination of such data sharing services and their benefits. Continue the TN-ITS support (website, documentation portal, etc.) and educate & train TN-ITS users/ experts (in the different user levels and user groups within Europe, open to public and private organisations).

11.1.1. Time plan

Timeplan

Year	2021			2022				2023				2024			
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Task 4.2.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Task 4.2.2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Task 4.2.3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Task 4.2.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Task 4.2.5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Task 4.2.6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Commented [CG(111)]: Here as well, specific focus should also be on the local level, as DR 2015/1962 is revised to address this local level, in particular for traffic regulations.

Commented [FD112R111]: added the suggestion

Commented [CG(113)]: Is this reflected in H.3.2 “Events” ?

Commented [FD114R113]: I cannot answer this , but SWG4.2 has this as a specific action in SWG4.2.6

Commented [HT115R113]: There will be a coordination effort between H.3.2 and all activities, yes.



11.1.2. Milestones

MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification (deliverables)
M4.2.1	4.2.1	Contribution to the Roadmap for harmonisation	11/2021	Set of recommendation provided to DATEX
M4.2.2	4.2.1	Contribution to the Roadmap for harmonisation	11/2022	Set of recommendation provided to DATEX
M4.2.3	4.2.2	Project management procedures in place	9/2021	D 4.x Project and quality management report
M4.2.4	4.2.3	Technical Specifications	11/2022	Report available
M4.2.5	4.2.3	Technical Specifications	6/2024	Report available
M4.2.6	4.2.4	Requirements on trust, quality, integrity and security of data established. Concepts of data evaluation tools (draft)	6/2023	Report available
M4.2.7	4.2.4	Guide on ensuring potential deployment of trust, quality, integrity and security of data established Concepts of data evaluation tools (update)	12/2024	Report available
M4.2.8	4.2.2	Recommendation for DG MOVE for TN-ITS deployment in EU Member States	6/2023	Recommendations sent to Coordinator
M4.2.9	4.2.2	Recommendation for DG MOVE for TN-ITS deployment in EU Member States	9/2024	Recommendations sent to Coordinator
M4.2.10	4.2.6	TN-ITS network meeting reports	6/2022	Report available
M4.2.11	4.2.6	TN-ITS network meeting reports	6/2023	Report available
M4.2.12	4.2.6	TN-ITS network meeting reports	6/2024	Report available
M4.2.13	4.2.6	TN-ITS network meeting reports	12/2024	Report available

11.1.3. Active/ following partnersParticipants:

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	NH	UITP
F		A	F	A	A	A	F	F	A		
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
F		F	F	F	A	F	A	F	F	L	
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
F	F	F	F	F	F	F	A	F	F	A	



11.1.4. Responsibilities

Task	Description	Responsible
4.2.1	Alignment and harmonisation	Stephen T'siobbel
4.2.2	Management and Coordination	Frank Daems
4.2.3	TN-ITS maintenance and extension of technical specification	Knut Jetlund
4.2.4	TN-ITS enhancement data sharing supply chain	Matti Pesu
4.2.5	Engage EU napcore MS	Bert Boterbergh
4.2.6	TN-ITS dissemination and communication	Frank Daems

11.2. Task 4.2.1 “Alignment and harmonisation”

11.2.1. Main objectives of the Task

Task 4.2.1 is part of a common task across the four NAPCORE subWGs and aims to align and harmonise the different data standards. The coordination between the subWGs is the responsibility of the French Ministry of Transport and the detailed approach and expected results are described in a dedicated work plan. The activities for this task include: (1) the identification of data standards ecosystem and (2) the definition of a roadmap for harmonisation. Reflected below is a representation of this cooperative effort between subWGs.

A specific 2022 topic is the Initial exploration of Linked Data representation of TN-ITS UML (see also 4.2.3) as a technology to harmonize and link mobility data standards. Discussion representatives of Data4PT/Transmodel and DATEX II, and with academics will be organized as to come to shared vision and approach

Commented [CG(116)]: The description of this chapter is very procedural (for Datex as well) and does not look like a real work programme. Don't we already have concrete things to discuss?

Commented [FD117R116]: I added

11.2.2. Organisational structure

The coordinator of this SubWG 4.2 task is Mr. Stephen T'Siobbel from ERTICO. Experts from the active NAPCORE subWG 4.2 team will participate to provide guidance and consolidate input to achieve the M.4.0.1 milestone. Monthly online meetings will be organised in sync with the subWG 4 defined schedule so output can be taken up in the coordinated action.

11.2.3. Dependencies and external relations

Dependencies: as mentioned above, this task is common across all NAPCORE subWGs. In case relevant external parties or initiatives are identified, these will be addressed/ evaluated as well.



11.2.4. Work Programme 2022

C Done		T Task focus				C Completion															
Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2022											
										1	2	3	4	5	6	7	8	9	10	11	12
										1st quarter			2nd quarter			3rd quarter			4th quarter		
4.2.1	4.2.1	Alignment and harmonisation		Stephen T'Siobbel																	
4.2.1	4.2.1.1	Establishing a dedicated Task Force	Consulting	Stephen T'Siobbel	M4.2.1	Ecosystem & role of standards described	Task Finished	Q3 2021	Q2 2022	T											
4.2.1	4.2.1.1	Definition of Scope of the study	Consulting	Stephen T'Siobbel	M4.2.1	Ecosystem & role of standards described	Task Finished	Q3 2021	Q2 2022		T										
4.2.1	4.2.1.1	Collection of inputs from experts	Consulting	Stephen T'Siobbel	M4.2.1	Ecosystem & role of standards described	Task Finished	Q3 2021	Q2 2022			T									
4.2.1	4.2.1.1	Consolidation of all contributions at task force level	Consulting	Stephen T'Siobbel	M4.2.1	Ecosystem & role of standards described	Task Finished	Q3 2021	Q2 2022				T								
4.2.1	4.2.1.1	Review between working group and sub working groups leaders	Consulting	Stephen T'Siobbel	M4.2.1	Ecosystem & role of standards described	Task Finished	Q3 2021	Q2 2022					T							
4.2.1	4.2.1.1	Finalization and submission of the documented cartography	Consulting	Stephen T'Siobbel	M4.2.1	Ecosystem & role of standards described	Task Finished and report available	Q3 2021	Q2 2022						C						
4.2.1	4.2.1.2	Constitution of task Force	Consulting	Stephen T'Siobbel	M4.2.3	Roadmap for harmonisation tasks & impact ass	Task Finished	Q2 2022	Q4 2022							T					
4.2.1	4.2.1.2	Methodology development	Consulting	Stephen T'Siobbel	M4.2.3	Roadmap for harmonisation tasks & impact ass	Task Finished	Q2 2022	Q4 2022								T				
4.2.1	4.2.1.2	Collection of qualitative impact assessment	Consulting	Stephen T'Siobbel	M4.2.3	Roadmap for harmonisation tasks & impact ass	Task Finished	Q2 2022	Q4 2022									T			
4.2.1	4.2.1.2	Consolidation of all recommendations	Consulting	Stephen T'Siobbel	M4.2.3	Roadmap for harmonisation tasks & impact ass	Task Finished	Q2 2022	Q4 2022										T		
4.2.1	4.2.1.2	Review between working groups	Consulting	Stephen T'Siobbel	M4.2.3	Roadmap for harmonisation tasks & impact ass	Task Finished	Q2 2022	Q4 2022											T	
4.2.1	4.2.1.2	Finalization and submission of the deliverable	Consulting	Stephen T'Siobbel	M4.2.3	Roadmap for harmonisation tasks & impact ass	Task Finished and report available	Q2 2022	Q4 2022												C



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11.3. Task 4.2.2 “Management and Coordination”

11.3.1. Main objectives of the Task

The main objectives of this task are:

- Management of the sub working group,
- Organising and executing a TN-ITS focused Member States Change Management Board,
- TN-ITS association NAPCORE support,
- Continuation and further Establishment of creating liaisons, support and promotion of the activity.

11.3.2. Organisational structure

Main responsible: ERTICO Frank Daems

Management of working group

Daily management, administration, monitoring and reporting

- Meeting set up: bi-weekly online meetings or at least one time per month with subWG group responsible people
- Workflow:
 - Establish a project and quality management report (Jan 2022) (T4.2.2.1)
 - Online task follow up in local SharePoint site (T4.2.2.2)

Organising and executing a TN-ITS focused Member States Change Management Board

Consists of representatives of the Member States involved in the SWG

- Participates in the definition of requirement, priorities and change requests of the Sub Working Group as a proposal towards all Members of NAPCORE
- Approves annual progress of the Sub Working Groups
- Serves as a coordinated TN-ITS input preparation for attendance to WG1 (NAP&NB platform strategy and governance)
- Serves as a coordinated TN-ITS input and potential attendance to task S.1.3, Internal alignment and H.1.3 Advisory Board
- Meeting set up: 2 times a year physical or hybrid meeting (T4.2.2.3)
- Workflow: invitation, agenda, meeting, report

TN-ITS association NAPCORE support

- Provides dissemination support and guidance to the NAPCORE project, from the TN-ITS community as a multi stakeholder membership, including the industry and service providers, especially focusing on cooperation and trust elements between public and private stakeholders.
- Approves the definition of requirements, priorities and change requests, in line with the TN-ITS association roadmaps
- Meeting set up: Dedicated action within TN-ITS forum (T4.2.2.4)
- Workflow: report at the TN-ITS GA at least 1 time a year.

Continuation and further establishment of creating liaisons, support and promotion of the activity

Identify emerging (road) data sharing initiatives within the EU NAPCORE partners and propose interaction/ alignment with them to the TN-ITS focused member state assembly.



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- Meeting set up: ad hoc (T4.2.2.5)
- Workflow: Maintain Active overview & calendar online in local SharePoint site

11.3.3. Dependencies and external relations

- WG1 (NAP& NB platform strategy and governance)
- Task S.1.3, Internal alignment and H.1.3 Advisory Board



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11.3.4. Work Programme 2022

D Done		T Task focus				C Completion															
Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2022											
										1	2	3	4	5	6	7	8	9	10	11	12
										1st quarter			2nd quarter			3rd quarter			4th quarter		
4.2.2	4.2.2.1	Management and coordination		Frank Daems																	
4.2.2	4.2.2.1	Make project and quality management report	SWG lead	Frank Daems	M4.2.2	Project management procedures in place	Report available	Q4 2021	Q1 2022	C											
4.2.2	4.2.2.2	Management of working group	SWG lead	Frank Daems				Q4 2021	Q4 2024			T			T			T		T	
4.2.2	4.2.2.3	Organising and executing a TN-ITS focused Member States assembly	SWG lead	Frank Daems				Q4 2021	Q4 2025						T					T	
4.2.2	4.2.2.4	TN-ITS association NAPCORE support	SWG lead	Frank Daems				Q4 2021	Q4 2026			T						T			
4.2.2	4.2.2.5	Continuation and further Establishment of creating liaisons, support and pro	SWG lead	Frank Daems				Q4 2021	Q4 2027		T										

11.4. Task 4.2.3 “Specifications”

11.4.1. Main objectives

This task addresses the further development of the TN-ITS technical specifications. It covers the envisaged harmonisation across subWGs, the exploration of new data sharing methods, the procedures & governance for the maintenance of the technical specifications, the support to service implementers of the technical specification, incl. tools & recommendations.

11.4.2. Organisational structure

Main responsible is Dr Knut Jetlund from the Norwegian Public Roads Administration.

Online meetings will be organised on (bi) monthly basis among identified experts from the NAPCORE active supporters in the Member States.

11.4.3. Dependencies and external relations

Internal: Revisions of the technical specification are expected to take place upon input/ recommendation from NAPCORE SWG 4 harmonisation task.

External relations: the TN-ITS technical specification TS 17268 was developed by a project team under CEN TC278. 4.4 work Programme 2022.



11.4.4. Work Programme 2022

C Done			T Task focus				C Completion												2022											
Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End																					
										1	2	3	4	5	6	7	8	9	10	11	12									
										1st quarter			2nd quarter			3rd quarter			4th quarter											
4.2.3	4.2.3	TN-ITS Maintenance and extension of the technical specification		Knut Jettund				Q4 2021	Q4 2028																					
4.2.3	4.2.3.1	Collection of updates for technical specifications	Task leader	Knut Jettund	M4.2.4	Harvested specification updates	Report available	Q4 2021	Q4 2022			T								C										
4.2.3	4.2.3.2	Formulate and consolidate specification updates	Task leader	Knut Jettund	M4.2.4	Proposals for specification updates	Report available	Q4 2021	Q4 2022						T						C									
4.2.3	4.2.3.3	Updates on novel data sharing methods (linked data, etc...)	Task leader	Knut Jettund	M4.2.5	New methods explored, tried, assessed	Report available	Q4 2021	Q2 2024									T												
4.2.3	4.2.3.4	Updating maintenance procedures & methods	Task leader	Knut Jettund	M4.2.5	Updated maintenance approach in place	Report available	Q4 2021	Q2 2024												T									
4.2.3	4.2.3.5	Technical alignment and harmonisation based on results of 4.2.1	Task leader	Knut Jettund	M4.2.5	NAPCORE harmonised data specifications	Report & Updates Specifications	Q4 2021	Q2 2024												T									
4.2.3	4.2.3.6	Specification support TN-ITS service deployment	Task leader	Knut Jettund	M4.2.5	Guidance to (new) service deployment	Report available	Q4 2021	Q2 2024												T									
4.2.3	4.2.3.7	Specifications tool recommendations and pre-development	Task leader	Knut Jettund	M4.2.5	Technical guidance to (new) services	Report available	Q4 2021	Q2 2024						T															



11.5. Task 4.2.4 “TN-ITS enhancements in relation to the data sharing supply chain”

11.5.1. Main objectives

This task serves as a coordinated TN-ITS input and potential attendance to Task 3.2 – European NAPs data quality.

Build up the Trust basis and ensure quality, integrity and security

- Meeting set up: online or hybrid workshops
- Workflow:

Step 1. (2021-2022): Trust Identification

- Establish a technical expert team with the NAPCORE Member States to research, make an inventory and perform an assessment of data trust related items and mechanisms, suitable to serve the bidirectional TN-ITS data exchange purposes within the complete data exchange chains:
 - Producer – publisher (NAP) – processor – consumers of data
 - Consumers of data – processor – producer (feedback loop)
- Research the most optimal quality system that can be applied to TN-ITS services, based on the inputs performed by the EU-EIP D4.1. Define the quality levels for an identified quality system
- Assess new applications in view of the data attributes and services provided by TN-ITS (e.g. ISA, automation)

Step 2. (2023-2024): Defining the Trust Assessment method (see next workplan)

Develop and deploy a TN-ITS data quality assessment methodology

This task will develop a generic data quality assessment methodology, taking into account all aspects of the TN-ITS data space, some of those based upon the document of the EU-EIP forum, in its activity 4.1. This activity has described a detailed analysis to address data quality, related to Real Time Traffic Information (RTTI). It also describes methods to maintain the data quality

- Meeting set up: online or hybrid workshops
- Workflow: This task is a further progression on the evolution methodology TN-ITS GO Deliverable D4.1 The task will take this background into account in its specific deployment to TN-ITS data space. Specifically, a clear co-operation with WG3 of NAPCORE will be established to ensure the alignment and coherence within the total NAPCORE.

Develop data TN-ITS quality evaluation and enrichment tool concepts and mechanisms

The concepts of the tools will be assessed to a number of developed criteria including technical, feasibility and business aspects. A methodology proposed can be an ideation like approach to kick off the conceptual ideas, followed by a further innovation management approach to come to the final concepts. These concepts can be subject for realisation proposals in potential future responses to CEF project calls. They will be presented in the dissemination to contribute to the overall ITS attention of data quality.

- Meeting set up: online or hybrid workshops
- Workflow: Based upon the findings of the previous subtasks, a concept will be worked out for data quality enrichment and assessment tools. The concepts of the existing tools such as those developed in the TN-ITS GO project (The TN-ITS Go feedback loop, The Data Evaluation tool



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keeping the scheme structure, assessing the conformity of the data sharing to the Specification) will be further enriched and shortcomings will be addressed.

11.5.2. Organisational structure

Main responsible is Mr. Matti Pesu from the Finish Transport Administration.

11.5.3. Dependencies and external relations

A strong co-operation with WG3 and WG5 will be required.



This project has received funding from the European Commission's Directorate General for Transport and Mobility under Grant Agreement no. MOVE/B4/SUB/2020-123/SI2.85223

Working programme 2022



11.5.4. Work Programme 2022

C Done		T Task focus				C Completion															
Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2022											
										1	2	3	4	5	6	7	8	9	10	11	12
										1st quarter			2nd quarter			3rd quarter			4th quarter		
4.2.4	4.2.4	TN-ITS Enhancement data sharing supply chain		Matti Pesu																	
4.2.4	4.2.4.1	Build up the Trust basis and ensure quality, integrity and security	Task leader	Matti Pesu	M4.2.6	Requirements on trust, quality, integrity and sec	Report available	Q4 2021	Q2 2023			T			T			T			T
4.2.4	4.2.4.2	Develop and deploy a data quality assessment methodology	Task leader	Matti Pesu	M4.2.7	Requirements on trust, quality, integrity and sec	Report available	Q4 2021	Q4 2024				T			T			T		
4.2.4	4.2.4.3	Develop data quality evaluation and enrichment tool concepts and mechanism	Task leader	Matti Pesu	M4.2.7	Requirements on trust, quality, integrity and sec	Report available	Q4 2021	Q4 2024										T		



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11.6. Task 4.2.5 “Engage the European NAPCORE Member States community”

11.6.1. Main objectives of the Task

Understand the roadblocks why a certain member state has difficulties to adopt TN-ITS as a data chain mechanism. Provide consultancy and mitigations as input to the European Commission to overcome identified member state issues.

11.6.2. Organisational structure

Main responsible: Bert Boterbergh from Flanders Agency of Roads and Traffic

Create a methodology to assess the actual status and future expectations of the Member States interested to TN-ITS

- Assess both Technical and non-technical aspects
- Create a survey/ interview to the Member States to understand barriers, status quo, etc.
- Meeting set up: online or hybrid workshops
- Workflow: Analyse results of TN-ITS GO on how MS implemented the service and what type of problems they encountered → Formulate a survey to get info from member states, Publish, get results and analyse the survey response. Make a synthesis and verify the outcome with the MS. The survey will be created on basis of the experiences gained in TN-ITS GO, in particular deliverables:
 - D2.2 Service implementation results
 - D3.1 Report on operational services
 - D3.2 improvement of the TN-ITS services
 - D5.3 TN-ITS implementation guidelines (Most important deliverable)
 - D5.5 Data chain requirements

The survey responses will give insight on the roadblocks that MS face to implement and deploy TN-ITS. From these responses we derive recommendations towards DG move on how to further progress.

- Supportive actions can be derived from the insights generated during the TN-ITS strategy discussions: The following challenges were identified:

- MS have different and particular levels of organizations
- Current RTTI delegated regulation mentioned Prioritization for. DATEX II (traffic data).
- lack of knowledge
- data availability/quality
-

And the following mitigations were proposed.

- TN-ITS cannot change the organizations itself but give examples
- Aggregator on regional level needed, to get the data from municipalities and take it to a higher level. (input Flanders)
- Increase prioritization of TN-ITS with more focus on safety (ISA) and the importance of good data—need for application. Although ISA law focusses a lot on the physical infrastructure, the industry currently observes a vast market demand for digital maps from OEMS. This will be part of our dissemination as well.

Commented [CG(118)]: Here again, we should have information on which MS are likely to be contacted, at which level, how to address local level as well if need be, etc. Otherwise too procedural.

Commented [FD119R118]: At the time of original writing this was still not very clear. I hope I give indications of the recent thinking and the actions in mind for 2022-(2023)



- The current RTTI adapted revision supports TN-ITS as well, which can motivate MS. A proper dissemination action will. Be set up on that theme.)
- Lack of competence : use the experience of the implementations of TN-ITS GOà We intend to create a Course under ERTICO academy . This action will take place after the MS Survey response analysis.
- TN-ITS considers to grant a free MS implementors membership to the forum to involve the MS (Under discussion , part of the revised TOR of the innovation platform)
- Specific focus will continue on cities and regions, started with the TN-ITS GOes Urban event at the Hamburg World Congress 2021. This activity is in close coordination with ERTICO's city moon shot 2022 plan.
- TN-ITS innovation platform has identified new categories of stakeholders like data providers and applicants as target members, in order to focus more on the particular needs of authorities (at all levels) . A dedicated business development action will take place. More data and applications will provide the need for supplying TN-ITS data.

On the longer term we can consolidate the actions via organising a specific road show to each MS individually (2023)

11.6.3. Dependencies and external relations

Co-operation with all MS needed (not only active members)





11.6.4. Work Programme 2022

C Done			T Task focus			C Completion															
Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2022											
										1	2	3	4	5	6	7	8	9	10	11	12
										1st quarter			2nd quarter			3rd quarter			4th quarter		
4.2.5	4.2.5	Engage EU Napcore MS		Bert Boterbergh																	
4.2.5	4.2.5.1	Create a methodology to assess the actual status and future expectations	Task leader	Bert Boterbergh	M4.2.8	Recommendation for DG MOVE for TN-ITS dep	Report available	Q4 2021	Q2 2023			T			T					T	
4.2.5	4.2.5.2	Deploy the assessment to each new MS	Task leader	Bert Boterbergh	M4.2.9	Recommendation for DG MOVE for TN-ITS dep	Report available	Q4 2021	Q3 2024												

11.7. Task 4.2.6 “TN-ITS focused dissemination and communication”

11.7.1. Main objectives of the Task

Ensure dissemination of results and the newly acquired TN-ITS knowledge (ref deliverables mentioned in chapter 11. 6.2. via website, webinars, participation to conferences, etc. The work will ensure a consistent and efficient dissemination of all SWG results, also in coordination with activity 4.2.1. A particular course will be established under the [ERTICO academy umbrella](#).

Commented [CG(120)]: Which ones?

Commented [FD121R120]: detailed with the reference

11.7.2. Organisational structure

Main responsible: Frank Daems from ERTICO

Ensure a good communication of the project and the dissemination of the acquired knowledge

- Act as single point of contact for maintaining a repository of support materials.
- Make proposals to the TN-ITS focused member state assembly concerning promotion of TN-ITS technical specifications & raising awareness via relevant media.
- Meeting set up: Monthly follow up with task contributors
- Workflow:
 - maintain an active editorial calendar in the online local SharePoint site
 - organise regular meetings (bi-yearly) with the TN-ITS experts and interested Member States to exchange lessons learned

11.7.3. Dependencies and external relations

None specifically.



11.7.4. Work Programme 2022

C Done		T Task focus				C Completion															
Task	Subtasks	Title and Description of Activities/Action	Responsibilities/Roles	Lead	Milestone number	Milestone	Target achievement/Outcome	Start	End	2022											
										1	2	3	4	5	6	7	8	9	10	11	12
										1st quarter			2nd quarter			3rd quarter			4th quarter		
4.2.6	4.2.6	TN-ITS Dissemination and Communication	Task leader	Frank Daems	M4.2.10	TN-ITS network meeting reports	Report available	Q4 2021	Q2 2022												
4.2.6	4.2.6.1	Ensure dissemination of results and the newly acquired TN-ITS knowledge	Task leader	Frank Daems	M4.2.11	TN-ITS network meeting reports	Report available	Q4 2021	Q2 2023						T						C
4.2.6	4.2.6.2	Maintaining an active TN-ITS expert community	Task leader	Frank Daems	M4.2.12	TN-ITS network meeting reports	Report available	Q4 2021	Q2 2024												



12. Sub Working Group 4.3 “Multimodal data”

12.1. Scope of the Sub Working Group for 2022

The working plan constitutes the roadmap for the elaboration of tasks under sub WG 4.3. It includes the sub tasks, the starting date and the due date. The sub WG 4.3 working plan is also dependent on related WGs working plan and the aim of this document is to enable the coordination between all relevant to sub WG 4.3. activities. The main objective of “SWG4.3: Multimodal data” is to contribute to harmonisation and alignment of standardisation work to establish interoperability of EU multimodal data standards. In particular, it will actively support the elaboration of WP4 respective task, where the four NAPCORE Sub-Working Groups will align their activities and design commonly the roadmap for standardisation. Sub WG 4.3 Tasks and Milestones are summarised as follows:

Tasks		Milestones		Due date
Organisational Tasks		M4.3.1	SubWG4.3 working programme 2022	Dec 2021
		M4.3.2	SubWG4.3 working programme 2023	Oct 2022
		M.4.3.4	SubWG4.3 working programme 2024	Oct 2023
T.4.3.1	Contribution to alignment and harmonisation Task (WG4)	M4.0.1	Ecosystem described and role of standards in relation to services documented.	Jun 2022
		M4.0.2	Roadmap for harmonisation tasks incl. qualitative impact assessment	Dec 2022
		M4.0.3	Update of Roadmap	Jun 2023
T.4.3.2	Identification of gaps and overlaps of existing standards and guidance to Member States on the use of multimodal data standards	M.4.3.3	Report on gaps, overlaps of standards for multimodal data exchange	Nov 2023
T.4.3.3	Mapping of different standards for multimodal data and standard update recommendations	M.4.3.5	Mapping of multimodal data standards and recommendations	Sep 2024

The participants of subWG4.3 are split into 3 main categories: leader/ co-leader, active and follower. The difference lays on the responsibilities undertaken by each category which will be described in detail for each task.

Leader	ITxPT	Co-Leader			UITP					
Active Contributor	1	2	3	4	5	6	7	8	9	10
	CZ	FI	FR	DE-BAS	GR	IT	NL	RO	SI	NPRA
Followers	1	2	3	4	5	6	7	8	9	10
	AT	BE	HR	CY	DK	GR-EG	HU	IE	LV	LT
	11	12	13	14	15					
	LU	MT	PL	PT	SK					



12.2. Organisational task

12.2.1. Main objectives of the Task

The organisational task aims to define the annual workplan of sub-working group 4.3. It deals with SWG objectives, actions and interface with other NAPCORE activities. SWG4.3 workplan is updated every year according to progress and general WP4 outcomes.

12.2.2. Organisational structure

The key actions and expected outputs in the framework of the organisational task are presented as follows.

<u>Actions:</u>	<u>Methodology:</u>	<u>Outputs:</u>
<ul style="list-style-type: none"> Kick off of subWG4.3 partners Definition of annual workplan 	<ul style="list-style-type: none"> Get feedback from subWG4.3 partners Coordination with other WGs workplan Update of workplan 	<ul style="list-style-type: none"> Kick-off meeting for SWG4.3 Workplan SGW4.3 2022 Workplan SGW4.3 2023 Workplan SGW4.3 2024

The responsibilities based on each participant category are presented in the following Table.

Partner	Roles and responsibilities in this activity
ITxPT (leader)	<ul style="list-style-type: none"> Organise SWG4.3 kick-off meeting Plan regular follow-up meeting with all partners Draft annual workplan Coordination actions with other WGs workplan Review annual workplan Deliver annual workplan
All active partners and followers	<ul style="list-style-type: none"> Contribute in annual workplan Review and comment annual workplan Participate in meetings as planned from the leader according to the needs of the task.

12.2.3. Dependencies and external relations

The activity is highly dependent by the final WG4 workplan (and even NAPCORE project one).

<u>Outputs:</u> <ul style="list-style-type: none"> Kick-off meeting for SWG4.3 Workplan SGW4.3 2022 Workplan SGW4.3 2023 Workplan SGW4.3 2024 	<u>Dependencies:</u> <ul style="list-style-type: none"> WG4 to align workplan at WG level WG4 will review subWG4.3 input <u>External relations or inputs:</u> <ul style="list-style-type: none"> DATA4PT project ITxPT and UITP relevant activities
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12.2.4. Work Programme 2022

Workplan of Organisational Task including 2021 and 2022:

SWG 4.3. work plan 2022	Kick off of subWG4.3 partners	All active partners + followers	ITxPT	M4.3.1	SubWG4.3 working programme 2022	Participants expectations and visions	Sep-2021	Sep-2021
	First draft of the workplan – v.0.1	ITxPT	ITxPT			First draft of the workplan – v.0.1	Oct-2021	Oct-2021
	Get feedback from subWG4.3 partners and update the initial plan –v.0.2	All active partners + followers				Revised draft workplan	Nov-2021	Nov-2021
	Coordination with other WGs workplan and update version v.0.2	ITxPT				Updated workplan	Nov-2021	Nov-2021
	Deliver the plan - v.1	ITxPT				SubWG4.3 working programme 2022	Dec-2021	Dec-2021
SWG 4.3. work plan 2023	First draft of the workplan – v.0.1	ITxPT	ITxPT	M4.3.2	SubWG4.3 working programme 2023	First draft of the workplan – v.0.1	Aug-2022	Aug-2022
	Get feedback from subWG4.3 partners and update the initial plan – v.0.2	All active partners + followers				Revised draft workplan	Sep-2022	Sep-2022
	Coordination with other WGs workplan and update version v.0.2	ITxPT				Updated workplan	Sep-2022	Sep-2022
	Deliver the plan -v.1	ITxPT				SubWG4.3 working programme 2023	Oct-2022	Oct-2022
	First draft of the workplan – v.0.1	ITxPT	ITxPT			M4.3.4	First draft of the workplan – v.0.1	Aug-2023
SWG 4.3. work plan 2024	Get feedback from subWG4.3 partners and update the initial plan – v.0.2	All active partners + followers			Revised draft workplan		Sep-2023	Sep-2023
	Coordinate with other WGs workplan and update version v.0.2	ITxPT			Updated workplan		Sep-2023	Sep-2023
	Deliver the plan -v.1	ITxPT			SubWG4.3 working programme 2024		Oct-2023	Oct-2023
	First draft of the workplan – v.0.1	ITxPT			SubWG4.3 working programme 2024		Oct-2023	Oct-2023

12.3. Task 4.3.1 “Contribution to alignment and harmonisation Task (WG4)”

12.3.1. Main objectives of the Task

To contribute to the overall objective of harmonisation and alignment of standardisation work, T.4.3.1 focuses on the identification of the ecosystem for multimodal standards, including the data categories that can be considered for multimodal services, the actors involved and the corresponding standards. Based on this first outcome, the second objective is to define a roadmap or otherwise an action plan that will help to coordinate the standardisation work in multimodal data standards and to define a strategy.

Three priorities related to multimodal data are identified:

- For rail: further alignment between OSDM and Transmodel + development of Transmodel to cover all use cases (including ticketing)
- For parking: alignment between ADPS / Datex II and Transmodel
- For cycling infrastructure: alignment between the different projects developed in Member States (French Nap has a specific standard being developed for ex.) and INSPIRE.

12.3.2. Organisational structure

The key actions and expected outputs in the framework of the identification of the multimodal standardisation ecosystem (Task 4.3.1.1) are presented as follows.

Commented [CG(122)]: Very procedural. Don't we already know some topics to address in 2022? E.g. parking standards?

Commented [CV(123R122)]: Indeed we have already identified three priorities on which additional work would be required:
 - Standards for booking and payment interfaces;
 - parking standards;
 - cycling infrastructure (data category in MMTIS)

Commented [EdV124R122]: Yes, that's correct. At least the three mentioned topics will be addressed in 2022. The text has been updated accordingly. But that's also important to make sure that all other topics are identified in early stage to prepare next year roadmap of even after project actions.

Actions: <ul style="list-style-type: none"> Collection of information on international initiatives and international actors Collection of information on national initiatives and actors Consolidation of input 	Methodology: <ul style="list-style-type: none"> Questionnaire for the collection of input from the partners Analysis of existing legislation/ white papers/ deliverables from other relevant projects Workshops 	Outputs: <ul style="list-style-type: none"> Identification of the data categories to be considered under multimodality Identification of stakeholders or entities that work on the standardisation of data exchange protocols which make part of multimodal data categories as defined in step (a), Identification of the working groups, projects, initiatives that elaborate standardisation work regarding multimodal data categories both in national and international level.
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Similarly, for the definition of the roadmap for harmonisation for the multimodal data (Task 4.3.1.2) the proposed approach is the following:

Actions: <ul style="list-style-type: none"> Initial proposal with the relevant initiatives, working groups, projects (standardisation activities) that should be followed closely based on subWG 4.3 Prioritisation of the activities that should take place for the alignment and coordination 	Methodology: <ul style="list-style-type: none"> Definition of criteria for prioritisation Partners opinion on priorities Leverage the experts' knowledge and experience Organisation of workshops 	Outputs: <ul style="list-style-type: none"> Identification of priorities related to subWG4.3. Consistent input for M.0.4.2 (WG4-Task 4.2. Roadmap for harmonisation)
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The responsibilities based on each participant category are presented in the following Table.

Partner	Roles and responsibilities in this activity
ITxPT (leader)	<ul style="list-style-type: none"> Provides inputs regarding international standardisation activities and actors based on DATA4PT experience and other ITxPT relevant activities. Proposes priorities based on DATA4PT outputs. Proposes experts which will contribute to the prioritisation at WG4 level. Collects inputs regarding priorities from the active and follower partners. Represents the subWG to the coordination meetings with the other subWGs leaders in the framework of the common task WG4 (including relevant preparation). Inform the partners of subWG4.3. about decisions taken in WG4 level.



	<ul style="list-style-type: none"> • Co-author of the WG4 relevant tasks deliverables. • Updates document after review of subWG 4.3. partners and WG4 members if need it. • Organises meetings with the subWG4.3. (approximately 3 meetings)
UITP (co-leader)	<ul style="list-style-type: none"> • Collects information on international initiatives and international actors regarding standards development and implementation in the domain of multimodal services. • Collects input on national standardisation activities and actors from follower and active members • Consolidates inputs of all active and follower partners of subWG. • Co-author of relevant WG4 task deliverables. • Update document after review of subWG 4.3. and WG4 members if need it.
All active partners and followers	<ul style="list-style-type: none"> • Collect and communicate to the leader/ co-leader any national or international initiative/ actor on standards development and implementation in written format • Participate in meetings as planned from the leader according to the needs of the sub WG. • Contributes to the definition of the WG4 roadmap (M.4.0.2) • Review and provide feedback to the WG4 roadmap (M.4.0.2)

12.3.3. Dependencies and external relations

The activity is highly dependent by the final methodology decided in the level of WG4. Indirect dependencies are created with WG3 and with Task 3.1. and milestone M.3.1.

<u>Outputs:</u> <ul style="list-style-type: none"> • Identification of the data categories to be considered under multimodalilty • Identification of stakeholders or entities that work on the standardisation of data exchange protocols which make part of multimodal data categories as defined in step (a), • Identification of the workings groups, projects, initiatives that elaborate standardisation work regarding multimodal data categories both in national and international level. • Identification of priorities related to subWG4.3. • Consistent input for M.0.4.2 and M.0.4.3 (WG4-Task 4.2. Roadmap for harmonisation) 	<u>Dependencies:</u> <ul style="list-style-type: none"> • WG4 in terms of methodology for the definition of standardisation ecosystem • WG4 will review subWG4.3 input • WG3 (Task 3.1. and milestone M.3.1) • Coordination of the relevant activities and exchange of inputs • Task T.4.3.2 results will be used for the update of the roadmap <u>External relations or inputs:</u> <ul style="list-style-type: none"> • DATA4PT project • ITxPT and UITP relevant activities
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12.3.4. Work Programme 2022

Workplan of Task 4.3.1. including 2021 and 2022:



4.3.1.1 - Identification of multimodal data standardization ecosystem	Collection of information on international initiatives and international actors	All active partners + followers	UITP	M.4.0.1	Ecosystem described and role of standards in relation to services documented	Inputs for standardisation landscape	Dec-2021	Feb-2022
	Collection of input from followers and active members on national initiatives and actors	All active partners + followers				Inputs for standardisation landscape	Dec-2021	Feb-2022
	Consolidation of input	UITP				Consistent inputs for M.4.0.1	Mar-2022	Apr-2022
	Delivery of the SWG 4.3 input to WG4 leader	UITP + ITxPT				Draft of SGW4.3 for M.4.0.1	May-2022	May-2022
	Update of the deliverable after WG4 review	UITP				Final contribution for M.4.0.1	Jun-2022	Jun-2022
4.3.1.2 - Contribution to the definition of roadmap for harmonisation	Setup of priorities on the areas or working groups and initiatives that require more attention and active participation of SWG 4.3	All active partners + followers	ITxPT	M.4.0.2	Roadmap for harmonisation tasks incl. qualitative impact assessment	Identification of priorities related to SWG4.3	Jul-2022	Sep-2022
	Consolidation of inputs	ITxPT				Consistent inputs for M.4.0.2	Sep-2022	Oct-2022
	Deliver to WG4 leader SWG 4.3 input	ITxPT				Draft of SGW4.3 for M.4.0.2	Oct-2022	Nov-2022
	Updates after WG4 review and delivery to WG4 leader	ITxPT	ITxPT	M.4.0.3	Update of Roadmap for harmonisation tasks incl. qualitative impact assessment	Final contribution for M.4.0.2	Nov-2022	Dec-2022
	Review of priorities on the areas or working groups and initiatives that require more attention and active participation of SWG 4.3	All active partners + followers				Update of priorities related to SWG4.3	Mar-2023	Apr-2023
	Consolidation of inputs	ITxPT				Consistent inputs for M.4.0.3	Apr-2023	Apr-2023
	Deliver to WG4 leader SWG 4.3 input	ITxPT				Draft of SGW4.3 for M.4.0.3	May-2023	May-2023
	Updates after WG4 review and delivery to WG4 leader	ITxPT				Final contribution for M.4.0.3	Jun-2023	Jun-2023

12.4. Task 4.3.2 “Identification of gaps and overlaps of existing standards and guidance to Member States on the use of multimodal data standards”

12.4.1. Main objectives of the Task

The aim of the Task 4.3.2 is the identification of gaps and overlaps between the different existing and under development standards relevant to multimodal data, in coordination with the other SWGs. Based on the decided roadmap, collaboration between different entities will be built, and the ground for coordination will be set. Furthermore, this subtask will disseminate indirectly NAPCORE objectives to different actors outside the consortium. The outputs of this Task will be used for the update of the roadmap for the harmonisation (see Task 4.3.1) and to provide guidance to stakeholders, in how and when to implement the different EU standards for multimodal services.

12.4.2. Organisational structure

The key actions, methodology and expected outputs in the framework of Task 4.3.2 are presented as follows:

Actions:	Methodology:	Outputs:
<ul style="list-style-type: none"> Building liaisons based on the decided WG4 roadmap Analysis and comparison of existing standards: functional scope, data elements, data producers, data consumers Collection of use cases per existing/ under development standard Collection of needs on guidance and training material 	<ul style="list-style-type: none"> Participation in meetings, exchanging information, collect documentation, organise bilateral meetings with the relevant stakeholders. Each active member will design its own strategy considering the type of the liaison. Involvement of national experts from active contributors Inputs by all partners of the subWG4.3. and 	<ul style="list-style-type: none"> Report on the results of the liaisons (what is the status of the standardisation work that you are assigned to follow? What challenges are raised? What documentation is available). Report on standards analysis based on relevant liaisons identified previously including data categories and data flows. Identification of gaps and overlaps Training programme – material & events



	other sources (experts, other projects etc.)	
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The responsibilities based on each participant category are presented in the following Table.

Partner	Roles and responsibilities in this activity
ITxPT (leader)	<ul style="list-style-type: none"> Coordinates the external and internal liaisons with active members Provides a template to active members to report their activity on building liaisons Identify/ proposes international experts who can contribute to the building of relevant liaisons Collects and consolidates inputs from active members and the activity of liaisons Communicates the results to subWG4.3 and WG4 partners Co-authors the report on the identification of gaps and overlaps (M.4.3.3) Contributes to the collection of use cases per existing standards/ under development standards – Link with Data4PT Contributes to the collection of needs on guidance and training material – Link with DATA4PT Support the training Organises meetings with the subWG4.3. (approximately 3 meetings) Contributes to the definition of a training programme Coordinates the development of training material Co-prepares the training material
UITP (co-leader)	<ul style="list-style-type: none"> Identify the liaison(s) to build Identify international experts that will support the liaison Report on the results/ conclusions of their liaison(s) Contribute to the analysis and comparison between standards Co-author the report on gaps and overlaps (M.4.3.3) Collects national use cases and national needs Collects input on national standardisation activities and actors from follower and active members Consolidates inputs of all active and follower partners of subWG. Proposes a training programme Coordinates the development of training material with the leader
All active partners	<ul style="list-style-type: none"> Identify the liaison(s) they would like to build Identify national or international experts that will support them in their liaison(s) Report on the results/ conclusions of their liaison(s) Contribute to the analysis and comparison between standards Co-author the report on gaps and overlaps (M.4.3.3) Share the national use cases that need to be supported by multimodal data standards Share the national needs regarding the type of guidance and training material Review the training programme Co-prepare training material Participate in subWG4.3 meetings planned in the framework of Task 4.3.2.
All followers	<ul style="list-style-type: none"> Share the national use cases that need to be supported by multimodal data standards Share the national needs regarding the type of guidance and training material Review the training programme

	<ul style="list-style-type: none"> Participate in subWG4.3 meetings planned in the framework of Task 4.3.2. upon request
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12.4.3. Dependencies and external relations

Outputs: <ul style="list-style-type: none"> Building liaisons based on the decided WG4 roadmap Analysis and comparison of existing standards: functional scope, data elements, data producers, data consumers Collection of use cases per existing/ under development standard Collection of needs on guidance and training material 	Dependencies: <ul style="list-style-type: none"> WG4 and in particular Task 4.2 Roadmap for harmonisation tasks - Task T.4.3.2 results will be used for the update of the roadmap H.3 in all tasks External relations or inputs: <ul style="list-style-type: none"> Many external relations are foreseen in this task as key activity is the building of external liaisons DATA4PT project ITxPT and UITP relevant activities
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12.4.4. Work Programme 2022

Workplan of Task 4.3.2. including 2021 and 2022:

4.3.2.1 - Identification of gaps and overlaps of existing standards	Building liaisons (participating in meeting, follow up standardization activities etc.) based on the decided WG4 roadmap	All active partners	ITxPT	M4.3.3	Report on gaps, overlaps of standards for multimodal data exchange	Report on the results of the liaisons (what is the status of the standardization work that you are assigned to follow? What challenges are raised? What documentation is available).	Oct-2022	Feb-2023
	Analysis and comparison of existing standards: functional scope, data elements, data producers, data consumers	All active partners				Detailed report on standards analysis based on relevant liaisons identified previously including data categories and data flows.	Mar-2023	May-2023
	Identification of gaps and overlaps	All active partners				Final deliverable	Jun-2023	Nov-2023
4.3.2.2 - Guidance to Member States on the use of multimodal data standards	Collection of use cases per existing/future standard by partners of the subWG4.3. and other sources (experts, other projects etc.)	All active partners + followers	UITP + ITxPT	M4.3.3	Guidance on the use of multimodal data standards	Definition of functional use cases including data elements, data producers, data consumers	Jan-2023	May-2023
	Collection of needs on guidance and training material	All active partners + followers				Definition of type of material, channels and methods of providing guidance	Jun-2023	Sep-2023
	Development of training programme material and guidelines	All active partners				Deliver training programme - material and events - link with H.3	Oct-2023	Nov-2023

12.5. Task 4.3.2 "Identification of gaps and overlaps of existing standards and guidance to Member States on the use of multimodal data standards"

12.5.1. Main objectives of the Task

The aim of the Task 4.3.2 is the identification of gaps and overlaps between the different existing and under development standards relevant to multimodal data, in coordination with the other SWGs. Based on the decided roadmap, collaboration between different entities will be built, and the ground for coordination will be set. Furthermore, this subtask will disseminate indirectly NAPCORE objectives to different actors outside the consortium. The outputs of this Task will be used for the update of the



roadmap for the harmonisation (see Task 4.3.1) and to provide guidance to stakeholders, in how and when to implement the different EU standards for multimodal services.

12.5.2. Organisational structure

The key actions, methodology and expected outputs in the framework of Task 4.3.2 are presented as follows:

<u>Actions:</u>	<u>Methodology:</u>	<u>Outputs:</u>
<ul style="list-style-type: none"> Building liaisons based on the decided WG4 roadmap Analysis and comparison of existing standards: functional scope, data elements, data producers, data consumers Collection of use cases per existing/ under development standard Collection of needs on guidance and training material 	<ul style="list-style-type: none"> Participation in meetings, exchanging information, collect documentation, organise bilateral meetings with the relevant stakeholders. Each active member will design its own strategy considering the type of the liaison. Involvement of national experts from active contributors Inputs by all partners of the subWG4.3. and other sources (experts, other projects etc.) 	<ul style="list-style-type: none"> Report on the results of the liaisons (what is the status of the standardisation work that you are assigned to follow? What challenges are raised? What documentation is available. Report on standards analysis based on relevant liaisons identified previously including data categories and data flows. Identification of gaps and overlaps Training programme – material & events

The responsibilities based on each participant category are presented in the following Table.

Partner	Roles and responsibilities in this activity
ITxPT (leader)	<ul style="list-style-type: none"> Coordinates the external and internal liaisons with active members Provides a template to active members to report their activity on building liaisons Identify/ proposes international experts who can contribute to the building of relevant liaisons Collects and consolidates inputs from active members and the activity of liaisons Communicates the results to subWG4.3 and WG4 partners Co-authors the report on the identification of gaps and overlaps (M.4.3.3) Contributes to the collection of use cases per existing standards/ under development standards – Link with Data4PT Contributes to the collection of needs on guidance and training material – Link with DATA4PT Support the training Organises meetings with the subWG4.3. (approximately 3 meetings) Contributes to the definition of a training programme Coordinates the development of training material Co-prepares the training material
UITP (co-leader)	<ul style="list-style-type: none"> Identify the liaison(s) to build Identify international experts that will support the liaison Report on the results/ conclusions of their liaison(s) Contribute to the analysis and comparison between standards



	<ul style="list-style-type: none"> • Co-author the report on gaps and overlaps (M.4.3.3) • Collects national use cases and national needs • Collects input on national standardisation activities and actors from follower and active members • Consolidates inputs of all active and follower partners of subWG. • Proposes a training programme • Coordinates the development of training material with the leader
All active partners	<ul style="list-style-type: none"> • Identify the liaison(s) they would like to build • Identify national or international experts that will support them in their liaison(s) • Report on the results/ conclusions of their liaison(s) • Contribute to the analysis and comparison between standards • Co-author the report on gaps and overlaps (M.4.3.3) • Share the national use cases that need to be supported by multimodal data standards • Share the national needs regarding the type of guidance and training material • Review the training programme • Co-prepare training material • Participate in subWG4.3 meetings planned in the framework of Task 4.3.2.
All followers	<ul style="list-style-type: none"> • Share the national use cases that need to be supported by multimodal data standards • Share the national needs regarding the type of guidance and training material • Review the training programme • Participate in subWG4.3 meetings planned in the framework of Task 4.3.2. upon request

12.5.3. Dependencies and external relations

<u>Outputs:</u> <ul style="list-style-type: none"> • Building liaisons based on the decided WG4 roadmap • Analysis and comparison of existing standards: functional scope, • data elements, • data producers, • data consumers • Collection of use cases per existing/ under development standard • Collection of needs on guidance and training material 	<u>Dependencies:</u> <ul style="list-style-type: none"> • WG4 and in particular Task 4.2 Roadmap for harmonisation tasks - Task T.4.3.2 results will be used for the update of the roadmap • H.3 in all tasks <u>External relations or inputs:</u> <ul style="list-style-type: none"> • Many external relations are foreseen in this task as key activity is the building of external liaisons • DATA4PT project • ITxPT and UITP relevant activities
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12.5.4. Work Programme 2022

Workplan of Task 4.3.2. including 2021 and 2022:



4.3.2.1 – Identification of gaps and overlaps of existing standards	Building liaisons (participating in meeting, follow up standardization activities etc.) based on the decided WG4 roadmap	All active partners	ITxPT	M4.3.3	Report on gaps, overlaps of standards for multimodal data exchange	Report on the results of the liaisons (what is the status of the standardization work that you are assigned to follow? What challenges are raised? What documentation is available).	Oct-2022	Feb-2023
	Analysis and comparison of existing standards: functional scope, data elements, data producers, data consumers	All active partners				Detailed report on standards analysis based on relevant liaisons identified previously including data categories and data flows.	Mar-2023	May-2023
	Identification of gaps and overlaps	All active partners				Final deliverable	Jun-2023	Nov-2023
4.3.2.2 – Guidance to Member States on the use of multimodal data standards	Collection of use cases per existing/future standard by partners of the sub-WG4.3. and other sources (experts, other projects etc.)	All active partners + followers	UITP + ITxPT	M4.3.3	Guidance on the use of multimodal data standards	Definition of functional use cases including data elements, data producers, data consumers	Jan-2023	May-2023
	Collection of needs on guidance and training material	All active partners + followers				Definition of type of material, channels and methods of providing guidance	Jun-2023	Sep-2023
	Development of training programme material and guidelines	All active partners				Deliver training programme - material and events - link with H.3	Oct-2023	Nov-2023

12.6. Task 4.3.3 “Mapping of different standards for multimodal data and standard update recommendations”

12.6.1. Main objectives of the Task

Based on task 4.3.1 outputs and task 4.1, the reference data standard will be chosen and an assessment of the standards requiring a mapping to the reference will be made. The data elements from identified standards will be analysed. Then, data elements of same scope will be highlighted. Based on the mapping results, recommendations on further steps and actions needed (harmonisation, conversion, or choice of specifications) will be identified to avoid overlap, feeding H-2 Task of NAPCORE project.

12.6.2. Organisational structure

The key actions and expected outputs in the framework of the Mapping of different standards for multimodal data and standard update recommendations (Task 4.3.3) are presented as follows.

Actions: <ul style="list-style-type: none"> • Identification of relevant standards to be mapped • Analysis of data elements and mapping • Recommendation for peer-to-peer standards mapping • Recommendation for standards update 	Methodology: <ul style="list-style-type: none"> • Crosscheck of existing standards from WP4 sub-working groups • Gaps and overlaps analysis 	Outputs: <ul style="list-style-type: none"> • Relevant standards list • Data elements comparison • Guideline to map peer to peer standards • Guideline to update standards according to mapping outcomes
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The responsibilities based on each participant category are presented in the following Table.

Partner	Roles and responsibilities in this activity
ITxPT (leader)	<ul style="list-style-type: none"> • Coordinate WP4 inputs collection from different sub-working groups • Identify data elements and prepare mapping table for gap & overlaps analysis • Drive gap & overlaps analysis • Prepare recommendations for peer-to-peer standards mapping and for standards update • Provide M4.3.5 milestones
All active partners	<ul style="list-style-type: none"> • Collect and communicate to the leader any relevant existing standards mapping according to use-case experience and NAP implementation



and followers	<ul style="list-style-type: none"> Participate in meetings as planned from the leader according to the needs of the task. Contributes to the definition of the guideline to update standards according to mapping outcomes (M4.3.5)
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12.6.3. Dependencies and external relations

The activity is highly dependent by the task identification of multimodal data standardisation ecosystem (4.3.1.1) and sub-working group 4.1 outcomes.

<u>Outputs:</u> <ul style="list-style-type: none"> Relevant standards list Data elements comparison Guideline to map peer-to-peer standards Guideline to update standards according to mapping outcomes 	<u>Dependencies:</u> <ul style="list-style-type: none"> SWG4.1 outcomes will be used for the mapping Task 4.3.1.1 results will be used for the mapping <u>External relations or inputs:</u> <ul style="list-style-type: none"> DATA4PT project ITxPT and UITP relevant activities
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12.6.4. Work Programme 2022

Workplan of Task 4.3.3. including 2021 and 2022:

Identification of relevant standards to be mapped	All active partners	ITxPT	M4.3.5	Mapping of multimodal data standards and recommendations	Select the standards relevant for a mapping based on gaps & overlaps deliverable M4.3.3	Jun-2023	Aug-2023
Analysis of data elements and mapping	All active partners				Crosscheck each data elements and related term & definition	Sep-2023	Mar-2024
Recommendation for peer to peer standards mapping	All active partners				Guideline to map peer to peer standards	Apr-2024	Sep-2024
Recommendation for standards update	ITxPT				Guideline to update standards according to mapping outcomes	Jul-2024	Sep-2024

13. Sub Working Group 4.4 “Metadata”

13.1. Scope of the Sub Working Group for 2022

13.1.1. Main objectives of the activity

Text from proposal:

“Metadata are a crucial building block for accessibility and exchange of NAP datasets. A common metadata approach will ease and harmonise accessibility and exchange mechanisms, thus enhancing the efficiency of individual NAPs. In previous works, some common concepts have been elaborated, namely the “Coordinated Metadata Catalogue”. This concept, however, does so far lack of wide-scale acceptance and interoperability with other data domains.

Addressing the EC Call for Proposals, this subWG will foster the definition and maintenance of a common metadata catalogue for all NAPs in Europe. To do so, the “Coordinated Metadata Catalogue” will be enhanced via building relationships to established, European metadata specifications (task 4.4.2). Moreover, a formal data specification will be elaborated, including maintenance and governance structures (task 4.4.3). Lastly, the common approach will be an input for a conceptualisation for a cross-border metadata registry (task 4.4.4), resulting in a planned demonstrator, to be realised under WG 2.”



The Work Plan status for the four tasks is as follows:

- The Work Plan for Task 4.4.1 will be written by the WG4 coordination team, and is not mentioned in this present 2021/2022 Work Plan.
- Task 4.4.2 and Task 4.4.3 are concretised in this present 2021/2022 Work Plan.
- Task 4.4.4 will be concretised in the next version (2023 Work Plan).

In this sense, the following chapters elaborate only on tasks 4.4.2 and 4.4.3.

13.1.2. Milestones

Milestones

MS #	Responsible Task	Milestone description	Indicative date of completion	Means of verification
M4.4.1	4.4.2	Publication of napDCAT-AP Version 1.0	3/2022	Documentation of online Workshop
M4.4.2	4.4.3	Inauguration of a napDCAT-AP back office	10/2022	News announcement
M4.4.3	4.4.3	Two-year-anniversary of napDCAT-AP, review session and stakeholder workshop	10/2023	Documentation of physical workshop
M4.4.4	4.4.4	Draft concept for a Metadata Interoperability Demonstrator	3/2023	Report available and approved by the Steering Committee

It is proposed to shift Milestone M4.4.1 from 03/2022 to 09/2022, as this task need a little more background work, as expected.

13.1.3. Active/ following partners

Participants:

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	HE	UITP
A	F			F	F	A	F		F		
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
F	L		A		F		A				
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
	A	F	F	F	A		F		A	A	F

L = activity/task leader, A = active contributor, F = Follower

13.2. Task 4.4.1 Alignment & Harmonization

The work items for this task are not elaborated in detail, as any alignment and harmonisation aspects regarding metadata will be handled by tasks in “Working Group 4 – Data Exchange Standards”.

13.3. Task 4.4.2 “Development of a new metadata specification for the NAP domain”



This project has received funding from the European Commission's Directorate General for Transport and Mobility under Grant Agreement no. MOVE/B4/SUB/2020-123/SI2.85223

13.3.1. Main objectives of the Task

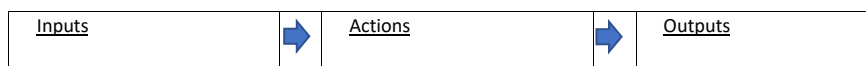
The main objective is to develop a “napDCAT-AP” specification, being an RDF-compatible representation of an agreed, Europe-wide metadata set for NAPS, based on the Coordinated Metadata Catalogue (CMC), and parallel DCAT-AP specifications. Some analytical and conceptual works are needed first, before working on a first “napDCAT-AP” version, which will be the most prominent milestone for 2022.

Another objective is to revisit the current Coordinated Metadata Catalogue (version from 2019). This means, that metadata definitions form the CMC (i.e., the 32 Metadata elements, including their description, types and obligation levels) should be reflected and potentially updated. This is important, given that several European countries have already adopted the CMC. “napDCAT-AP” will build upon such update.

13.3.2. Approach

General Principles and Structure

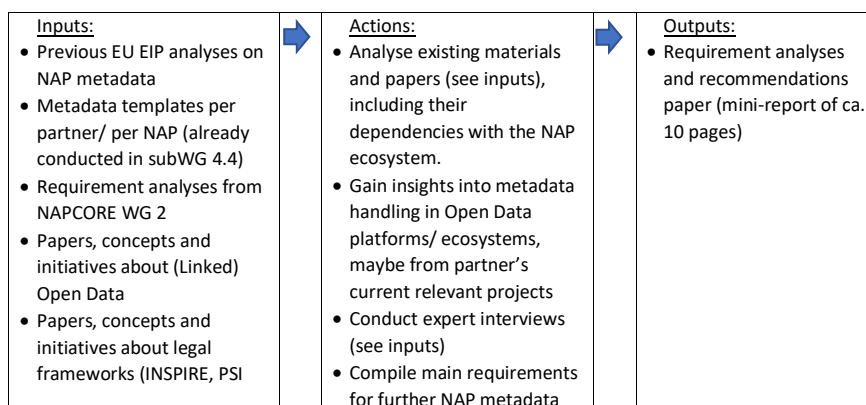
The task is split into four Work Items. Each Work Item consists of inputs, actions and outputs, which feed into each other, as shown next:



The Work Items will be starting subsequently, i.e. the first ones will run at the beginning of the subWG, while others will follow later, as they rely on the outputs produced before. However, the Work Items also overlap to have smooth transitions.

In the following, the four work items are explained in detail.

Work Item 4.4.2.1: Requirements analyses



Directive and other EU Regulations) • Opinions and expertise from NAP experts/ stakeholders (from NAPCORE consortium, looking at roles and needs of NAP deployers, metadata creators and metadata users) • Opinions and expertise from external experts (DG DIGIT, SEMIC, EU Open data Portal, etc.)		harmonisation & specification • Discuss main requirements internally (e.g., at a subWG 4.4. Workshop)		
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Work Item 4.4.2.2: Approach towards DCAT-AP specification

<u>Inputs:</u> • Documents and experts from SEMIC/ the DCAT-AP group • Documents about other DCAT-AP extensions (e.g., geoDCAT-AP, national DCAT-AP extensions)	➡	<u>Actions:</u> • Elaborate on the following questions: • <i>How to build a proper DCAT-AP extension?</i> • <i>How to align with existing DCAT-AP extensions?</i> • <i>How to reuse knowledge and support from DCAT-AP group?</i> • <i>What exact deliverables/ artefacts to be produced (e.g., verbal model description, model structures via UML, model schema files, example files and guidance documents)?</i> • Produce a “road-map to napDCAT-AP” (= an overarching concept for introduction of napDCAT-AP) • Present road-map (e.g., at a NAPCORE subWG 4.4. Workshop)	➡	<u>Outputs:</u> • “A road-map to napDCAT-AP” (poster or a paper of ca. 5 pages)
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Work Item 4.4.2.3: Conceptual model

<u>Inputs:</u> • Coordinated Metadata Catalogue (CMC), Version 2019	➡	<u>Actions:</u> • Elaborate on the following questions: • <i>Which metadata elements are <u>essential</u> both for the</i>	➡	<u>Outputs:</u> • A conceptual model of essential metadata elements.
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<ul style="list-style-type: none"> • Metadata definitions in NAP deployments (e.g., analyses of selected NAP information models, looking at individually deployed metadata; special focus: metadata which is <u>not</u> defined in the CMC) • Opinions and expertise from NAP experts/ stakeholders from NAPCORE consortium 	<p><i>European NAP community, and for the Open Data community?</i></p> <ul style="list-style-type: none"> • For those <u>essential</u> metadata elements: what is their definition, type and obligation level? • Are these essential metadata elements represented well by the current CMC? If not, how to improve the CMC? • Draw a conceptual model (e.g. via a UML), showing the position and relationships of <u>essential</u> metadata elements in the NAP context, (including dependencies, cardinalities etc.), 	<ul style="list-style-type: none"> • Optionally: an update of the CMC.
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Work Item 4.4.2.4: Draft specification

<p><u>Inputs:</u></p> <ul style="list-style-type: none"> • Any outputs from the three work items above 	<p><u>Actions:</u></p> <ul style="list-style-type: none"> • Make a semantic mapping between existing DCAT-AP elements and NAP entities, including the <u>essential</u> metadata elements from above (to find a common language and understanding between DCAT-AP and NAP domains). Identify any gaps and mismatches. • For identified gaps and mismatches: make a proposal for new/ revised RDF classes/ properties • Check how to convert metadata with predefined options into RDF-compatible "controlled vocabularies" • Compile the above into napDCAT-AP v1.0, including a logical model (UML); listings of RDF classes, properties, and controlled vocabularies; and maybe accompanying docs (e.g., a usage guideline) 	<p><u>Outputs:</u></p> <ul style="list-style-type: none"> • "napDCAT-AP v1.0" specification, including all artefacts • Public (online) presentation or workshop about "napDCAT-AP v1.0" (= milestone 4.4.1)
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Organisational structure

Work Item Leader:

Each of the four Work Items will be in the responsibility of one active partner of the subWG: the Work Item Leader. He or she will decide on the working mode, i.e. assign works to other subWG partners, set-up meetings, check (interim) deadlines, edit and approve the outputs.

It is expected that the Work Item Leader will report to the subWG4.4. working meetings (scheduled each month), giving a status on the progress, planned steps and potential bottlenecks.

Other subWG members (active and followers):

All other subWG members will contribute to the progress of the individual Work Items, using their capacities and expertise, upon the request by the Work Item Leader and/ or the SubWG Leader.

SubWG leader (BAST):

The subWG Leader will supervise the individual outputs by the Work Items, and cooperate with the Work Item Leaders to ensure a smooth progress of the entire subWG.

Dependencies and external relations

We expect support by NAPCORE WG 2 “Interoperability and level of service of NAPs” in terms of the metadata requirements analyses (see work item 4.4.2.1). It is suggested to use synergies between partners who are both active in WG 2 and subWG 4.4.

We expect support by NAPCORE WG H.3 “Dissemination, outreach activities, training” in terms of publishing of the napDCAT-AP specification (see work item 4.4.2.4). It is suggested to use synergies between partners who are both active in WG H.3 and subWG 4.4.



Partner allocation and time planning for 2022

Task and Work Item	Work Item Lead	Milestone number	Target achievement/Outcome	Contributing partners	2022											
Task 4.4.2: Development of a new metadata specification for the NAP domain					1st quarter			2nd quarter			3rd quarter			4th quarter		
Item 4.4.2.1: Requirements analyses	CZ		Requirement analyses and recommendations paper	DE, IT	x	x	x	x	x	x						
Item 4.4.2.2: Approach towards DCAT-AP specification	IT/ NRPA		"A road-map to napDCAT-AP"			x	x	x	x	x						
Item 4.4.2.3: Conceptual model	AT		A conceptual model of essential metadata elements.	DE, IT, CZ				x	x	x	x	x	x			
Item 4.4.2.4: Draft specification	SE/ DE	4.4.1	napDCAT-AP v1.0	CZ						x	x	x	x	x	x	x



13.4. Task 4.4.3 “nap DCAT-AP back office”

13.4.1. Main objectives of the Task

The main objective is to establish formal maintenance and governance structures supporting the napDCAT-AP specification, in order to make it more sustainable and efficient in a long run. In particular, administrative, management and technical tasks related to such maintenance and governance will be bundled and institutionalised.

13.4.2. Approach

General Principles and Structure

The task is again split into four Work Items. The concept of Work Items is explained under task 4.4.2. (section 2.2.1 above).

In the following, the four work items are explained in detail.

Work Item 4.4.3.1: Governance & maintenance structures

Inputs: <ul style="list-style-type: none"> Best practices on governance & maintenance of (meta)data standards (e.g., based on DATEX II, DCAT-AP...) 	➡	Actions: <ul style="list-style-type: none"> Conceptualisation on governance & maintenance for napDCAT-AP, including: <ul style="list-style-type: none"> <i>What organisational & technical structure? (e.g., responsibility of a subteam in subWG 4.4?; special website on NAPCORE website?)</i> <i>How to receive, store & process incoming issues and comments about napDCAT-AP? (e.g., a ticket system?)</i> <i>How to discuss and approve resolutions? (e.g., which workflows?)</i> 	➡	Outputs: <ul style="list-style-type: none"> Concept paper about the “napDCAT-AP back office” (ca. 5 pages) Inauguration of a “napDCAT-AP back office”, including a news announcement (= milestone 4.4.2)
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Work Item 4.4.3.2: Hosting of “controlled vocabularies”

Inputs: <ul style="list-style-type: none"> Best practices on hosting of “controlled vocabularies” (e.g., based on vocabularies hosted by “EU Publication Office” and by countries for their DCAT-AP extensions) 	➡	Actions: <ul style="list-style-type: none"> Conceptualisation on hosting of “napDCAT-AP controlled vocabularies”, including: <ul style="list-style-type: none"> <i>rules for controlled vocabularies (how to establish? how to maintain & update?)</i> <i>technical implementation (where and how to host?, e.g. at NAPCORE website?)</i> 	➡	Outputs: <ul style="list-style-type: none"> Concept paper about “napDCAT-AP controlled vocabularies” (ca. 5 pages) Solution for technical implementation
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Commented [CG(125)]: Can we envisage that this task also monitors the implementation of the common metadata in each MS?

Commented [HT126R125]: Yes, this is also part of this task.



Work Item 4.4.3.3: Support & dissemination to NAP operators

<p><u>Inputs:</u></p> <ul style="list-style-type: none"> • Best practices on support & dissemination of (meta)data standards (e.g., based on DATEX II, DCAT-AP...) 	➔	<p><u>Actions:</u></p> <ul style="list-style-type: none"> • Conceptualisation on support & dissemination including: • <i>Which way? (e.g., hands-on support via “hot line” etc? implementation guidelines? FAQ?)</i> 	➔	<p><u>Outputs:</u></p> <ul style="list-style-type: none"> • Concept paper about support & dissemination for napDCAT-AP (ca. 5 pages) • First concrete support & dissemination action (e.g., a first online guideline)
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Work Item 4.4.3.4: Revision of napDCAT-AP

<p><u>Inputs:</u></p> <ul style="list-style-type: none"> • (This will be done in 2023. Thus, it will be concretised in the 2023 Work Plan) 	➔	<p><u>Actions:</u></p> <ul style="list-style-type: none"> • (This will be done in 2023. Thus, it will be concretised in the 2023 Work Plan) 	➔	<p><u>Outputs:</u></p> <ul style="list-style-type: none"> • (This will be done in 2023. Thus, it will be concretised in the 2023 Work Plan)
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Organisational structure

Work Item Leader/ other subWG members/ subWG leader:

See role descriptions under task 4.4.2 (section 2.2.2 above).

Dependencies and external relations

We expect support by NAPCORE WG “H.3 Dissemination, outreach activities, training” in terms of support and training to NAP operators (see work item 4.4.3.3). It is suggested to use synergies between partners who are both active in WG H.3 and subWG 4.4.

Partner allocation and time planning for 2022

Task and Work Item	Work Item Lead	Milestone number	Target achievement/ Outcome	Contributing partners	2022											
Task 4.4.3: nap DCAT-AP back office					1st quarter			2nd quarter			3rd quarter			4th quarter		
Item 4.4.3.1: Governance & maintenance structures	NL	4.4.2	Inauguration of a “napDCAT-AP” back office	DE, CZ				x	x	x	x	x	x	x	x	x
Item 4.4.3.2: Hosting of “controlled vocabularies”	RO		Concept paper about “napDCAT-AP controlled vocabularies”	CZ					x	x	x	x	x	x		
Item 4.4.3.3: Support & dissemination to NAP operators	GR		Concept paper about support & dissemination for napDCAT-AP	DE, IT									x	x	x	x
Item 4.4.3.4: Revision of napDCAT-AP	(later)	(in 2023)	(in 2023)													



14. Working Group 5 “National Bodies and compliance assessment”

14.1. Scope of the Working Group for 2022

The objective of this Working Group is to harmonise the compliance assessment of National Bodies/ National Authorities for the Delegated Regulations (EU) No 885/2013, No 886/2013, No 2015/962 and No 2017/1926. The revisions of the ITS Directive and its Delegated Regulations will be taken into consideration. Hereto the necessary processes, required forms, quality and evaluation criteria and conditions for data-reuse are going to be discussed and harmonised, where appropriate. Moreover, the Working Group will work out common strategies to address private organisations and ITS-related platforms to deliver data on the NAPs fully compliant to the Delegated Regulations.

14.1.1. Milestones 2022

MS #	Resp.	Milestone description	Indicative date of completion (GA)	Indicative date of completion (current)	Means of verification	Ext. MS
M5.1	WG5	WG5 Working Programme		12/2021	Handed over to coordinator	
M5.2	5.1	Best Practices and recommendations for harmonised compliance assessment identified	3/2022	9/2022	Report submitted to Steering Committee	X
M5.3	5.2	Synchronised compliance assessment processes and self-declaration forms defined	3/2022	9/2022	Report and forms submitted to Steering Committee	
M5.4	5.3	Common quality & evaluation criteria for compliance assessment defined	5/2022	03/2023	Report submitted to Steering Committee	X
M5.5	WG5	WG5 Working Programme		10/2022	Handed over to coordinator	
M5.6	5.4	Strategies and actions to address (private, international) organisations defined	12/2022	04/2023	Report submitted to Steering Committee	X

14.1.2. Active/ following partners

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	HE	UITP
L	A		F	A	F	A	F	A	A		
FR	DE-BAS	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
A	A		A	F	F		A	A	A		
LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
	A	F	F	A	A	F	F	F	F	F	

L = activity/task leader, A = active contributor, F = follower

 EU-Member State  Organisation  EU-NONE Member State / associated partners



		2021												2022												2023												2024																													
Activity	Task	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12																					
5		MS.1 																																	MS.7 																																
	5.1											MS.5 																					MS.9 																																		
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	5.4																					MS.6 																						MS.10 																							
	5.5																																MS.8																																		

14.1.4. Responsibilities

Resp. Task	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follower	I cannot contribute to this task
WG Lead	Leading the working group Responsible for management, overall task and milestone fulfilment Part of the Core Alignment Team	M5.1 Working Programme M5.5 Working Programme M5.7 Working Programme	AT	M5.1 – AT M5.5 – AT M5.7 – AT				
5.1	Best practices, national legislation and NB reference architecture	M5.2 Best Practices/recommendations for harmonised compliance assessment identified M5.9 NB Reference Architecture defined/agreed	IT	M5.2 - GR M5.9 - RO	LV	AT, LT, EE, PT, HR, IT, FR	BE, DK, NPRA	CZ, NL
5.2	Harmonisation of self-declaration forms, compliance assessment & random inspection processes and methods	M5.3 Synchronised compliance assessment processes/self-declaration forms defined	FI	M5.3 – BE	EE	AT, CZ, LT, GR, RO, DE, LV	PT, SE, DK	NL
5.3	Quality and evaluation criteria	M5.4 Common quality/evaluation criteria for compliance assessment defined	CZ	M5.4 - HR	LT	AT, EE, FI, GR, NL, RO	BE, PT, DK	
5.4	Develop strategies to address private (international) organisations to comply with the Delegated Regulations	M5.6 Strategies and actions to address (private, international) organisations defined M5.10 Prototypical multi-national compliance assessment demonstrated	PT	M5.6 - EE M5.10 - DE	NL	AT BE, FI, GR, FR, IT	SE, DK	CZ
5.5	Continuous evaluation, progress monitoring and improvement of Compliance Assessment	M5.8 Strategies/actions for non-compliance defined	FR	M5.8 – LT	BE	AT, CZ, RO, IT, DE, LV	PT, GR, DK	NL

- **Task Lead:** responsible for getting the required activities of the task done (in cooperation with the active partners & co-leader); organising most of the task meetings; organising the collection of most of the inputs of this task; structure the work; provide input to the work programme for the specific task; provide input to the yearly reports for the specific task; not responsible for producing milestone reports;
- **Task Co-Lead:** act as back-up for the task leader; responsible to organise selected task meetings; organise the collection of selected inputs; provide additional input to the work programme; provide additional input to the yearly reports; not responsible for producing milestone reports;
- **Active partners:** participate in all task meetings; provide input as requested by task leaders, co-leaders and partners responsible for milestones; review the work programme and the yearly report and add input as requested by the task leader/ co-leader; provide input to the milestone reports as requested by the responsible partners;
- **Milestone leader:** planning the work to reach the milestones; deliver input to the work programme accordingly; collecting results and inputs from all tasks/ activities as required; responsible of the production of the milestone report;
- **Follower:** allowed to participate the meetings; can give comments on results; do not have responsibility to actively work on results; are responsible for delivering input on national issues (e.g. answers to questionnaires, studies, ...)

14.2. Task 5.1 “Best practices, national legislation and National Body reference architecture”

14.2.1. Main objectives of the Task

The status and success of National Body/ National Authority implementation across Europe will be analysed. Maturity levels will be studied/ analysed, in order to be able to classify the progress of various Member States. Analysing the national legislation, regulating the National Body implementation in the different Member States, will round up the identification of best practices to support proper compliance assessment. National legislation will also be analysed concerning possible actions in case of non-compliance. The role of National Bodies in relation to a possible reinforcement of compliance on European level will be analysed and defined.

14.2.2. Organisational structure

Resp. Task	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follower	I cannot contribute to this task
5.1	Best practices, national legislation and NB reference architecture	M5.2 Best Practices/ recommendations for harmonised compliance assessment identified M5.9 NB Reference Architecture defined/ agreed	IT	M5.2 – GR M5.9 RO	LV	AT, LT, EE, PT, HR, FR	BE, DK, NPRA	CZ, NL

- **Task Lead** (IT - Aiscat, Autovie, AutoBrennero): task coordination, definition of the roles and activities for the partners and time management, organisation of meetings to share the results and provide feedback (eg. Possible solutions for NB/ NAP), at least 2 meetings (virtual) to share the questionnaire results and one to provide specific feedback on possible solutions/ possible actions of NBs/ NAs in case of non-compliance.
- **Task Co-Lead** (Latvian State Roads - Boriss.Jelisejevs@lvceli.lv; LV State Enterprise): support in the previously mentioned activities; meeting participation and support to organisation
- **Active partner:** (AT, LT, EE, PT, HR, FR, GR, RO) cooperation in the activities (e.g. Input to the questionnaire, answers evaluation, Identify the solutions/ possible actions of NBs/ NAs in case of non-compliance), meeting participation
- **Follower:** (BE, DK, NPRA) review of the documents and feedback on the activities, meeting participation

14.2.3. Dependencies and external relations

- The document produced within Task 5.1 will be Input to Task 5.2 (Analyse the status of the NBs/ NAs concerning the supporting documents), to Task 5.3 (Define (common) quality and evaluation criteria for Compliance Assessment) and Task 5.5 (Collect suggested improvements)
- Possible cooperation with Subtask 3.2.2 – Guidance & best-practices for quality assessment: based on the output of the questionnaire (to be defined)
- Possible liaisons and cooperation with TISA, ASECAP, EU bodies



14.2.4. Work Programme 2022

Subtasks	Title and Description of Activities/Action	Responsibilities/ Roles	Lead	Milestone number	Target achievement/Outcome	Start	End	2021	2022							
									1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter
Task Lead Activities	Yearly Progress Report 2021	AT, EE, PT, HR, FR, GR, LV, RO	IT	Input to Yearly Report												
	Work Programme 2022	AT, EE, PT, HR, FR, GR, LV, RO	IT	Input to M5.5												
Analyse status and success of National Bodies / National Authorities	Review existing questionnaire concerning the status of NBs/NAs	AT, LT, EE, PT, HR, FR, GR, LV, RO	IT	Input to M5.2	Identify Best practices											
	Adapt the questionnaire according to new requirements	AT, LT, EE, PT, HR, FR, GR, LV, RO	IT	Input to M5.2	Identify Best practices											
	Include the questions of TS.2, 5.3	AT, LT, EE, PT, HR, FR, GR, LV, RO	IT	Input to M5.2	Identify Best practices											
	Spread the questionnaire and collect answers	AT, LT, EE, PT, HR, FR, GR, LV, RO	IT	Input to M5.2	Identify Best practices											
	Fill out the questionnaire	all Countries														
	Evaluate the answers to the questionnaire	AT, LT, EE, PT, HR, IT, GR, LV, RO	IT	Input to M5.2	Identify Best practices											
	Identify the solutions/possible actions of NBs/NAs in case of non-compliance	AT, LT, EE, PT, HR, IT, GR, LV, RO	IT	Input to M5.8	Identify existing strategies for non-compliance											
	Classify according to maturity levels	AT, EE, PT, HR, IT, GR, FR, RO	LV	Input to M5.2	Define maturity levels and steps along											
	Analyse NBs/NAs according to maturity levels	AT, EE, PT, HR, IT, GR, FR, RO	LV	Input to M5.2												
	Classify the NBs/NAs according to maturity levels	AT, EE, PT, HR, IT, GR, FR, RO	LV	Input to M5.2												
Analyse national legislation	Analyse the legal basis and solutions for installing NBs/NAs in the different countries	AT, LT, EE, PT, HR, FR, GR, LV, RO	IT	Input to M5.2	Identify Best practices and recommendations											
	Analyse national solutions/possible actions of enforcement in case of non-compliance	AT, LT, EE, PT, HR, FR, GR, LV, RO	IT	Input to M5.8	Identify existing strategies for non-compliance											
	Identify best practices and provide recommendations for compliance assessment	AT, EE, PT, HR, IT, FR, LV, RO	GR	M5.2												
	Study the results of the questionnaire, the results of the maturity analysis, the results of the national legislation analysis	AT, EE, PT, HR, IT, FR, LV, RO	GR	M5.2												
	Work out different best practices on how to implement NBs/NAs	AT, EE, PT, HR, IT, FR, LV, RO	GR	M5.2												
	Develop recommendations for compliance assessment based on the results of the sub-tasks	AT, EE, PT, HR, IT, FR, LV, RO	GR	M5.2												
	Write the Mission Report M5.2	AT, EE, PT, HR, IT, FR, LV, RO	GR	M5.2												
NB Reference Architecture defined/agreed			RO	M5.9	Considering the results of Task 5.2 a reference architecture for implementing National Bodies will be defined.											
2023			RO	M5.9												
Continuous adaptation according to the results of Task 5.5																

14.3. Task 5.2 “Harmonisation of self-declaration forms, compliance assessment & random inspection processes and methods”

14.3.1. Main objectives of the Task

Existing self-declarations forms will be reviewed and missing uniform self-declaration forms will be developed (e.g. for Delegated Regulation (EU) No. 2017/1926). This is to ensure harmonised forms across Europe. Additionally, the possible structure respectively the requested content of accompanying documents will be discussed and defined.

Processes and methods for compliance assessment and random inspections will be discussed and compared according to specifically defined criteria. Common process elements for compliance assessment and methods for random inspection will be defined and agreed upon.



14.3.2. Organisational structure

Resp. Task	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follower	I cannot contribute to this task
5.2	Harmonisation of self-declaration forms, compliance assessment & random inspection processes and methods	M5.3 Synchronised compliance assessment processes/ self-declaration forms defined	FI	M5.3 – BE	EE	AT, CZ, LT, GR, RO, DE, LV	PT, SE, DK	NL

14.3.3. Dependencies and external relations

- Cooperation with Task 5.1 (questionnaire) and Task 5.5 (Implementation of recommendations)

14.3.4. Work Programme 2022

Subtasks	Title and Description of Activities/Action	Responsibility/ Roles	Lead	Milestone number	Target achievement/Outcome	Start	End	2021	2022
Task Lead Activities	Yearly Progress Report 2021	AT, CZ, GR, RO, DE, LV, BE, EE	FI	Input to Yearly Report					
	Work Programme 2022	AT, CZ, GR, RO, DE, LV, BE, EE	FI	Input to M5.3					
Development of uniform self-declaration forms	Review and discuss existing self-declaration forms	AT, CZ, LT, GR, RO, DE, LV, BE, EE	FI		Uniform self-declaration forms for Delegated Reg. 986/2013, 986/2013, 2015/982, 2017/1189				
	Consider the review of the ITS Directive and the Delegated Regulations 2015/982, 2017/1189	AT, CZ, LT, GR, RO, DE, LV, BE, EE	FI						
	Adapt existing self-declaration forms as required	AT, CZ, LT, GR, RO, DE, LV, BE, EE	FI						
	Develop draft uniform self-declaration forms, if missing	AT, CZ, LT, GR, RO, DE, LV, BE, EE	FI						
	Discuss the drafts with all Member States	AT, CZ, LT, GR, RO, DE, LV, BE, EE	FI						
	Finalise all uniform self-declaration forms and publish on NAPCORE webpage	AT, CZ, LT, GR, RO, DE, LV, BE, EE	FI	Input to M5.3					
Develop recommendations for the structure of accompanying documents	Analyse the status of the NBs/NAs concerning the supporting documents	AT, CZ, LT, GR, RO, DE, LV, BE, FI	EE		Commonly agreed structure of accompanying documents				
	Review existing questionnaire and provide input if needed (→Task 5.1)	AT, CZ, LT, GR, RO, DE, LV, BE, FI	EE						
	Finalise the questionnaire	all Countries	EE						
	Evaluate the answers to the questionnaire	AT, CZ, LT, GR, RO, DE, LV, BE, FI	EE						
	Analyse the Delegated Regulations concerning the requirements for supporting documents	AT, CZ, LT, GR, RO, DE, LV, BE, FI	EE						
	Consider the review of the ITS Directive and the Delegated Regulations 2015/982, 2017/1189	AT, CZ, LT, GR, RO, DE, LV, BE, FI	EE						
	Organise a workshop to discuss the possible structure respectively the requested content of accompanying documents	AT, CZ, LT, GR, RO, DE, LV, BE, FI	EE						
	Develop a recommendation structure for the accompanying documents	AT, CZ, LT, GR, RO, DE, LV, BE, FI	EE	Input to M5.3					
Define common process elements for compliance assessment and methods for random inspection	Analyse the status of NBs/NAs concerning Compliance Assessment & Random inspections	AT, CZ, GR, RO, DE, LV, BE, EE	FI		Common processes, methods and criteria for Compliance Assessment & Random inspections are defined and shared with all NBs/NAs				
	Review existing questionnaire and provide input if needed (→Task 5.1)	AT, CZ, GR, RO, DE, LV, BE, EE	FI						
	Finalise the questionnaire	all Countries	FI						
	Evaluate the answers to the questionnaire	AT, CZ, GR, RO, DE, LV, BE, EE	FI						
	Define criteria for evaluation of results of the analysis	AT, CZ, GR, RO, DE, LV, BE, EE	FI						
	Define basic process elements for compliance assessment	AT, CZ, GR, RO, DE, LV, BE, EE	FI						
	Define basic methods for random inspections	AT, CZ, GR, RO, DE, LV, BE, EE	FI						
	Discuss and agree upon common process elements for compliance assessment and methods for random inspections (i.e. workshop)	AT, CZ, GR, RO, DE, LV, BE, EE	FI	Input to M5.3					
Define templates/processes for fulfilling the reporting obligations of NBs/NA and Member States	Define templates/processes for the report towards the European Commission	AT, CZ, LT, GR, RO, DE, LV, BE, EE	FI						
	Define templates/processes for the report of the NB/NA towards the Member States	AT, CZ, LT, GR, RO, DE, LV, BE, EE	FI						
	Discuss and agree upon common templates/processes for reporting to EC and Member States	AT, CZ, LT, GR, RO, DE, LV, BE, EE	FI	Input to M5.3					
Synchronised compliance assessment processes/self-declaration forms	Develop structure for the milestone report	AT, CZ, GR, RO, DE, LV, BE, FI	BE	M5.3	Milestone report M5.3				
	Gather the results of the subtasks	AT, CZ, GR, RO, DE, LV, BE, FI	BE	M5.3	Milestone report M5.3				
	Write Milestone report	AT, CZ, GR, RO, DE, LV, BE, FI	BE	M5.3	Milestone report M5.3				
Common process elements for compliance assessment and methods for random inspection will be specified in the reference architecture (Task 5.1). Continuous adaptation according to the results of Task 5.5									



14.4. Task 5.3 “Quality and evaluation criteria”

14.4.1. Main objectives of the Task

Focussing on the requirements of compliance assessment, (common) quality and evaluation criteria will be defined, to be used by national bodies/ competent authorities. This task will be carried out in close cooperation with WG3, referring to quality criteria identified for data and services as published via the National Access Points.

In order to increase the uptake of data/ services provided on the NAPs the terms and conditions for data re-use should be reasonable and proportionate. Evaluation criteria for assessing the degree of compliance concerning reasonable and proportionate terms and conditions for data re-use (worked out within WG3) will be discussed by the National Bodies and implemented for Compliance Assessment, if suitable.

14.4.2. Organisational structure

Resp. Task	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follower	I cannot contribute to this task
5.3	Quality and evaluation criteria	M5.4 Common quality/ evaluation criteria for compliance assessment defined	CZ	M5.4 - HR	LT	AT, EE, FI, GR, NL, RO	BE, PT, DK	

14.4.3. Dependencies and external relations

- Strong correlation with WG3 for Quality and evaluation Criteria (intermediate results in Summer 2022; final report in 2023) and for Terms and conditions of data reuse.
- Cooperation with Task 5.1 (Questionnaire) with Task 5.5 (implementation of recommendations)



14.4.4. Work Programme 2022

Subtasks	Title and Description of Activities/Action	Responsibilities/ Roles	Lead	Milestone number	Target achievement/Outcome	Start	End	2021	2022			
									1st quarter	2nd quarter	3rd quarter	4th quarter
Task Lead Activities	Yearly Progress Report 2021	AT, EE, FL, GR, NL, RO, HR, LT	CZ	Input to Yearly Report								
	Work Programme 2023	AT, EE, FL, GR, NL, RO, HR, LT	CZ	Input to MS 5								
Define (common) quality and evaluation criteria for Compliance Assessment	Analyse the Delegated Regulations concerning the requirements for applying quality and evaluation criteria	AT, EE, FL, GR, NL, RO, HR, LT	CZ									
	Analyse existing quality and evaluation criteria, applied for compliance assessment by NBs/NAs	AT, EE, FL, GR, NL, RO, HR, LT	CZ									
	Review existing questionnaire and provide input if needed (→ Task 5.1)	AT, EE, FL, GR, NL, RO, HR, LT	CZ									
	Fill-out the questionnaire	allie Countries										
	Evaluate the answers to the questionnaire	AT, EE, FL, GR, NL, RO, HR, LT	CZ									
	Define requirements for the definition of quality and evaluation criteria for WG3 work	AT, EE, FL, GR, NL, RO, HR, LT	CZ									
	WG3 providing intermediate results concerning NBs/NAs requirements	GR										
	Use the results of WG3 and reflect concerning the NBs/NAs requirements	AT, EE, FL, GR, NL, RO, HR, LT	CZ									
	Identify suitable quality & evaluation criteria	AT, EE, FL, GR, NL, RO, HR, LT	CZ									
	Discuss and agree upon (common) quality & evaluation criteria for Compliance Assessment amongst the Member States	AT, EE, FL, GR, NL, RO, HR, LT	CZ		(common) quality and evaluation criteria for Compliance Assessment defined							
Common quality/evaluation criteria for compliance assessment defined	Develop structure for the milestone report	AT, EE, FL, GR, NL, RO, CZ, LT	HR	M5.4	Milestone report M5.4							
	Gather the results of the subtask	AT, EE, FL, GR, NL, RO, CZ, LT	HR	M5.4	Milestone report M5.4							
	Write Milestone report	AT, EE, FL, GR, NL, RO, CZ, LT	HR	M5.4	Milestone report M5.4							
Define reasonable and proportionate terms and conditions for data re-use to be implemented in Compliance Assessment	Define requirements for the definition of reasonable and proportionate terms and conditions for data re-use for WG3 work	AT, EE, FL, GR, NL, RO, CZ, HR	LT									
2022	Use the results of WG3 and reflect concerning the NBs/NAs requirements											
2023	Define evaluation criteria to assess the degree of compliance concerning reasonable and proportionate terms and conditions for data re-use											
2023	Define suitable processes for integration in Compliance Assessment / Adapt the existing processes accordingly				Compliance Assessment of reasonable and proportionate terms and conditions of data re-use							
Continuous adaptation according to the results of Task 5.5												
Semi-automated tools	Define requirements from the perspective of National Bodies for semi-automated support tools											
	Gathered and provided to the respective (Sub-) Working Groups (e.g. WG4 – DATEXII, MMIS)											

14.5. Task 5.4 “Develop strategies to address private (international) organisations to comply with the Delegated Regulations”

14.5.1. Main objectives of the Task

Addressing private (international) organisations properly, in order to ensure access to relevant data, compliant to the Delegated Regulation is a huge challenge, faced by all Member States. This task aims therefore at the identification of the relevant organisations and implementation of strategies and actions to motivate these organisations (private, international) to provide data on the NAPs, complying with the Delegated Regulations and hand in self-declarations.

Affected data holders or service providers will be identified in cooperation with WG2/ WG3 and an information campaign will be set up in cooperation with Activity H.3 Dissemination & Outreach activities. Consulting concerning the requirements of the Delegated Regulations for data/ service provision on the NAPs will be offered to organisations, in order to accelerate the provision of data on the NAPs.

Commented [CG(127)]: And implement?

Commented [GD128R127]: of course, the strategies will be applied during the run-time of the project and the success can be evaluated.

Commented [GD129R127]: yes, of course.



14.5.2. Organisational structure

Resp. Task	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follower	I cannot contribute to this task
5.4	Develop strategies to address private (international) organisations to comply with the Delegated Regulations	M5.6 Strategies and actions to address (private, international) organisations defined M5.10 Prototypical multi-national compliance assessment demonstrated	PT	M5.6 – EE M5.10 – DE	NL	AT, BE, FI, GR, FR, IT	SE, DK	CZ

14.5.3. Dependencies and external relations

- Strong correlation with WG2 and WG3 for identification of data holders and service providers
- Strong correlation to WG1/ Task 1.2 and to the Advisory Board (H1.3) for contacting (private, international) organisations
- Strong correlation with H3 for information campaign



14.5.4. Work Programme 2022

Subtasks	Title and Description of Activities/Action	Responsibilities/ Roles	Lead	Milestone number	Target achievement/Outcome	Start	End	2021	2022			
									1st quarter	2nd quarter	3rd quarter	4th quarter
Task Lead Activities	Yearly Progress Report 2021	AT, BE, FI, GR, FR, IT, EE, NL, DE	PT	Input to Yearly Report								
	Work Programme 2023	AT, BE, FI, GR, FR, IT, EE, NL, DE	PT	Input to M5.5								
identification of the relevant organisations and implementation of strategies and actions to motivate these organisations (private, international) to provide data on the NAPs	Gather types and sectors of organisations/players affected by the Delegated Regulations (in cooperation with T1.2 and H1.3)	AT, BE, FI, GR, FR, IT, EE, NL, DE	PT									
	Identify data holders and service providers in cooperation with WG2/WG3	AT, BE, FI, GR, FR, IT, EE, NL, DE	PT	Input to M5.6	Relevant data holder and service providers are identified							
Accelerate the provision of data on the NAPs	Develop consulting material for organisations (E.g. FAQ, ...) concerning the requirements of the Delegated Regulations	AT, BE, FI, GR, FR, IT, EE, PT, DE	NL									
	Set-up an information campaign in cooperation with Act H.3	AT, BE, FI, GR, FR, IT, EE, PT, DE	NL									
	Carry out the information campaign (targeted to international organisations)	AT, BE, FI, GR, FR, IT, EE, PT, DE	NL	Input to M5.6	More data is provided on the NAPs							
Strategies and actions to address (private, international) organisations defined	Develop structure for the milestone report	AT, BE, FI, GR, FR, IT, NL, PT, DE	EE	M5.6								
	Gather the results of the subtask	AT, BE, FI, GR, FR, IT, NL, PT, DE	EE	M5.6								
	Write Milestone report	AT, BE, FI, GR, FR, IT, NL, PT, DE	EE	M5.6	Milestone Report M5.6							
Prototypical multi-national compliance assessment demonstrated			DE	M5.10								
2024			DE	M5.10								



14.6. Task 5.5 “Continuous evaluation, progress monitoring and improvement of Compliance Assessment”

14.6.1. Main objectives of the Task

Within this task, during the runtime of NAPCORE, the implementation of common self-declaration forms, harmonised compliance assessment processes, the outcomes of the random inspections as well as the suitability of the applied quality and evaluation criteria will be monitored and evaluated. Potential for improvement and existing gaps will be identified and required adaptations of forms, processes, quality and evaluation criteria will be defined.

14.6.2. Organisational structure

Resp. Task	Task Definition	Related Milestones	Task Lead	Milestone Lead	Task Co-Lead	Active	Follower	I cannot contribute to this task
5.5	Continuous evaluation, progress monitoring and improvement of Compliance Assessment	M5.8 Strategies/ actions for non-compliance defined	FR	M5.8 - LT	BE	AT, CZ, RO, IT, DE, LV	PT, GR, DK	NL

14.6.3. Dependencies and external relations

Cooperation with Task 5.1, 5.2 and 5.3 concerning handing over the suggested improvements and recommendations.



14.6.4. Work Programme 2022

Subtasks	Title and Description of Activities/Action	Responsibilities/ Roles	Lead	Milestone number	Target achievement/Outcome	Start	End	2021	2022																	
											1st quarter				2nd quarter				3rd quarter				4th quarter			
Task Lead Activities	Yearly Progress Report 2021	AT, CZ, RO, IT,DE, LV, BE	FR	Input to Yearly Report																						
	Work Programme 2023	AT, CZ, RO, IT,DE, LV, BE	FR	Input to M5.5																						
Progress monitoring	Set up modus and a time schedule for the monitoring of the implementation of the harmonised self-declarations forms, Compliance Assessment processes and random inspection methods	AT, CZ, RO, IT,DE, LV, BE	FR																							
	Carry out the progress monitoring	AT, CZ, RO, IT,DE, LV, BE	FR		Identify the status of implementation																					
	Report on the progress, identify gaps and define improvement measures (e.g. twice a year)	AT, CZ, RO, IT,DE, LV, BE	FR		Improve Compliance Assessment																					
Evaluation	Define an evaluation process and evaluation criteria concerning the outcome of the random inspections and compliance assessment	AT, CZ, RO, IT,DE, LV, BE	FR																							
	Define an evaluation process and evaluation criteria concerning the usability of the defined quality and evaluation criteria for CA	AT, CZ, RO, IT,DE, LV, BE	FR		Evaluate Compliance Assessment results																					
	Carry out the evaluation process																									
	Report on the evaluation results, identify gaps and define improvement measures	AT, CZ, RO, IT,DE, LV, BE	FR		Improve Compliance Assessment																					
Improvement	Collect suggested improvements	AT, CZ, RO, FR,DE, LV, IT, LT	BE																							
	Communicate the requested improvements to the related tasks :	AT, CZ, RO, FR,DE, LV, IT, LT	BE		Improve Compliance Assessment																					
	Forms – Task 5.1																									
	Compliance Assessment/Random Inspections – Task 5.2																									
	Quality & Evaluation criteria – Task 5.3																									
Strategies and actions for non-compliance defined			LT	M5.8																						
2023			LT	M5.8																						