



GUIDELINES FOR THE **HARMONIZATION OF ENERGY AND MOBILITY PLANNING**

Version November 2018

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FOREWORD



ENERGY PRODUCTION AND CONSUMPTION, **TRANSPORT** AND **MOBILITY** ARE CRUCIAL, TRANSVERSAL ELEMENTS AFFECTING ALL ASPECTS OF SOCIO-ECONOMIC DEVELOPMENT IN EUROPE, CENTRAL TO EACH EUROPEAN CITIZEN'S QUALITY OF LIFE AND ESSENTIAL IN ANY **URBAN DEVELOPMENT PLANNING** IN A CONTINENT CHARACTERIZED BY GROWING URBANIZATION.

European policies have set ambitious sustainability targets for all levels of governance for 2000 and the coming decades, expecting important reductions in GHG emissions, a significant increase in energy efficiency and in production from renewable sources, and a dramatic reduction of Europe's dependence on imported oil. The role of local authorities through their local strategic energy, transport and mobility plans is pivotal to meet these targets. However, individual sectoral plans dealing with energy, transport and mobility separately have often proved inefficient to provide effective, long-term solutions.

The SIMPLA project (www.simpla-project.eu/en) offers local authorities an innovative, comprehensive approach to harmonize energy, transport and mobility planning in the frame of wider urban development and land-use planning, providing a step-by-step methodology described in the chapters of these guidelines.

The guidelines are the outcome of a preparatory process entailing extensive consultations in the territories of the

SIMPLA partnership. An acknowledgement goes to the over 350 stakeholders, institutional and non-institutional actors involved, including local, regional and national authorities, academy and research centres, national and local energy agencies, utilities, associations, environmental NGOs. Their feedback was elaborated by an international team of energy, mobility and climate change experts to come up with the concept underpinning the SIMPLA methodology.

Based on the guidelines, the 6 SIMPLA National Focal Points established in Austria, Bulgaria, Croatia, Italy, Romania, and Spain, are going to implement an extensive capacity building action involving several local authorities in the six countries. The local authorities selected to be piloting the scheme are going to develop harmonized strategic energy and mobility plans using the step-by-step methodology for the development, review, update and upgrade of their plans in the frame of wider-reaching sustainable urban development schemes.

SHAPING THE ENERGY AND MOBILITY FUTURE OF EUROPEAN CITIES



ALMOST THREE QUARTERS OF THE EUROPEAN POPULATION LIVES IN URBAN AREAS AND, ACCORDING TO OFFICIAL ESTIMATES, THIS SHARE IS GOING TO INCREASE IN THE COMING YEARS, REACHING 80% AROUND 2050 AND **MAKING EUROPE ONE OF THE MOST URBANIZED CONTINENTS** IN THE WORLD.

European cities, small and large, are faced with a growing number of challenges on their path to a more sustainable and inclusive development, including:

- T**he impacts of demographic trends and population change on lifestyles, social cohesion, productivity, economic growth, and quality of life in the urban areas;
- F**ast technological development challenging operational scenarios at unprecedented pace;
- A**dapting to and mitigating the effects of climate change, balancing ambitious environmental impact reduction targets

and the need to guarantee affordable, secure and sustainable energy.

Local authorities are called to adopt strategic visions and offer convincing solutions to citizens' needs when planning urban development. Energy production and consumption, mobility and transport are crucial, transversal elements with multifold repercussions on any European citizen's life and on the overall management of cities. Focusing on individual, separate sectoral policies does not seem to pay off: the solution is to be sought in a holistic approach to urban development planning. Moreover, a harmonized strategic planning process for energy, mobility, transport and land use policies provides decision makers, technical



departments, public and private stakeholders with a better, integrated and synergistic view of actions needed to build the European cities of tomorrow.

Cities in Europe are urged to do their share through integrated strategic planning for their urban environments to implement the main EU energy and mobility policies:

The White Paper on Transport 'Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system';

The Urban Mobility Package;

The 2030 Framework for Climate and Energy;

The 2050 Energy Roadmap.

LOCAL AUTHORITIES' ACTIONS ARE PIVOTAL FOR REACHING THE OBJECTIVES SET BY THE AFOREMENTIONED POLICIES:

-40% GHG emissions by 2030, **-60%** by 2040 and **-80%** by 2050 compared to 1990 levels;

At least **27%** energy production from renewables and **27%** energy savings compared to a business-as-usual scenario by 2030;

Dramatic reduction of Europe's dependence on imported oil, 60% reduction of carbon emissions in transport and no more conventionally fuelled cars in cities by 2050;

Increased resilience to climate change;

Building efficient and effective urban mobility and transport systems responding to the needs of all city users while balancing development and integration of the different transport modes with sustainability, economic viability, social equity, security, health and environmental quality to enhance the attractiveness of the urban environment and quality of life in European cities.



SIMPLA's solution for local authorities is a step-by-step methodology to develop, review and adapt their strategic urban development, energy, mobility and transport plans based on a set of 6 pillars:

1. a strategic vision shared within the local authority and with local partners and stakeholders;
2. increased interdepartmental, multidisciplinary cooperation within local authorities;
3. extensive involvement of local public and private actors in decision making;
4. a shared monitoring methodology based on common data sets;
5. enhanced multi-level governance;
6. qualified leadership to guide the process.

HARMONIZED, MULTI-SECTOR PLANNING IS THE KEY FACTOR FOR HIGHER-QUALITY, EFFECTIVE IMPLEMENTATION.

It's time to act!
Planning energy and
mobility together:
IT'S SIMPLA!

INTRODUCTION AND PROBLEM SETTING

ENERGY, TRANSPORT AND MOBILITY ARE TYPICALLY MANAGED BY DIFFERENT DEPARTMENTS WITHIN A LOCAL AUTHORITY. THESE AREAS RARELY FALL UNDER THE RESPONSIBILITY OF THE SAME POLITICAL DECISION MAKER, MAKING INTERNAL HORIZONTAL INTEGRATION A DIFFICULT PROCESS.

Energy, transport and mobility planning processes in themselves are often a challenge for local authorities, because these processes entail the participation of stakeholders and the local population, vertical integration with other governance levels and a long-term vision, trying to balance costs and benefits and to achieve and maintain consensus.

As a result, local authorities often come up with individual separate sectoral policies and measures (urban planning, parking, cycling, public transport, production from renewables, energy efficiency in buildings, etc.), lacking a common strategic vision, and with poorly coordinated sectoral planning tools, to the extent that they sometimes each plan seems to be going its own separate way.

Coordination and integration in strategic planning is important for the effectiveness and efficiency of any local authority's action. They will lead to economies of scale, harmonization and synergies between individual policies and measures. A harmonized approach resting upon a solid knowledge base, furthermore, offers political decision makers and technical officers crucial coordinated support for their actions¹.

SIMPLA acts on this, offering a structured process and methodology addressed to lead the harmonization of strategic sustainable energy, climate adaptations and mobility plans (in Europe typically SECAPs and SUMPs, although some

¹ At present, a major debate is going on European level: Also in the context of local governments economy of scale applies. If small municipalities each deliver their own services independently this will result in higher expenditures for the same level and quality of output than the same services delivered by fewer larger councils, therefore small municipalities in the same area could aggregate to develop jointly their plans. This could also prevent from the risk of environmental dumping i.e. a municipality trying to attract businesses and residents by setting lower environmental standards than their neighbours.

countries prefer to refer to different working frames), coordinated with the main relevant local strategic documents, especially land use planning tools.

These guidelines aim to provide a description of the harmonization process leading to the formal approval of two harmonized plans (a SECAP and a SUMP) and their harmonized implementation and monitoring.

The SIMPLA approach is consistent with the SUMP principle of “Horizontal and vertical integration” since the planning of sustainable mobility is required to be coordinated with energy and land use planning, the harmonization process is the operational description of how integration this could be achieved. Also SECAP guidelines require an harmonization of the SECAPs with other existing plans and urban policies including therefore also SUMPs.

The participatory approach is a common pillar of both SECAPs and SUMPs, and the active involvement of stakeholders is planned also during the harmonization process.

The assessment of the current and present performance is a common principle since both plans are requested to set objectives and SMART indicators.

Regular monitoring, review and reporting are a critical area of the harmonization, as later described in details, a monitoring process is envisaged by both SUMPs and SECAPs, but the way the monitoring plan is structured is significantly different and specific actions are required to harmonize the monitoring plans.

1.1 DEFINITIONS

1.1.1 WHAT IS A **SECAP**?

Following the adoption of the European Union's Climate and Energy Package in 2008, the European Commission launched the Covenant of Mayors, to endorse and support the efforts deployed by local authorities in the implementation of sustainable energy policies, addressing climate mitigation by means of a reduction in fossil fuels consumption.

In October 2015, following a consultation process on the future of the Covenant of Mayors, the European Commission launched the new integrated Covenant

of Mayors for Climate and Energy, which goes beyond the objectives set for 2020. The signatories of the new Covenant commit to reduce their CO₂ emissions (and possibly other GHG) and to adopt a joint approach to tackling mitigation and adaptation to climate change.

Signatories of the Covenant of Mayors for Climate and Energy have committed to prepare and implement a Sustainable Energy and Climate Action Plan (SECAP) before 2030.

Adaptation means anticipating the adverse effects of climate change and taking appropriate action to prevent or minimise the damage they can cause, it has been shown that well planned, early adaptation action saves money and lives later.

As SEAP does, SECAP includes an assessment of the geographical, demographical and energy local context, a Baseline CO₂ Emission Inventory (BEI) referring to a specific base year, a clear identification of the emissions reduction target, and the actions planned together with time frames, assigned responsibilities and estimated impacts and costs. Thus the SECAP retains the same outline procedure used for SEAPs but differs in:

Target: a SECAP is aimed at defining mitigation actions that allow cutting down at least 40% of CO₂ emissions;

Timeframe: a SECAP is expected to achieve the objective of 40% reduction by the year 2030;

Development time: a SECAP has to be submitted within two years of joining the Covenant.

Guidelines on how to develop a SEAP are available at: http://www.simpla-project.eu/media/32996/seap_guidelines_en-2.pdf

In addition to the differences listed above, the Covenant of Mayors for Climate and Energy requires members to develop a risk and vulnerability assessment of the effects of climate change, in order to highlight strengths and weaknesses of a territory. This is to determine the nature and extent of risk by analysing potential hazards and assessing vulnerability that could pose a potential threat or harm to people, property, livelihoods and to the environment on which they depend. This will allow the definition of appropriate adaptation strategies, which will translate into the

SECAP's actions and contribute to improve the resilience of the territory.

The Urban Adaptation Support Tool (Urban-AST) provides guidelines on how to develop an adaptation plan. The tool is available at:

<http://climate-adapt.eea.europa.eu/knowledge/tools/urban-ast>

This tool provides easy access to relevant adaptation information, data, tools and guidance specifically tailored for urban settings in Europe. It includes procedures for the assessment of risks and vulnerabilities to climate change, the identification assessment and selection of adaptation options, their implementation monitoring and evaluation.

The SECAP format basically consists of two parts, "Mitigation" and "Adaptation", which can be developed following the SEAP guidelines, and the Urban-Adaptation Support Tool (Urban-AST) respectively.

The plans have to be approved and adopted by the Covenant signatories' city councils and then submitted to the Covenant of Mayors Office (CoMO) for a review process which ends with the acceptance of the plan. After the formal acceptance by the CoMO, the implementation of the plan has to be monitored every two years, following the monitoring guidelines available at the CoMO website (www.covenantofmayors.eu).

In order to identify all energy consumers, the Covenant of Mayors' commitments concern the entire geographical area of the local authority, taking into account the energy consumed in all sectors of activity the local authority can influence.

The Covenant's key sectors are the following:

Municipal buildings, equipment and facilities;

Tertiary (non-municipal) buildings,
equipment and facilities;

Residential buildings;

Transport.

The whole initiative is implemented by means of both public and private actions, and is mainly aimed at raising awareness among stakeholders on energy issues, through the promotion of successful projects and the launch of new actions.

1.1.2 WHAT IS A **SUMP**?

SECAPS (SUSTAINABLE ENERGY AND CLIMATE ACTION PLANS) ARE STRATEGIC PLANS THAT LOCAL AUTHORITIES DEVELOP AND ADOPT AFTER JOINING THE COVENANT OF MAYORS FOR CLIMATE AND ENERGY.

Promoted by the European Commission in the White Paper on Transport (2011) and the Urban Mobility Package (2013), Sustainable Urban Mobility Plans

(SUMPs) are one of the main tools available at EU level to tackle transport and mobility in urban and suburban areas.



A **SUMP** HAS AS ITS CENTRAL GOAL IMPROVING ACCESSIBILITY OF URBAN AREAS AND PROVIDING HIGH-QUALITY AND SUSTAINABLE MOBILITY AND TRANSPORT TO, THROUGH AND WITHIN THE URBAN AREA. IT REGARDS THE NEEDS OF THE 'FUNCTIONING CITY' AND ITS HINTERLAND RATHER THAN A MUNICIPAL ADMINISTRATIVE REGION²

SUMPs are strategic plans based upon a long-term vision, with the main goal to provide integrated solutions to transport and mobility needs of people and goods, guaranteeing technical, economic, environmental and social sustainability³.

The pillars underpinning the process leading to a SUMP are³:

Building on existing practices and regulatory frameworks in Member States;

Defining a clear long-term vision, objectives,

2. COM(2013) 913 final 'Together towards competitive and resource efficient urban mobility'

3. Source: Guidelines 'Developing and implementing a Sustainable Urban Mobility Plan' European Common (2014)

measurable targets and a suitable, regular monitoring and evaluation system ensuring quality of implementation and a cyclical approach;

Pledge for economic, technical, environmental, social sustainability;

Participatory approach involving stakeholders and population in decision making;

Vertical and horizontal integration to foster cooperation and coordination between different levels of government and different departments within a local authority;

Revue of transport costs and benefits, including direct and indirect, internal and external.

A SUMP'S OBJECTIVES INCLUDE:

Guaranteeing accessibility to all road users, with a focus on the so-called "vulnerable users", namely pedestrians, cyclists, children, disabled persons, etc.;

Fostering a balanced development of all transport modes, tackling public and private, motorized and non-motorized transport, intermodality, urban logistics, mobility management and ITS systems;

Reducing environmental impacts (primarily air and noise pollution) rationalizing efficiency and cost-effectiveness;

Optimizing the use of urban areas leading to a cleaner urban environment and consequently more attractive cities and better quality of life for all citizens;

Improving road safety and security.

Adopting a SUMP offers a local authority several opportunities, since it paves the way to a new culture for urban mobility based on a participatory approach, increases the liveability of urban spaces and consequently citizens' quality of life, creates a favourable environment to attract investors and boost economic development and increases chances to access EU funds.

Two portals supported by the European Commission provide extensive information, reports, news and case studies for local authorities and transport and mobility experts to refer to:

Eltis - The urban mobility observatory
(www.eltis.org)

CIVITAS - Cleaner and better transport
in cities (www.civitas.eu)

The Eltis platform (<http://www.eltis.org/mobility-plans/sump-concept>) also offers a tool dedicated to self-assessment of any urban mobility plan to determine whether it meets all the criteria making it a SUMP, taking as main reference the guidelines 'Developing and implementing a Sustainable Urban Mobility Plan', available online in the same section.

1.1.3 DIFFERENCES BETWEEN **SEAP, SECAP AND SUMP**

A fundamental prerequisite for a proper harmonization of SEAPs/SECAPs and SUMPs is an in-depth understanding of the features of each plan.

The following table compares the respective approaches (Table 1).

ISSUE	SEAP	SECAP	SUMP
TIME-SPAN	To 2020	To 2030	Long term (min. 10 years)
FIELDS OF ACTION	<ul style="list-style-type: none">• Municipal buildings (energy, heating and cooling plants)• Tertiary (non-municipal) (energy, heating and cooling plants)• Residential buildings (energy, heating and cooling plants)• Transport• Public lighting• Green public procurement• Local electricity production• Local heat/cold production• Others (e.g. industry, agriculture, forestry, fisheries)	<ul style="list-style-type: none">• Municipal buildings (energy, heating and cooling plants)• Tertiary (non-municipal) buildings (energy, heating and cooling plants);• Residential buildings (energy, heating and cooling plants);• Transport• Public lighting• Green public procurement• Local electricity production• Local heat/cold production• Others (e.g. industry, agriculture, forestry, fisheries)• Land Use Planning• Environment & Biodiversity	Mobility and transport of people and goods in urban and sub-urban environments ('functioning cities')

ISSUE	SEAP	SECAP	SUMP
RELEVANCE OF A LOCAL AUTHORITY'S TERRITORIAL SIZE	No technical relevance, however complexity increases with the size of the local authority's territory		Urban and sub-urban contexts of such a size where a balanced development of all transport modes is feasible and realistic (typically the population of the functioning area is above 100.000, even although cases of smaller areas exist)
NEED FOR VERTICAL AND HORIZONTAL INTEGRATION	Highly relevant, as different levels of governance and different departments of the local authority should be will be involved in planning for an effective and satisfactory action		Highly relevant, as different levels of governance can be involved in planning (esp. relevance of vertical integration) the whole metropolitan area should be addressed Political commitment
PROCESS STEPS	<ul style="list-style-type: none"> • Political commitment • Involvement of stakeholders • Planning • Baseline definition • Adapting administrative structure • Establishment of a long-term vision with clear objectives • SEAP elaboration • Actions implementation • Monitoring and reporting progress 		<ul style="list-style-type: none"> • Context analysis • Initiation of stakeholders' involvement process • Definition of vision, objectives, indicators, measures • Elaboration Ex-ante evaluation (including a cost/benefit analysis) • Definition of scenarios • Implementation of actions • Monitoring and evaluation
OBJECTIVES	(At least) 20% CO ₂ emissions reduction by 2020	(At least) 40% CO ₂ emissions reduction by 2030 and climate adaptation	<ul style="list-style-type: none"> • Accessibility • Balanced development of all transport modes • Reduced environmental impacts (including, among others, CO₂ reduction) • Improved road safety and security • Optimized land use in urban areas • More attractive cities • Better quality of life for citizens

ISSUE	SEAP	SECAP	SUMP
RELEVANCE OF PARTICIPATORY APPROACH	Highly relevant to inform, trigger activities and guarantee acceptance of stakeholders		
DEFINITION OF BASELINE	Comprehensive overview of energy generation and consumption in the municipality	Comprehensive overview of energy generation and consumption Risk and vulnerability assessment	Context analysis mainly based on transport infrastructure, mobility, and socioeconomic data
INDICATOR	<p>A SEAP must include the following indicators:</p> <ul style="list-style-type: none"> • % Reduction of CO₂ emissions • Energy use, generation from RES and savings indicators for each action [MWh] <p>Moreover, a SEAP should include customized “activity indicators” to monitor actions, e.g.:</p> <ul style="list-style-type: none"> • Energy delivered by electrical vehicles charging stations [kWh/year] • Public lighting systems electrical consumption [kWh/lighting pole/year] • Litres of water delivered by public water houses [L] • Photovoltaic systems electricity production [kWh/year] • Amount of ligneous biomass consumed [kg/year] and thermal power delivered to district heating final users [kWh/year] 	<p>A SECAP must include the following indicators:</p> <ul style="list-style-type: none"> • % Reduction of CO₂ emissions • Energy use, generation from RES and savings indicators for each action [MWh] • Vulnerability-related indicators, e.g.: <ul style="list-style-type: none"> • length of transport network (e.g. road/rail) located in areas at risk (e.g. flood/drought/heat wave/ forest or land fire) • number of consecutive days/nights without rainfall • Impact-related indicators, i.e.: <ul style="list-style-type: none"> • % of habitat losses from extreme weather event(s) • % of livestock losses from pests/pathogens • Outcome-related indicators, i.e.: <ul style="list-style-type: none"> • % of transport, energy, water, waste, ICT infrastructure retrofitted for adaptive resilience • % of coastline designated for managed realignment • % of forest restored <p>Moreover, a SECAP should include customized “activity indicators” to monitor actions (see SEAP column on the left).</p>	<p>A SUMP should include environmental/energy indicators (e.g. reduction of CO₂, CO, NO_x, SO_x, PM10, PM 2.5, VOC, fuel consumption, increase in number of vehicles running on alternative fuels).</p> <ul style="list-style-type: none"> • Each SUMP measure, moreover, requires specific indicators. A few examples are provided of the most common indicators used: • Public transport: network size, bus Km/year, passengers/year • Cycling: network size, trips per year, no. bikes and stations for bike sharing • Transport system: limited traffic areas (extension); • Car sharing: cars, Km/year; • Traditional vehicles trips/year; • Freight traffic in peak time; • Parking policies: park and ride places; pay and display areas; fare system; • Motorization rate; • Modal split; • Road safety: accidents/year; fatalities/year. • Public administration transport costs (investments and running costs per year);
ELABORATION OF SCENARIOS	Limited relevance: there's a single scenario: 2020 compared to the baseline year (Baseline Emission Inventory - BEI)	Limited relevance: initial and final (2030) scenarios and optional “long term scenario” beyond 2030	The elaboration of scenarios (1, 2 and 3) is a distinctive feature of SUMP elaboration

ISSUE	SEAP	SECAP	SUMP
CENTRALIZED MONITORING	Report to Covenant of Mayors Office		Each local authority responsible for its own monitoring and evaluation
COST & BENEFIT ANALYSIS	Recommended but not mandatory		Recommended when selecting actions
REPORT	Monitoring Emission Inventory (MEI) every four years, standardized and mandatory report submitted every two years		Not formalized

Table 1: Main differences between SEAP/SECAP and SUMP



1.2 DEFINITION OF HARMONIZATION

The differences between SECAPs and SUMP's highlighted in the previous paragraph should not lead the reader to the conclusion that their harmonization is not viable. Harmonizing, furthermore, does not mean unification of activities or the mere inclusion of sections of one plan into the other.

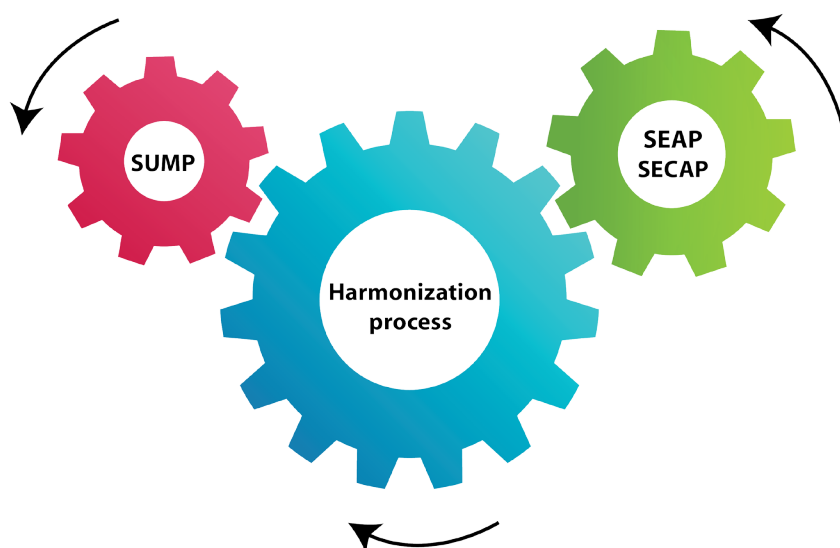


Fig 1: illustrates the idea of harmonizing the activities of a SECAP and a SUMP into one single framework by the analogy of meshed gears

Harmonization means working on those areas which are complementary in order to have the plans working together for the achievement of an overall strategic objective. Harmonization helps different departments in local authorities share the same vision, work together and optimize the use of resources.

Figure 1 illustrates the idea of harmonizing the activities of a SECAP and a SUMP into one single framework by the analogy of meshed gears.

Note: Making an analogy between a gearing system and the harmonized development and implementation of SECAP and SUMP, we could come up with two considerations:

1. the lack of activity in one of two plans or in their harmonization forcedly stops the other two;
2. once started, the wheel representing the harmonization process, showing an inertia and a diameter far more significant than the other two, easily drags the smaller wheels representing the SECAP and the SUMP.

The areas of potential cooperation to focus on during the harmonization process are the following:

Strategic vision: both SUMP and SECAPs (in particular considering the new elements added by SECAPs) aim at improving citizens' quality of life and minimizing impacts on the environment.

Baseline: all plans rely on a thorough definition of the baseline against which the progress in achieving the plans' objectives is to be measured. Defining common databases leads to more coherence and a more efficient use of resources.

Participation of stakeholders: the development of both plans relies upon the active engagement of stakeholders. A coordinated management of the stakeholders' involvement process helps in the definition of a single vision and a better use of resources.

Common actions: all actions related to low carbon mobility contribute to the achievement of the goals of both plans, therefore the need for coordinated actions is crucial.

Monitoring and controlling: the regular and transparent check of progress towards achieving the objectives, as well as the identification of new challenges, are common to both plans and should be also performed in a harmonized way.

Local authorities initiating their harmonization process may have different starting scenarios:

They may already have both a SECAP and a SUMP, needing harmonization;

They may already have either a SECAP or a SUMP, needing to develop the other in such a way that it is harmonized with the existing plan;

They may have to develop both plans.

Possible starting scenarios are shown in Figure 2:



Fig 2: Starting scenarios for the harmonization process

In terms of management, four operational principles should guide the harmonization process:

- 1.** Shared vision: all departments taking part in the process (mobility, environment, energy, land use planning etc.) should share the same vision and strategic objective.
- 2.** Cooperation: all departments taking part in the process (mobility, environment, energy, land use planning etc.) should work jointly and actively cooperate.
- 3.** Leadership: a single, qualified and capable project manager should lead the process.
- 4.** Project management techniques: the harmonization process is a complex task, requiring coordination of different activities, multidisciplinary teams and compliance with several, and sometimes

contradicting, regulations and guidelines. Defining a work plan, attributing tasks and setting milestones are therefore necessary steps.

In operational terms, the harmonization process can be summarized into four main steps briefly presented in figure 3 and described in details in chapter 2.

The process is conceived as circular, with the outcome of the monitoring leading to a review and update of the plans.



Fig 3: Steps of the harmonization process

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Chapter 2



THE HARMONIZATION PROCESS



2.1 STEP ONE: INITIATION

2.1.1 POLITICAL COMMITMENT

RELATIONSHIP WITH SUMP GUIDELINES

As for all the harmonization process, the actual implementation of this step crucially depends on the starting context – i.e. whether the city has, is developing or intends to develop a SUMP.

According to the individual situation, the SIMPLA guidelines interact with the SUMP guidelines in a specific and more definite way. That is to say that, since SUMP guidelines describe the process to develop a (new) SUMP where one does not exist, in case the situation falls into one of the other two general categories (existing SUMP or at some point in its development), the instructions and suggestions contained in the SUMP guidelines may be used to adjust and fine-tune the plan towards harmonization with a SECAP.

Looking at the SUMP guidelines, Step 2.1.1 is connected to Phase 1 'Preparing well' - Step 1 'Determining potential for success' - Activity 1.1 'Commit to overall sustainable mobility principles' – and Phase 2 – 'Rational and transparent goal setting' - Step 4 'Develop a vision and engage citizens' – Activity 4.1 'Develop a common vision'. The latter is further developed and implemented under Step 2.3.1 'Harmonization of vision' of these guidelines.

RELATIONSHIP WITH SECAP GUIDELINES

As for all the harmonization process, the actual implementation of this step crucially depends on the starting context – i.e. whether the city has a SECAP, it is developing a new one from scratch or based on a previous SEAP. Specifically, the Covenant of Mayors offers a growing range of "technical documents" to guide Municipalities in drafting a SEAP, implementing specific parts such and monitoring the plan.

Looking at the SEAP/SECAP guidelines (How to develop a Sustainable Energy Action Plan Guidebook part I) the whole Chapter 2 is devoted to "Political Commitment", therefore is connected to Step 2.1.

This chapter explains how to establish political commitment for the harmonization process.

SUMPs and SECAPs are based on formal political commitment from the local authority's political decision makers. Therefore, all necessary activities for the

harmonization will be triggered by the decision makers, typically the Mayor, who should be informed about the potential and benefits of harmonization by informed stakeholders and by senior officers working for the local authority.

POLITICAL SUPPORT TO THE HARMONIZATION PROCESS IS PARAMOUNT

To ensure the success of the harmonization process, sufficient empowerment and support need to be provided by the local authority's key decision makers, by allocating adequate human resources with a clear mandate and sufficient time and budget to prepare the local authority's harmonized SECAP and SUMP.

To start the harmonization process, a meeting is to be held with the local authority's key decision makers and senior officers to discuss the goals of the harmonization process and the advantages of a harmonized SECAP and SUMP. It is essential to provide convincing information regarding the practicalities of the harmonization process (see par. 1.2).

As an output of this meeting, formal political commitment regarding the harmonization process should be announced in the form of an overarching vision including and merging the specific visions of SECAP and SUMP. It is an opportunity to improve each plan, for example:

U Update the SECAP and/or the SUMP including new actions

H Harmonize the SECAP and SUMP with other plans (e.g. land use plan, regional mobility plan, etc.)

I Involve stakeholders

The political commitment clearly states the objective of harmonization and the planned deadline. It appoints a “project manager” in charge of the harmonization process.

It also includes a commitment to regular information on the follow-up of the implementation process.

EXPECTED OUTPUT DOCUMENT: FORMAL POLITICAL COMMITMENT SETTING THE OBJECTIVE TO HARMONIZE SEAP/SECAP AND SUMP, WITH A “HARMONIZED VISION ON SUSTAINABLE MOBILITY, ENERGY AND CLIMATE ADAPTATION” AND APPOINTMENT OF A “HARMONIZATION COORDINATOR” AS PROJECT MANAGER.

2.1.2 SETTING UP THE HARMONIZATION TEAM

RELATIONSHIP WITH SUMP GUIDELINES

Looking at the SUMP guidelines, Step 2.1.2 is connected to Phase 1 ‘Preparing well’ - Step 1 ‘Determining potential for success’ - Activity 1.4 ‘Review resources’ and Phase 2 – ‘Rational and transparent goal setting’ - Step 2 ‘Define plan scope and process’ – Activity 2.2 ‘Strive for policy coordination and an integrated planning approach’ and Activity 2.4 ‘Agree on work plan and management arrangements’

RELATIONSHIP WITH SECAP GUIDELINES

Looking at the SEAP/SECAP guidelines (How to develop a Sustainable Energy Action Plan Guidebook part I), Chapter 3 is focused on “Adapting administrative structures”, therefore is connected to Step 2.1.2. Moreover, ‘Adapting city structures, including allocation of sufficient human resources’ is a formal commitment of those signing the Covenant of Mayors.

The project manager summons a kick off meeting, involving the local authority’s department directors. In this meeting the members of the harmonization team and their degree of involvement need to be defined.

Departments to involve may include: urban planning, environment, transport and mobility, statistics, ICT, public procurement, PR, etc.

IT **IS PARAMOUNT** TO INVOLVE IN **THE HARMONIZATION TEAM** THE KEY PERSONS IN CHARGE FOR THE EXISTING SECAP AND/OR SUMP WHEN APPLICABLE.

To avoid the perception that one of the two plans prevails over the other, it is advisable not to appoint the SECAP or the SUMP coordinator as manager of the harmonization team. All the required technical and communication skills to develop the SECAP and SUMP should be well represented.

Not all the team members need to be permanent members of the team; some might be required for limited tasks or on an ad-hoc basis. The time of involvement into the harmonization process needs to be defined.

EXAMPLE: CITY OF AREZZO (ITALY):

The development of the city's SEAP started after the adoption of the SUMP draft by the Mayor's Cabinet in January 2015. The SEAP, passed by the Council in July 2016, benefitted from a series of interdisciplinary meetings to coordinate the two plans, led by the Department for the environment and the Department for urban planning and land use. A multidisciplinary team was created, involving political decision makers (2 deputy mayors, for environment and urban mobility and

traffic, respectively). Technical officers were involved from the urban mobility unit and the environment protection unit. External consultants were involved for the development of both SEAP and SUMP. The SUMP and SEAP teams cooperated in the collection and elaboration of data regarding transport.

Arezzo's SEAP and SUMP are now aligned in terms of actions contained in the two plans.

EXAMPLE: CITY OF PORDENONE (ITALY):

Exploiting the major opportunity offered by the need to fully revise the city's land use and development plan, Pordenone's SEAP and SUMP were developed in parallel and in the overall framework of the abovementioned plan, in a process started in 2014 and completed in 2016. A multidisciplinary team was set up to align contents and approaches in SEAP and SUMP, involving partners and stakeholders internal and external to the local authority.

In particular, overall coordination was entrusted to the Department of land management, infrastructure

and environment. Political decision makers were actively involved (3 deputy mayors for environment, urban mobility, urban planning and land use planning, respectively). Technical officers were involved from the urban mobility and traffic unit, the environment unit, the complex operative unit for land policies. External consultants were involved for the development of three plans (land use and city development, SEAP and SUMP). Data collected for overlapping areas (particularly traffic) were used jointly for the development of SEAP and SUMP and overlapping actions aligned and shared between the two plans.

The team may be composed of a small number of members during step 2 (planning of the harmonization process), and be supplemented by more members in step 3 (implementation). External consultants might be useful to support the process or individual tasks. Typical tasks to commission to external consultants are tasks for which the municipality lacks own resources, like data collection or the facilitation of the participatory process.

At this stage, a preliminary estimate of the required resources including time spent by the team and budget required for external consultants is done to provide a framework for further planning. It has proven practical to create a shared folder for data on the municipal server, accessible to all the SEAP/SECAP, SUMP and harmonization teams. A common database might be considered, including the rules for data collection, storage and updating.

EXPECTED OUTPUTS

1. DOCUMENT: OUTLINE OF SKILLS REQUIRED, PRELIMINARY BUDGET, ASSESSMENT OF STAFF AND CONSULTANTS REQUIRED FOR THE HARMONIZATION PROCESS.
2. APPOINTMENT OF THE INITIAL HARMONIZATION TEAM AND OUTLINE OF THE FULL TEAM
3. SHARED FOLDER FOR DATA STORAGE DURING THE HARMONIZATION PROCESS



2.2 STEP TWO: PLANNING

2.2.1 INITIAL ASSESSMENT

RELATIONSHIP WITH SUMP GUIDELINES

Looking at the SUMP guidelines, Step 2.2.1 is connected to Phase 1 'Preparing well' - Step 1 'Determining potential for success' - Activity 1.2 'Assess impact of regional/national framework', Activity 1.3 'Conduct self-assessment' and Activity 1.4 'Review availability of resources' as well as Phase 2 - 'Rational and transparent goal setting' - Step 2 'Define plan scope and process' - Activity 2.1 'Look beyond your own boundaries and responsibilities'.

RELATIONSHIP WITH SECAP GUIDELINES

Looking at the SEAP/SECAP guidelines (How to develop a Sustainable Energy Action Plan Guidebook part I), Chapter 5 deals with Assessment of the current framework therefore is connected to Step 2.2.1.

This chapter explains how to produce a complete and consistent initial assessment.

The harmonization team firstly needs to analyse the current way of working on the SEAP/SECAP and SUMP processes. The purpose is gaining an understanding of the quality and efficiency of current operations and evaluating their performance. The benefits of this assessment are:

- D**eveloping a common understanding of the current processes;
- D**escribing the inputs, sequence (work flow) of steps, hand-offs/transfers, approvals, people, technology, and rules involved in producing outputs;
- I**dentifying opportunities for improvement;
- C**reating a “status” of measures (progress in relation to objectives, incurred costs, consumed resources, etc.) describing current performance;
- I**dentifying the gaps between stakeholders' needs and current performance;
- I**dentifying parts of the current process that are non-value adding from the stakeholders' perspective.

FACTORS WHICH POTENTIALLY HAVE AN IMPACT ON THE HARMONIZATION PROCESS

- L**egal requirements;
- O**rganizational structure and responsibility for energy planning, environment, and mobility;
- P**hysical distance between departments;
- P**ersonal differences (individual interpretations of rules and procedures, personal preferences, knowledge sharing, cultural factors);

Organizational culture (communication, coordination and consensus-building procedures)

Quite frequently, data collection and evaluation is outsourced to external consultants. The following documents should be reviewed:

- R**elevant legislation and documents with an impact on SECAP and SUMP (for example municipal budget, land use plan, city council decisions, etc.)
- S**ources of information used in the SECAP (energy consumption of residential buildings, energy consumption of public and private tertiary buildings, transport, local production from RES etc.) and SUMP (mobility), availability of data, correctness of data, accessibility, consistency of data, completeness, procedures to update the data regularly.
- O**ther relevant plans (e.g. urban development plan, traffic plan, regional mobility plan...) that may be used as a source of data or may somehow influence or constrain SECAP and SUMP.

Initially, in a SECAP a baseline needs to be drawn regarding the emissions of carbon dioxide in the area of the municipality. This includes the collection and evaluation of data.

Characterizing the number, size, energy consumption of **Private Buildings**

Characterizing the number, size, energy consumption of **Public Buildings**

Characterizing the number, size, energy consumption of **Public Lights**

Characterizing the number, size, energy consumption of **Public Undertakings** (water supply, waste water treatment, waste management, recreation and sports facilities...)

Characterizing the energy consumption of **Public Transport**

During the initial assessment, as a preparation for the actual harmonization, the harmonization team identifies sources for these data, data acquisition methods, access to the data, data accuracy, completeness and consistency.

For a SUMP, an initial context is defined, including data on mobility demand, accessibility, modal split, socio-demographic and economic features, fuel consumption and emissions.

Overlapping areas regarding data in SECAPs and SUMP are mainly those regarding transport. If these data are collected for a SUMP, the team might make them available to support a SECAP extrapolating data on fuel consumption and carbon dioxide emissions. Viceversa, SECAP data on fuel consumption in the region can be made available for a SUMP.

Tools specific for this phase are available in the appendices.

2.2.2 INVOLVEMENT OF PARTNERS AND STAKEHOLDERS

RELATIONSHIP WITH SUMP GUIDELINES

Looking at the SUMP guidelines, Step 2.2.2 is connected to Phase 1 'Preparing well' - Step 1 'Determining potential for success' - Activity 1.6 'Identify key actors and stakeholders', Step 2 'Step 2: Define the development process and scope of plan' - Activity 2.3: Plan stakeholder and citizen involvement', as well as Phase 2 - 'Rational and transparent goal setting' Step 4: Develop a common vision of mobility and engage citizens' - Activity 4.2: Actively inform the public'.

RELATIONSHIP WITH SECAP GUIDELINES

Looking at the SEAP/SECAP guidelines (How to develop a Sustainable Energy Action Plan Guidebook part I), Chapter 4 'Building support from stakeholders' deals with identification, engagement and communication with relevant stakeholders, and is consistent with Step 2.2.2.

THE NUMBER OF **STAKEHOLDERS** CAN BE VERY LARGE, THEREFORE YOU SHOULD FIRST IDENTIFY THE **VARIOUS TYPES** OF STAKEHOLDERS THAT NEED TO BE INVOLVED IN THE HARMONIZATION PROCESS.

A good starting point is asking decision makers, the harmonization team members and other interested parties the following questions:

Who will be affected by the success or failure of the harmonized SECAP and SUMP?

Who will evaluate and sign off on the harmonized SECAP and SUMP when they are delivered and implemented?

Are there any other internal or external

contributors to the SECAP and SUMP whose needs must be addressed?

Who will develop the harmonized SECAP and SUMP?

Who will implement and manage the harmonized SECAP and SUMP?

Who will support harmonized SECAP and SUMP?

Is there anyone else?

After the stakeholders for the harmonization process have been identified, it is time to start recruiting the stakeholder representatives who will actively participate in the harmonization process. Of particular interest are those who will be directly involved in the harmonization activities. Before approaching any individuals to become stakeholder representatives, you should attempt to define exactly what their roles and responsibilities are.

WHEN DEFINING STAKEHOLDERS' ROLES, BE SURE TO CAPTURE THE FOLLOWING INFORMATION:

Name	Name the stakeholder's role.
Brief description	Briefly describe the stakeholder's role and what it represents with respect to the harmonization process.
Responsibilities	Summarize the role's key responsibilities with regard to the harmonization process. Capture the value the role will be adding to the harmonization team.
Involvement	Briefly describe how they will be involved.

The following questions can help you define the stakeholders' roles:

- Is every stakeholder type represented?
- Is every affected business unit and department represented?
- Who will evaluate and sign off on the requirements specification?
- Who will attend the usecase modelling and other requirements workshops?
- Who will provide the domain knowledge required

to develop a successful solution?

- Who will be involved in any market research undertaken to justify and validate the product?
- Which stakeholder types are the most important?
- Who is the target audience for the release of the product under development?

There are some stakeholders that, because of their specific duties and institutional functions, may have access to data and information which may prove essential in the development and harmonization of strategic energy and mobility plans. These stakeholders should be considered as partners in operations and the exchange of information and knowledge with other parties may prove as beneficial to them.

Various techniques can be used to involve the stakeholder representatives in the harmonization process. They include the following:

INTERVIEWS

Interviews are among the most useful techniques for involving stakeholders in a harmonization process. If you have a good understanding of a stakeholder's role, you can keep the interview focused on the issues at hand.

QUESTIONNAIRES

Questionnaires are a very useful technique, particularly when a large number of stakeholder representatives are involved. Low return rates should however be considered.

FOCUS GROUPS

A focus group allows you to sample sets of stakeholder representatives to get their perspective on what the system must do. Focus groups tend to be used to gather specific feedback on specific topics.

ADVISORY BOARDS

An advisory board is a kind of standing focus group. It provides a way to gather stakeholders' perspectives without the overhead of establishing a focus group. The disadvantage compared to a focus group is that the composition of the advisory board cannot be varied according to the topic.

WORKSHOPS

Workshops can be a very useful way to capture requirements, build teams, and develop their understanding of the system. They should be well planned with a defined agenda that is sent to participants beforehand along with any background reading material.

REVIEWS

Reviews are formal or informal meetings organized with the specific intent to review something, be it a document or a prototype.

ROLE PLAYING

This is a facilitation technique that is typically used in conjunction with workshops to elicit specific information or feedback.

The choice of the technique to be implemented is very closely coupled with the definitions of the stakeholders' roles and the availability of actual individuals to take on the responsibilities defined by the roles. There is no point in deciding that a project will have full-time ambassador users attending weekly workshops if there are no experienced stakeholders in a position to take on this level of commitment.

METHODS FOR ACTIVELY INVOLVING STAKEHOLDERS

Ensure that the intended message is understood and the desired response achieved

Early consultation helps get useful information and ideas, so ask questions!

Careful planning with experienced people, who know the issues, has significant payoff

Consultations help build trust with the stakeholders

Stakeholders can be treated as risk and opportunities that have probabilities and impact

Stakeholder involvement helps understand an action's success rate

From the moment the engagement has been achieved, the harmonization team has to assume this engagement will last until the end of the harmonization process, implying regular communication and update on progress, even when the stakeholders' participation is over. It is convenient to keep a record of all communications and activities related to stakeholders, as well as to let them see their input and opinions have been considered by providing feedback even in case their suggestions cannot be implemented.

Tools specific for this phase are available in the appendices.

2.2.3 WORK PLAN

RELATIONSHIP WITH SUMP GUIDELINES

As for all the harmonization process, the actual implementation of this step crucially depends on the starting context – i.e. whether the city has, is developing or intends to develop a SUMP.

According to the individual situation, the SIMPLA guidelines interact with the SUMP guidelines in a specific and more definite way. That is to say that, since SUMP guidelines describe the process to develop a (new) SUMP where one does not exist, in case the situation falls into one of the other two general categories (existing SUMP or at some point in its development), the instructions and suggestions contained in the SUMP guidelines may be used to adjust and fine-tune the plan towards harmonization with a SECAP.

Looking at the SUMP guidelines, Step 2.2.3 is connected to Phase 1 'Preparing well' - 'Step 2: Define the development process and scope of plan' - Activity 2.4 'Agree on work plan and management arrangements', as well as Phase III 'Elaborating the plan' respectively in Step 7 'Agree on clear responsibilities and allocate funding', Activity 7.1 'Assign responsibilities and resources', Activity 7.2 'Prepare an action and budget plan' and Step 8 'Build Monitoring and assessment into the plan' - Activity 8.1: Arrange for monitoring and evaluation

RELATIONSHIP WITH SECAP GUIDELINES

Development of a work plan for a SEAP/SECAP is addressed to in the guidelines 'How to develop a Sustainable Energy Action Plan Guidebook part I', chapters 1.1 (process) and 1.5 (financial resources).

The work plan for the harmonization of SECAP and SUMP should be developed to address all objectives and targets, detailing how and when they are to be met. A clear structure will subsequently facilitate monitoring the progress towards meeting the objectives and achieving the targets. The action plan should include schedules, resources and responsibilities, yet it should be flexible enough to be revised if necessary to reflect the evolution of objectives and targets.

Based on the analyses done in the chapter 'Initial assessment' the opportunities for harmonization are identified and a corresponding work plan to exploit them should be designed. The following table lists potential areas for harmonization between the procedures to develop a SECAP and SUMP and potentially applicable activities for harmonization in the work plan (Table 3):

STEP	HARMONIZATION STRATEGY INCLUDES MAINLY
INITIATION (stakeholders' involvement, resources)	Replication activities Replication is relevant for independent but similar units working on the elements of a SECAP and SUMP, with autonomous managers, data, which are locally owned, and with limited access across departments
PLANNING (initial assessment, vision, objectives, financing)	Coordination activities Coordination is applicable when there are individual, separate administrative units responsible for the formulation of a SECAP and SUMP, who need to know each other, who do shared transactions with an impact on each other.
ACTION PLAN	Coordination activities
IMPLEMENTATION OF MEASURES	Diversification activities Diversification will apply to different administrative units, working with different clients, autonomous managers, and few data standards.
MONITORING AND CONTROLLING	Unification activities Unification can be considered if the same administration unit does the corresponding activities within the formulation of a SECAP and SUMP; when there are common standards available (e.g. for data collection) an integrated procedure is possible.
UPDATE AND CONTINUATION	Replication activities

Table 3: Potential areas for harmonization

A monitoring plan should be part of the work plan, because a monitoring plan provides the process of the systematic approach to assess the impact of implemented measures and to evaluate the performance indicators set in the plan. The monitoring plan outlines the key evaluation and monitoring questions and describes how, which and when monitoring and evaluation activities will be carried out,

who is responsible for them, what resources are necessary and who will participate. This helps enable sufficient allocation of resources, avoids unnecessary effort for data collection, improves acceptance and contributes to good project management during the implementation of the harmonization process.

HOW TO WRITE A WORK PLAN

1 Identify the areas for harmonization

2 Determine your goals and objectives

Goals and objectives are related in that they both point to things you hope to accomplish through your work plan.

Organize your work plan by “SMART” objectives

Smart targets are:

- Specific – precisely described using quantitative and/or qualitative terms that are understood by all stakeholders.
- Measurable – the current situation has been measured and is known. Resources are also in place to measure the changes (qualitative and quantitative) that occur.
- Achievable – based on the technical, operational and financial competencies available and stakeholder agreements/commitments that have been made
- Relevant – stresses the importance of choosing targets that matter, that drive urban mobility forward and that support or are in alignment with other targets
- Time-bound – key dates for the achievement of the target are clearly defined

4 List your resources

Include anything that will be necessary for you to achieve your goals and objectives. Resources will vary, depending on the purpose of your work plan.

5 Identify any constraints

Constraints are obstacles that may get in the way of achieving your goals and objectives.

Define who is accountable

- 6 Accountability is essential for a good plan. Who is responsible for completing each task? There can be a team of people working on a task (see resources) but one person has to be answerable for the timely completion of a given task.

7 List specific action steps

Identify what needs to happen to complete your objectives.

8 Create a schedule

Though you can create a tentative work schedule, realize that unexpected things happen and you need to build space into your schedule to prevent falling behind.

GANTT CHART

A Gantt chart is a type of bar chart that illustrates a project schedule. Gantt charts illustrate the start and finish dates of the terminal elements and summary elements of a project. Terminal elements and summary elements comprise the work breakdown structure of the project. Gantt charts also show the dependency relationships between activities. Gantt charts can be used to show current schedule status using percent-complete shadings and a vertical today line.

Gantt Project: Free project scheduling and management app for Windows, OSX and Linux. Download Link: <http://www.ganttproject.biz/>

EXPECTED OUTPUTS

DOCUMENT: WORK PLAN FOR THE
HARMONIZATION PROCESS



2.3 STEP THREE: IMPLEMENTATION

2.3.1 HARMONIZATION OF **VISION**

RELATIONSHIP WITH SUMP GUIDELINES

Looking at the SUMP guidelines, Step 2.3.1 is connected to Looking at the SUMP guidelines, as previously mentioned under Step 2.1.1 of these guidelines, Step 2.3.1 is connected to Phase I: 'Preparing well' - Step 1 'Determine your potential for a successful SUMP' - Activity 1.1 'Commit to overall sustainable mobility principles' and Step 2 'Define the development process and scope of plan' - Activity 2.2 'Strive for policy coordination and an integrated planning approach' as well as Phase II 'Rational and transparent goal setting' - Step 4 'Develop a common vision of mobility and engage citizens' - Activity 4.1 'Develop a common vision of mobility and beyond' and Activity 5.1 'Identify the priorities for mobility'

RELATIONSHIP WITH SECAP GUIDELINES

Looking at the SEAP/SECAP guidelines (How to develop a Sustainable Energy Action Plan Guidebook part I), chapters 6.1 and 6.2 call for a vision and specific objectives towards a sustainable energy future.

THE VISION GUIDING THE HARMONIZED DRAFTING/RE-ELABORATION OF STRATEGIC ENERGY, TRANSPORT AND MOBILITY PLANS IN ANY LOCAL AUTHORITY SHOULD REFLECT A **CLEAR POLITICAL STATEMENT**, A ROUTE TO STEER STRATEGIC AS WELL AS OPERATIONAL CHOICES.

Defining a strategic vision of what the city should look like in ten years' time generates a common framework in which SECAPs' and SUMP's visions contribute to the achievement of the same strategic goals.

This is why the elaboration of such a vision needs to take into account the views of stakeholders and main territorial actors and strive to provide an overarching, common orientation for policies and measures, encompassing bipartisan consensus as much as possible to guarantee ample, long-lasting ownership of the plans.

Defining a vision for the harmonization of SECAPs and SUMP's may draw from previous political statements which decision makers prompted, for instance during their electoral campaign (such as a mandate program or similar) or may provide the opportunity to design a wider,

more comprehensive orientation, encompassing a whole set of policies and measures in several interrelated fields besides energy and mobility (e.g. urban planning, city logistics, city's quality and attractiveness for citizens and visitors). The "vision" chapter of SECAP and SUMP has to be consistent with the Vision produced in Step1.

If necessary, in order to successfully perform the harmonization of the programmatic vision to be included in the plans, it is possible to compare the strategic objectives based on the results obtained comparing the data contained in both plans. Looking at both plans, the joint analysis of data, identified and read with different planning purposes, could bring out some critical issues in the city leading to a review of both vision and strategic objectives.

2.3.2 SHARING COMMON DATA SETS AND DATA COLLECTING METHODS FOR BEI/MEI AND FOR CONTEXT ANALYSIS

RELATIONSHIP WITH SUMP GUIDELINES

Looking at the SUMP guidelines, Step 2.3.2 is closely related to Phase I 'Preparing well' - Step 1 'Determine your potential for a successful SUMP' - Activity 1.3 'Conduct self-assessment' and Step 2 'Define the development process and scope of plan' - Activity 2.2 'Strive for policy coordination and an integrated planning approach' - Step 3 'Analyse the mobility situation and develop scenarios' - Activity 3.1 'Prepare an analysis of problems and opportunities' - Activity 3.2 'Develop scenarios'.

RELATIONSHIP WITH SECAP GUIDELINES

Data collection of data is a critical part of SEAP/SECAP, as described in the guidelines 'How to develop a Sustainable Energy Action Plan Guidebook part 2', chapters 4.2.2.

Sharing data among departments within the same local authority may appear obvious, however experience shows that creating a common data repository (with a more or less complex form, ranging from a shared folder system to a proper database) and common standards for data collection and storage may well prove a challenge and a very much needed procedural innovation. Lack of coordination among different departments in the same city quite often leads to collecting the same data twice, using different measurement units and standards for data storage. Collecting data for the elaboration and/or monitoring of SECAPs and SUMP presents common, often overlapping fields and actions as well as significant differences related to procedures and methodologies (e.g. gathering data from existing sources rather than implementing

direct measurements on the ground). This translates into the opportunity to exploit economies of scale, avoid duplications and use more refined data when available.

A typical example is elaborating traffic-related CO₂ emissions in an area using actual vehicle counting data (typical of SUMP elaboration) or data on fuel sold, often available only at a county level (as typically used in SECAP elaboration). A possible solution is comparing the two sets of existing data, once the necessary preliminary considerations have been made, since the comparison may in itself provide interesting conclusions, highlighting for instance discrepancies between fuels sold and vehicles actually circulating in an area. In case of significant discrepancies, a choice may be made to opt for the more detailed and reliable information, which may be

the one gathered on the ground. Different techniques and methodologies typically have (sometimes significantly) different costs. Exploiting interdepartmental synergies and choosing wisely where to invest for data gathering may help choose the least cost-intensive way to retrieve reliable data.

One additional feature related to data gathering and sharing is the opportunity to have relevant support from a range of local actors and stakeholders, providing data and information they may have due to their institutional functions. In return, the exchange of information and knowledge provided by other parties may prove as beneficial to the stakeholders involved in the process.

The data on energy consumption used to define the BEI in SECAP have to be consistent with data identified in SUMP's initial assessment (Step1). More specifically, data on energy consumption for vehicles have to be consistent with the empirical and simulation results typically available and necessary for SUMP's elaboration and monitoring.

SIMPLA, therefore, suggests to compare CO₂ emissions resulting from both SECAP and SUMP data collecting methods. The output of this comparison process should be a common methodology to evaluate CO₂ emissions, ensuring the same CO₂ emissions values in the same year in the two plans at least for the overlapping sectors (e.g. private transport CO₂ emissions). Taking into account that the BEI defined at the time of the submission of the SECAP to the CoMO cannot be changed and has to be the baseline for the following emission inventories in the monitoring process, for the purpose of the harmonization process an alternative new BEI (Baseline Emission Inventory) can be defined, choosing a base year coinciding with the year of the initial scenario of the SUMP.

In order to obtain a correct emissions evaluation for both plans, the same set of CO₂ emission factors should be used. Whether you decide to use standard IPCC (based on the carbon content of each fuel), or LCA emission factors (taking into consideration the overall life cycle of the energy carrier), SIMPLA suggests to use those the "CoM Default . for the Member States of the European Union"¹.

In order to optimize data collection needed to elaborate context analyses, BEI/MEI, actions' impacts, initial and future scenarios, a shared database of mail contacts and site links should be created by the harmonization team. This database should be made available to the various departments, putting each of them in charge of specific data collection, saving time and trying to avoid duplications.

One possible technique to tackle this step is the following. Identify the reference years of the data contained or cited in the plans; evaluate the congruence of data (if referring to comparable periods); compare data sources and processing methods where available. Formulate written proposals for alignment of datasets reference years and sources; if necessary modify data values in the plans. Produce an activity report, including a table compiled on the basis of the indications above.

Based on the results of this step, it is possible to re-address the previous step involving policy-makers.

1. Make reference to version 2017 downloadable at <http://data.jrc.ec.europa.eu/dataset/jrc-com-ef-comw-ef-2017> (please check JRC website for future updates)
Source: Guidelines 'Developing and implementing a Sustainable Urban Mobility Plan' European Commission (2014)

EXAMPLE: SYSTEMATIC APPROACH FOR TRACKING ENERGY EFFICIENCY

Croatia has introduced two national internet platforms for monitoring energy efficiency development: one is ISGE, a dynamic software for measuring actual energy consumption in public buildings, and the other is SMIV, a monitoring platform intended for registering all savings. ISGE, or eng. EMIS – Energy management information system – was developed under the United Nations Development Programme in Croatia, which undertook the first brave steps into a more energy efficient public sector. ISGE was introduced to all public buildings and monitors their energy consumption through energy bills for electricity, heating and water. The system is currently run manually, meaning that each public building has a designated person who enters the bills on a monthly basis. Municipalities use this platform widely when developing SECAPs.

The other Internet platform that has been introduced is the National System for Monitoring, Measuring and Verifying Energy Savings (Croat. SMIV), through which all realized energy savings are monitored at a national level. Croatia is one of the first EU countries that have a system for planning and monitoring the implementation and notification on the realization of all savings. SMIV is being used by state institutions, local and regional governments, energy service providers and the Environmental Protection and Energy Efficiency Fund. SMIV monitors the implementation of projects and energy efficiency measures in all sectors of final consumption (households, utility, transport, industry) and the realization of energy savings and greenhouse gas emissions reductions set in the national and local energy plans.

2.3.3 HARMONIZATION OF REFERENCE YEARS AND MONITORING TIMEFRAME

RELATIONSHIP WITH SUMP GUIDELINES

Looking at the SUMP guidelines, Step 2.3.4 is closely related to Phase I 'Preparing well' - Step 1 'Determine your potential for a successful SUMP' - Activity 1.5 'Define basic timeline' and Step 2 'Define the development process and scope of plan' - Activity 2.1 'Look beyond your own boundaries and responsibilities' and Activity 2.4 'Agree on work plan and management arrangements' as well as Phase III 'Elaborating the plan' - Step 8: Build Monitoring and assessment into the plan - Activity 8.1: Arrange for monitoring and evaluation

RELATIONSHIP WITH SECAP GUIDELINES

The reference year is referred to as 'baseline year' in guidelines 'How to develop a Sustainable Energy Action Plan Guidebook part 2', and dealt with in chapter 2.1,

A SECAP provides for the definition of a baseline year to be used as the reference point to draw the Baseline Emission Inventory (BEI).

The baseline year could be much earlier than the SECAP's approval year (suggest that it should be 1990 or - if the local authority does not have data to compile an inventory for 1990 - the closest subsequent year for which the most comprehensive and reliable data can be collected). A SUMP foresees instead the definition of a "state of the art" at the time of the plan initiation.

Once the baseline year has been selected, SECAPs aim at decreasing them by at least 40% by 2030.

The approach used in SUMP is less defined. Each SUMP sets its time horizon to implement actions and achieve targets independently. Such time horizon is usually fixed at 10 years after the time of approval of the plan. Moreover,

while SEAPs define the reduction of CO₂ emissions as the only target, each SUMP defines its own set of objectives, indicators, approach for their definition and deadline for their achievement.

For example, it is possible to define the reduction of the use of private conventionally fuelled vehicles in favour of low carbon modes (public transport, cycling, walking etc.) as a specific objective and to define the related impact indicator in terms of modal split evolution (for example by increasing walking & cycling from 17% to 23% in 5 years).

SIMPLA suggests introducing in SUMP also a 2020 or 2030 scenario, depending on whether the city has a or a SECAP, and defining also for the SECAPs a scenario in line with the SUMP timeframe. Drafting these scenarios could at first sight appear to be an unnecessary burden, yet this is the only way to achieve the harmonization and the

comparability of both plans' objectives as a prerequisite for the setting up of a joint monitoring procedure of results and the consequent revision of the plans' objectives.

The SECAP monitoring procedures entail monitoring the achievements in two ways: every two years, at least the progress made by the actions should be assessed; every 4 years, besides monitoring the actions an update of the CO₂ Monitoring Emissions Inventory – MEI is required (the MEI

has the same structure of the BEI, but the data are referred to the most recent available data).

The SUMP guidelines suggest monitoring the progress made towards the achievement of the plan's objectives every 1-5 years. The suggestion for harmonization is updating MEI and assessing the progress made by the SECAP actions every two years and revise SUMP objectives and actions at the same time, as shown in Figure 8:

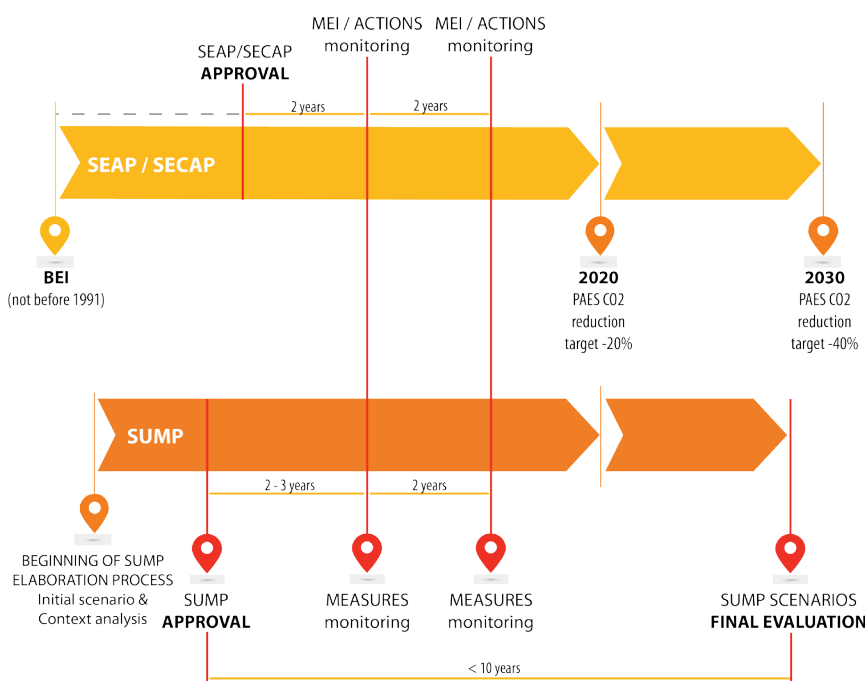


Fig 8: Schedule for harmonized monitoring of SECAPs and SUMPs

2.3.4 HARMONIZATION OF ACTIONS

RELATIONSHIP WITH SUMP GUIDELINES

Looking at the SUMP guidelines, Step 2.3.4 is closely related to Phase II 'Rational and transparent goal setting' - Step 6 'Develop effective packages of measures' - Activity 6.1 'Identify the most effective measures', Activity 6.2 'Learn from others' experience', Activity 6.3 'Consider best value for money' and Activity 6.4: Use synergies and create integrated packages of measures

RELATIONSHIP WITH SECAP GUIDELINES

Looking at the guidelines 'How to develop a Sustainable Energy Action Plan Guidebook part 1', relevant actions are dealt with in chapters 8.2 'transport'

ONE OF THE INTERVENTION AREAS OF A SECAP IS **MOBILITY**. THE HARMONIZATION PROCESS SHOULD THEREFORE LEAD TO A TOTAL CORRESPONDENCE BETWEEN THE MOBILITY ACTIONS INCLUDED IN SECAP AND THE ACTIONS DESCRIBED IN THE SUMP.

The harmonization team is advised to refrain from just copying and pasting the actions described in the existing SUMP into the SECAP and vice-versa. First of all, the consistency of the sections described in SUMP should be checked against the new harmonized objectives and some of the mobility actions included in the SECAP could be included in the SUMP.

But this is just the starting point of the harmonization of actions. Synergies and correlations between different actions should be checked and could require some additional measures. In general terms, SECAPs and SUMPs should be thoroughly revised in order to identify repercussions on and connections to mobility aspects in energy actions and vice-versa.

Analysing the objectives in both SECAP and SUMP will help the harmonization team in the identification of joint actions that can be beneficial to both plans. The following is a possible operational methodology to address this step.

Verify that all the actions contained in the SUMP have a correspondence in the SECAP in the section Transport & Mobility and vice versa. In case of total absence of one or more actions or differences with respect to the description of similar actions, propose modifications and additions in order to make the plans aligned.

Analyse all the actions of the SECAP, trying to understand which (especially outside the Transport & Mobility section) can have significant impacts on the SUMP and the related indicators. On the basis of previous analysis results, propose changes and additions to the SUMP so that the plan can take into account these influences. If necessary, propose also a reformulation of the actions contained in the SECAP, so that the relevance for the SUMP is more accentuated. Report a brief summary of the activity in to the policy-maker.

2.3.5

MONITORING AND REVIEW OF THE ACTIONS

RELATIONSHIP WITH SUMP GUIDELINES

This step goes in the direction of searching for synergies and mutual improvement in the monitoring processes conducted for the measures contained in (typically existing) SUMPs and SECAPs, yet without prejudice to standard monitoring procedures normally used for SUMPs (and SECAPs).

Looking at the SUMP guidelines, Step 2.3.6 is closely related to Phase III 'Elaborating the plan' - Step 8 'Build Monitoring and assessment into the plan' - Activity 8.1: Arrange for monitoring and evaluation

RELATIONSHIP WITH SECAP GUIDELINES

Step 2.3.5 is related to chapter 11 of the general guidelines 'How to develop a Sustainable Energy Action Plan Guidebook part 1' and also to the 'Quick Reference Guide Monitoring SECAP implementation'.

HARMONIZATION OF TWO DIFFERENT CO₂ EMISSIONS EVALUATION PROCESSES **IS NOT** **THE ONLY TECHNICAL ASPECT** TO DEAL WITH.

In order to monitor progress, both SECAP and SUMP utilize several indicators (as described in par. 2.3.1), which are usually directly related to specific actions. A common set of indicators, based on the same database, with a shared methodology for updating, should be used as a reference for monitoring and evaluating actions and scenarios. The methodology for collection and sharing of data is closely linked to a constant and productive dialogue among the staff operating in different departments and responsible for the implementation of actions, both inside and outside the local authority (e.g. public and private partner companies).

It is particularly important to plan a periodic review and a potential adaptation of SECAPs and SUMPs based on their harmonized monitoring results. It could

happen that some of the measures of one plan affect measures of the other (e.g. the traffic is jammed in a street due to the refurbishment of a large building or renovation of street lighting to improve energy efficiency). Thus, it could be necessary to review the impact of such action by implementing a joint review of the two plans, recalculating the indicators and planning further and alternative measures to overcome the problem in order to reduce pollutant emissions and improve citizens' quality of life.

ACTION	WHY	HOW	PERSON IN CHARGE	DUE DATE	REVIEW DATE

Table 4: Summary sheet

RATE YOUR PERFORMANCE

For a clear outlook of results, SIMPLA suggests to use a colour code to signal urgency of action when completing the table above, as described in the box shown below.

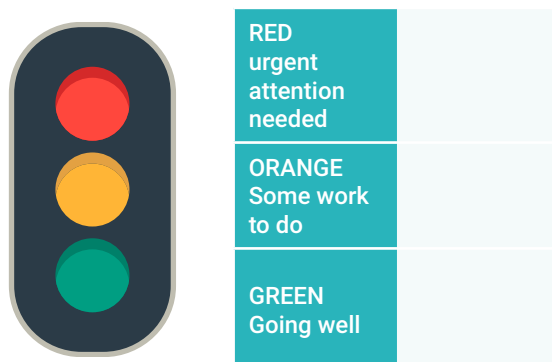


Fig 9: Colour code for performance rating

2.3.6 FORMAL APPROVAL OF PLANS

RELATIONSHIP WITH SUMP GUIDELINES

Looking at the SUMP guidelines, Step 2.3.7 is closely related to Phase III 'Elaborating the plan' – Step 9 'Adopt Sustainable Urban Mobility Plan' - Activity 9.1 'Check the quality of the plan', Activity 9.2 'Adopt the plan' and Activity 9.3 'Create ownership of the plan'.

RELATIONSHIP WITH SECAP GUIDELINES

Step 2.3.6 is related to the general guidelines 'How to develop a Sustainable Energy Action Plan Guidebook part 1' chapter 1.4, where the formal approval phase is defined and set into context.

After the end of the harmonization process, the revised SECAP and SUMP are submitted for approval by the City Council (or other relevant decision maker according to national law) possibly in the same session to underline their connection and to have a joint political debate.

In order to keep the harmonized plans coherent, it is indeed important that the discussion in the city council (which in some countries includes also a public consultation) and the possible amendments are focused on both plans whenever a change in one plan affects also the other. To achieve this, it is crucial to raise bipartisan consensus on the relevance of the harmonization process and the need to keep the two plans coordinated.



2.4 STEP FOUR: MONITORING AND CONTROLLING OF THE HARMONIZATION PROCESS

2.4.1 **HOW TO** ASSESS PROGRESS IN THE HARMONIZATION

RELATIONSHIP WITH SUMP GUIDELINES

The harmonization process has as a typical project cycle structure (see section 1.2 'Definition of harmonization' and in particular figure 3 'Steps of the harmonization process'). While steps 1 ('Initiation'), 2 ('Planning') and 3 ('Implementation') have several direct connections with individual actions related to SUMP (and SECAP) elaboration, Step 2.4.1 is strictly related to the running of the harmonization process in itself (in particular it regards monitoring and evaluation of process implementation). Although this may well have indirect repercussions on the subsequent adaptation/revision/updating of the plans, it has no direct connections with the SUMP guidelines used for the elaboration of the mobility plans. (this considerations apply also to the next step)

RELATIONSHIP WITH SECAP GUIDELINES

Step 2.4.1 is strictly related to the running of the harmonization process in itself (in particular it regards monitoring and evaluation of process implementation). Although this may well have indirect repercussions on the subsequent adaptation/revision/ updating of the plans, it has no direct connections with the SECAP guidelines used for the elaboration of the mobility plans. (this considerations apply also to the next step)

THIS CHAPTER EXPLAINS **HOW TO MONITOR** THE HARMONIZATION **PROCESS** AND **PERFORM** AN ASSESSMENT OF THE WORK DONE BEFORE THE FORMAL APPROVAL OF THE HARMONIZED SEAP/SECAP AND SUMP.

The main topics are:

- U**se the "SELF ASSESSMENT QUESTIONNAIRE" (attached)
- C**heck the results with stakeholders
- C**heck the results with the decision maker issuing the initial political commitment statement
- W**rite the harmonization report (see 2.4.2)
- D**iscuss "lessons learned" with the harmonization team to improve the process for the next time.

The harmonization process monitoring and controlling activities take place in parallel with the implementation process. While the harmonization work-plan is being executed, its progress is being monitored and controlled by overseeing actions' implementation and taking corrective action if necessary.

The harmonization process is monitored and measured regularly against the work-plan to ensure that it is within acceptable variance of costs, schedule and scope, and that

risks and issues are continually monitored and corrective action taken as needed.

The main purpose of monitoring and controlling activities is to be proactive in identifying (potential) issues ahead of time and taking corrective action. Corrective action has the ultimate goal of bringing the project back in line with project objectives and constraints and improving future execution to avoid repeating the same procedures.

Monitoring and controlling the process collects performance information and assesses measures and trends to forecast potential items requiring corrective action. This includes monitoring risks and ensuring that they are being managed according to the harmonization process' risk register.

OUTPUTS INCLUDE:

- Recommended corrective actions
- Recommended preventive actions
- Forecasts
- Recommended defect repair
- Requested changes

The schedule control process monitors and controls changes to the project schedule.

OUTPUTS INCLUDE:

- Updates to the schedule model data and baseline
- Performance measurements
- Requested changes
- Recommended corrective actions
- Updates to organizational process assets
- Activity list and activity attribute updates
- Updates to the Project Management Plan

The cost control process monitors and controls costs and changes to the project budget.

OUTPUTS INCLUDE:

- Cost estimate updates
- Cost baseline updates
- Performance measurements
- Forecast completion
- Requested changes
- Recommended corrective actions
- Updates to organizational process assets
- Updates to the Project Management Plan

The quality control performance process measures specific project results to determine whether the project is meeting quality standards.

OUTPUTS INCLUDE:

- Quality Control measurements
- Validated defect repair
- Updates to the quality baseline

- Recommended corrective and preventive actions
- Requested changes
- Recommended defect repair
- Updates to organizational process assets
- Validated deliverables
- Updates to the project management plan

The performance reporting process collects and distributes information whether the performed activities met their goals - including status reports, progress reports and forecasts.

OUTPUTS INCLUDE:

- Performance reports
- Forecasts
- Requested changes
- Recommended corrective actions
- Updates to organizational process assets

This process manages stakeholder communications and work with stakeholders to ensure that requirements are satisfied and issues are proactively resolved.

OUTPUTS INCLUDE:

- Resolved issues
- Approved change requests
- Approved corrective actions
- Updates to organizational process assets
- Updates to the Project Management Plan

The following table shows an example of how to briefly summarize monitoring activities (Table 5).

PROJECT NAME:		PROJECT MANAGER:
Reporting period: Month of		Today's Date:
YES	NO	STATUS SUMMARY
Scope		
		1. Has the scope changed or is it about to be impacted?
		2. Have the deliverables/objectives changed?
		3. Is the quality of the deliverables being affected?
Time		
		4. Is a deliverable/milestone about to be missed?
		5. Has the estimated schedule changed?
		6. Are there any other major issues or new risks?
Cost		
		7. Have the estimated costs (i.e., out of pocket) changed?
		8. Are there productivity problems affecting the team's ability to perform the work?
		9. Is there a problem with resources?

Explanation of “Yes” items: for every question answered “yes”, give a brief explanation.

Table 5: Example of a monitoring report

2.4.2 HOW TO DRAFT THE HARMONIZATION REPORT

THE HARMONIZATION REPORT IS A DOCUMENT **DESCRIBING** THE HARMONIZATION **PROCESS**.

It does not need formal approval, but it is signed by the harmonization process' project manager. The report must describe the changes and improvements made on both SECAP and SUMP and the reason why they have been made. The report will be useful internally for the further reviews of the harmonization process and externally for sharing with all stakeholders the achievement of the harmonization process. The report should be written during the process, and finalized after completing step 4. A template of the harmonization report is provided. The main chapters are the following:

- Chapter 1: step 1 = description of what you did to initiate the harmonization process
- Chapter 2: step 2 = description of what you did to plan the harmonization process
- Chapter 3: step 3 = description of how you modified your SECAP and SUMP
- Chapter 4: step 4 = description of what you did to monitor the harmonization process
- Chapter 5: step 5 = actions planned for updating and continuing harmonization in 2 years' time.

EXPECTED OUTPUT DOCUMENT: HARMONIZATION REPORT



2.5 STEP FIVE: UPDATING AND CONTINUATION

RELATIONSHIP WITH SUMP GUIDELINES

Independently from the starting context, any harmonization process should result in two aligned and homogeneous plans (a SUMP and a SECAP), along with the necessary elements and prescriptions to stay harmonized over time, during their implementation and monitoring/evaluation phases. As for all processes, this needs to be attentively observed and controlled in order to avoid dis-alignments (e.g. one of the plans being modified without the subsequent modifications occurring in the other).

Looking at the SUMP guidelines, Step 2.5 is closely related to Phase III 'Elaborating the plan' - Step 11 'Learn the lessons' - Activity 11.1 'Update current plan regularly', Activity 11.2 'Review achievements – understand success and failure' and Activity 11.3 'Identify new challenges for next SUMP generation'.

RELATIONSHIP WITH SECAP GUIDELINES

Step 2.5 is closely related to the 'review' of a SEAP/SECAP referred to as 'review' in the guidelines 'How to develop a Sustainable Energy Action Plan Guidebook part 1' chapter 1.4.

THIS CHAPTER EXPLAINS **HOW TO** PLAN FOR **UPDATING** AND **CONTINUATION**.

Every 2 years (according to the SECAP and SUMP harmonized monitoring plan) a joint review of the plans should be done by the harmonization team, following the same steps described for the initial harmonization.

The actual frequency depends on the land use planning, political, legislative, and technical context. The rationale is to focus on reviewing the achievements of the SECAP and SUMP assessing both the broader impact on energy sustainability and mobility and the effectiveness of the planning process itself. This helps to provide a sound basis for the next planning cycle.

The aims of this step are:

- Assessment of the broader impact of the measures implemented (when a sufficient number of results is available).
- Analysis of the planning process, the actual plans and their implementation with an eye to success stories and failures.
- Enhancement of the understanding of the planning process and overall impact of implemented measures.
- Documentation of lessons learned to prepare for the next SECAP or SUMP generation.
- Listing of objectives that could not be reached, but are still on the agenda.
- Communication of the “lessons learnt” to the harmonization team and key stakeholders.
- Consolidation of planning framework.

The experience from countries where sustainable urban mobility planning has been mandatory for some years shows that each planning cycle helps improve the expertise on sustainable urban mobility planning and to increase the effectiveness of the next planning cycle.

The process evaluation can use participatory observation, focus groups, and interviews. The updating phase for either SECAP or SUMP is the suitable stage to undertake the harmonization activity with the other plan.

APPENDICES

A.1 FUNDING OPPORTUNITIES

A.1.1 ESTABLISHED FINANCING MECHANISMS

AN ACTION PLAN FOR SEAP AND SUMP CANNOT
BE IMPLEMENTED WITHOUT **FINANCIAL
RESOURCES.**

The identification of key financial resources is necessary to finance the defined actions. Most local authorities will face the problem of scarce available funds, so it is paramount to be open to use the available resources of the local authority in a targeted plan and to be creative and cooperative to gather additional funds at a national or European level.

The financing mechanisms typically used by local authorities can be broadly grouped into four categories. These represent an increasing dependence on commercial as opposed to public sources of funding:

Budget financing. Direct financing from local authority's budgets, the use of external grants, and the use of budget capture mechanisms.

Funds developed specifically to address energy efficiency. Revolving funds which, initially established from the general budget or donor funds, become self-sustaining.

Public support to leverage commercial financing. Public sector financing mechanisms, provided by donors and/or national or regional governments to local authorities, to help support or leverage commercial financing.

Commercial financing. Commercial loans from banks or funds raised by issuing municipal bonds.

The advantages and limitations of various financing mechanisms are summarized in Table 6.

MECHANISM	MAIN FEATURES	ADVANTAGES	LIMITATIONS	PERFORMANCE RISK ALLOCATION
BUDGET FINANCING				
GRANTS	Investment costs funded by grant(s) from donor or national government	Indefinite term No financing costs	Limited grant funding available May encourage non-viable projects Not sustainable or scalable	Donor or government providing the grant
GENERAL BUDGET	EE project investment costs funded from general municipal revenues	Can build market capacity No additional financing costs	Budget resources often limited Sustainability not assured	Municipality
BUDGET CAPTURE	Financing to municipalities for EE projects from MoF, with repayment	Makes viability clearer Builds market capacity	Can be difficult to ring-fence May require recourse to budget	Municipality or financier, depending on extent of recourse
ENERGY EFFICIENCY FUNDS				
ENERGY EFFICIENCY FUNDS	Independent, publicly owned entity provides financing for EE to public clients, with repayments based on estimated energy cost savings	Financially self-sustaining Can finance municipalities that are not able to borrow Can leverage funds by pooling or bundling of projects and develop simple ESCO models	Recovering operating costs may be difficult in early funding years Reliance on good fund manager Needs municipal repayment mechanism	Fund in the first instance Ultimately, sponsors of the fund
PUBLIC SUPPORT FOR COMMERCIAL FINANCING				
DEDICATED CREDIT LINES	'Soft' public loans to commercial institutions for on-lending to municipalities for EE projects	Allows municipalities to undertake own procurement/implementation Can be scalable Funds can revolve	Serves creditworthy municipalities only Requires strong and willing bank partners to develop project pipeline	Entity providing the credit line, commercial financier and municipality, depending on sharing of losses
CREDIT AND RISK GUARANTEES	Risk sharing guarantee from donor or national government that covers part of commercial lenders' loss from loan defaults	Allows leverage of public funds Addresses risk perception of commercial lenders regarding EE projects	Can serve only a limited number of municipalities Requires strong and willing bank partners to develop project pipeline	Guarantor for the covered part of the loan and commercial financier for the uncovered part

COMMERCIAL FINANCING				
VENDOR CREDIT	Equipment vendor supplies EE equipment with payments spread over a period of time	Little or no requirement for collateral or recourse limit Mobilizes commercial financing Does not count against borrowing	Limits choice of equipment to that offered by vendor Financing only available for short terms	Vendor and/or municipality, depending on what collateral and recourse is provided
LEASE OF ASSETS	Financing of EE equipment under lease contract, usually with lease payments based on estimated energy savings	Provides a means of paying the costs of EE equipment over time Lease may not count against borrowing limit	Relies on local banks and leasing companies for reasonable cost financing and to assume credit risks Serves creditworthy municipalities only	Lessor and/or municipality, depending on what collateral and recourse is provided
COMMERCIAL LOANS	Commercial financing institutions lend money to municipalities for EE projects either directly or through ESCOs using the ESPC mechanism	Mobilizes commercial financing Can be scalable and sustainable Full project cycle is financed With ESPC, risks are transferred to the ESCOs	Banks or ESCOs exposed to bear credit risk Serves creditworthy municipalities only ESCO industry hard to develop High due diligence costs	Commercial financier, municipality, or ESCO
MUNICIPAL BONDS	Municipality issues bonds to private parties and use proceeds to finance EE projects	Mobilizes commercial financing Allows municipalities to undertake own procurement/implementation Can be scalable and sustainable	Can have high transactions costs Requires a developed municipal bond market Limited to large and highly creditworthy municipalities	Commercial financier

Table 6: Advantages and limitations of various financing mechanisms⁵

5. Source: Financing municipal energy efficiency projects, Energy management assistance program, knowledge Series 018/14 Link: http://www.simpla-project.eu/media/33033/final_mgn1-municipal-financing_ks18-14_web.pdf

A.1.2 INNOVATIVE FINANCING OPPORTUNITIES

CROWDFUNDING

Crowdfunding is the practice of funding a project or venture by raising monetary contributions from a large number of people. Crowdfunding is a form of crowdsourcing and of alternative finance. There exist several types of crowdfunding models, which can be grouped in two overarching categories, which differentiate themselves on the basis of the relationship between those who provide financial resources and those that receive the funds:

1. Non-financial or donation crowdfunding, where individuals' contributions are not associated with a financial return; and
2. Financial or investing crowdfunding, where financial instruments are sold in relation to companies' assets and/or financial performance.

Figures 10 and 11 below show an overview of major crowdfunding models:

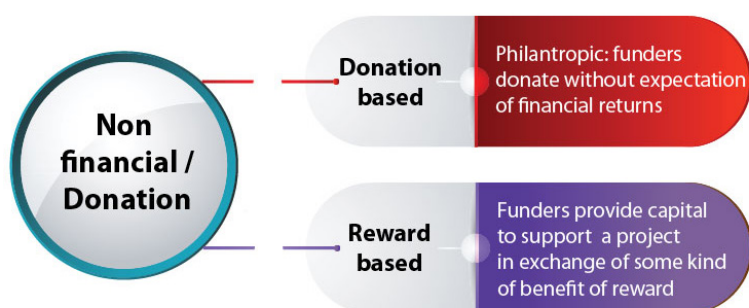


Fig 10: Overview of major non financial/donation crowdfunding models

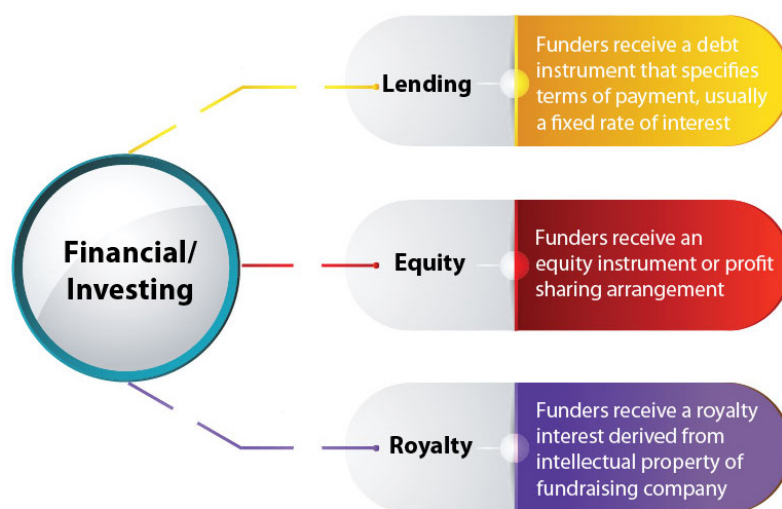


Fig 11: Overview of major financial/investing crowdfunding models

Non-financial crowdfunding can be pure calls for donations which are given without expectation of any financial returns or benefit, thus relying on altruistic motives. Typical donation campaigns are run for charitable or public interest causes. A declination of such model is civic crowdfunding, where citizens' contributions are used to finance public works or services for communities.

Another form of non-financial crowdfunding is the reward based model where individuals provide capital to support a project in exchange for some kind of benefit or reward.

With lending crowdfunding funders receive a debt instrument that specifies future terms of payment, usually a fixed rate of interest. Lending platforms can be peer-to-peer or peer-to-business. With equity crowdfunding funders receive an equity instrument or a profit sharing arrangement. A third less common model which is gaining traction more recently is the royalty based model, where funders receive a royalty interest derived from intellectual property of the fundraising company.

PUBLIC-PRIVATE PARTNERSHIP (PPP)

Public-private partnership (PPP) is a funding model for a public infrastructure project such as a new telecommunications system, airport or power plant. The public partner is represented by the government at a local, state and/or national level. The private partner can be a privately- owned business, public corporation or consortium of businesses with a specific area of expertise. Different models of PPP funding are characterized by which partner is responsible for owning and maintaining assets at different stages of the project. Examples of PPP models include:

Design-Build (DB): The private-sector partner designs and builds the infrastructure to meet the public-sector partner's specifications, often for a fixed price. The private-sector partner assumes all risk.

Operation & Maintenance Contract (O & M): The private-sector partner, under contract, operates a publicly-owned asset for a specific period of time. The public partner retains ownership of the assets.

Design-Build-Finance-Operate (DBFO): The private-sector partner designs, finances and constructs a new infrastructure component and operates/maintains it under a long-term lease. The private-sector partner transfers the infrastructure component to the public-sector partner when the lease is up.

Build-Own-Operate (BOO): The private-sector partner finances, builds, owns and operates

the infrastructure component in perpetuity.

The public-sector partner's constraints are stated in the original agreement and through on-going regulatory authority.

Build-Own-Operate-Transfer (BOOT): The private-sector partner is granted authorization to finance, design, build and operate an infrastructure component (and to charge user fees) for a specific period of time, after which ownership is transferred back to the public-sector partner.

Buy-Build-Operate (BBO): This publicly-owned asset is legally transferred to a private-sector partner for a designated period of time.

Build-lease-operate-transfer (BLOT): The private-sector partner designs, finances and builds a facility on leased public land. The private-sector partner operates the facility for the duration of the land lease. When the lease expires, assets are transferred to the public-sector partner.

Operation License: The private-sector partner is granted a license or other expression of legal permission to operate a public service, usually for a specified term (this model is often used in IT projects).

Finance Only: The private-sector partner, usually a financial services company, funds the infrastructure component and charges the public-sector partner interest for use of the funds.

Guidelines for successful Public-Private Partnership (European Commission, March 2003): these guidelines are designed as a practical tool for PPP practitioners in the public sector faced with the opportunity of structuring a PPP scheme and of integrating grant financing.

Resource Book on PPP Studies (European Commission, June 2004): the Resource Book is structured to present detailed case studies in the following sectors: water/wastewater, solid waste management and transport.

When preparing or reviewing PPP project documents, it is useful to have access to checklists of issues to consider: <https://ppp.worldbank.org/ppp/overview/practical-tools/checklists>

A.2 LIST OF REFERENCES

- Bittner, K., Spence, I. (2003): *Use case modelling*, Addison-Wesley ISBN 0-201-70913-9
- Brocke, J., Rosemann, M., (Eds.): *Handbook on Business Process, Management 1, Introduction, Methods and Information systems*, ISBN 978-3-642-45099-0, 2nd Edition
- Brown, J. (2002): *A Resource Guide for Hosting Conversations That Matter at The World Café*, World Café Community ©2002 Whole Systems Associates, <http://www.theworldcafe.com>
- Candelise, C. (2015): *Crowdfunding and the energy sector*, CEDRO
- CIVITAS – Cleaner and better transport in cities: www.civitas.eu
- Covenant of Mayors' portal: <http://www.covenantofmayors.eu>
- Elmasy, R.: *Disney's Creative Strategy: The Dreamer, The Realist and The Critic*, www.designorate.com
- Eltis - The urban mobility observatory (www.eltis.org)
- European Climate Adaptation Platform: <http://climate-adapt.eea.europa.eu/knowledge/tools/urban-ast>
- European Commission (2003): *Guidelines for successful Public – Private – Partnership*
- European Commission (2004): *Resource Book on PPP Studies*
- European Commission (2011): *White Paper on Transport 'Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system'* http://www.simpla-project.eu/media/58425/white-paper-on-transport_en.pdf
- European Commission (2013): *Urban Mobility Package* http://ec.europa.eu/transport/themes/urban/urban_mobility/ump_en
- European Commission (2014): *The 2030 Framework for Climate and Energy*
<https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2030-energy-strategy>
- Financing municipal energy efficiency projects, Energy management assistance program, Knowledge Series 018/14
http://www.simpla-project.eu/media/33033/final_mgn1-municipal-financing_ks18-14_web.pdf
- GanttProject: Free project scheduling and management app for Windows, OSX and Linux. Download Link: <http://www.ganttproject.biz/>
- International Organization for Standardization (2011): *ISO 50001:2011, Energy management systems -- Requirements with guidance for use*
- Land Kärnten (2016): *Mobilitätsmasterplan Kärnten 2035*, http://www.mobilitaetsmasterplankaernten.at/306626_DE
- Limaye, D., Derbyshire, W. (2014): *Energy Sector Management Assistance Program, The World Bank Financing municipal energy efficiency projects, Energy management assistance program, Knowledge Series 018/14*
- Luxembourg, Publications Office of the European Union (2010), *How to develop a sustainable energy action plan*,
http://www.simpla-project.eu/media/32996/seap_guidelines_en-2.pdf
- Ould, A.M. (1995): *Business Processes: Modelling and Analysis for Reengineering*, Wiley, ISBN 0-471-95352-0

Pardo C., Pino, F. J., García, F. (2012): *Identifying methods and techniques for the harmonization of multiple process reference models*, DYNA ISSN 0012-7353

Pmdocuments (2017): *Project Monitoring and Control Activities*, <http://www.pmdocuments.com/project-monitoring/>

Richen, A. and Steinhorst, A. (2005) *Standardization or harmonization? you need both*. European Health Informatics. BPTrends

Ross J.W.; Weill, P., Robertson, D.C. (2006): *Enterprise Architecture as strategy*. Harvard Business School Publishing, Boston, MA.

The World Café Community foundation Creative Commons Attribution (2015): *A Quick Reference Guide for Hosting World Café*, <http://www.theworldcafe.com>

van der Aalst, W. M. P., van Hee, K. M. (2002) *Workflow Management: Models, Methods and Systems*. MIT press, Cambridge, MA

wikiHow: *How to create a workplan*, <http://www.wikihow.com/Write-a-Work-Plan>

Zigiaris, S. (2000): *Business process re-engineering BPR*, Report produced for the EC funded project INNOREGIO: dissemination of innovation and knowledge management techniques

CREDITS/ACKNOWLEDGEMENTS:

Fig 1: Harmonized framework for action: Created by Freepik.com

Fig 2: Starting scenarios for the harmonization process: Created by Shahsoft - Freepik.com

Fig 3: Steps of the harmonization process: Created by Freepik.com

Fig 4: Example of a swim lane diagram: <http://commons.wikimedia.org/wiki/File:Approvals.jpg>

Fig 5: Result of a problem tree analysis from Spain: Created by CIRCE

Fig 6: Application of the six hats in a workshop in Spain: Created by CIRCE

Fig 7: The Walt Disney method: Created by Freepik.com

Fig 8: Schedule for harmonized monitoring of SEAPs and SUMP: Created by Stefano Alessandrini (AREA Science Park)

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A.3 TOOLS

TOOLS TO BE USED IN STEP 2.2.1 INITIAL ASSESSMENT

PROCESS MAPPING

The goal of the process mapping activity is to:

- ✓ Show the actors (administration, external experts, stakeholders, coordinator)
- ✓ Show the activities (useful, targeted, unproductive)
- ✓ Show the inputs and outputs (data input, report)

for the relevant processes which lead to a SEAP/ SECAP and SUMP.

For the evaluation of the quality of the processes the following criteria can be used:

- ✓ Effect on tangible results
- ✓ Effect on actual implementation
- ✓ Value added from stakeholders' point of view
- ✓ Effect on stakeholders' satisfaction
- ✓ Time spent
- ✓ Resources spent
- ✓ Transparency of actors' roles

PRACTICAL FACILITATION TIP: **MAPPING THE WAY THINGS** ARE TODAY

A simple yet very effective tool that can be used to facilitate the discussion is to map the processes of SEAP/SECAP and SUMP development using post-it notes. The facilitator sticks several large white sheets of paper (for example flipchart paper) on the wall. On these, one can then draw a number of swim lanes.

The team should write the different process steps on the post-its (one process step per post-it). The team then maps the existing process using the post-it notes in the swim lanes and subsequently discusses improvement opportunities. Place the post-its from left to right so as to reflect the sequence of the steps. However, do not include arrows or other links directly on the white paper since - when you change the order of the post-its - these markings will be confusing.

A good aspect of the post-it notes is that one can easily move the process steps from one swim lane (Figure 4) to another or alternatively eliminate a step by taking the post-it off the paper. Lastly, the post-it map is easily translated into a mapping software (such as Lucidchart or MS Visio) since the same logic and tools are used. An example of such a process map using post-its is provided below.

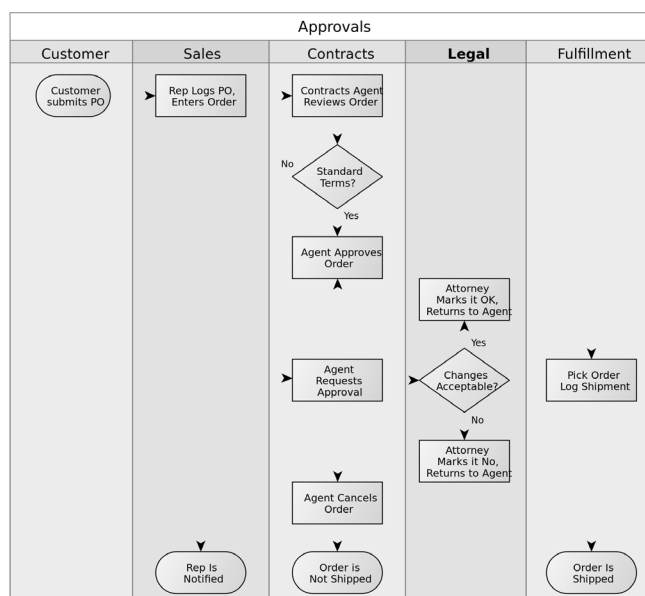


Fig 4: Example of a swim lane diagram
<http://commons.wikimedia.org/wiki/File:Approvals.jpg>

When conducting process analyses, it is important to stay focused on the goal, i.e. improving the processes, making them more efficient and effective. The result of the process needs to be in the spotlight: what is it that we want to achieve or obtain in order to satisfy the client of the process? Keeping the following approaches in the back of your mind during the exercise will help you and your team stay on track and might trigger thinking out of the box:

RETHINK

Why do it this way? Is there a different way to reach the objective? Is there a better, faster, cheaper way to complete the steps?

RECONFIGURE

Can we consolidate common activities? Can we eliminate non-value adding work? How can sharing information improve the process?

REASSIGN

Can activities be moved to different departments with better access to relevant information or to stakeholders or

people with more experience on the task? Can the activity be outsourced?

RESEQUENCE

Can the number of interconnections and mutual dependencies be reduced?

RELOCATE

Can an activity be attached to related activities?

RETOOL

Can mutual training improve the process? Can a data bank support the process? Can coordination meetings support an easy process flow?

REDUCE

How can critical resources be used more effectively? Can a stable planning process be designed with less need for detailed data? Would more information enable greater effectiveness?

PROBLEM TREE ANALYSES – IN A POSITIVE WAY

The “problem, objective and strategy tree” analysis is a participatory tool of mapping out main problems, along with their causes and effects. In Spain, a harmonization team used the problem tree in a different way: during a workshop a problem tree was developed by highlighting the positive aspects which result from harmonization as compared to the present situation of the status of separate SEAPs and SUMP. The “leaves” show the effects or impacts. The “roots” of the tree show the causes leading to a “perfect” harmonization of SEAP and SUMP.

Representatives of the different municipalities participated in the activity, determining causes and effects according to their criteria and experience.

The activity provides guidance for the way forward to a future harmonization, highlighting the good practices and actions followed.



Fig 5: Result of a problem tree analysis from Spain

THE SIX THINKING HATS, BY EDWARD DE BONO

The most important elements of this method are six hats with different colours. Each colour corresponds to a character or personality. When wearing the different hats, the participants shall contribute different points of view to a problem.

The characters of the hats are:

1. **White hat:** Think in an objective and neutral way
2. **Red hat:** Express the feelings, without need for justification.

3. **Yellow hat:** Look only at the positive aspects on a certain aspect.

4. **Black hat:** Be critical in a negative way; identify why something will not go well.

5. **Green hat:** Apply creative and lateral or divergent thinking.

6. **Blue hat:** To control the rest of the hats; control the time, the order of events and collect the contributions of the participants.



Figure 6: Application of the six hats in a workshop in Spain

Please note: A moderator of a workshop needs to have effective listening skills to guide the group. The moderator needs to be flexible to follow the participant's thoughts and feelings. Furthermore he/she should have a topical expertise to guide the discussion. The moderator needs the ability to understand language used by participants and to interpret the statements so that they always relate to the topic.

EXPECTED OUTPUT DOCUMENT: INITIAL ASSESSMENT OF AVAILABLE DATA OPPORTUNITIES FOR THE IMPROVEMENT OF THE SEAP/SECAP AND SUMP PROCESSES.

TOOLS

TO BE USED IN STEP 2.2.1 PARTNERS AND STAKEHOLDERS INVOLVEMENT

There are many different techniques designed to reach and enhance stakeholders' engagement, including public consultations, questionnaires, surveys, social media contributions, workshops, open debates, mass communication, participatory activities in the city, etc. (see Table 2).

Again, every technique must be adapted and designed bearing in mind which stakeholder is targeted, as well as the input we want to get through the activity.

We recommend to contact the previous teams involved in developing the existing SEAP/SECAP and SUMP (if applicable) and gather as much information as possible, contact and solicit feedback from additional relevant stakeholders, and, if possible, try to assess through surveys the current public opinion and expectations to avoid missing important information and points of view.

NAME OF STAKEHOLDER OR PARTNER	REASON FOR INVOLVEMENT	EXPECTED CONTRIBUTION	HOW TO INVOLVE THEM	WHEN TO INVOLVE THEM
CITY COUNCIL	Responsible for city politics	Vision, resources	Steering committee, working groups	At project start, regularly e.g. every 6 months
DIFFERENT DEPARTMENTS OF CITY COUNCIL (e.g. construction, transport, facility management, information, environmental office, land use planning etc.)	Responsible for technical aspects, involved in planning and implementation	Technical input, suggestions for improvement, resources, delegation of a project manager	Working groups	In meetings, e.g. every two months

HIGH LEVELS OF ADMINISTRATION (county, region, province)	Responsible for technical aspects, involved in planning and implementation	Input regarding land use planning and legal framework	Steering committee	Steering committee e.g. every six months
PUBLIC UNDERTAKINGS (energy supply, transport)	Public transport is one of the major areas of energy consumption, the energy suppliers can provide information on energy consumption	Technical input, suggestions for improvement, resources	Working groups	In meetings, e.g. every two months
NGOS (energy agency)	Reach out to citizens, have technical knowledge	Technical input, suggestions for improvement, resources	Steering committee, working groups	Steering committee e.g. every six months, Working group meetings, e. g. every two months
SOCIAL HOUSING	Buildings are big energy consumers	Technical input, suggestions for improvement	Working groups	In meetings, e.g. every two months
UNIVERSITY	Academic background, reflection, monitoring	Vision, technical input, suggestions for improvement	Steering committee, working groups	Steering committee e.g. every six months, Working group meetings, e.g. every two months
CITIZENS	Early information, inclusive process, participative involvement	Detailed observations, data, suggestions for improvement	Questionnaires, workshops	Meetings for information, meetings during initial assessment
CHAMBER OF COMMERCE	Link to enterprises	Technical input, suggestions for improvement	Working groups	In meetings, e.g. every two months

Table 2: Stakeholders and their involvement

CIVIL JURY

“Civil jury” includes a number of citizens and enables the formulation of recommendations on a specific activity or a problem that needs to be solved.

Basically, the civil jury follows the model of a jury in which randomly selected citizens without special backgrounds discuss the reported evidence and come to a decision or recommendation. The debates are carried out on a predefined set of questions and are facilitated by a moderator who does not intervene in the discussion. Citizens may listen to experts who offer different perspectives. The civil jury listens to the reported evidence by the experts and has the right to ask questions for further clarification. Based on the information the jury proposes recommendations for concrete measures. Outcomes

and solutions are presented in a Citizen’s Report which is delivered to officials. Often the choice of experts and the range of questions that will be put forward to discussion are determined by an Advisory Board.

VISUAL PLANNING

Visual planning is a method which is often applied in the urban planning process. It is a structured community-oriented process aiming at mobilizing the citizens’ active involvement in the development and improvement of the urban environment. The participants in the visual planning process identify problems and barriers in the community they live in, develop ideas for improvements, to access currently not used but available funding resources.

Initially community representatives are gathered and construct a 3D model of the respective city/district/quarter, which is located at different open spaces and visible places. After that the available resources and

human capacities and skills are defined and a discussion is organized to debate and trigger possible interventions. Subsequently the participants divided into working groups set priorities and develop action plans.

EXAMPLE: SELF-ASSESSMENT TO IDENTIFY STRENGTHS AND WEAKNESSES. KOPRIVNICA. CROATIA

The city of Koprivnica, Croatia, undertook a project to promote walking and cycling and to better incorporate them into the existing transport system. At the very beginning of the Active Access project (www.active-access.eu), a detailed status-analysis was carried out. This was based on a self-assessment carried out by the municipality itself, an extensive consultation process with a range of stakeholders, and a public survey. The public survey was conducted repeatedly, targeting those who walk and cycle regularly, as well as those who primarily drive their cars. A solid self-assessment was crucial in choosing the right focus for Koprivnica's mobility planning, and assured great public acceptance during the implementation phase.

EXAMPLE: STAKEHOLDER INVOLVEMENT PROCESS FROM AUSTRIA

During the definition of the MOMAK (Mobility Concept for the Federal State of Carinthia) more than 40 stakeholder meetings were conducted on the level of the individual district. This process created awareness, contributed to the collection of various solutions and prepared the implementation of the measures very well.

The 20 invited technical experts analysing data and developing solutions met in four additional workshops.

Source and further information are available on:

www.eltis.org/discover/case-studies/self-as-sessment-identify-strengths-and-weaknesses-koprivnica-croatia

MODERATION METHODS FOR STAKEHOLDER MEETINGS

WALT DISNEY METHOD

The Walt Disney method is a creativity strategy in which a group uses three specific thinking styles in turn. It involves parallel thinking to analyse a problem, generate ideas, evaluate ideas, construct and criticize a plan of action.

In order to prepare the team for Walt Disney's creative strategy, three parts of the room are set for each thinking method. The first part is for dreaming and imagination, the second part is for realists and/or planning and the third part is for critics.

The team gathers with a target to achieve, this target can be a dream to turn into reality, a design to visualize, a problem to solve or a process to improve.

The strategy is based on three main stages; the dreamer, the realist and the critic. Each stage represents a style of thinking and should be applied in the same sequence:

THE DREAMER

Any creative idea usually starts with a visionary anticipation, full of passion and enthusiasm. In ordinary meetings, this dreaming style is blocked by premature criticism and does not have the space to go further on. The first stage allows the team to share their dream without restrictions

or criticism. This supports imagination and free flow of associations to generate creative ideas. Some of these ideas are feasible and others are probably not.

Separating the feasible concepts comes later as a result of the second and third stages in the approach. The dreamer asks questions that help describing ideas and thoughts such as the following:

What do we want? What is the solution? How do we imagine the solution? What are the benefits of applying this solution?

THE REALIST

Subsequently, the realist stage follows. The team physically shifts the location (e. g. to another room) and thinking mode to think in a more logical rational style. Based on the first stage, the attendees pretend that the dream can be implemented and start making plans to achieve it. The plans aim to turn the imaginary ideas into a manageable action plan. During this stage all the thoughts should be constructive and targeted turning the idea into a real plan. This stage includes questions such as the following:

How can we apply this idea in reality? What is the action plan to apply the idea? What is the timeline to apply this idea? How to evaluate the idea?

THE CRITIC

As a third stage, the critic thinking mode shall discover the barriers of applying the idea and how to overcome them. In this session, the team provides a constructive evaluation for the idea in order to find the weak points and solve it in the final solution. In this stage, the team asks questions as following:

What could be wrong with the idea? What is missing? Why can't we apply it? What are the weaknesses in the plan?:

CONCLUSION

As a result of the three main stages of the Disney's Creative Strategy, the team reaches a solid creative idea with an action plan to apply it.

The **first stage** focused on the creative aspect and sharing creative ideas and solutions.

The **second stage** focused on reality and how to turn the idea into an action plan and finally the **third stage** aimed at identifying the weakness in the idea and overcome it in the final plan.



Fig 7: The Walt Disney method

WORLD CAFÉ

The World Café is a group interaction method focused on collecting ideas from bigger groups by providing a framework for associations and combinations of ideas. A World Café conference is a creative process to support collaborative dialogue, share knowledge and spark ideas in groups. The meeting room is set up like a café, with about four tables covered with paper. The groups are supplied with refreshments. A group of four to eight participants sits at a table and holds a discussion lasting from 20 to 45 minutes about one or more predefined questions. The resulting ideas are noted on the paper. At the end of each round, one person remains at each table as the host, while the others continue to other tables. The table hosts welcome newcomers to their tables and share the essence of that table's previous conversation as a starting point for the next discussions. The new participants at one table take up the ideas noted on the paper table cloth and then the conversation continues, deepening as the rounds progress:

KAHOOT

Kahoot is a free response tool for administering quizzes, facilitating discussions, or collecting survey data. Questions are projected on a shared screen, while an unlimited number of players answer the questions with their smartphone, tablet or computer. This creates a social, fun and game-like environment. Kahoot allows for the design of multiple-choice quizzes as well as polls and surveys facilitating on the spot data collection; the quiz questions and polls stimulate quick instructional decisions as well as whole-class discussion.

World Cafe events should be designed and hosted according to the following principles:

- ✓ Clarify the context
- ✓ Create a hospitable environment
- ✓ Explore questions that matter
- ✓ Encourage everyone's contribution
- ✓ Connect diverse perspectives
- ✓ Listen together for insights and deeper questions
- ✓ Gather and share collective discoveries

Further information on how to host a World Cafe is provided in "A Quick Reference Guide for Hosting World Café", 2015 The World Café Community Foundation.

Practical experience from a workshop in Spain: the Kahoot tool was quite useful to generate debate among the participants and this resulted in a better understanding of their needs and points of view. For this reason, the objective of the dynamics is not to compete but to promote discussion by playing with options, answers and scores.

A.3 SELF-ASSESSMENT QUESTIONNAIRE



Self-assessment questionnaire

The present self-assessment questionnaire is intended for teams within local authorities to independently monitor the implementation of the harmonization process, following the envisaged steps. It should, therefore, be used not at the end of the process, but rather along its development to make sure all foreseen actions have been carried out and relevant results achieved before moving on to the next stage. Applying the questionnaire is the opportunity to self-evaluate performance in implementation, decide on any adjustment needed and reset design and timing of prospective actions to be undertaken.

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SIMPLA has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 695955

Step 1: Initiation

Political commitment:

Has sound political commitment been secured before embarking upon the harmonization process?

Is there a formal statement containing a harmonized vision on sustainable mobility, energy and climate adaptation and the appointment of a harmonization coordinator to manage the process?

Harmonization team:

Have the needed skills been defined to complete the harmonization process?

Has the core harmonization team been appointed?

Are external consultants needed as well as internal staff?

Has a preliminary budget for the process been drafted?

Has an outline of the full team (including contributors from a whole range of departments and units) been defined?

Has a system been defined for collecting and sharing data within the team during the harmonization process?

End of step 1, the 'Initiation' stage: if you are happy with the outcome, move to step 2, otherwise make a list of missing information and corrective actions to be taken, carry out the necessary measures and repeat the first stage in self-assessment

Step 2: Planning

Initial assessment:

Have the procedures related to the design/implementation of SEAP/SECAP and SUMP been reviewed at a satisfactory level and efficiency and effectiveness of current performance assessed?

Has a complete review been carried out of relevant EU/national/regional legislation?

Has a complete review been carried out of external and internal sources of information used?

Has a complete review been carried out of other relevant local/regional/national plans affecting energy, mobility and climate change adaptation/mitigation?

Have opportunities for the improvement and harmonization of SEAP/SECAP's and SUMP's design and implementation been defined?

Involvement of partners and stakeholders:

Is the distinction between partners and stakeholders clear to everyone involved in operations?

Have stakeholders and possible partners been clearly identified?

Has a clear plan for their involvement been drafted?

Have times, methodology, expected outputs and solutions to transfer results from consultations into the plans been decided?

Have partners and stakeholders been appropriately informed of their roles and expected contributions and of the use to be made of the gathered information and data?

Work plan:

Has a complete work-plan been drafted for the harmonization process?

Does the plan contain a clear definition of objectives, actions to be implemented, responsibilities, resources needed, timelines, risks and constraints?

Have a flowchart and a Gantt chart been produced to graphically represent the process?

End of step 2, the 'Planning' stage: if you are happy with the outcome, move to step 3, otherwise make a list of missing information and corrective actions to be taken, carry out the necessary measures and repeat the second stage in self-assessment

Step 3: Implementation

Harmonization of vision:

Has a common, overarching vision for sustainable energy and mobility policies, backed by sound political commitment, been decided and shared with all relevant internal and external actors and stakeholders?

Share data:

Have appropriate procedures been established for the joint and coordinated collection, storage and elaboration of data on energy and mobility?

Has a dedicated repository been created and adequate management rules set?

Common data and data collecting methods for BEI/MEI and context analysis:

Have actions been undertaken to optimize and coordinate data collection for the definition of BEI/MEI and context analysis?

Harmonization of reference years and monitoring timeframe:

Have common scenarios been produced for SEAP/SECAP and SUMP?

Are provisions in place for the alignment of monitoring timelines and procedures?

Harmonize actions:

Are homogeneous and coherent transport and mobility actions contained both in SUMP and SEAP/SECAP?

Have all actions in SEAP/SECAP and SUMP been reviewed to assess their alignment with the harmonized vision and objectives?

Have all repercussions of mobility actions on energy and climate change adaptation and vice-versa been thoroughly examined to define actions with linking elements?

Monitoring of the actions:

Are adequate provisions in place for a periodic, joint review and potential adaptation of harmonized SEAP/SECAP and SUMP actions?

Formal approval of plans:

Have the plans undergone joint approval by the city council?

End of step 3, the 'Implementation' stage: if you are happy with the outcome, move to step 4, otherwise make a list of missing information and corrective actions to be taken, carry out the necessary measures and repeat the third stage in self-assessment

Step 4: Monitoring and controlling of the harmonization process

How to assess progress of harmonization:

Has the self-assessment questionnaire provided positive results?

Are there corrective and/or preventive actions to be taken?

Has a monitoring plan been produced, aligned with the work-plan?

Does the monitoring plan contain detailed reference to the project schedule, budget quality standards, performance forecast?

Is communication with stakeholders envisaged as a relevant element in monitoring procedures?

Step 5: Updating and continuation

Has a plan been produced for constant (every two years) monitoring and update of the plans?

Have measures been devised to assess both the impact on energy and mobility sustainability and the effectiveness of the harmonization process?

DOWNLOAD THE SELF-ASSESSMENT QUESTIONNAIRE:

[HTTP://SIMPLA-PROJECT.EU/DOCUMENT_GUIDELINES/SIMPLA_QUESTIONNAIRE.DOCX](http://SIMPLA-PROJECT.EU/DOCUMENT_GUIDELINES/SIMPLA_QUESTIONNAIRE.DOCX)

A.4 HARMONIZATION REPORT TEMPLATE



Harmonization Report Template

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1. Initiation

Describe what you did to initiate the harmonization process through the following steps:

1.1 Political commitment

Describe how political commitment was secured and which form it took.

1.2 Setting up the harmonization team

Describe how the harmonization team was set up and which members, skills and competences it included.

2. Planning

Describe what you did to plan the harmonization process through the following steps:

2.1 Initial assessment

Describe the review of relevant EU/national/regional legislation, as well as of other relevant local/regional/national plans affecting energy, mobility and climate change adaptation/mitigation, you carried out.

2.2 Involvement of partners and stakeholders

Describe which partners and stakeholders you identified and the methods and timelines you used to involve them.

2.3 Work plan

Briefly describe the actions, timelines and responsibilities included in your work plan.

3. Implementation

Describe how you modified your SEAP/SECAP and SUMP through the following steps:

3.1 Harmonization of vision

Describe the new overarching vision for sustainable energy and mobility policies common to both plans.

3.2 Sharing data

Describe the procedures you set up for the joint and coordinated collection, storage and elaboration of data on energy and mobility.

3.3 Common data sets and data collecting methods for BEI/MEI and for context analysis

Describe the method used to coordinate data collection for the definition of BEI/MEI and context analysis.

3.4 Harmonization of reference years and monitoring timeframe

Describe how you aligned monitoring timelines and procedures of your SEAP/SECAP and SUMP.

3.5 Harmonizing actions

Describe the linking elements you have introduced between:

- A) SEAP/SECAP's actions with repercussions on mobility and SUMP's actions
- B) SUMP's actions with repercussions on energy and climate change adaptation and SEAP/SECAP's actions

3.6 Monitoring the actions

Describe the provisions you put in place for the joint monitoring of the implementation of both plans' actions and their review when necessary.

3.7 Formal approval of plans

Describe how the harmonized SEAP/SECAP and SUMP were jointly approved by your city council.

4. Monitoring the harmonization process

Describe how you monitored progress in the harmonization process and the harmonization monitoring plan (aligned with the harmonization work-plan) you produced.

5. Updating and continuation

Describe the actions planned for the periodic harmonized revision of SEAP/SECAP and SUMP on the basis of the monitoring outcomes.

DOWNLOAD THE HARMONIZATION REPORT TEMPLATE:

[HTTP://SIMPLA-PROJECT.EU/DOCUMENT_GUIDELINES/SIMPLA_HARMONIZATION_REPORT.DOCX](http://SIMPLA-PROJECT.EU/DOCUMENT_GUIDELINES/SIMPLA_HARMONIZATION_REPORT.DOCX)