

Article

Towards a National Harmonized Framework for Urban Plans and Strategies in Romania

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Abstract: The present paper aims to open the discussion on the adoption of a simplified, flexible, and harmonized strategic framework for city development in Romania. Besides a development strategy associated with general urban planning, multiple strategies are elaborated in accordance with the requirements of the financing authorities and the specific spatial planning legislation. These strategies were developed at different times by different institutions and aim to substantiate the directions and priorities of development and attract funding for various programs. In this study, we performed a thorough analysis in eight municipalities and concluded that such strategies cannot be effective, as they are not always coordinated and often lack consistency and complementarity with other strategic and operational plans and programs at the local level. Based on an international literature review including the recommendations of the Harmonization for Sustainable Energy, Climate Action Plans, and Sustainable Urban Mobility Plans developed by the EU financed project “Sustainable Integrated Multi-sector Planning” (SIMPLA), we propose a unification of the various strategies in a single harmonized, flexible strategic structure for the city. This harmonized structure includes specific components related to resilience in case of disasters and financing sources for all proposed projects.

Keywords: urban plans; development strategies; energy; mobility; marginalized area; simplified framework; harmonization



Citation: Luca, O.; Gaman, F.; Răuță, E. Towards a National Harmonized Framework for Urban Plans and Strategies in Romania. *Sustainability* **2021**, *13*, 1930. <https://doi.org/10.3390/su13041930>

Academic Editor: Manuel Duarte Pinheiro

Received: 3 January 2021

Accepted: 4 February 2021

Published: 11 February 2021

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1. Introduction

Before 1989, Romania had very well-developed planning systems [1,2] like the other countries in Central and Eastern Europe. Five-year plans were mandatory from the central-government level to the agricultural-production-cooperative and state-owned-enterprise levels. The State Planning Committee was established to ensure the coherence of all strategies at the national and local levels. However, the communist society at that time was far from being a regulatory model, mainly because strategic planning was built more for propaganda and less for performance or managerial development. This whole experience created a natural reluctance to the concept of planning in the years following 1989 [3].

Following the fall of the centralized planning system, Romania had to learn how to plan its cities according to market rules. This process has encountered many difficulties, interruptions, and restarts, with the entire national legislative base re-developed over the last 30 years, starting from the Constitution to primary and secondary legislation. General Urban Plans (GUPs) were developed after 1990, featuring nicely colored plans outlining rigid regulations; these plans did not properly consider the definitions of public or private property and were not based on statistical data or factual realities. Urban policies were imposed only after 2000 by land speculators and real estate developers whose goals were to maximize their own profits.

The regulatory parts of the GUPs [4] were enriched with clear strategic provisions (vision, strategic objectives, policies, programs, and projects, indicators, stakeholders’

responsibilities, deadlines, sources of funding, and related multi-annual budgets) after 2006–2007. This new approach is similar to the classic strategic planning methodology which, in general, includes the following steps: (1) auditing the existing situation; (2) vision and strategic objectives; (3) policies, programs, and projects; (4) action plan; and (5) monitoring and evaluation [5]. The GUPs must, therefore, be developed based on the local development strategy of the city and must be correlated with the budget and the public investment programs of the city.

Although the GUP is a mandatory urban planning document [6,7], with a specific validity period (between 5 and 10 years), many local administrative units work with urban planning documents that are no longer valid. The Bucharest municipality is the most well-known example of this issue, with no strategy for its GUP (the plan has not been updated since 1999).

The above urban planning instruments have been complemented in recent years with integrated urban development plans or strategies (IUDPs or IUDSs), local development strategies for marginalized urban areas (LDS for MUA), sustainable urban mobility plans (SUMP), sustainable energy and climate plans (SECAPs), and smart city strategies that are preconditions for cities to attract EU funding through various financial instruments, available through the European Structural and Investment funds. The structure of these strategies includes a substantial part that analyzes the existing situation, while the most important part comprises a small list of projects proposed to be funded from EU funding. Hence, the planning process lacks substance and is repetitive between local strategies, especially in the case of vision and strategic objective formulations. More than 70% of Romanian local authorities believe that the main reason for adopting a strategic document is the fact that is a specific requirement for accessing European funds [8].

Besides the strategies mentioned above, other strategies and plans may be developed by the local authorities, such as an integrated air quality plan that aims to improve air quality to reduce pollution and bring pollutant concentrations within the limits set by law or strategies for utilities that usually include the project proposals in the IUDS but also other projects.

An overview of the strategic framework, designed based on our experience and including the necessary coordination and subordination relationships between various strategies and plans at the local, county, and regional levels, is outlined in Figure 1.

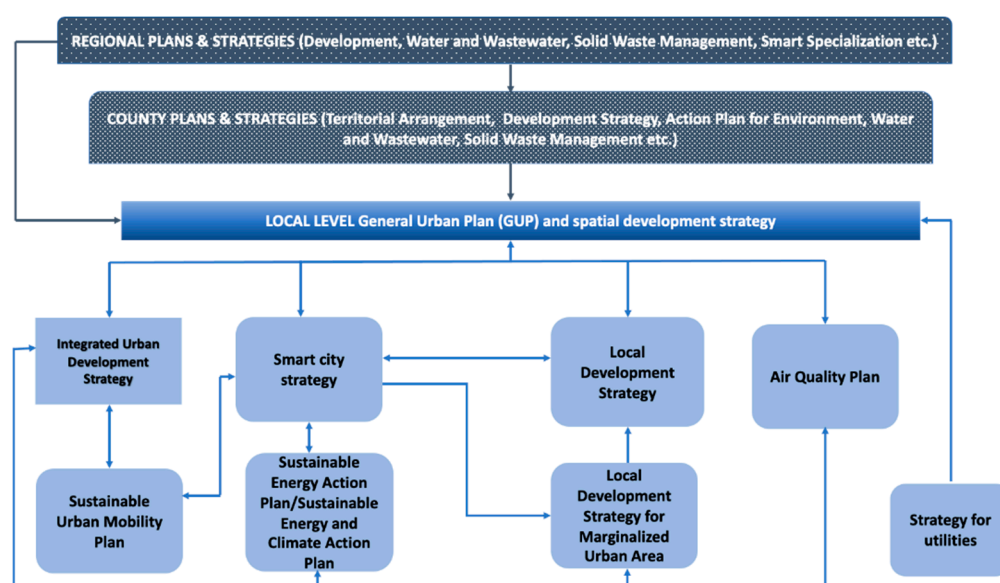


Figure 1. Overview of the strategic framework.

In the attempt to ameliorate the redundancy and overlap between various urban plans and strategies mentioned above, this study aims to perform an evaluation of strategic framework in selected municipalities, and based on the review of international literature on the topic, explore the potential for harmonization of strategies at the local level into a single, unified and flexible structure, correlated with the county and regional priorities included in the relevant plans and strategies.

Our academic and practical experience in developing, evaluating, implementing, and working with strategies at the municipal, county, and regional levels constitutes the basis for starting this research, representing the initial assumptions that need to be validated in relation to the abundance of strategies and plans at the local level, lack of complementarity and synergies between them and coordination with higher-level plans and strategies.

Taking into account all the above, the following research question is proposed: how can we harmonize the existing strategic framework in Romania into a single, unified, and flexible structure that will supplement the GUP? To answer this question, the objectives of this paper are multifold: (1a) to analyze the multiple strategies elaborated for eight municipalities in Romania; (1b) to briefly analyze the international literature on urban planning and strategic planning frameworks, especially in ex-communist countries; (2) to develop a step-by-step process for harmonization based on the analysis in steps (1a) and (1b); and (3) to design a unified, integrated structure for the harmonized strategies. Thus, this paper aims to present an original, up-to-date analysis of the strategic framework, develop a harmonization process, and propose an integrated structure for the strategies developed at the local level in Romania.

2. Materials and Methods

The methodology used in the study includes the following factors: (A) an analysis of the city's strategies and urban planning documents in eight municipalities in Romania to validate our initial assumptions; (B) a brief analysis of the international literature (including printed and online sources) on the urban planning and strategic frameworks at the international level; (C) the need to build a process to harmonize these strategies; and (D) the development of a common structure for a unified, integrated strategic framework. The methodology is outlined in Figure 2 below.

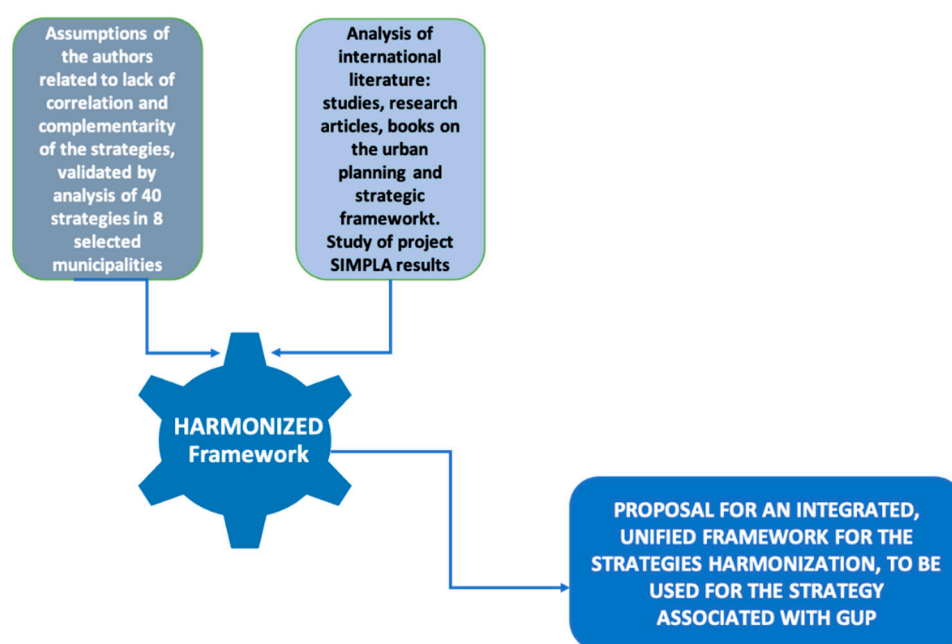


Figure 2. Research methodology.

2.1. Analysis of Strategic Framework in Romania

To achieve objective (1a), we investigated the strategic framework in eight municipalities based on our assumptions related to the strategic planning framework in Romania, which is confronted with an abundance of strategies developed to attract EU funds, such as the Integrated Urban Development Strategy (IUDS), Local Development Strategy (LDS) for Marginalized Urban Area (MUA) under the Community Led Local Development (CLLD) mechanism, Sustainable Urban Mobility Plan (SUMP), Sustainable Energy and Climate Action Plan (SECAP), energy plan, smart city strategy, defense plan, etc. To validate the assumptions, we performed an extensive analysis of the strategic framework at the local, county, and regional levels in Romania and analyzed 40 strategies in eight municipalities (Piatra Neamț, Focșani, Ploiești, Craiova, Lupeni, Turda, Alba Iulia, and sector 5, Municipality of Bucharest), selected, as outlined in Figure 3, in different development regions (one municipality per region), with various population sizes (from 25,000 to 300,000 inhabitants) and different availabilities of plans and strategies, with a higher or lower number of updated plans (from plans not updated since 1999 to those updated in 2020). In addition, we verified the corresponding county plan and the water and wastewater masterplan at the county level, together with the regional development strategy for the programming period of 2014–2020. The evaluation took into account the criteria related to the (i) complementarity of the different strategies and urban plans; (ii) synergies built between strategies and urban plans; (iii) coordination with higher-level plans such as county plan, county and regional masterplans for water and wastewater, regional development strategy.

Region 1 - North East, city Piatra Neamț, population 112,451 inhabitants, county residence municipality, General Urban Plan (GUP) associated strategy established in 2018, Integrated Urban Development Strategy (IUDS) present, Local Development Strategy (LDS) for Marginalized Urban Areas (MUA) present but not approved, Sustainable Urban Mobility Plan (SUMP), Sustainable Energy and Climate Action Plan (SECAP), smart city strategy included in GUP, strategy 2021–2027 in elaboration.
Region 2- South East, city Focșani, population 91,815 inhabitants, county residence municipality, GUP associated strategy established in 2020, IUDS, LDS for MUA, SUMP, SECAP are present, smart projects, defense plan against floods, ice and accidental pollution 2014–2017
Region 3 – South Muntenia, city Ploiești, population 226,133 inhabitants, county residence municipality, GUP 20 years old, IUDS, LDS for MUA, SUMP, SECAP are present, smart projects.
Region 4 – South West, city Craiova, population 300,375 inhabitants, county residence municipality, GUP associated strategy in 2018, IUDS, SUMP, SECAP are present, smart projects, IUDS 2030 in progress.
Region 5 – West, city Lupeni, population 25,891 inhabitants, municipality with demographic decline (–23,64%), GUP validity extended until 2023, IUDS and SUMP are present.
Region 6 – North West, city Turda population 55,392 inhabitants, municipality, GUP from 1999, IUDS, LDS for MUA, SUMP, SECAP are present.
Region 7 – Centre, city Alba Iulia, population 74,722 inhabitants, county residence municipality, GUP in 2014, IUDS, LDS for MUA, SUMP, SECAP are present, smart city strategy, GEHL study, harmonization report SUMP and SECAP .
Region 8 – Bucharest Ilfov, 5th district Bucharest municipality, population 241,585 inhabitants, zonal plan, LDS for MUA, SECAP are present, Guide for urban rehabilitation is present

Figure 3. Summary of criteria for selecting the eight municipalities for analysis.

SUMP is a key document for developing urban mobility and an instrument for the development of policy [9–11]. SUMP is complementary to the GUP and was a condition for accessing European funds in the 2014–2020 programming period through the Regional Operational Program (ROP) and the Large Infrastructure Operational Program (LIOP).

SECAP is a local energy planning strategy that includes a separate section on climate change adaptation [12–15]. The plan includes an assessment of the current situation (Basic Emissions Inventory for the climate change mitigation part and Risk and Vulnerability Assessment for the adaptation part), clearly identified goals and objectives, measures planned with realistic timelines, responsibilities assigned, and the estimated impact. The plan covers the whole territorial unit and includes measures to reduce CO₂ emissions and

energy consumption by the end-users (public buildings, residential sector, transport, and urban lighting) that may be financed from EU funds and the local budget.

IUDS outlines the urban context [16] and identifies the main challenges at the local level (demography, unemployment, employment structure, living conditions, social and educational infrastructure, climatic and environmental conditions in the studied area, local public transport, urban facilities, urban infrastructure, green spaces, marginalized areas, etc.). Analysis of the existing situation and development trends must be included, together with the vision and objectives, the indicative activities to be developed to meet the IUDS' key objectives, a portfolio of projects (including potential sources of funding that could help achieve the vision and objectives), implementation, and monitoring and evaluation of the strategy along with a partnership framework for strategy implementation.

LDS for MUA captures a detailed analysis of the existing situation at the local level for sectors similar to those discussed in the IUDS and spatial strategies related to GUP, addressing the same territorial unit. In addition, a large part of the strategy describes the urban marginalized area together with the main problems of the vulnerable beneficiaries discussed widely with the community, based on a bottom-up approach, yielding soft and hard measures to be implemented in the marginalized area and to be supported by both the European Regional Development Fund and the European Social Fund. The specific feature of LDS related to MUA is the Local Action Group (LAG) decision-making body that brings together representatives of all stakeholders, including the population of the marginalized community, and plays a central role in designing, implementing, monitoring and evaluating the mechanism. Usually, projects are carried out by public or private entities requesting funding from the LAG by submitting project fiches. The LAG or one of its members may also be a project beneficiary.

The smart city strategy constitutes a planning framework for the implementation of projects using smart technology. The Smart City for Smart Communities Guide developed in Romania, emphasizes a series of sectors that cannot become “smart” without properly developing communication infrastructures that will monitor and manage them, including telecommunications (the basic elements within the smart city concept), energy infrastructure (smart grid), transport infrastructure (mobility), and water and wastewater infrastructure.

The updated GUP is a complex document, which must include a spatial strategy component in addition to a complex set of studies elaborated to substantiate the plans, relevant graphs to identify the problems, and visual representations of the suggested solutions. In terms of content, the IUDS as an individual document is friendly, easier to access, and more readily understood.

2.2. Brief Literature Review at the International Level

To achieve objective (1b), we performed an analysis of the literature related to SUMP, SECAP, and smart city strategies [17–26] together with a brief analysis of strategic and urban planning frameworks in several former communist countries: Serbia, Hungary, Poland, and Bulgaria. We complemented the above research with a study on the Wien suite of strategies and explored the idea of harmonization used in the Sustainable Integrated Multi-sector Planning (SIMPLA) project. The analysis revealed a large variety of perspectives related to urban plans and urban development strategies, methodologies for the integration of topics, and attempts at achieving synergies between urban strategies and urban plans. However, none of these international research articles further explored the idea of building an integrated, unified, and flexible strategic framework. Thus, further detailed research is required on this extensive, complicated, and diversified subject at the international level, which exceeds the limits of the present publication.

In Serbia, Gajić et al. (2021) [27] developed a unitary methodology integrating the land-use, energy, and mobility fields to create a living document to serve as the basis for making strategic engineering/planning decisions. This methodology could be used in the process of developing urban plans and defining the recommendations for its implemen-

tation but could also be integrated into the section for energy efficiency measures at the urban planning level. Serbian legislation does not require compulsory public participation, leaving decisions on urban spaces left to investors, which is not always in the best public interest. However, in the proposed integrated methodology, a wide participatory process including local authorities, the civil society, private companies and citizens is compulsory, thus ensuring transparency and inclusion and excluding the subjectivity of the planning practitioners or local administration. The Hungarian experience highlights climate change, social inclusion, and a creative urban environment. The strategies financed through EU funds—namely, the Integrated Urban Development Strategies—include the main elements described in the dedicated handbook; however, their legal status and relationship with the settlement development concept, as well as their position in the settlement planning hierarchy, are not completely clear [28]. In Debrecen, clarifying the relationship between the sustainable urban development strategy (SUD) to be developed for the next programming period and other pre-existing strategic frameworks required breaking long-term strategies down into the short timeframes of EU programs [29]. Urban strategies in Poland are not mandatory documents, but most cities have one, which is both an attempt to express the vision about the future and a factor that facilitates the access to external funds. Many programs and initiatives such as smart cities, climate adaptation plans, SUMP, and Integrated Territorial Initiatives (ITIs) have been described [30,31], but harmonization and the integration of plans and/or strategies have not been considered. For instance, Warsaw currently has three strategic documents setting the direction for changes in the short and long term: (A) Strategy for the Development of the Warsaw Metropolitan Area by 2030, (prepared in 2015); (B) Strategy of Integrated Territorial Investments for the Warsaw Functional Area 2014–2020+ (prepared in 2015 and updated in 2017); and (C) Warsaw Strategy 2030, adopted in May 2018. However, the harmonization or synergies between the existing strategies have not been discussed [32]. Even if such strategies are not required by national legislation, an accumulation of strategies in recent years was also observed for Sofia [33]. The teams of the four strategies currently in development—“City for people”, “Green capital”, “Sustainable mobility”, and the “Vision”—are in constant contact, engaging in regular meetings to coordinate their efforts and ideas. This effort is intended to exchange information and intentions to achieve, even if only partially, a more holistic approach to city planning. The Austrian experience [34] reveals that there are very different types of planning (guidelines, strategies, and schemes on the one hand and sovereign regulations on zoning and development on the other) and contents, as well as also very different planning processes. In the past few years, cooperative and participative planning approaches have gained significance. The approaches used to involve citizens are manifold, varying from providing information on participation and collaboration in discussions to forms of cooperation and co-determination. In some member states, it is expected that CLLD will be taken up in relation to SUD strategies, but there is no dedicated budget (e.g., Lithuania). In other states (Slovakia, Hungary, and Latvia) CLLD is not a part of the SUD strategy but will be implemented in the territory. In other cases (Greece, Italy, Portugal, Hungary, Romania, and Slovenia, the use of CLLD is planned, but it is not clear how much the CLLD will be related to SUD [35]. The SIMPLA project provides a description of the harmonization process leading to the formal approval of two harmonized plans, SECAP and SUMP, as well as the harmonized implementation and monitoring of those plans. Harmonization entails working on the areas that are complementary to ensure that the plans work together for the achievement of an overall strategic objective. This process helps different municipality departments to share a similar vision, work together, and optimize the use of resources. A five-step harmonization process was developed, involving initiation, planning, and implementation followed by monitoring and controlling of the harmonization process, updating, and continuation [36,37]. The inclusion of different types of stakeholders, individuals, and groups in the evaluation process for projects may be achieved through multi-actor multi-criteria analysis, which is a decision-making model

extensively used in mobility projects. Different stakeholders' opinions may be explicitly included at an early stage of the decision-making process [38,39].

To achieve objective (2), we adapted the results of the international literature research, building on the idea of synergies and harmonization between the various topics and strategies and stressing the idea of public participation. We then extended the harmonization framework to the entire strategic framework at the local level. Further, to achieve objective (3), we outlined a unified framework for harmonizing the activities of a SECAP and SUMP into a single harmonized and flexible strategic framework for the city.

3. Results

3.1. Results of the Evaluation of Strategies at Local Level

The analysis performed on the eight cities revealed that sectoral strategies at the local level (SUMP, SECAP, utility services strategies, etc.) have a good degree of correlation. However, the IUDS and LDS for MUA and the strategies associated with GUP are usually not well-correlated. Some strategies and plans address similar sectors, as is the case for IUDS and strategies associated with GUP, with clear overlaps between sectors for the same territorial units but without correlation and reference to each other. In addition, the provisions included in the documents at the county and regional levels are not always captured in the local strategies. There are, for example, projects financed through the county water and wastewater master plans that are not foreseen in the LDSs/GUPs. Further, different strategies and plans have different implementation periods, which generates multiple inefficiencies. For example, GUP must be updated every 10 years, and IUDS is conjunctural and depends on the EU financial programming period (7 years), together with the SUMP, which is also part of the GUP. SECAP is developed for different periods in accordance with the needs of the settlement.

Our assumptions were validated, with the findings outlining the overlap, lack of synergy, and insufficient alignment between strategies accompanying GUP and IUDS. We discovered that the IUDS (which is the basis for funding projects from Regional Operational Program) includes similar local visions developed for various cities, with extensive and very descriptive situational analyses sections, accompanied by a rich range of public interventions that are not strategically prioritized based on a coherent set of ideas derived from a careful analysis but instead as the results of brainstorming exercises [40]. Developing a long list of projects regardless of the funding source and/or type of applicant/beneficiary does not necessarily mean that the municipalities will find funding for project implementation during the programming period.

The smart city strategy is generally not correlated with the strategy associated with the GUP or with the IUDS, mainly because of the lack of legislation regulating the smart level for a municipality or public service.

Marginalized urban communities are often seen as isolated islands of poverty, and their mobilization involves actions at the community level, as well as changing the ways that those communities are perceived by local actors in other communities (municipalities, schools, civil society, private sector, etc.). Therefore, the local development strategies developed for the implementation of community-level local development instruments are not clearly related to the IUDS or other strategies and plans in the area. Monitoring activities are a challenge since they not require permanent involvement of marginalized communities.

GUPs were not updated for any of the eight analyzed municipalities, as an associated strategy is not present for Ploiești and Turda, thus limiting support for better allocation of the resources and the impact of public actions.

With SECAP, adopted in 2011, and SUMP, adopted in 2017, both promoting a strong initiative of becoming a smart city, Alba Iulia went through the harmonization process and adopted the harmonized SEAP in 2019 and harmonized SUMP in 2020, offering an insightful experience to be explored for future harmonization processes.

As a general finding, the team observed a weak involvement of local communities in the development, monitoring, and implementation of the general urban plan, which may

partially explain the plan's lack of effectiveness. The first reason is that public consultation is often just a formality and serves only as legal confirmation for a process already completed, as the planning process is mostly carried out by the local public administration representatives with the support of private companies offering technical assistance. The second reason is related to the widespread lack of trust and limited efforts of local authorities, which leads to limited success of involving citizens in strategic planning processes. Third, the Romanian legislation requires the involvement of communities and key stakeholders, but there are no clear guidelines and methodologies to make this process effective at the local level. New forms of participatory planning, complemented by planning education for the general public, can and should improve community involvement.

The involvement of the larger community in the decision making process has a clear added value for local public administrations responsible with the development of the cities they are administrating [41,42]. Participation leads to better ownership and support, realism, coherence, and understanding of important issues. Participation should not be limited to informing citizens about the activities of the administration [43] but should permanently involve citizens in deciding public priorities, such as participatory budgeting, sectoral working groups, and regular consultation. On the other hand, decisions on the implementation and operational priorities are main attributions of local elected officials who have the legitimacy to decide on behalf of the citizens. However, better and informed decisions of local officials need to be based on better analyses, projections, and simulations (including financial) on targeted strategic projects, as well as on the permanent communication between community and administration through different working groups [44] to support project implementation.

All these strategies and plans are elaborated in accordance with the requirements of the financing authorities or the specific spatial planning legislation and are developed at different times by different institutions. These strategies aim to substantiate the development directions and priorities and to attract funding for various programs.

3.2. Designing the Harmonized Framework

Considering the analysis performed on the eight cities and the international literature results, we adapted the harmonization process proposed in the SIMPLA project [36,37], detailing the first main result: a three-step process (summarized in Figure 4) for a general harmonized framework of the plans and strategies mentioned above.

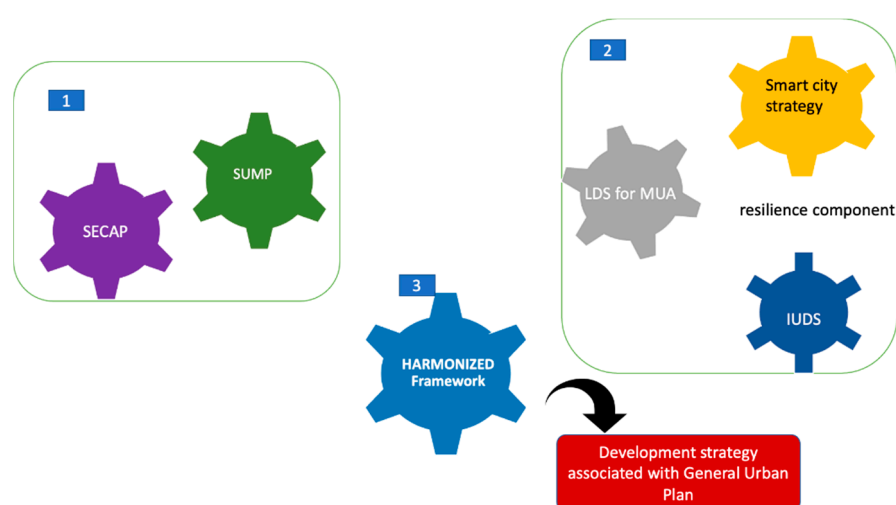


Figure 4. Steps for a harmonized framework.

The first step includes harmonization of the strategic sustainable energy, climate adaptation, and mobility plans (SECAPs and SUMP) already included in the SIMPLA project, funded by Horizon 2020.

Harmonization of the conjunctural strategies (IUDS, LDS developed for the marginalized urban areas under CLLD mechanism, smart city strategies), which are developed for a certain programming period is the second step taken into consideration.

Finally, the third step aims to harmonize the two frameworks discussed above into a single, flexible approach for aspects related to contents, stakeholders, procedures, methodologies, institutional setups, and policies. The results should feed into the strategy associated with the general urban plan and must be accomplished with the support of the consultant or entity developing the GUP.

We recommend six principles for harmonization:

- All the strategies discussed aim at improving citizens' quality of life and minimizing impacts on the environment. Therefore, a joint strategic vision could be pursued.
- The active involvement of stakeholders will lead to the successful development of strategies. Coordinated management of the stakeholders' involvement process will help define a single vision and lead to better use of resources. The multi-actor multi-criteria analysis (MAMCA) tool is recommended to be used to support decision-makers in navigating complex consultation processes across various stakeholder networks.
- All the plans and strategies should be monitored and evaluated in a harmonized way because assessing progress against goals is a common aim, as well as the identification of new challenges.
- In case a smart strategy is not yet developed for the city, the smart component should be part of the harmonized framework.
- The IUDS should be developed for the functional area but must include specific provisions for informal communities or marginalized urban areas in the territory.
- Local authorities initiating their harmonization process may consider different starting scenarios according to the availability of the plans or strategies:

Scenario 1: All the plans and strategies are available, updated, and need harmonization (e.g., the case of Alba Iulia).

Scenario 2: Some of the strategies are available (e.g., the case of Craiova).

Scenario 3: All the plans and strategies have to be updated (e.g., case of Lupeni).

3.3. Establishing the Structure for the Harmonized Strategy

For all three cases, we propose a dedicated structure for the harmonized strategy (Figure 5) comprising the six steps described below. The second key result of the research is, therefore, an integrated structure developed based on a literature review and the analysis results of the 40 strategies developed in the eight municipalities mentioned above. In practice, the general structure of the harmonized strategy proposed here should be tailored to the specific circumstances involved in each individual case with the support of relevant stakeholders and community involvement.

The harmonization process is complex, requiring coordination of different activities, the involvement of multidisciplinary teams and experts, and compliance with several, sometimes contradictory, regulations and guidelines. Each municipality must define a clear work plan (with a timeline for monitoring, risks, and mitigation measures), attribute tasks, and set milestones adapted to specific circumstances for the harmonized framework. This process could be developed by external consultants, could be performed by the local authorities' staff or could be a mix. In any case, city representatives need the skills and experience to perform the quality check on the final product.

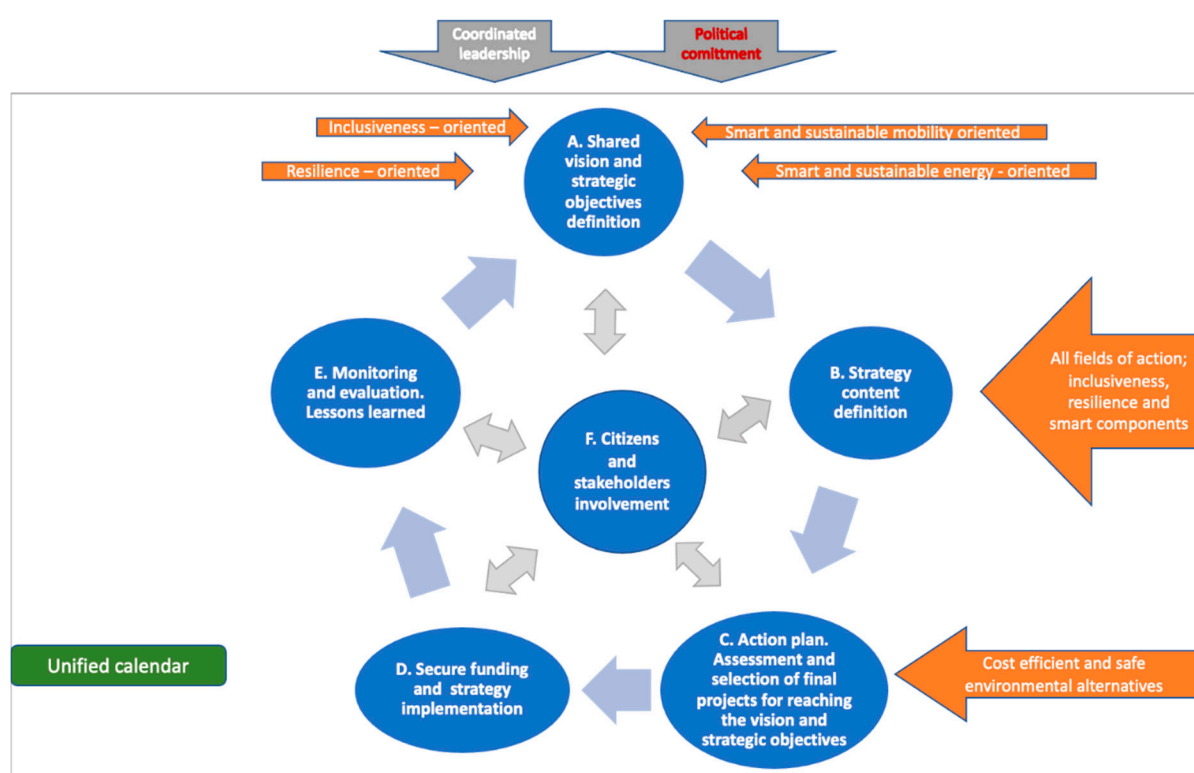


Figure 5. Proposal for the unified, integrated structure of the harmonized strategy.

Cooperation for the integration of the strategies and plans is necessary between the institutions involved in the process, as well as between the departments of City Hall taking part in the process (urban planning, EU projects, mobility, environment, energy, etc.), whose representatives should jointly and actively work together. To coordinate all the specialists, experts, and institutions involved, a qualified, and capable project manager with a strong team should lead the process.

In addition, 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 plans and strategies. It is recommended that the harmonization process starts with an initial meeting 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 framework for all the strategies. It is essential to provide convincing information regarding the practicalities of the harmonization process. As an output of this meeting, formal political commitments regarding the harmonization process should be announced in the form of an overarching vision including merging and updating the specific visions of land-use plans and strategies. This provides an opportunity to improve each plan, for example, to:

- Update the IUDS, SECAP, SUMP, and smart city strategies by including new actions.
- Harmonize the IUDS, SECAP, SUMP, and smart city strategy with other plans (e.g., a GUP-associated strategy, superior level plans such as the waste management county plan, or water and wastewater county plans).
- Involve stakeholders and the community.

For harmonizing the spatial strategies associated with GUPs and other developed strategies, the municipality may ask for support from the experienced companies developing GUPs to be involved or lead the process.

We designed the framework as a circular process comprising six steps:

A. Shared vision and definition of strategic objectives

All the departments and institutions taking part in the process should contribute and must articulate and share the same vision and strategic objectives.

An objective is what a planner seeks to accomplish or obtain. Moreover, an objective generally indicates the direction(s) requiring improvements. The objectives guide the entire planning process since they provide the basis for generating and evaluating alternatives. To accurately define the objectives, it is necessary to clearly identify the key issues that need to be resolved in priority with the support of a full-scale survey.

It should be noted that the objectives of the general urban plan with the spatial strategy and the objectives of the conjunctural strategies may not be the same. There may even be conflicts between them, given that progress on one objective may only be accomplished at the cost of another. However, for the goal of urban sustainable development, objectives in different realms should be consolidated as one. In most cases, the objectives set might be an outcome of a compromise between the various stakeholders.

B. Strategy content definition

The content of urban plans is different from that of strategies. Urban planning focuses on its economic and social rationality while strategies may focus more on sustainable, inclusive, and smart components [45]. Through systematic integration, the essential contents of strategies (zoning based on resilience principles, smart projects, etc.) should be incorporated into the planning system. The main activity fields to be updated and integrated are related to the identification of marginalized urban areas with their respective problems and solutions, populations, employment structures, economic competitiveness, housing and living conditions, transport, utilities, waste management, bioeconomy, and climatic and environmental conditions, including green spaces, tourism, culture, social services, health, culture, etc.

Smart components should also be included in the harmonized framework (for smart mobility, sustainable and smart buildings, information and communications technology (ICT) and public utilities, intelligent waste management, etc.). Urban transportation needs can be addressed through innovative ICT-enabled applications that provide more optimized and efficient travel [46]. Some of the benefits of personal cars can be achieved through shared transport and better transportation system integration, making travel across multiple modes of public and private transportation more attractive. This could include ICT-optimized transport systems that integrate collective and private modes of transport and deliver public transport to citizens in a more convenient way. Improving public transport electrification to fight against climate change also has to be considered [47]. Reshaped city spaces tying work, shopping, and living areas closer together and the use of improved telepresence technology and virtual interactions can also limit the need for travel.

Smart building technologies, renewable power generation, and energy storage technologies—controlled by smart energy management systems—may further drive improvements in energy efficiency [48]. As smart cities should take into account the needs of all groups of their “users”, they should also consider the activities of the elderly and their ability to move freely across the city, which depends on suitable urban planning and the availability of public transport [49]. In addition, using ICT in a smart city/home context can provide personalized health care, social services, and intelligent community services necessary for an aging population.

Innovations involving technologies may also improve waste management services. It is expected that 5G will play a significant role in the industry. Big data combined with Internet of Things (IoT) and artificial intelligence (AI) will enable authorities to create tailor-made analytics dashboards that will support the understanding of waste streams and aid in designing smarter resource recovery programs. Automating the procedure of trash disposal or sorting [50] using artificial intelligence for smart waste management and recycling is expected to represent a better garbage disposal alternative to recycling. One of the biggest and most important contributions that technology can make to waste management in 2020 and beyond is through the creation of automated technologies, especially robotics [50,51].

C. Action plan. Assessment and selection of final projects for achieving the vision and strategic objectives

The projects to be included in the harmonized framework may include projects derived from the strategies featuring sustainability, smart, and resilience factors. For all of these factors, cost-benefit analyses should ideally be considered, together with a variety of other elements (such as public acceptance) before reaching a decision on a preferred option.

D. Secure funding and strategy implementation

All the projects in the action plan should have at least two funding options, which can include budgetary sources, EU funds, international financial institutions (IFI) sources, public – private partnership (PPP), or other sources that may be available. Implementation must turn strategies into actions to accomplish the vision and strategic objectives.

E. Monitoring and evaluation. Lessons learned

Monitoring and evaluation is a powerful public management tool in terms of achieving objectives, improving the quality of life, enhancing sustainability, and influencing decision making [52]. It is crucial to have a system of monitoring and evaluation during this process, contributing to achieving the vision and strategic objectives. The system may update, test, and incorporate feedback into the integrated framework to ensure good performance.

F. Citizen and stakeholder involvement

Following the identification of the stakeholders for the harmonization process, stakeholder representatives should be recruited to actively participate in the harmonization process, especially those who will be directly involved in the harmonization activities. Before approaching any individuals to become stakeholder representatives, their roles and responsibilities should be precisely defined.

The principles, means, and organizational phases, as well as the steps for public consultation for the projects developed, are clearly established by the existing literature in the field [44].

In addition to direct engagement with citizens and stakeholders, communication with citizens is crucial to increase the success of the harmonized framework experiment. Consulting and improving upon communication with citizens and local businesses through timely and personalized content will lead to great public acceptance and stakeholder support. Recently, mobility innovations aimed at managing the impact of COVID-19 on cities showed the effectiveness of communicating with citizens and stakeholders. This was the case, for instance, with the rapid roll-out of pop-up bike lanes across cities worldwide, from Bogota to Berlin, which was quickly understood to safeguard sustainable mobility during the pandemic [53,54].

The integration model aims to unify “separated” subjects into a “combined” object that can help change long-term inconsistencies or even the combative relationship between GUP-associated strategies and other strategies. Incrementally, this model will have positive impacts on facilitating “harmony” between the timelines, methodologies, procedures, and key stakeholders involved in the process.

4. Discussions and Conclusions

4.1. Discussion on Findings, Limitations, and Future Research Directions

The results provide evidence that our initial assumptions are validated. The study on 40 strategies in eight municipalities outlines the overlap, lack of synergy, and insufficient alignment between the strategy accompanying GUP and the other strategies in Romania. However, the sample of the study is relatively small, and future research should include more municipalities to sufficiently validate the findings of this research. Interestingly, it was found that Alba Iulia municipality designed seven strategies at the local level (compared with the other cities which designed four or five strategies), which may explain the need for starting harmonization process for SUMP and SECAP.

As the evaluation of the strategies in the present paper is performed only for urban settlements, questions arise if this is narrowing the research results. In order to extend and improve the analysis, the next research step is to evaluate the plans and strategies for rural settlements (communes) for testing the initial assumptions used for the analysis of urban settlements.

This study found that the selection criteria for development and implementation of the harmonized structure in the eight municipalities are sufficient, but it should be completed with other criteria capturing willingness of the local authorities to participate in the process, expressed through the designation of a key responsible person. In practice, implementation of harmonization could start in Alba Iulia, the city that participated in the SIMPLA project, under the conditions based on political commitment, availability of dedicated staff, and community and stakeholders' participation.

It should also be noted that the findings of the study are based on analysis of the public versions of urban plans and strategies on the official websites of the municipalities, counties, and regions. As some of these versions may be outdated or incomplete, future research should consider to collect plans and strategies directly from the municipalities.

The review performed on international literature on the topic paved the way to the conclusion that steps have been done for the integration of topics (energy, urban planning, mobility, smart concepts) but, except the results of project SIMPLA and idea of CLLD to be taken up in relation to SUD, the harmonization process has not yet started at the EU level [29,36,37]. To enrich the context, the literature review must be extended, for instance with an evaluation of strategic frameworks in North American and/or Asian cities.

4.2. Conclusions

Redundancy and overlap between the different plans and strategies must be ameliorated, but the consistency between them also needs to be improved. A general harmonized framework has to be explored at the local and metropolitan levels for the unification of various strategies, correlated with the county and regional priorities included in the relevant plans and strategies. This approach should be cautious and flexible, integrating all the necessary information and smartly involving the community. This framework may be useful in designing a new development strategy for GUP, but it could also be used for the harmonization of different strategies already in place. In both cases, inclusiveness and smart components should be considered, alongside close consultation with the relevant stakeholders. Harmonization should refer to the correlation of timelines proposed by different plans and strategies together with the integration of actors, procedures, contents, methodologies, institutional setups, and policies.

We may also conclude that the study reveals that plans must be elaborated in a clear hierarchy. In principle, higher-level plans (county or regional) should be developed before lower-level ones (local). Otherwise, the lower-level plans would not have a clear base and would not benefit from coordination. In Romania, there is no order in the elaboration of such plans, and many GUPs have been designed and approved without a county territory arrangement plan in place. Top-level plans should be friendly and easy to understand by anyone, able to be realistically implemented in a well-defined timeframe (e.g., if a plan has a validity period of 10 years, it should include only projects and proposals that can be realized in that time horizon).

The close collaboration of local authorities' representatives in the metropolitan area/functional urban area is necessary to efficiently implement infrastructure projects. There are cases when projects cannot be developed or are delayed because the relevant policymakers refuse to collaborate with entities such as the Intercommunity Development Association (IDA) to develop the most efficient technical solutions (e.g., the association created for the development of water and wastewater or waste management projects).

Ideally, the GUP-associated strategy should be drafted in an integrated, flexible manner and should be easily updated, thus serving as the basis for all future development initiatives within the municipality. This will avoid the proliferation of a multitude of

strategies and plans, such as those discussed in the present study. Romania should take steps to improve and unify different strategic requirements for local communities by creating an integrated strategic framework correlated with county and regional plans and strategies, fostering a common vision, and promoting inclusiveness.

It is necessary to pursue increased cooperation and co-creation with relevant stakeholders and citizens' involvement in the context of urban strategies and plans. Fostering learning and networking as ongoing activities could be further improved by engaging in some concrete actions such as creating bridges between the key stakeholders, as well as sharing problems and identifying solutions. These factors could be achieved through training or information/awareness events, thematic workshops, and more.

Finally, it is important to address capacity issues related to the development, monitoring, and implementation of these integrated plans. In this respect, encouraging the procurement of technical assistance services resulting in documents is needed, as well as capacity building of local actors in terms of technical knowledge and infrastructure (preparation for monitoring and evaluation, communication services to increase attention to planning and people's various roles, GIS infrastructure, etc.), which will improve the effectiveness and efficiency of the entire planning process.

Author Contributions: Conceptualization, O.L. and F.G.; methodology, O.L.; validation, O.L., F.G., and E.R.; formal analysis, O.L., F.G., and E.R.; investigation, O.L. and E.R.; resources, O.L.; data curation, F.G.; writing—original draft preparation, O.L.; writing—review and editing, O.L., F.G., and E.R.; visualization, O.L., F.G., and E.R.; supervision, O.L. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not Applicable.

Informed Consent Statement: Not Applicable.

Data Availability Statement: Not Applicable.

Conflicts of Interest: The authors declare no conflict of interest.

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