SUSTAINABLE USE OF LAND AND NATURE BASED SOLUTIONS

Preparation of workshops - preliminary requirements

Deliverable D.6.1.1

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Deliverable D. 6.1.1. – Preparation of workshops – preliminary requirements

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EXECUTIVE SUMMARY

Baia Mare is a municipality along the Săsar River, in north-western Romania. With a population of ca. 145.000 and a metropolitan area home to more than 230,000 residents, Baia Mare is the capital of the Maramureș county.

The city's **industrial past in the mining and metallurgical sector** left a legacy of approximately 627 ha of land polluted by heavy metals (up to 5 times the acceptable value) within the municipal boundaries, which is totally disconnected from the urban framework.

Citizens' health was severely affected by environmental pollution, with increased incidence rates of specific morbidity in the area of respiratory, digestive, renal, endocrine, and metabolic diseases.

The **crucial challenges** for the city are and will be the remediation and regeneration of a large number of contaminate brownfields left as a legacy by the city's industrial past; the provision of quality and healthy green and blue spaces; as well as the revitalization of the local economic and entrepreneurial frameworks and the overall adoption of a sustainable and environmentally-friendly development model.

Coherently, **land-use strategies and regulations** at all governance levels prioritize sustainable initiatives and nature-based solutions for the bioremediation and regeneration of brownfields; promote research and development initiatives geared towards technological innovation and digitalization; and encourage multi-stakeholder participatory approaches to local governance.

Citizens' perceptions and awareness towards environmental issues are scattered, yet with a positive tendency towards sustainable and "green" attitudes and behaviors.

In this context, **SPIRE – Smart Post-Industrial Regenerative Ecosystem** proposes an innovative approach to the reuse of heavy metal-contaminated land in the city of Baia Mare, through adaptive phytoremediation and the creation of new urban ecosystems, as a long-term strategy for sustainable local economic development.

SPIRE will test its innovative solutions on five pilot sites located in four areas of Baia Mare: Centre, Craica/Vasile Alecsandrii, Ferneziu Lower, and Ferneziu Upper. The co-creation process regarding community workshops and related activities will focus on these sites' vocation and purpose at a neighborhood level.

INTRODUCTION

SPIRE - Smart Post-Industrial Regenerative Ecosystem has the ambition of starting a long-term **environmental, social, and economic redevelopment** in Baia Mare through the co-development of new adaptive and productive landscapes, integrated into a circular ecosystem of cascading material and energy value chains.

In order to have meaningful social redevelopment/social regeneration through sustainable landscaping of the sites, **a collaborative process with the local communities is much needed**. Not only that, when working with the local communities, it provides us with useful information regarding needed facilities, needed public equipment, overall input on identity and ambiance, but also, **it will ensure that the intervention is accepted, used, and valued.**

The Work Package 6 is focused on *Co-creation of the Biomass Cascading Value Chains*, which is a complex process with several steps, starting with *Participatory design of the BM renatured and productive landscapes*. Deliverable 6.1.1 *Preparation of workshops - preliminary requirements* (the current document) explores the main objectives of the community involvement, taking into consideration the current situation due to the pandemic restrains, and also explores/describes important aspects that a successful public space must integrate against main challenges of the sites and local context.

In conclusion, the first step in creating the Biomass Cascading Value Chains, is to build and plant the actual sites. The first purpose of the sites is to phytoremediate and to produce biomass. The second purpose of these spaces is to become functional elements in the urban life of the local community – transforming into ecological community public spaces.

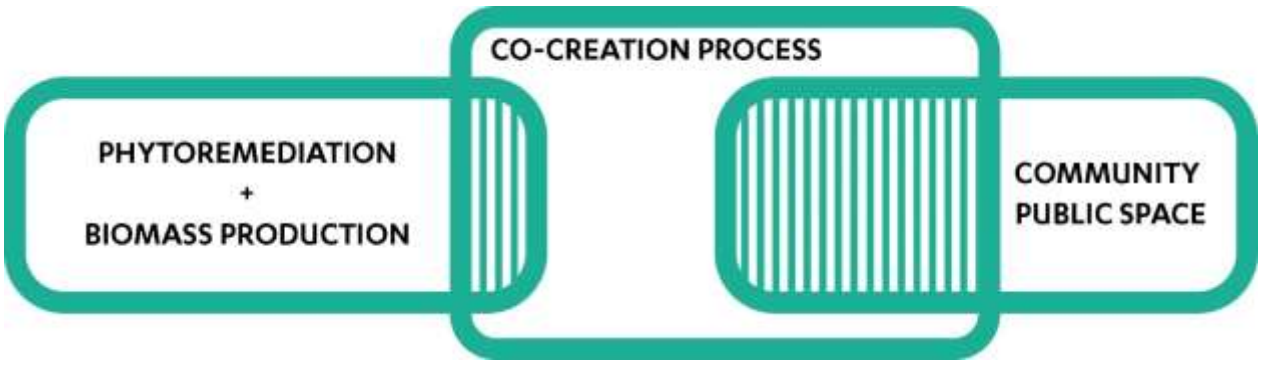


Figure 1 - The two main purposes of the sites and the relationship with the co-creation process

Due to these different aspects of the functions of the sites, **the co-creation activities will be more focused on how the spaces can accommodate the functions needed by the community, and less on how the planting for the phytoremediation process will happen (due to restricted/limited options of plants and the specific methodology detailed in Remediation Toolkit).**

Within the SPIRE project, the scope of this deliverable is to ensure planning support to the co-creation activities with the local community. The support comes in the form of preliminary principles, guidelines, frameworks, and preliminary requirements. The current document outlines the first practical steps and tasks in the process, as a methodological and an operational approach (the document also has the purpose of potential replicating for other sites in the Baia Mare metropolitan urban area). It provides guidelines for the SPIRE partners to begin the first phase of the renaturalization process on the project pilot sites. Specifically, D.6.1.1:

- Provides the supporting guidelines and programme for the implementation of co-design activities, under the coordination of the MUA
- Establishes the minimum goals with respect to renaturalization and the ratio between the experimental phytoremediation subplots and the community needs and requirements.
- Defines the guiding land-use principles for the sites, and correlates them with existing city provisions for green spaces and other planning documentation in force.
- Defines the working methodology of the co-design process: who will be involved, who is affected, for whose benefit the pilot sites are designed and what activities can enable a meaningful community collaborative process.
- Due to the current situation regarding the pandemic, the initial workshops (three for each site) must occur in a different manner.

The activity will transform into a more gradual and hybrid participatory process, mixing open discussions, public information activities, public consulting, actual workshops with mainly on-line and some off-line activities.

METHODOLOGY

The current deliverable regarding workshops and preliminary requirements morphed into a more methodological approach regarding the co-creation process, due to the complex nature of community involvement in decision making and implementation. The deliverable offers a complex and integrated framework of co-creation, filtered through SPIRE specific aims and objectives, having also the replicating character in the case of other nature-based solutions projects at a similar scale.

The proposed structure has three parts: 1 Presentation of the pilot sites; 2 Workshops and related activities principles and objectives; 3 Organization frameworks of local events.

The first section presents the context of SPIRE operational element regarding the transformation of the sites with the purpose of experimental phytoremediation, biomass production, and community place-making. The section explores the urban and social context in which the sites are part of, the problems of the local community that can be tackled through collaborative place-making. This chapter is important in order to properly assess which shape the co-creation process should take.

The second section of the document addresses the principles, objectives, and minimum goals that the proposed co-creation process meets. Is important to define the thematic areas of focus, the landscape design requirements, and the needed functionality/vocation of the pilot sites, so that the managing part of the collaborative activities does not result in contradictory/opposed solutions to what is actually needed.

The third section is the operational part of the document, which resulted from the knowledge, conditions, and objectives formulated in previous chapters. It provides a preliminary toolkit of activities from which the proposed framework selects from it in the form of three Workshops and related activities Packages. The organizational framework emphasizes on different options of mixing online and offline activities, that as a system, has the most advantages regarding community involvement, resources (time, people), and safety (uncertain situation due to pandemic). In conclusion, the current deliverable, has the ambition of guiding the co-creation process, not just through organization of a certain set of workshops, but through a step by step scenario, that takes into consideration a complex set of creative/innovative activities that accompanies the actual workshops and ensures their success.

CO-CREATION PROCESS IN SPIRE

SPIRE project is a complex initiative, that enables different systems of the city Baia Mare, in order to start a long-term environmental, social, and economic redevelopment.

We have to look at the co-creation process as an essential element in SPIRE ambitions. Citizen participation is needed in order to gather information but also to educate, in the hopes of changing behavior. Making people more concerned about the environment and have them contribute to a more sustainable day-to-day life is one of the main ambitions. A very powerful tool that can be understood as co-creation, at the metropolitan level, is the iLEU platform[1]. The iLEU is an instrument that enables the citizens to actively participate in the new ecological value-chains and systems, and also are rewarded for it. The other important aspect of the co-creation process (the subject of the current deliverable) is the involvement of the community in the decision-making activity, regarding the functions and the landscape design identity of related sites. To further explore the ways the guiding principles in which community workshops and related activities can happen, we must first understand what co-creation represents and what the defining characteristics are.

Co-creation as a collaborative process supported by citizens and experts: "focuses on including relevant and sufficiently diverse knowledge in urban processes to create innovative solutions to complex problems". [2]

In the case of the SPIRE project, the innovative solutions arising from the co-creation process are related to the overall ambiance, functionality, and vocation of the sites as important spaces for the daily life of the locals.

According to *Co-creating cities - Defining co-creation, as a means of citizen engagement*[3], the co-creation processes have a set of characteristics:

A. **Systemic**: extends across the entire value chain, "from generation, selection, incubation, and eventually, even to marketing the new product or service"
B. **Innovative and Productive**: intended to generate new products and models of service delivery.

[1] See Work Package 5 – Digital solutions, Tools and Services
[2] Zimmermann, Alfred, Howlett, RJ, Jain, Lakhmi C, Human centered Intelligent Systems, 2020
[3] Co-creating Cities Defining co-creation as a means of citizen engagement, Leading Cities, 2014

C. **Collaborative**: transforms citizens from 'passive audiences' to 'active players'. In this sense, the relationship can be conceived of as a partnership.

D. **Diverse**: involves many stakeholders and includes such actors as non-governmental organizations/ civil society, business, and academics.

E. **Hierarchy-flattening**: the distinction between consumers and producers, users and designers, bureaucrats, and citizens is blurred or transcended. Co-creation shares power between government and citizens and other stakeholders rather than traditional structured or predetermined programs, initiatives, projects, or campaigns into which people are asked to "plug-in" and participate.

F. **Bi- or multi-directional**: Information and ideas flow among stakeholders. The process is neither top down nor bottom-up. All stakeholders learn and gain value from co-creative processes and outcomes.

G. **Repeated and intense**: The frequency, duration and volume of information exchanged in interactions between stakeholders is greatly increased using co-creative techniques.

H. **Mutually beneficial**: a learning process, in which stakeholders learn from one another and participants assist others in a hope of improving their community in the long-term.

I. **Trusted and Transparent**: Trust is a key component of public participation and co-creation. Trust comprises an important criterion for government – a trusted central authority allows open and equal opportunity of participation.

It is worth mentioning that these criteria weigh differently compared to the purpose of the project. Figure 2 represents the ratio of each characteristic related to the main objectives of SPIRE.

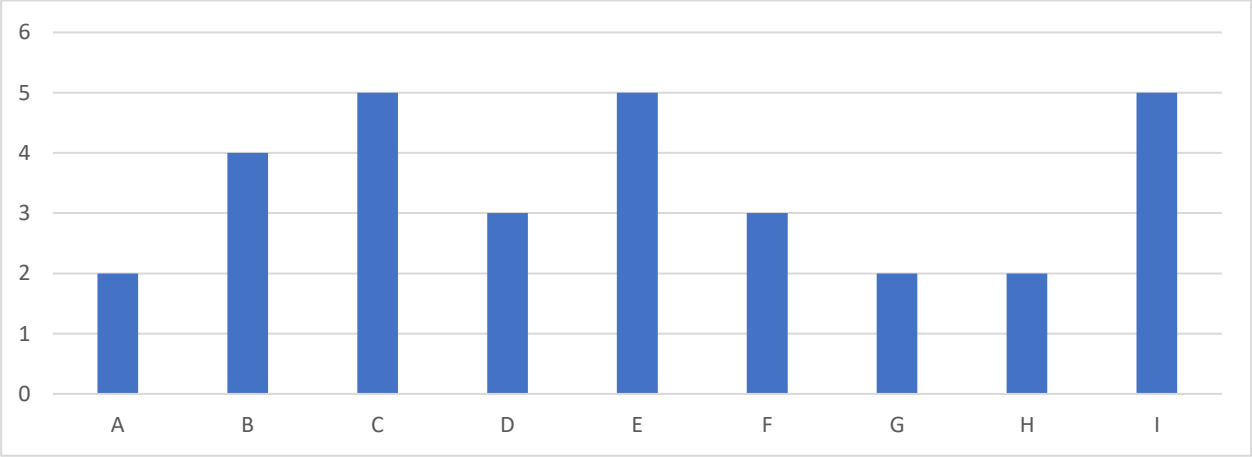


Figure 2 - Criteria relevance against the purposes of the project – score 1 to 5 agreed upon within the partners

1. PRESENTATION OF THE SITES

1.1 Analysis of the sites and the local context

1.1.1 Sites location in Baia Mare city

Figure 3 - SPIRE's Main Intervention Neighborhoods and Pilot Sites

At the city level, 3 of the sites are located in the periphery, and other 2 (with exception of the SPIRE Hub and Maker Space) are located in the pericentral area (in this case the urban context is closer to the central area of the city).

The location of the pilot sites is quite diverse:

- sites Romplumb and Colonia Topitorilor being close to Nicolae Bălcescu school, and in close relationship with the Firiza river and the forests of the two major hills in the east and west;
- sites Colonia Topitorilor and Urbis are located in more dense residential area, in close relation with public functions like Local Police, commercial areas, in close relation with Săsar River and Colonia Topitorilor being in close proximity of the start points of hiking tracks (to the northern part, climbing up the hill)
- site Craica has a challenging location, being near a soon-to-be-moved landfill, near a cemetery, and near one of the most marginalized and disadvantaged communities, having as major limits two challenging elements: relatively heavy circulated road in the north and a rail line in the south.

The green-blue axis represents an important element in the context of green infrastructure and the system of natural elements within the city. Baia Mare has 2 main rivers Săsar and Firiza. In the case of SPIRE project pilot sites distribution within the city context follows a close relationship with these blue axes. Ferneziu site and Romplumb are in close relation with Firiza river, Colonia Topitorilor site is and the confluence of Firiza and Săsar rivers, Urbis site is on the right side of Săsar river, and Craica has a small pond that crosses the entire site.

The municipality had the initiative of planning and designing a set of sites across Săsar River with the purpose of regenerating the public space and the natural environment. SPIRE project is line with this initiative, expanding the sites planned as ecological and community spaces with five new additions, situated in a different context than the previous planned ones in the ZUP Săsar, having the complementary role of phytoremediation, bio-mass production and ecological community public space. All considered, the overall conditions of the blues axis across the city will improve, and its very important that the approach integrates all elements of the green infrastructure and natural environment, because the entire set of spaces related with water functions as a unitary system, with the purpose of improving biodiversity and climate conditions.

1.1.2 State of pollution in Baia Mare

The environment and particularly the soils are polluted due to the acid rains and heavy metal emissions from the industrial activities previously developed in the area. The region became of international concern after the cyanide spill accident in January 2000 that affected the ecosystem of Tisa and Danube rivers. Despite the fact that the copper smelter was lost in 2008 and the lead smelter in 2012, and it was reported an improvement in the air quality, the area is still highly polluted and has a high level of soil contamination with HM. In a study conducted by Damian et al (2008), the HM (Pb, Cu, Zn and Cd) soil pollution was studied on a surface over 20.53 km2 of Baia Mare. The total concentration of HM was measured in the upper horizon for the entire surface of Baia Mare city and for each pedogenetical horizon within the soil profiles up to 1.20 m depth in the industrial zones. [4]

The state of pollution represents a real threat for the community, especially in the case of home-gardening. The risk to human health through food-chains transfer is a studied aspect (more detailed information check D.4.3.3) : the daily intake rate (DIR) and the target hazard quotient (THQ) calculated data indicated that consumption of parsley, kohlrabi, and lettuce from the area on a regular basis may pose high potential health risks to local inhabitants, especially in the area located close to non-ferrous metallurgical plants (Romplumb SA and Cuprom SA).

[4] State of Play in Baia Mare, Desk Analysis, Research repository & Awareness appraisal, SPIRE Baia Mare, D.4.3.3, UIA 2020

1.2 Presentation of the site's constraints and challenges

1. Romplumb (1.25 ha)

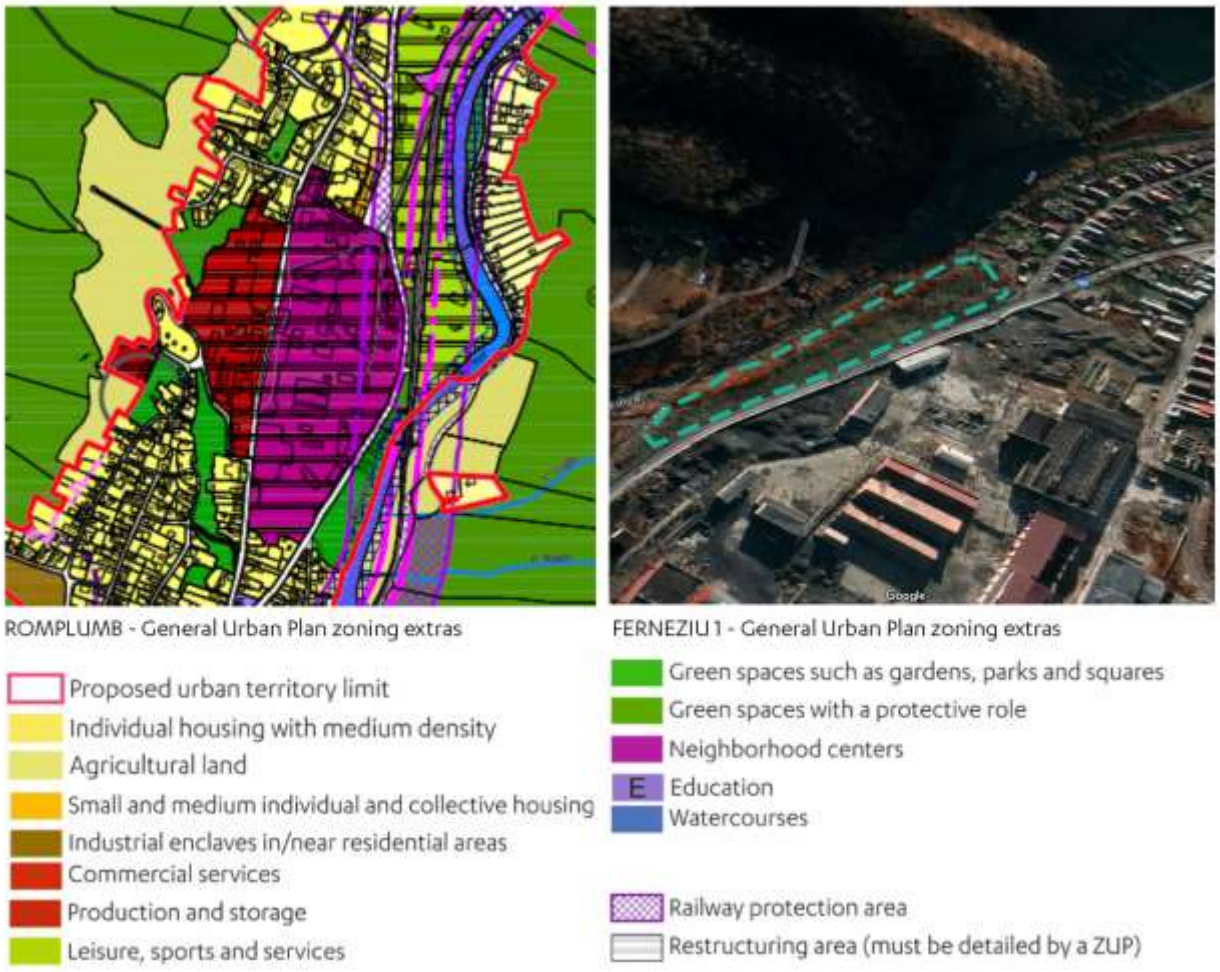


Figure 4 = Romplumb site GPU extras and aerial image

Romplub site is the most peripheral site, in the northern part of the city, between two hills, near a post-industrial center. According to the in-force GUP, the site is included in the green spaces such as gardens, parks and squares, meaning that the SPIRE project is in line with the overall planning and regulation context. As concerns important elements of the surrounding, the site is in relation with:

- Post-industrial site (see the arial image) that is planned for restructuring a neighborhood center – again the SPIRE initiative is in line with the planning vision for the city.
- Natural elements such as forests (green spaces with a protective role) and river (Firiza) – the site is part of the macro green infrastructure and blue-green corridor of Baia Mare

- Residential areas with individual housing units and an almost rural landscape, but with a higher build density – the transformation of this space can be a functional element for the neighborhood, being the only public community space in the area.

2. Ferneziu (0.8 ha)

Figure 5 - Ferneziu site GPU extras and aerial image

Ferneziu is the next site, very close to Romplumb, which is why both sites can work together in providing the role as community public spaces. The zoning context is similar with the previous one, but is important to highlight the fact that Ferneziu site has a very close relation with Nicolae Bălcescu school.

The site is surrounding the school building, meaning that the vocation of the space must be oriented also to activities related to youth (in designing the space is important to manage limits and intensive activity area, in order to ensure safety and a coherent urban image).

3. Colonia Topitorilor (1.5 ha)

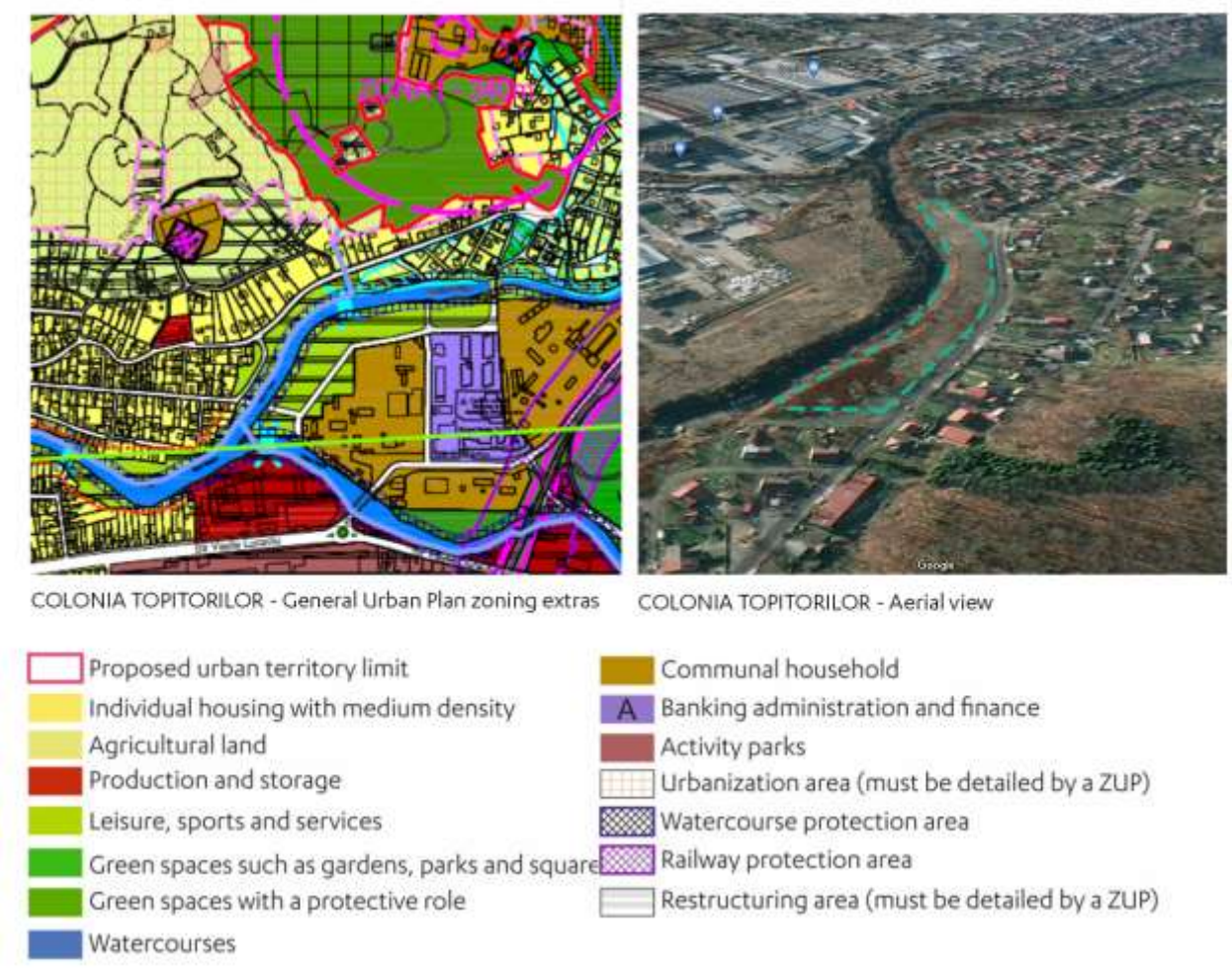


Figure 6 - Colonia Topitorilor site GPU extras and aerial image

Colonia Topitorilor site (along with Urbis) is relatively closer to the city center. Is located at the base of the northern hill, where the starting point for hiking tracks are. The zoning context is in-line with the vocation of the site, the site being included in a residential area with individual housing. The site has the characteristic of becoming a successful community public space. The relation of the site with the river is favorable, having a waterfront of approximately 300m. It can be a functional and attractive element of the blue-green corridor in the city context.

Regarding the zoning plan, the site is planned for restructuring for functions as leisure, sports and services. In this situation, the challenges of the site are to effectively mediate the relation between the two major limits and the space functionality. Dense vegetation can play an important role, but is important not to cancel the visual relation with the water. The site has a relatively slight slope, that will be considered when designing the paths, alleys and planting.

4. Urbis (0.75 ha)

Figure 7 - Urbis site GPU extras and aerial image

Urbis site is located near an important public function – the Police Department in Baia Mare, but the opportunity of transforming it into a community public space is not so favorable, because is not easily accessible. In the case of this site, the challenge is to proper mediate the relation between the river as a limit and a focus point, and the Police Department. Another important challenge is the overall surface area of the site, being the smallest of all five. The opportunity of accommodating relevant or intense public facilities and functions is lower than the other sites, but Urbis site can play an import part as a dense planted public space with the role of increasing the biodiversity and the quality of the local landscape of the blue-green corridor.

5. Craica (3 ha)

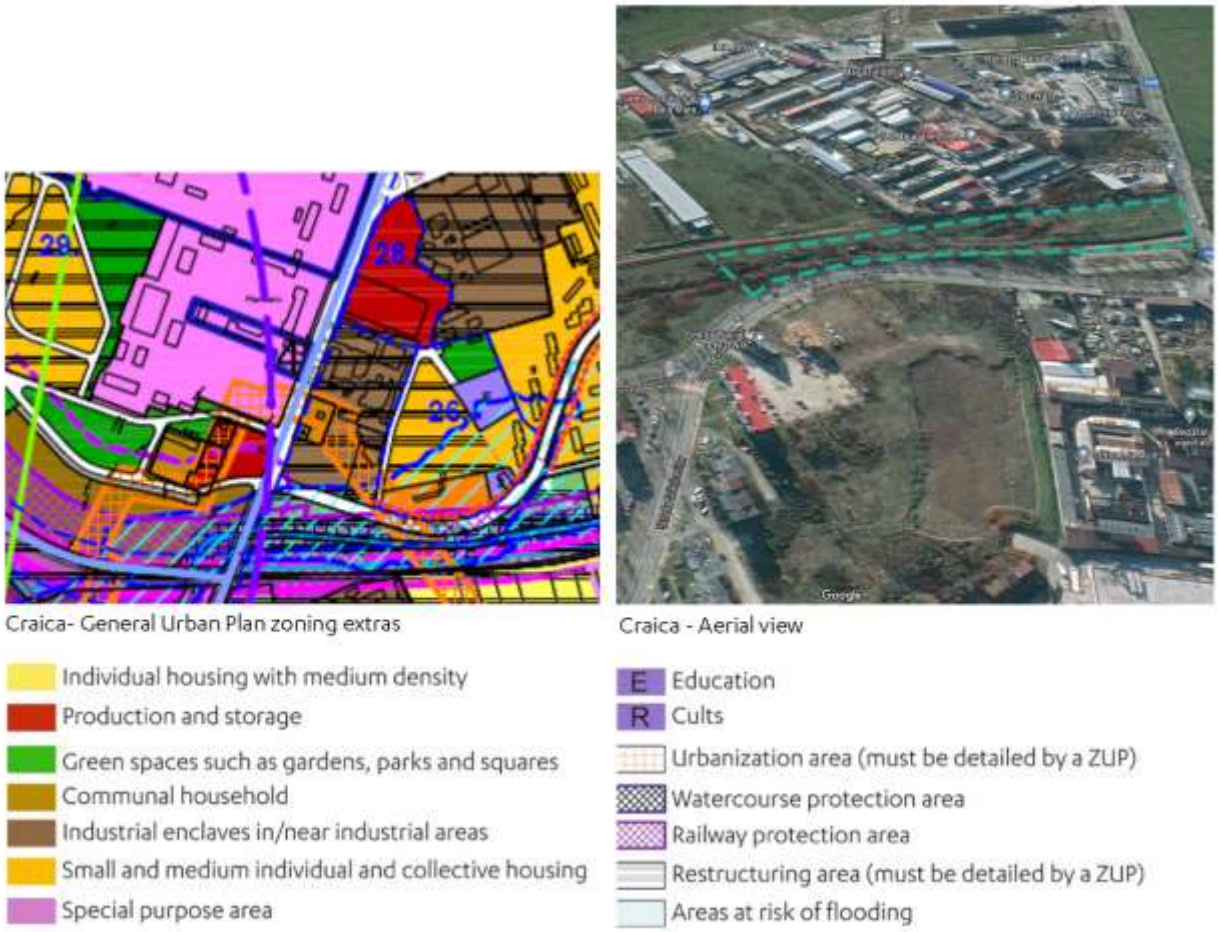


Figure 8 - Craica site GPU extras and aerial image

Site Craica can be considered one of the most peripheric site of all five (as in zoning context not geographically), but has the advantage of being located in a more densely populated area (located near collective housing). Although is the biggest site as in surface area, is one of the most challenging to transform due to a set of obstacles: the site is delimited by heavily circulated roads and a rail line; is in the proximity of communal household (that is planned for moving), the social context is challenging due to the presence of marginalized communities.

If overcoming these challenges, Craica site has the potential of making a real change, in becoming a functional and valuable element in the day-to-day life of the local community, making them appreciate nature more, making them interact more, and promoting a new ecological behavior. In transforming this space, working with the local community is crucial, in order to have them value and appreciate the environment and the urban space.

2. WORKSHOPS AND RELATED ACTIVITIES PRINCIPLES AND OBJECTIVES

The main objective of the SPIRE initiative is the phytoremediation of several test sites in order to explore (in an experimental way) sustainable methods of regenerating the heavy-metal polluted soil, and further use the resulted biomass in sustainable local value chains helping the community through related start-ups programs.

In this case, the first purpose of the sites is to be densely planted to efficiently phytoremediate the soil and to be productive, so that the resulted vegetation can be harvest and transformed.

The second purpose of the sites, but important nevertheless, is to also be a functional public space, addressing the local community's necessities and wishes, which is why co-creation and co-design activities are so important.

2.1 Co-creation and co-design principles and areas of focus

The specific character of the project dictates a certain approach in the place-making activity of the sites. It is important to formulate additional principles for the co-creation process, in order to ensure an efficient implementation. In conclusion, the overall thematic range for the collaborative part (meaning workshops and other related activities), is strongly dictated by the two purposes of the sites and the general conditions.

2.1.1 Principles of co-creation in the context of SPIRE project and related sites

Co-creation is an umbrella term for a wide range of participatory and open-design processes. It is an approach to creative practice by moving beyond consultation towards collaboration between the citizens impacted by an issue. It puts the user and citizen as the 'expert' of their own life at the center stage of

the design process. Co-design is usually facilitated by a professional, who might choose a certain approach, and within that various methods or tools to spark creativity and keep a process of reiterative questioning, refining, reflection going. Scenario or prototypes can be built and reviewed. While co-design as an approach asserts users to be capable experts of their own experiences, they must still be supported through tools that allow them to express themselves.[5]

Co-design represents a way of a participatory approach in which real power is transferred to citizens. Due to specific characteristics of the function of the site, which have an important impact on the overall design options, the transfer of the power must fit under the site's requirements.

It is important to underline the fact that co-creation activities are a creative practice that moves beyond consultation towards collaboration. **The objectives of the workshops and community-oriented activities in Baia Mare will be aligned with the following principles:**

1. **Gradual involvement** of the community through strategic activities with the purpose of informing, educating, co-creating. The first steps of the co-creation activities must be oriented to general informing and overall educating the locals about the project and further, explore problems and define them.

2. **Co-empathize**. Is important to understand the needs and necessities of the community, the main challenge being prioritizing the problems and expectations

3. **Creative activities for creative solutions**. Involvement of the community in a collaborative approach must be made accessible as in language, visual representations

2.1.2 Specific conditions of the sites landscaping/design in the co-creation process

The case of the selected sites as Living Labs for: phytoremediation, biomass production, and community space, have a set of requirements due to its unique vocation. Previous principles must be corelated with the specific conditions of the sites. It is important to address these conditions in an early stage, in this way the co-creation process will be guided and focused on the areas where new innovative and creative ideas are needed.

1. **A carefully selected range of species of plants that phytoremediate and also produce valuable biomass.**

[5] WIEGMANN, Mareile, PAPPERS, Jesse, KESERU, Imre, MACHARIS, Cathy, Learning Loops in the Public Realm, Guidelines for the co-design of alternatives, 2018

Due to the unique vocation, the landscaping design must only use the selected range of species.

2. Dense vegetation with the purpose of having an optimal production of biomass.
   A major share of sites area will be planted densely and efficiently according to Remediation Toolkit.
3. The necessity of having mainly pervious surfaces. An objective of the project is to start the phytoremediation process on 90% of the pilot site surface (ca. 6.6 ha out of 7.3 in total).
4. Having a functional role in the day to day life of the locals.
   The first two requirements of the sites were addressed in the Remediation Toolkit. All of the general requirements (except plant selection) will be addressed through co-creation activities, with the main purposes of finding creative design solutions and generating social integration.

2.1.3 Thematic areas of focus in the co-creation activities:

The workshops and related activities will discuss, debate, facilitate collaboration and innovate in different thematic areas, which together compose the overall needed/wanted image of the sites.

1. Identity and ambiance of the public spaces.
   Overall ambiance and identity of the sites will be built upon the community's input. The workshops and the related activities will approach the collaborative part in various and creative ways in order to develop an overall image that is wanted and needed by the community.
2. Functionality in the context of the local community.
   Part of the sites will accommodate functions oriented to leisure, sport, social interactions. Due to special requirements, the dedicated area for these types of functions is approximately 10-15% of the total area (without circulations). The workshops and related activities will address options and ideas on how these spaces can accommodate the functions chosen by the community.
3. Vegetation and landscaping.
   Planting can be influenced during co-creation activities but in a limited way. The design options regarding planting can be an important subject included in the workshops and community-oriented activities, but it has to be a well-guided discussion, moderated by the experts, in order to not be in conflict with the main requirements of the sites.

2.2 Land-use principles and phytoremediation minimum goals

For each site, a specific selection of plants was made, taking into consideration the native species found. The overall planting of the sites will be made accordingly, in order to better phytoremediate the polluted soil and also to have a reasonable biomass harvest.

See the list of selected plants (selection based on-site analysis and Remediation Toolkit) in O.7.1.1 and O.7.1.2.

Regarding vegetation, the co-creation activities must have a well-established framework of guiding principles, on which, the collaborative part can elaborate creative ideas and solutions.

The co-creation process will provide valuable input on the general ambiance of the public spaces. A guideline is needed so that the output will be aligned with the general site's requirements and characteristics. The co-creation activities will address issues like planting, relation with surroundings, entrances location and design, path and alleys structure, typology of functions, and functions design. In order to have a structured and coordinated workshops activities and public consulting activities, a set of general land-use principles are developed. The creative input will respect the formulated principles and contribute with creative solutions on how these components of the sites can be built.

2.2.1 Land-use principles regarding vegetation

- Densely and mixed vegetation. Even if 10-15% of each site will not have dense vegetation, the overall percentage of vegetation mass will exceed 100% because planting will be mixing natural pastures, with shrubs, trees, and other types of weeds. Is important to plant as densely as possible because, in this way, we speed up the phytoremediation process, and also this will result in a better production of biomass.
- Perviousness. The sites will use as much as possible pervious surfaces, in order to phytoremediate 100% of the area. In the case of impervious surfaces, there is a range within which the natural soil underneath will benefit from phytoremediative action via the roots of the plants.
- Protection. Is important that the vegetation will play a protective role for the users of the space, as in shade, wind, noise pollution, visual pollution. In this case, vegetation must be thought out in relation to the natural conditions (wind direction, sunlight)

2.2.2 Land-use principles regarding surroundings

- Ensuring psychological and physical protection from the roads and traffic. This can be realized through a specific plant zoning.
- Use of vegetation green screens and barriers in order to mitigate the visual relationship of the sites with unpleasant surroundings, such as industrial areas, undeveloped land, etc.....
- The proximity to residential areas must have dense vegetation and low activity (as in functions), in order to not disturb.
- Creating relations with the green infrastructure, natural environment, and with the water area.

*Notes. In the case of the land-use principles regarding surroundings, community involvement and input from the locals are necessary in order to provide information regarding which areas represent good proximity or bad proximity, which street is more or less transited and which visual connection should be kept or mitigated.

2.2.3 Land-use principles regarding entrances

- Entrances must be well marked in relation to the main pedestrian nodes.
- The sites must have a maximum of two main entrances and several secondary entrances (no more than three).
- Entrances must be well illuminated and with proper urban furniture.

*Notes. The co-creation process must provide information on the preferred locations for entrances (in relation to pedestrian routes and sites alley structure). Creative solutions on how the entrances must be designed is also a topic that is part of the collaborative community works.

2.2.4 Land-use principles regarding paths and alleys structure and design

- Each site should have one main alley and possibly one or two secondary alleys. The alleys should be a maximum of 1.5m for the main alley and a maximum of 1m for secondary alleys.
- The materials used and the overall design of the alleys must ensure a mainly pervious surface so that phytoremediation processes can happen.
- The alleys structure must be correlated with the chosen entrances points and with the major surrounding functions.

*Notes. During the co-creation process topics like the design of the alleys, the overall composition and ambiance will be debated.

2.2.5 Land-use principles regarding functions

- It is preferred for each site to accommodate three major categories of areas:

a. Engaging and dynamic activities area
b. Social interaction activities area
c. More intimate areas for relaxation, meditation, quiet time.

- The overall functions surface coverage must not exceed 15% of the entire site, and also the design of the subareas must include pervious surfaces.
- The share of each area can be negotiated during community consulting and workshops.

*Notes. In the co-creation process, the topic of functions typologies and functions design represents the main focus of the activities. It's the most creative and most attractive topic for the local community, locals having the chance to actually request what they would like to use and interact with, in day-to-day life.

2.3 Desired results - The main objectives of the workshops and related activities

The workshops and related activities that together compose the co-creation process have the following main objectives:

- **Creating optimal design solutions** aligned with the land-use principles, taking into consideration the role of phytoremediation, the role of biomass production, and the role of the community public space.
- **Generating creative ideas** that can overcome the challenges of available space, difficult terrain, and the main requirement of ecological design. In order to have a creative output, it is important to have also a creative approach in organizing, leading, and monitoring the activities. Having a relatively small area in which functions and circulation can be built does not get in the way of having an efficient and functional public space, in which the community wishes, expectations, and necessities are met.
- **Creating functionally, valued and frequently used public space.** Due to the fact that the sites are located in relatively marginalized communities, the direct involvement of them is crucial, because they are the users, and only they can ensure that SPIRE ambitions are met - long-term environmental, social, and economic redevelopment.
- **Educating and encouraging citizens to shift towards sustainable and eco-friendly behavior.** The involvement of the community in such activities does not serve only the purpose of creating design solutions but also is an opportunity to change behaviors. The needed workshops and community-oriented activities must also inform the locals about the other aspects of the SPIRE project, such as iLEU, SPIRE Hub, Makerspace, and the overall benefits of phytoremediation, in the idea of upscaling the initiative at the metropolitan level.

3. ORGANISATION FRAMEWORK OF LOCAL EVENTS

3.1 How to approach co-creation

The co-creation process can be approached in many ways regarding certain types of projects. SPIRE initiative has a specific approach to the way the sites must transform (first main purpose as Living Labs for phytoremediation and biomass production, and second purpose as an important functional element in the day-to-day life of the local community).

3.1.1 References relevant for SPIRE project

The nature-based solutions approach and the design component of the sites are the thematic umbrellas part of each component of the co-creation process, which is the reason why the current document has the following references:

1. **Guidelines for co-design of alternatives, LOOPER – Learning Loops in the Public Realm, D 3.1, Urban Europe 2018**

~~project~~ As a good practice we consider the theoretical and simplistic approach of the project LOOPER 2018 (Learning Loops in the Public Realm) suited for the co-creation process needed in Baia Mare (the presented information is used as main guideline for the SPIRE project and its co-creation specific framework). The methodology derives from the design domain, on the idea that design thinking can also be applied to urban planning. They propose a co-creation process that has three main steps: Identification of Problem - Co-design, and Evaluation - Implementing and Monitoring.

It is a staged and organic approach in which the community must be part of at every step. One can stagger these theoretical steps depending on the project typology. In present situation the steps regarding identification of the problem and co-design and evaluation are the most difficult to address. For this reason, the preparation of workshops and related activities will focus more resources on information, education, social integration and building trust and close/strong relationships with the community.

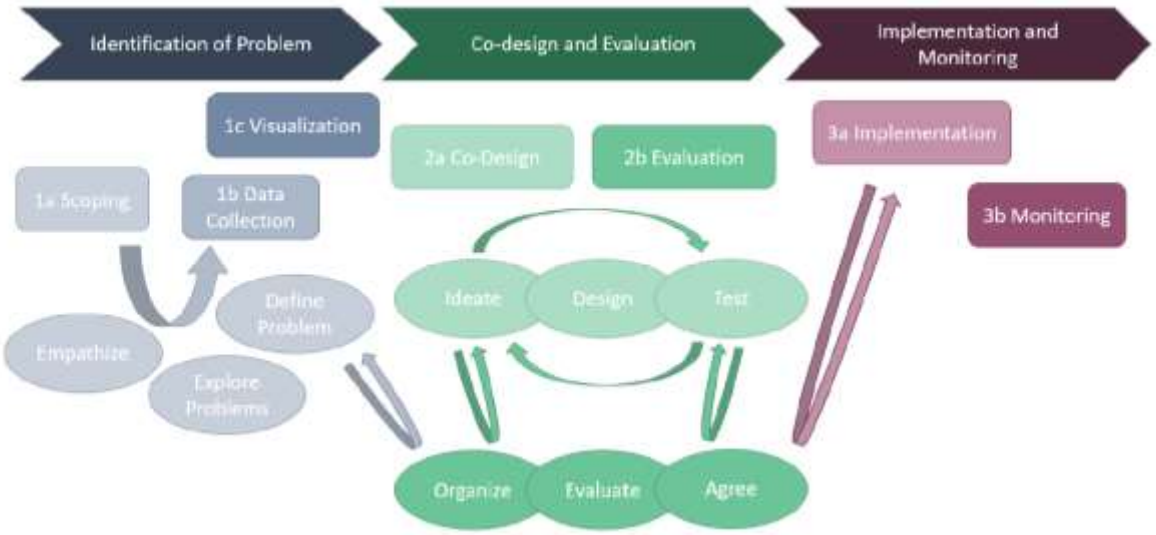


Figure 9 - Conceptualization of the LOOPER process (initial proposal extended based on design methodology literature) Source: LOOPER Project

2. **Guidelines for co-designing and co-implementing green infrastructure in urban regeneration processes, D 2.10, proGIreg. Horizon 2020**

The proGIreg project, Guidelines for co-designing and co-implementing green infrastructure in urban regeneration processes, is providing very relevant guidelines for the co-creation process. The following principles/considerations are taken into consideration (the bolded points are the ones considered most important in the context of SPIRE objectives):

- *Know your target group, their daily routines and needs to find anchor points for their engagement and design activities according to their needs.*
- *Engage stakeholders early in the process to create a sense of ownership for the NBS and increase the chance of their maintenance and caretaking beyond termination of a pilot project.*
- *Especially when working with disadvantaged groups, transparency is key to gaining trust, one of the most important assets in the management of such an initiative. Trust can be won by engaging users and intermediary NGOs directly and from the start.*
- *Identifying the benefits of an NBS for the target group and making them visible and valued is crucial but at times difficult. The more focused the NBS is on its target groups' benefits, the easier it is to communicate them and thus aid any co-creation process*

3. **CLEVER Cities Guidance on co-creating nature-based solutions: PART I -Defining the co-creation framework and stakeholder engagement. Deliverable 1.1.5, CLEVER Cities, H2020**

Regarding CLEVER project, in the current context, it represents a solid bases of practices, offering guiding principles of what co-creation is or should be. It is fitting for the SPIRE project, because it also has the nature-based solutions aspect, filtering in this way the wide variety of co-creation approaches. According to them, the co-creation process has the following characteristics (the bolded points are the ones considered most important in the context of SPIRE objectives):

- *An innovative and active collaboration between partners;*
- ***Aims to achieve co-benefits on both local and city-wide scales;***
- *Is processed through collective and shared governance approach;*

and has the following principles:

- ***Togetherness: there is equal collaboration between all internal and/or external parties;***
- ***End-users: they must play a central role to the overall process;***
- *Ongoing: The process is ongoing and participative in every phase;*
- ***Productive: it leads to implementation of the co-created solution;***
- ***Transparent: relevant information is accessible to all;***
- *Supported: supported by all stakeholders;*
- *Value-driven: results in value creation for end-users and involved parties;*

4. Strategic Territorial Agendas for Small and Middle-Sized Towns and Urban Systems, Urban Planning Institute of the Republic of Slovenia (UIRS), Trnovski pristan 2, Ljubljana, 2014

Regarding URBASOFIA experience, the STATUS project is a building block for the SPIRE co-creation approach, having the knowledge of the result of the methodology in the past projects. STATUS stands for Strategic Territorial Agendas for Small and Middle-Sized Towns & Urban Systems. The project was oriented to more city and territorial planning involving a wide range of stakeholders. The complexity and character of the project is different from the SPIRE system, but it provides a well-thought-out framework of steps. In the first stage of the provided methodology, Analysis plays an important part, setting the stage for the next steps, which in this case are the scenario building and, after that, the design. In the context of SPIRE co-creation framework, the scenario building will be taken form from the public consultation and workshops, in which the thematic of necessities, wishes and expectations will be tackled. As a result, from these activities, the scenario building will provide a set of 3 options of design, that will be put up to voting, in a collaborative manner, in this way making sure that the decision making is transparent and has a wider reach within the Baia Mare community.

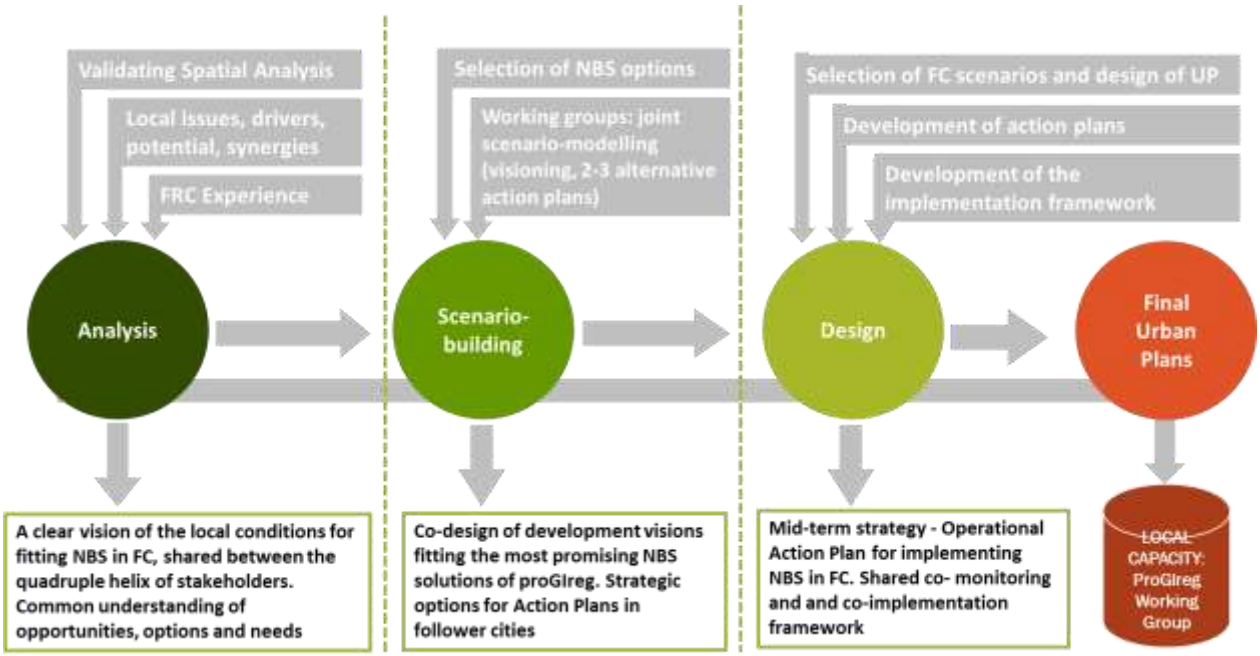


Figure 10 - STATUS co-creation methodological framework

5. STEMBERT, Nathalie, Co-Creative Workshop Methodology Handbook, User Engagement For Large Scale Pilots in The Internet of Things, U4IoT Consortium, 2017-2019

The handbook offers a hands-on methodology to co-create solutions with multi-disciplinary stakeholders. In the case of SPIRE co-creation process, the reviewed document was a good starting point on structuring activities, requirements and checklist. The methodological hand-book is offering a toolkit that has a replicable structure, made of 4 stages: Phase 1 Co-Analysis (determining/defining the solutions in a collaborative manner), Phase 2 Co-Design (solution making part), Phase 3 Co-Evaluation (decision making), Phase 4 Co-Implementation. This structure represents a good approach, that in the case of SPIRE, the steps will be made within certain activities, and not included in one big workshop (what the handbook proposes), because transparency, wider reach and trust building within the community and SPIRE project need more time and a more punctual implementation.

3.1.2 SPIRE co-creation methodological steps

Identification of Problem

In the current context, identification of the problem must revolve around the way the sites are perceived and the way the community interacts with the environment in day-to-day life. The most important part is identifying the functions that are missing from the local neighborhoods and can be integrated into the sites. In order to properly define the issues/necessities, a gradual approach of the community is needed, also due to the fact that the SPIRE is a bold project with complex components. The gradual approach can

be done in steps, informing the community about the project, asking them general questions about the neighborhood and the actual sites, and further enable complex discussions on necessities expectations, wishes, and opportunities. Is important to note that in this stage, the preliminary land-use principles must be taken into consideration, so that we don`t promise something we can`t deliver.

Co-design and Evaluation

After the main issues are formulated and confirmed/agreed upon, the creative process in which ideas and solutions are debated starts. This part of the co-creation process must be well prepared and guided. Also, a gradual approach is needed, step by step, first debating general issues and topics, and then further discuss more detailed and focused issues. In order to move to the next step is important that an agreement is made, so that process is built upon well-laid bricks.

Implementation and Monitoring

In the context of the SPIRE project, implementation and monitoring are a crucial component, because of the experimental character. Regarding the environmental aspect, Key Performance Indicators (KPI) were formulated (D.4.3.2). KPI`s have the purpose of monitoring the ecological and environmental impact of SPIRE initiatives in a scientific and rigorous manner. Regarding implementation as a co-creation activity, is crucial that the local community is part of it. They must be aware of the environmental aspects and to the fact that the actual space is also built for their use and benefit. As mentioned before, the involvement of locals in all stages of designing and implementing is crucial, so that the project is accepted and valued by the community.

Conclusion. These methodological steps are used as guidelines in the organization of co-creation activities. Overall, as a result, the entire co-creation process has 3 categories of activities: 1– Public promoting, 2 – Public consulting, 3 – Public collaborative participation – details on chapter 3.3.

3.2 Stakeholders analysis

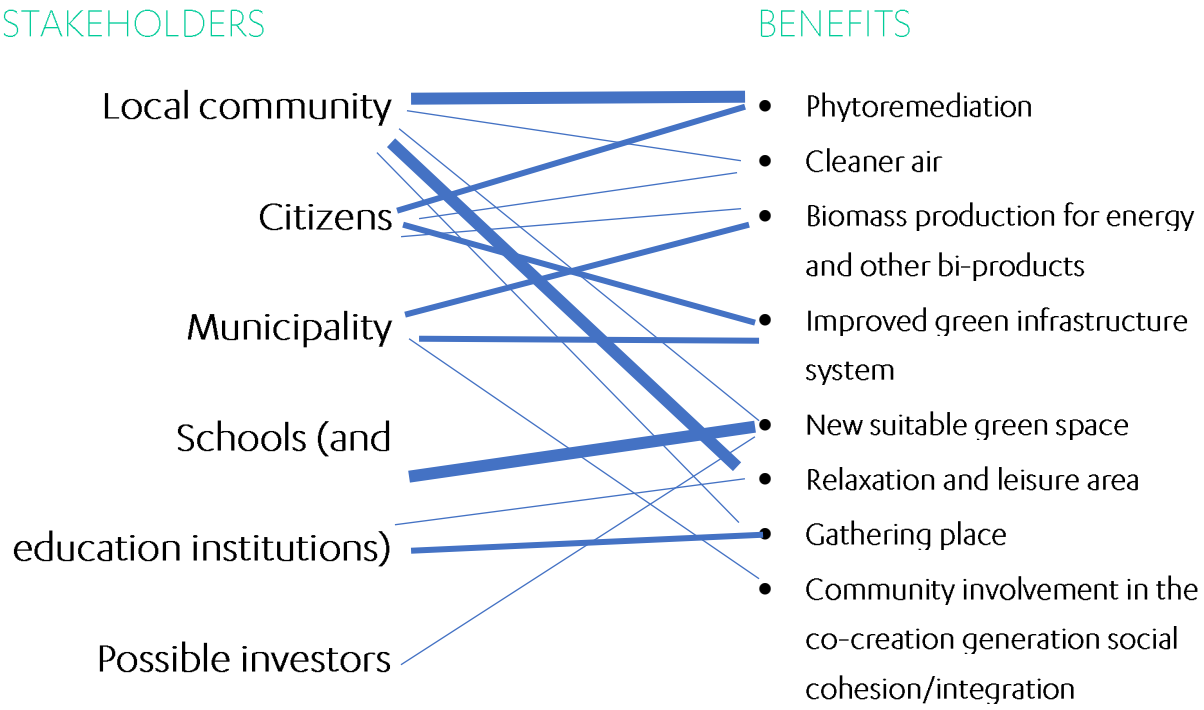
3.2.1 Overview of the stakeholders

Due to the unique nature of the project, the range of stakeholders may involve indirectly a wider group of people or entities. Regarding the co-creation process and phytoremediation through pilots sites the stakeholders' categories are as follows:

- Local community. In this case, the local community is represented by the people living in the neighborhoods in which the pilot sites are located. Is important to mention, that the transforming of the sites will help first and foremost the overall municipality and its inhabitants, due to its ecological nature and the initiative's potential to scale it up to the metropolitan level. Regarding immediate benefits, the neighborhood people are the key facilitators of the new sites. The locals have to be involved in the process of making a place that, directly or indirectly is theirs. Is important to distinguish the different target groups of each pilot site, such as: children, young people, young couples, the elderly, disadvantaged people (as in socially disadvantaged, economically disadvantaged, or people who have locomotor problems - people in wheelchairs).
- Municipality. The municipality as a stakeholder has the purpose of coordinating and ensuring a well-organized implementation. The main objective as a stakeholder in the SPIRE project is the increase in the quality of life of the citizens and the contribution to a new ecological and sustainable day-to-day behavior of the inhabitants.
- SPIRE project members. Project members have the purpose of providing knowledge, experience, also they have the role of implementing the SPIRE aspirations in an operational and effective way.
- Schools and education institutions + Neighborhood Council Presidents. These types of institutions/representatives can act as a medium or a link between project objectives/measures and the key stakeholders of the local community which are represented by young people (age 5-15).
- Possible investors in the proximity. One of the major scopes of the project is to educate and to promote a new ecological and sustainable behavior. This ambition does not apply only to citizens but also to economic and local entities that can make a change. Due to the fact that all sites in the municipality are polluted, existing and future investors developing in Baia Mare Metropolitan Urban Area, can implement planting areas based on the experiments, knowledge, and results of SPIRE phytoremediation processes. Investors do not represent the target audience, but they can be approached (in the communication phase or certain public consulting activities).
- The citizens as a sum. Baia Mare municipality, seen as a big community is part stakeholder, but mainly part of the target group. Even if the key stakeholders are the locals located in the pilot sites neighborhoods, people from all over the city (due to its size) can facilitate from this new public function - especially site Colonia Topitorilor which has a privileged location, close to the center and the beginning of hiking trails.

3.2.2 Relation between stakeholders and benefits of the transformed pilot sites (exercise for SPIRE project team members and also for the rest of the stakeholders involved in co-creation)

Exercise: Connect the items from each column. If you think is necessary, rank the importance of the relations from 1 - relevant to 3 - very important - you can do this by line weight, color, or number the connection line.



This type of exercise has multiple roles. When done by the SPIRE project team, it results in the vocation of the project, starting from which, we can assess if the implementation goes in the right direction. When done by the rest of the stakeholders, we can find multiple things. For instance, the results can reflect the community expectations and wishes, and also it can reflect what kind of impact the public communication and promoting had. If the promoting and public communicating of the project is not well coordinated and organized, the input from the locals cannot be fully exploited. In this case, a good approach is to integrate this exercise in the community workshops in the first stage of co-creation, in order to have a guided discussion (but open, informal) so that the community can understand the value of the project.

3.3 Tools and instruments

3.3.1 Hybrid approach – online and offline

The context of today (due to the pandemic situation) and the complex nature of the project requires a more diverse structure of activities that compose the overall co-creation process. A hybrid approach is proposed, mixing guided activities with free/not constraint activities, and online display and consulting with off-line workshops and promoting. The initial framework of three workshops per site has to transform in order to ensure:

- Public safety, minimizing the risk when possible.
- Coherency and efficiency of the co-creation process, in order to have successful interventions.
- Actively and creatively involvement of the local communities

3.3.2 Main categories of activities that use both online and offline approach

Before making the selection of activities for the co-creation process related to the SPIRE project (meaning co-designing the pilot sites with implication in phytoremediation and encouraging an ecological behavior of citizens and entities in BM), is important to construct the framework on which the process is built upon. This framework
The categories of activities are as follows:

1. Promoting. Is crucial in the first stages of the co-creation process, but also important through-out the project, with the purpose of informing on the general objectives of the project and also informing on the results, accomplishments and future steps and ambitions.
2. Consulting. Must happen after the communication activities, so that the community is aware of the main ideas and approaches. It can be many forms: voting, interviews, deliberations, open discussions, online polls. The consulting activities can revolve around the sphere of identification the problems and also around the design options/creative input sphere, although the first one is crucial in the co-creation process.
3. Participating. Participating activities take place mainly offline, due to the specific criteria of collaborating. These types of activities can be thematic workshops, public debates, community gatherings. In the online environment, the participating activities are more difficult to organize and mediate, but it can happen, and due to a potential wider reach, can also provide valuable solutions and ideas.

Each category uses different types of online and offline activities in order to ensure the best results and overall organization coherence.

3.3.3 Online and offline SWOT regarding benefits in the context of SPIRE project ambitions

In this case, of a mixed approach of mediums in the co-creation process, a preliminary toolkit of potential activities is formulated, divided into the above-mentioned categories: 1 – Promoting, 2 – Consulting, 3 - Participating. The co-creation process needed will mixt online and offline in order to gather the best input and to generate the most impactful reactions. A proposal for mixing those activities is made in the next subchapter - the selection can change according to certain constraints or opportunities.

The fact that the co-creation process must happen in this hybrid way can be a big opportunity because both types of activities have their own strengths and weakness. In order to better understand which are the advantages, a matrix was made in order to assess the potential impact on the implementation phase.

Advantages and Disadvantages on online co-creation potential activities

Advantages	Disadvantages
• It can have a wider reach to people, due to mainstream media; • It has no major time constraints; • The digital medium is ensuring a safe environment; • People can be more honest when there is no peer pressure or fear of public speaking; • Having a wider reach, we can expect surprising ideas or information; • Potentially creating a snowball effect for community engagement, if properly promoted; • Better public display;	• The amount of guidance and input from the managing team can be insufficient in some cases. • Digital activities can be easily ignored; • It can have a low input, due to the lack of open discussion and actually visiting the sites; • Relying only on digital can result in a low activity from the community; • The digital environment has the risk of misunderstanding the project and potentially harming the conduct of other activities; • Due to `trolling` or informed opinions, a bad publicity through informal media can be formed;

- Advantages and Disadvantages on offline co-creation potential activities

Advantages	Disadvantages
• It can result in more engaging activities; • Offline activities have the advantage of guiding the discussion in order to optimize the needed input in the time allocated. • Offline medium Collaborative working on creative solutions. • It can generate social inclusion and bonding within the community • Directly involving the locals is increasing the chances of acceptance of the implementation. • Working in an interactive and organic way, the education part of the project can be more effective.	• If not managed properly regarding COVID-19 safety measures, can increase the risk of spreading the virus; • The offline activities due to low promoting or due to the pandemic conditions can potentially have a low attendance. • Due to material acquiring and catering the activities can be more expensive (but not too expensive). • It is possible to have a non-responsive audience.

3.3.4 Preliminary toolkit

	Categories of activities	Typologies	Role and general explanations	Id. of problems	Id. of needs/ wishes	Educating and promoting the ecological behavior	Potential impact	Creative input	Engaging level	Total score
		Minimum score – maximum score		1-10	1-8	1-8	1-6	1-8	1-10	maximum 50
online	PROMOTING	**Online communicating the project through mainstream media**	The SPIRE project and the initiative of involving people from Baia Mare must be well advertised and promoted.	0	0	4	5	0	3	12
		Announcement of steppingstones in the co-creation process on municipality website	Announcements on the municipality website makes it more official, even if the reach is not as big as mainstream media – official SPIRE Facebook page.	0	0	4	6	0	3	13
	CONSULTING	Voting activities	It can be part of the questionnaire and also part of the co-creation process when deciding on design options. Polls can be an independent part in the co-creation process	6	4	3	3	4	5	25
		Online deliberation/consultations	The locals are asked for their opinion or preferences, but they are also asked questions regarding the existing problems.	10	6	6	4	2	7	35
		Online Questionnaire	In the current context questionnaire can play a major part in the co-creation process. It is recommended to have at least 2 stages.	8	6	6	5	2	5	32
	PARTICIPATING	Online debating	It can be organized as a mediated chat room using platform such as ZOOM. It can provide useful information but it's not very practical, due to `digital` filter.	8	8	8	4	4	6	38
		Gamification of the co-design	Use software and games for a creative process. It can be guided and open to all citizens. The results must be disseminated and critically chosen, but also transparent.	2	6	4	6	8	10	36
		Collaborative platform for collecting problems and ideas	As organization it can happen similarly to online deliberation/consultations, but must happen as a follow up to consultation, with prior registration and focused on creative solutions and ideas.	6	5	8	5	4	10	38
		Online Workshops		8	7	7	5	5	8	40
offline	PROMOTING	**Banners and panels with information on SPIRE project and co-creation involvement**	A mandatory component. It is important to announce the implementation and co-creation process in the public environment, in the most circulated areas and also on respective pilot site. Can be done in an unconventional way to gather information from the public.	2	2	3	4	1	4	16
	PROMOTING	**Flyer distribution**	A mandatory component. It can happen within the key areas (pilot site's neighborhood) and also in the public environment if possible. It can be done in an unconventional way, to be more engaging, creative.	1	1	3	3	1	3	12
	PROMOTING	**Contacting public institutions**	A mandatory component to engage stakeholders.	1	1	2	2	0	1	7
	PROMOTING	**Contacting the local communities and inform about the project**	Contacting the locals in the proximity of the pilot sites is very important – the activity should be just flyer or questionnaire distribution. The goal of this activity is to inform, engage and raising awareness – making people understand that the pilot sites will be transformed for them, and they should take a stand in how it should transport (first is important to communicate the initial vocation of the sites – phytoremediation and biomass production)	4	4	4	6	1	2	21
	CONSULTING	**Hard copy questionnaire**	Can work in the case of workshops, at then or beginning of the activity. Another option is to share them in public institutions so that it can be easily collected.	7	6	5	5	4	5	32
	CONSULTING	Community open discussions	An important part of the co-creation process, especially in the first stages. It is important to ensure overall safety in the case of organizing such activities. As a recommendation is important to attract people with something - small catering and engaging activities. For these types of activities is important to know which are the target groups.	10	8	8	6	4	8	44
	CONSULTING	Interviews		10	7	6	5	3	5	36
	PARTICIPATING	**Workshops**	Crucial for generating creative solutions. Also, the active involvement of the community in the decision making has the benefits of better acceptance of the project. It must happen at least twice, regarding different thematic – 1 Identification of the problem, defining the needs and necessities/ 2- Creative solution workshop – co-design activities	10	8	8	6	8	10	50
	PARTICIPATING	**Gamification of the co-design – guided**	It can happen as a workshop, life, guided – recommended to be organized in schools. The collaborative part must be guided so that students understand the problems and necessities, and then the collaborative part can be done in teams.	5	6	6	4	8	10	39
	PARTICIPATING	Participate in implementation - actual planting and building	Volunteering in building activities can educate and also generate social cohesion and bonding within the community. Is important that the locals realize that the space is for them, also made by them.	1	2	8	6	2	10	29

3.4 PROMOTING: methodology/requirements

Promoting and overall transparency is major part of the project. It is important to communicate to the public, so that the community involvement part can happen in a bigger number, and also in order to ensure that the educational part, regarding ecological behavior, has success.

Review on potential activities:

Online communicating the project through mainstream media/ Announcement of stepstones in the co-creation process on municipality website/ Banners and panels with information on SPIRE project and co-creation involvement/ Flyer distribution/ Contacting public institutions, Contacting the local communities and inform about the project.

General methodology/requirements:

As mentioned before, the promoting part will happen as a regular and constant activity, in order to involve more people and to keep a relevant level of awareness and engagement of the local community. It will happen in both digital environment (through media, announcements, regular and relevant post on the current stage of the project) and in the public space (through flyers, banners, panels).

The promoting activity can be part of the others steps of the co-creation process and community. Public informing can be an engaging part in the case of creating engaging disseminative materials, replacing conventional flyers with games (in form of puzzles, or game cards) which makes people to actively contribute with ideas.

Activities requirements for the entire set of potential options:

- Simple and attractive form of presenting information
- General overview of the project and some details on current stage
- Creative form of disseminative materials
- Engaging motto/titles and engaging graphics
- Regular and constant update
- In the case of other activities in the co-creation process, promoting and informing will happen in the beginning

3.5 CONSULTING: methodology/requirements + QUESTIONNAIRE

Public consulting gained new approaches, digital environment options being the solutions which are easily accessible and have a wider reach. In this subchapter an overview of potential activities and general methodology is made, followed by a more in-depth guideline for the **questionnaire,** which represent an important part in the co-creation process.

Review on potential consulting activities:

Voting activities/ Online deliberation, consultations/ Online Questionnaire/ Hard copy questionnaire/ Community open discussions/ Interviews

General methodology/requirements:

Consulting part concerns activities that involves the community in different ways, each option having a different approach and slightly different output from citizens. Either way, the consulting part is a major steppingstone in the co-creation process, being the bases on which the co-design solutions can emerge and be built upon. Between consulting and participating there is a fine line that in the case of certain activities (**like interviews, and community open discussions**) is crossed, because the community can actively provide feedback, ideas - conclusions, output that is influenced by the way the activity is guided.

Activities requirements for each set of potential options:

Interviews	Community open discussions/ Debates/ Online deliberation, consultations	Voting activities	Questionnaires
☐ Establish trust before asking questions ☐ Inform about the project and the goals ☐ Guide the interviews, but allow for free speak ☐ Provide graphic materials for better understanding	☐ Prepare: who is the target audience ☐ Provide topics ☐ Guide the discussion according to the topics ☐ Have an attractive element – video, games, etc... ☐ Allow for free speech and interaction between the locals	☐ Voting on issues and priorities ☐ Voting on solutions provided by the co-design activity ☐ Voting on the overall expectations or impact	☐ Gradual and well-thought-out structure of questions related to the project objectives ☐ Prepared in stages and adjusted after the first outputs and outputs from other activities

3.6 PARTICIPATING: methodology/requirements + organizational framework of dedicated workshops

Review of potential participating activities:

Online debating/ Online Gamification of the co-design/ Collaborative platform for collecting problems and ideas/ Workshops/ Gamification of the co-design – guided/ Participate in implementation - actual planting and building

General methodology/requirements:

The participating potential activities are more focused on solutions and ideas. The overall share of focus areas of this component is mainly 30% on defining the problem and 70% on creative output. The previous category, consulting, is 70% focused on defining the problem and 30% on possible solutions. Due to the wide reach of the consulting part (is important to gather input from as many people of the target groups as possible), this category cannot have a more in-depth collaborative approach regarding defining the solutions. For this reason, the participating part also includes as an introduction for each potential activity, an exercise of defining the problem or a short presentation of the past results.

Activities requirements for each set of potential options:

Online and offline Gamification of the co-design	Collaborative platform for collecting problems and ideas	(Thematic) Workshops (online or offline)	Gamification of the co-design (open and guided)	Participate in implementation – actual planting and building
☐ Easy to use platforms ☐ Provide a creative guideline for the users (related to the project objectives) ☐ In the case of guided activity (as a workshop) working on teams is recomended	☐ Easy to use ☐ Short term for contributing (keeping relevance and avoiding `trolling`)	☐ Engage the target audience ☐ Provide visuals and attractive presentations ☐ Don't overcomplicate the tasks ☐ Generate interactions and	☐ Easy to use ☐ Has a tutorial ☐ Activity must be rewarded ☐ Has to be transparent – solutions displayed to the public through SPIRE website	☐ Make it an entertaining activity ☐ Young people are the main group of people that have to be involved ☐ Allow for personalization

3.7 Workshops and related activities framework of the entire co-creation process – proposal Plans of Attack

For this chapter check Annex 2 Preliminary Plans of Attack of Co-creation Process.

The initial structure of 3 workshops per pilot site had to transform in order to ensure safety, efficiency and goals achievement.

The proposed framework has 2 option of Plans of Attack, Plan A – Hybrid approach 50-50 (online and offline) and Plan B – Hybrid approach 80-20 (online and offline). The frameworks have a gradual approach of activities, with the promoting component being a recurrent activity needed to ensure a relevant involvement, engagement and public display.

Plan of Attack A – Hybrid approach 50 – 50 principles: The plan is divided in 3 workshop packages, first one is focused on identifying the problems for all sites, the second one is focused on solution making grouping target groups and sites (sites Colonia Topitorilor + Urbis, sites Romplumb + Ferneziu and site Craica). The last workshop package is focused on place building, involving the community as volunteers (is also important to involve them in the actual work, so they start to value more the spaces).

Plan of Attack B – Hybrid approach 80 – 20 principles follows the same methodology as Plan A, but with the difference that major gatherings and offline workshops will be organized online. With the help and information from similar projects presented in the second SPIRE Webinar *Co-creation in times of social distancing*, we have the tools and knowledge of organizing engaging and creative activities in the digital environment.

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