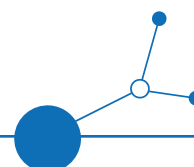


INNOVATIVE METROPOLITAN PROTOTYPING



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A. Innovative Metropolitan Prototyping

1. Initial information about the new solution

Study cluster and the members developing a new solution	<p>This new solution has been developed within the study cluster “Metropolitan Prototyping Academies - Innovative cooperation and transferability locally and internationally”.</p> <p>It is based on the experience gained through the realisation of pilot action by the Ostrava Metropolitan Area and the Stuttgart Region. The lighthouse metropolitan area of the study cluster, the GZM Metropolis, as well as the scientific partners, the University of Silesia (Katowice) and Charles University (Prague), gave feedback and input to the development of the new solution.</p>
The pilot action tested, and the tool chosen	<p>Tool: Metropolitan Prototyping Academies (GZM Metropolis)</p> <p>Pilot action: Participatory approach to transforming metropolitan territories in the Ostrava Metropolitan Area and the Stuttgart Region</p>
The new solution	Innovative Metropolitan Prototyping

2. The concept of new solution

Description of new solution	<p>The core of this new solution is to develop prototypes for current metropolitan challenges. These can include public transportation, energy supply, climate adaptation, improving the quality of public space, digitalization and adaptation to new technologies, challenges connected to demographic changes, migration, integration and the housing market, as well as newly rising challenges that cannot be foreseen yet.</p> <p>The prototypes are</p> <ul style="list-style-type: none">- developed in the metropolitan dimension, then- tested on an urban scale, broken down to local conditions,- then upgraded back to the metropolitan level. <p>Through a well-prepared and moderated series of workshops, involving the whole range of all relevant multi-sector stakeholders from all over the metropolitan area, raising their creativity and collective problem-solving capacity, a prototyping concept (e.g. a</p>
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	<p>thematic metropolitan strategy or guidelines for further settlement-development or new governance approaches) is developed.</p> <p>Methods of data collection (qualitative and quantitative data) and data analysis will be used simultaneously to the interdisciplinary workshops. The collection of data can have the form of surveys (online and/or printed questionnaires), structured interviews with local and metropolitan stakeholders and/or with engaged activists, systematic on-ground observations, on-site documentation or the evaluation of previous research.</p> <p>The prototyping concept is first to be tested and evaluated in different cases within the metropolitan area, e.g. in different local authorities. Based on the evaluation of the prototyping concept, a new solution (a final concept) for the metropolitan challenge is developed.</p>
Main elements	<p>The main elements/steps of the new solution are:</p> <ul style="list-style-type: none"> ■ Identifying a metropolitan challenge (e.g. development of affordable housing, public transportation, mitigation of urban sprawl, the need to strengthen city centres, improving the quality of public space, the need to reorganize the energy supply on a regional scale, waste management etc.) that cannot be tackled at single municipal level. The challenges will be identified in workshops and working groups, or they can be indicated by previous participatory activities or by surveys. ■ Developing a prototyping solution in a participative way with relevant stakeholders through a series of workshops, supported by data collection and evaluation. The prototype solution will be a concept, a strategy, a joint approach or metropolitan guidelines. <p>One or several interdisciplinary teams are established by institutions responsible for metropolitan cooperation in each MA. The task of these interdisciplinary teams is to develop the prototyping concept. These expert teams are interconnected, interdisciplinary, mixed groups of different specialists, local politicians, influencers, civic activists and active inhabitants from diverse branches.</p> <p>The interdisciplinary teams /working groups are a tool for interactive approach to metropolitan problems. They provide the platform for the application of different know-how to common challenges. They provide the chance for professionals from different branches and stakeholders from different parts of the metropolitan area to get to know each other, but also to include</p>



	<p>possible opponents from the very beginning and to listen to their opinions.</p> <ul style="list-style-type: none"> ■ Testing the prototype in one or several exemplary cases in different municipalities to verify and approve the concept with local stakeholders. After the testing phase, an evaluation phase follows, where the prototype concept is to be adjusted, modified or complemented according to the results of the testing phase. ■ This leads to setting up a final approved concept, strategy or guidelines on how to solve or approach the challenge for the whole metropolitan area.
Innovativeness and uniqueness of new solution	<p>The Innovative Metropolitan Prototyping:</p> <ul style="list-style-type: none"> ■ further develops traditional planning methods by applying a bottom-up approach, ■ upgrades the original concept of Prototyping Academies by applying it to metropolitan challenges, involving metropolitan stakeholders and providing metropolitan answers, ■ focuses on identifying the challenge, not immediately thinking of solutions (solutions, which seem to be the obvious way to solve the problem), ■ provides a platform for exchange among different stakeholders, ■ enables the stakeholders to think in a different way, to change their perspective, to be creative, ■ fosters interdisciplinary cooperation, ■ gets you from theory to practice, ■ mobilises the development of metropolitan areas.
Improvement of the selected tool	<p>Compared to the original Prototyping Academies tool, the new solution goes one step further. It directly tackles challenges that should be addressed at a metropolitan level. It is meant for problems, which have a metropolitan dimension (not only single on-site problems / local problems), and it provides metropolitan solutions which can be a plan, a strategy, an approach etc. that is supported by all metropolitan stakeholders, expresses a common understanding and serves as a common metropolitan guideline (rather than a concrete physical intervention in a specific area). After testing and approving the prototype concept on a municipal scale, it provides metropolitan answers to metropolitan or even broader challenges.</p>



3. Joint development and project management

The process of development of new solution	<p>First, the Prototyping Academies tool as presented by GZM Metropolis during a site visit in May 2024 has been evaluated jointly by the Ostrava Metropolitan Area and the Stuttgart Region between December 2024 and March 2025.</p> <p>Second, both piloting partners brainstormed separately on how to develop a new solution.</p> <p>In several online meetings and via the joint work on shared documents with all partners in the study cluster, various ideas were presented, discussed, and refined together, ultimately leading to the development of a new joint solution.</p> <p>During a transnational meeting in Berlin, in February 2025, the new solution of the “Innovative Metropolitan Prototyping” was presented and discussed with the whole MECOG-CE consortium.</p>
Methods of work	<p>Online meetings with all partners within the study cluster (Ostrava, Stuttgart, GZM, Brno as WP leader, scientific partners) to put ideas together and develop a new solution jointly.</p> <p>Joint work on shared documents.</p> <p>World café discussions during transnational partner meeting in Berlin.</p>
The reflection of the initial work set-up and time plan	<p>The partners defined the tasks collaboratively (regular online meetings, offline work on this sub-report, consulting the sub-report draft with the partners and adapting it after common discussions) and the timeline. The original activity framework was adhered to, with the time plan carefully monitored, thanks to the strong commitment of the project team. Both the planned procedures and the projected timetable were realistic and successfully followed.</p>
Problems and deviations	<p>No serious problems or deviations occurred. The team maintained constant and constructive communication.</p>

4. Strengthening metropolitan cooperation and governance

Impact on metropolitan cooperation and governance	The Innovative Metropolitan Prototyping breaks out of traditional thinking in local dimensions.
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	<p>By identifying problems, considering tools to be applied, inviting active citizens and involving metropolitan stakeholders, the transferability of the adopted work plan between different municipalities within a MA or between different MAs will be overviewed and monitored. The metropolitan thinking is constantly present.</p> <p>Besides the development of metropolitan solutions, the consequent inclusion of a broad range of metropolitan stakeholders and their joint work in interdisciplinary teams is a chance to gain social capital for all participating experts and stakeholders.</p> <p>Due to the testing of the Prototyping Academy tool in two MAs solving different challenges, the new solution is replicable on different levels.</p> <p>New solutions at the city quarter / urban level help to strengthen metropolitan cooperation (transfer/exchange of good practice to/between cities in the metropolitan area, creating an inclusive space for cooperation and establishing informal networks).</p> <p>New solutions at the metropolitan level provide a guide for the whole metropolitan area. This type of new solution is suitable for MAs with stronger metropolitan governance.</p>
Involvement of metropolitan stakeholders	<p>Within the Innovative Metropolitan Prototyping, multiple teams of metropolitan stakeholders are established to develop the prototyping concept. These expert teams are interconnected, interdisciplinary, mixed groups of different specialists, local politicians, influencers, civic activists and active inhabitants from diverse branches.</p> <p>The interdisciplinary expert groups are a tool for interactive approach to metropolitan problems. They provide the platform for the application of different know-how to common problems. They provide the chance for professionals from different branches and stakeholders from different parts of the MA to get to know each other, but also to include possible opponents from the very beginning and to listen to their opinions.</p>
Contribution to the Common Metropolitan Vision	<p>As the Common Metropolitan Vision states, the Metropolitan areas function as daily socio-spatial ecosystems, where most social interactions and connections take place. Metropolitan areas are engines of innovative development with far-reaching effects, beyond their borders.</p> <p>The tool of “Innovative Metropolitan Prototyping” contributes to the Common Metropolitan Vision by advancing inclusive community-</p>



	building in metropolitan societies and areas, maximizing the positive impacts of societal processes in metropolitan areas, contributing to the prosperity and quality of life of their inhabitants, strengthening and developing civic engagements and metropolitan governance and by emphasizing the empowerment of the metropolitan dimension in Europe.
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5. Replicability to other metropolitan areas

Replicability to metropolitan territories	<p>This new solution is led by the fact that metropolitan areas become the new reference points for global problems. Metropolitan urban areas are the ideal space for identifying problems, testing them in practice and developing solutions transferable to other metropolitan areas, regions or conurbations.</p> <p>Other metropolitan areas can easily replicate values and procedures such as a combination of quantitative and qualitative techniques. They can use it in topics like affordable housing, public space, spatial development etc. They can replicate them with a broad involvement of stakeholders (including possible opponents).</p> <p>Each element and step of the new solution is highly replicable as it is not strongly based on the context of a particular MA. This is enhanced by the fact that this new solution was drafted by two metropolitan areas with different context so that the replicability of this solution is inherent.</p>
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6. Uptake of new solution

Uptake of new solution	<p>Via the new solution, prototyping guidelines will be developed in a multi-stakeholder approach. These guidelines will be developed through a series of workshops with a range of metropolitan stakeholders starting with the identification and definition of the metropolitan challenge.</p> <p>The new solution can be viewed as a “cookbook”, where the details are up to each metropolitan area to add. The implementation in both metropolitan areas, which were involved in the development of this new solution, will be launched in 2025 and will be completed after the closure of the MECOG-CE project.</p>
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	<ul style="list-style-type: none"> ✓ In the Stuttgart Region, the new solution will be used to tackle the metropolitan challenge of developing affordable housing. The experience gained through the pilot action on sustainable industrial areas will be upscaled to the regional level and used for the challenge of developing areas of sustainable and affordable housing. ✓ In the Ostrava Metropolitan Area (OMA), Innovative Metropolitan Prototyping will be used to address the metropolitan dimension of the problems identified in public space in prefabricated housing estates. Local proposals will be combined with priority challenges and proposals from other cities in the OMA, as discussed in the Regional Stakeholder meeting and combined into a metropolitan cookbook / a handbook with examples of good practice. This metropolitan handbook might be submitted to a relevant OMA authority with metropolitan impact or to all OMA cities for their convenience.
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7. Summary of new solution

Summary	<p>Our new solution, the Innovative Metropolitan Prototyping, is designed to develop prototypes for addressing pressing metropolitan challenges. These challenges might span across public transportation, energy supply, climate adaptation, digitalization, demographic shifts, migration, integration, housing markets, and unforeseen emerging issues.</p> <p>The core innovation lies in the structured, multi-stakeholder prototyping process. Through a series of well-moderated workshops, engaging a broad spectrum of metropolitan stakeholders, creative and collective problem-solving capacities are harnessed. The result is a prototyping concept, such as a metropolitan plan, strategy, development guidelines, or governance approaches, that tackles challenges on a metropolitan scale rather than isolated local issues.</p> <p>Unlike the original Prototyping Academies tool, this new approach focuses on metropolitan-level challenges from the outset. It fosters a metropolitan perspective by testing and evaluating prototypes by different local authorities before scaling them up to</p>
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provide a metropolitan solution. This **ensures a common metropolitan guideline** supported by all stakeholders.

By integrating qualitative and quantitative data collection methods, such as surveys, interviews and systematic observations, the solution builds a strong evidence base for decision-making. Additionally, by continuously involving **a broad range of metropolitan stakeholders**, it fosters social capital and strengthens informal networks for sharing best practices across the metropolitan area.

The new solution is **designed to be highly transferable**. The methodology, which combines interdisciplinary collaboration with structured data analysis and testing, can be applied to various metropolitan challenges. The interactive approach, where guidelines are tested, refined, and scaled, ensures **adaptability across different metropolitan contexts**.

By piloting the tool in two different metropolitan areas and tackling different challenges, the new solution is ready for broad applicability. It is a “**cookbook**”, **providing steps while allowing flexibility for various metropolitan areas to adapt the process to their specific needs**.

In the Stuttgart Region, the new solution will be used to face challenges in the housing market and to develop possibilities for **affordable housing**. In the Ostrava Metropolitan Area, the new solution will be applied to diverse metropolitan topics, including the need to reframe the housing conditions in socially challenged housing estates and to create a city-wide mixture of **housing, leisure and business**.