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MECOG-CE

ACTION PLAN for the Stuttgart Region

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Executive Summary

Rationale

The Regional Plan (Regionalplan) is the central strategic instrument guiding spatial development, urban growth, industrial land use, and environmental protection in the Stuttgart Region. As economic, demographic, and ecological conditions change continuously, the plan must be updated regularly. The current plan dates from 2009, making a revision both timely and necessary.

The Action Plan outlines four strategic actions to improve how the new Regional Plan, particularly Chapter 1, which contains the overarching objectives and principles, will be developed. This update aims to modernize the metropolitan strategy of the Stuttgart Region, ensuring resilience, competitiveness, and sustainability in the face of significant structural transformations.

Action 1: Introduction of New Digital Planning Instruments

This action focuses on the creation of a digital twin of the Stuttgart Region. A digital twin is a virtual, dynamic model of real-world systems used for analysis and decision-making. In regional planning, the digital twin will differ somewhat from classic real-time sensor-based models. Its purpose is to support strategic planning at a regional scale, helping visualize spatial scenarios, simulate planning outcomes, and improve evidence-based decision-making.

Action 2: Structured Stakeholder Engagement in Goal Definition

Updating Chapter 1 requires input from all relevant public-sector stakeholders, including municipalities, technical and sectoral authorities and external experts from academic institutions and chambers.

The Stuttgart Region comprises 179 municipalities, ranging from small villages to larger cities. While municipalities often perceive regional planning as restrictive, designated areas for commercial or residential development often remain unused. Local interests and possibilities must therefore be considered from the outset of the updating process.

Involving technical and sectoral authorities and experts ensures that the updated plan is legally robust and fact-based, and takes into account scientific, environmental, infrastructural and economic considerations.

Relevant stakeholders will be involved via a series of workshops supported by external moderation. Techniques such as world café discussions, round tables and mapping exercises will be used to engage stakeholders.

Action 3: Citizens' Forum

The Citizens' Forum is a participatory event designed to increase transparency, improve public understanding of regional planning, gather citizen perspectives, and facilitate dialogue between residents, planners, and policymakers.

Many citizens know little about regional planning's purpose, tools, or legal basis, making conventional surveys ineffective. Complex planning topics cannot be reduced to simple yes/no questions.

The forum will invite randomly selected citizens, taking into account demographic criteria such as gender and age. Participants receive thorough information before providing nuanced, reasoned input. The process is informal and non-binding, and the final report summarizing citizen perspectives will support the plan update. This approach also helps diversify participation, counteracting the tendency for older men to dominate traditional public meetings.

Action 4: Innovative Metropolitan Prototyping

Innovative Metropolitan Prototyping is an innovative, flexible, participatory tool to explore one strategically important topic for the Stuttgart Region. It complements formal planning by allowing stakeholders to jointly develop and test ideas before they are integrated into policy.

The core element is broad stakeholder involvement. Depending on the selected topic, participants will include municipalities, politicians, companies, employees, property owners, residents, NGOs or educational institutions. They jointly work through all phases of the prototyping process, from identifying the challenge to developing and piloting solutions.

By integrating this tool, the Stuttgart Region aims to strengthen its capacity to navigate transformation and encourage innovation. Prototyping helps build shared understanding and produces practical insights, contributing to the region's long-term resilience, economic strength and quality of life.

Conclusion

The Action Plan lays out a comprehensive, future-oriented framework for updating the Regional Plan. By combining digital innovation, stakeholder and citizen participation, and experimental metropolitan prototyping, the region aims to create an updated goal setting that reflects current challenges, supports resilient development, and strengthens the Stuttgart Region as a sustainable living and economic space.

Introduction

The Regional Plan (Regionalplan) serves as the basis for spatial planning and urban and industrial growth within the planning regions in Germany.

To keep up with continuing economic, demographic and environmental developments in the Stuttgart Region, the Regional Plan needs to be updated regularly.

The latest regional plan came into force in 2009.

This Action Plan defines four major actions that will be implemented to improve the process of developing a new regional plan within the next years.

The Action Plan focuses on the collaborative development of the strategic guidelines (objectives and principles) of the Regional Plan (Chapter 1).

The Strategy for Strengthening Metropolitan Cooperation and Governance (D.3.1.2) that has been developed within the MECOG-CE project defines six aspects of metropolitan governance:

- Political agreement on metropolitan cooperation and governance
- Political decision-making systems
- Financial Schemes
- Thematic areas of metropolitan cooperation
- Stakeholder involvement including collaborative planning, data sharing and digital platforms
- Monitoring and evaluation

Regarding the Verband Region Stuttgart, the first four aspects are already widely established:

Political agreement:

The Verband Region Stuttgart (VRS) was established in 1994 by a public law following legislation adopted by the state of Baden-Württemberg.

Political decision-making system:

The political decision-making entity of Stuttgart Region is the regional assembly which is elected every five years directly by the region's citizens.

Financial schemes:

VRS has a financial scheme clearly defined by law. It obtains its income from two sources: levies and donations/allocations (e.g. regionalization funds for the commuter

rail system). VRS can levy fees in accordance with the provisions of the Local Taxes Act. VRS has the right to collect the following three levies from districts and municipalities of the region:

- General association levy (for the 179 municipalities)
- Transportation levy (for the urban and rural counties involved in the VVS Public Transportation Association)
- Waste levy (for urban and rural counties). VRS charges the city of Stuttgart and the districts a levy for its waste disposal costs that are not covered by user fees.

Thematic areas of cooperation:

VRS is responsible by law for regional planning, regional public transport (responsibility for the S-Bahn), regional transport planning, landscape planning, Landscape Park Stuttgart Region (a public funding scheme for the development of open spaces), business development, tourism development and waste disposal. In addition, the region is voluntarily involved in other sectors such as sports and culture and the trade fair. All major metropolitan topics are thus already covered by VRS and don't leave much space for further improvement via this action plan.

However, regarding aspect 5 – Stakeholder Involvement, potential for further development can be seen. Two actions of this Action Plan will thus focus on stakeholder involvement, shared decision-making, participatory approaches, and the inclusion of informal dialogues into the process of metropolitan governance. Action 2 will involve municipal stakeholders and external authorities, Action 3 consists in the organisation of a citizens' forum.

Regarding aspect 6 - Monitoring and Evaluation, the VRS has recently published a new online tool monitoring relevant data on labour market, businesses, education, economic strength, innovation, demographics, finance, energy transition and social infrastructure. This data dashboard, as well as the concomitant report on structural development contains a broad database on Stuttgart Region and its local authorities, as well as benchmarking to other German regions, and monitors the effects of Stuttgart Region's policies. It defines recommendations for the alignment of future policies.

Monitoring and evaluation are thus well established and up to date, but a chance is seen in using new technologies as a basis for planning decisions. Developing a digital twin of Stuttgart Region will be one of the actions described in this Action Plan.

Action 4 will incorporate a tool that has been developed jointly with the MECOG-CE partners: the Innovative Metropolitan Prototyping.

All four actions will contribute to preparing the update of the Regional Plan. The Regional Plan serves as the metropolitan strategy of Stuttgart Region. Chapter 1 of the Regional Plan sets out the objectives and principles for the desired spatial development of the Stuttgart region. It includes a fundamental mission statement, innovative approaches, thematic objectives and principles for the development of the region as a living and economic space. The current regional plan was adopted in 2009. It is appropriate to reflect on and update the objectives and principles set out at that time.

The following actions are defined for the preparation of the update of the Regional Plan:

- Action 1: New Digital Planning Instruments
- Action 2: Stakeholder Engagement in Goal Definition
- Action 3: Citizens' Forum
- Action 3: Innovative Metropolitan Prototyping

Action 1: New Digital Planning Instruments

Action 1 consists in elaborating a digital twin of the Stuttgart Region.

A digital twin is a dynamic, virtual copy of a physical object, process, system or environment that is connected to its real-world counterpart through real-time data from sensors. This digital replica enables monitoring, analysis, simulation and optimization of the real system or object. Digital twins are used in various fields such as manufacturing, healthcare and urban planning to improve performance and facilitate decision-making.

However, on regional level the definition is somewhat different: Real time sensoring is less important and the scope is adapted to the regional scale.

1.1 Needs assessment for Action 1

The basis of any planning is the monitoring of the status quo. For Stuttgart region, a wide variety of spatial data sets is already available. In addition, data on demographic and economic development, transportation and climate are also available. Information is provided by several public authorities and private sources, while some is generated in-house or commissioned for collection.

Currently, the data used in planning is not automatically updated, is not linked to relevant sources, and must be further processed, analyzed, and interpreted by experts. Moreover, data is provided in different, not standardized formats. The first climate atlas of Stuttgart Region for example was published in 2008 as a printed book. This kind of data is not inter-operable and cannot be processed together with other information.

With the regional digital twin, data shall be systematically collected, automatically updated and easily integrated in planning and decision-making procedures. This approach is not limited to regional planning but provides an additional value also on local level. The proposed tool is designed to support local land-use-plans and urban development concepts as well. This also contributes to the coordination and integration of local and supra-municipal plans. It is expected, that the introduction of this tool improves transparency of planning procedures, illustrates and facilitates political decision making, improves legal compliance and increases the efficiency of procedures in general.

Action 1 is targeted to develop a digital twin according to the afore mentioned specifications and to provide necessary data. This will also comprise the integration of models to provide foresight, esp. in the fields of demographics, ecological performance,

transport and climate. Due to the importance of this tool for formal decision-making, the digital twin must be legally compliant.

1.2 Stakeholder Engagement and Governance for Action 1

The Digital Twin of the Stuttgart Region will be developed in a quadruple helix approach.

Government and politics

The development of New Digital Planning Instruments is based on decisions of the directly elected regional assembly and its committees. The planning committee voted for the development of the Digital Twin and its implementation.

Governmental partners at state level (e.g. Ministry of Transportation) and cities / local authorities are involved (e.g. Department for Urban Climatology, City of Stuttgart). Partners within national and international networks are invited to contribute to the development process.

Academia

Expertise from different academic institutions (e.g. IREUS University Stuttgart, IMK Karlsruhe Institute of Technology, IÖW, DIFU) is integrated in the development process.

Civil Society

Transparency and comprehensibility are key issues for the use of the digital twin. Therefore, the feedback from this group of users is a top priority. Elements are tested on several occasions, and the results are used to improve and optimize the development of the tool.

In addition, relevant NGOs will participate in the elaboration process according to their relevant thematic specifications.

Private Sector

The tool is developed in close cooperation with a private consultant.

1.3 Implementation of Action 1

The action will be implemented via the following steps and milestones:

Short term (by the end of 2026)

- Definition of aims
- Identification of stakeholders
- Setting up a working group of stakeholders
- Data collection and preparation
- Cost estimation for the technical development of the tool

Medium term (by 2029)

- Developing algorithms and methodological background for data procession in selected use cases (e.g. cost utility analysis)
- Technical development of the tool
- Several test runs in outreach activities and cooperation with municipalities, other public stakeholders, civil society and NGO's
- Feedback loops, modification and further development of the tool

Long term (2029+)

- Integration in formal planning and decision-making procedures (Planning Committee and Regional Assembly)
- Usage for providing service for local planning procedures and outreach activities

1.4 Funding and Resource Mobilization for Action 1

The development of the digital twin will mainly be paid from the original VRS budget. The main costs for the technical development of the tool will have to be foreseen in the budgets for 2027-2029.

The overall costs cannot be precisely quantified yet. A cost estimation has to be realized in the first phase of the project in 2026.

An essential part of the digital twin's data, the climate atlas, will be updated as part of the ongoing ISAP II project, which means that funds from the Federal Ministry of Research, Technology and Space under the 'Research for Sustainable Development (FONA)' programme will contribute to the elaboration of the action.

Maintaining the digital twin up to date is expected to cost at least €50,000 per year. These maintenance costs will be financed via the Region's annual budget.

1.5 Monitoring and Evaluation for Action 1

The implementation of Action 1 will be monitored and evaluated along the following measurement framework. It helps to monitor progress, define responsibilities, and evaluate the impact of the regional digital twin at both local and regional levels.

A. Data Update Frequency and Automation Rate

Objective

Ensure that data in the digital twin is systematic, real-time (or near real-time), and reliable enough to support spatial planning, scenario modelling, and legal decision-making.

Key Performance Indicators

- Percentage of data layers automatically updated
- Average update interval per dataset
- Number of data sources fully integrated via Application Programming Interfaces (APIs)

Targets

- ≥ 80% of priority datasets automatically updated
- No critical datasets older than defined freshness threshold
- < 5% monthly update failures

Responsible Stakeholders

- Digital twin IT and data engineering team
- GIS department of Verband Region Stuttgart

B. Integration Rate into Planning and Decision-Making

Objective

Demonstrate that the digital twin is not just a technical tool but a core component of regional and local planning workflows.

Key Performance Indicators

- Percentage of planning procedures using the digital twin (regional and local)
- Number of municipalities actively using the platform

Targets

- ≥ 60% of new local land-use procedures supported by the digital twin
- 100% of regional planning procedures integrating digital twin outputs

Responsible Stakeholders

- Verband Region Stuttgart
- Municipal planning departments
- Digital twin project management team

C. Procedural Efficiency Gains

Objective

Assess whether the digital twin improves speed, cost-efficiency, and workflow quality in planning.

Key Performance Indicators

- Reduction in time spent on data preparation and plan evaluation
- Percentage of reduction in manual GIS/Excel work

Targets

- ≥ 30% time savings in data compilation
- ≥ 25% fewer manual data-processing steps

Responsible Stakeholders

- Verband Region Stuttgart
- Municipal planning departments
- Digital twin project management team

1.6 Challenges and Risk Mitigation for Action 1

Developing a regional digital twin can improve planning efficiency, transparency, and legal robustness, but success depends on managing a handful of key risks and embedding clear mitigation and conflict-resolution practices.

- Technically, the biggest issues are inconsistent or outdated datasets, interoperability challenges with legacy systems, and scaling from pilots to full regional coverage. Without harmonized standards, metadata, and APIs, the twin

risks becoming fragmented; and if the architecture is proprietary or inflexible, costs and lock-in can rise as the system grows.

- Organizationally, resistance to new workflows and techniques, unclear roles, and limited skills can obstruct implementation and adoption.
- Financially, ongoing costs for data quality, infrastructure, and support are often underestimated. Legally and ethically, privacy (GDPR), unclear data-sharing agreements, and the misinterpretation of model outputs as binding can create disputes.
- Politically, municipalities may have diverging interests and be hesitant to share data, and twin outputs can be selectively used to support pre-set agendas.

A disciplined risk assessment can prioritize issues by likelihood and impact, assign ownership, and track indicators such as dataset freshness and completeness, the proportion of planning procedures using twin outputs, user satisfaction, training completion, and lifecycle costs.

Targeted mitigation includes:

- Clear regional data and metadata standards, automated quality checks and audit trails, and practical templates and validation scripts for municipal data.
- Strengthening capacity through ongoing training, playbooks, and change management that communicates concrete benefits (time saved, fewer errors, clearer decisions).
- Establishing governance with designated data owners, and securing multi-year funding for infrastructure, licenses, maintenance, and staffing.
- Applying privacy-by-design (aggregation, anonymization), formalizing data-sharing agreements, and document methods and limitations to prevent over-interpretation of scenarios.

To prevent conflicts in multi-level planning, we will establish mechanisms from the start: a regional steering committee to set standards and arbitrate disputes, technical working groups to coordinate operations, and a political advisory board to align decisions with policy goals.

We will use the digital twin for joint fact-finding, ensuring that traceable data and transparent assumptions clarify trade-offs. We will follow a clear procedure for disagreements: identify the issue, conduct joint analysis, compare options, mediate, escalate if needed, and document outcomes.

We will also involve municipalities early and, where appropriate, provide public-facing dashboards to build trust and show that diverse inputs are reflected in the model. Through

this streamlined approach, we will keep the digital twin credible, widely adopted, and useful—supporting evidence-based, efficient, and coordinated planning across all levels.

Action 2: Stakeholder Engagement in Goal Definition

Action 2 relates to the involvement of all relevant public stakeholders in the elaboration of chapter 1 of the updated Regional Plan. These stakeholders are:

- Municipalities
- Technical authorities at different levels of government
- External experts such as academic institutions and chambers

2.1 Needs assessment for Action 2

The need for an active involvement of relevant stakeholders in the process of elaborating an updated Regional Plan has been seen at the MECOG-CE stakeholders' workshop hold in July 2025.

Municipalities

Many municipal actors experience regional planning as a limitation, even violation of their local right to plan and develop within the constitutional guaranteed home rule.

Stuttgart Region comprises 179 municipalities. The state capital Stuttgart and many municipalities of varying sizes, from small villages to large towns, spread across five districts. Many of these smaller entities are organized in inter-municipal associations, which jointly carry out land use planning. Some, especially larger municipalities, organize their land use planning individually.

Mandatory regulations of the regional plan are – mostly restrictive – guidelines for local development. These regulations are strictly enforced and are important for open space protection etc. The regional plan also provides areas for specific development e.g. residential areas with above average density or specific commercial use. These opportunities are not used many municipalities. As a result, approx. 1.000 ha of commercial and approx. 2.000 ha of potential residential areas remain undeveloped – despite an urgent demand for housing and industrial activities and logistics.

Future regulations on regional level should tackle these obstacles. Therefore, the strategy aims at a mix of instruments and other supportive measures to ensure the development to meet aforementioned necessities.

Technical/sectoral authorities and external experts

It is necessary to involve technical/sectoral authorities in updating the regional plan because they provide specialist knowledge, legal requirements and concrete implementation options. This ensures that the plan is legally compliant, economically viable and factually sound. The authorities provide scientific assessments, examine environmental and legal issues, ensure transparency and acceptance in practice, and help to identify and resolve conflicts at an early stage.

Other external experts e.g. representatives of universities will be involved in the same step.

2.2 Stakeholder Engagement and Governance for Action 2

Municipal stakeholders to be involved are:

- Mayors of all 179 municipalities
- Urban planning departments and building authorities of municipalities and districts
- Employees of other relevant municipal departments – e.g., environment, mobility

Technical authorities to be involved are:

- Ministry for Development and Housing
- Ministry of Transportation
- Ministry of the Environment, Climate and Energy of Baden-Württemberg
- Regional State Authority (“Regierungspräsidium”), Department of Regional Planning)
- State Office for Geoinformatics and State Surveying (LGL)
- State Office for the Preservation of Historical Monuments (Denkmalpflege)
- Neighboring regional planning associations

Other experts to be involved are:

- Universities
- Chambers of Industrie, Commerce and Crafts
- Business and Professional Associations
- Recognized nature conservation organizations
- Representatives of larger regional companies

Municipal stakeholders, technical authorities and other external experts will be involved via a series of workshops. The workshops will be organized and implemented by VRS staff in cooperation with an external moderation. They will use stakeholder engagement techniques such as world café discussions, round tables, and mapping exercises.

2.3 Implementation of Action 2

The action will be implemented via the following steps and milestones:

Short term (by the end of 2026):

- Approaching the communities
- Informing about the launch of the process
- Enquiring about their respective needs

Medium term (by 2028):

- Preparing the series of workshops by analysing and clearly presenting relevant data
- Conducting the workshops in the respective communities (moderated workshops in person)
- Conduction additional online surveys
- Evaluating the workshops and surveys

Long term (2028+):

- Improved cooperation, possible follow-up events
- Personal visits to the respective municipalities: visiting a municipality shows appreciation, face-to-face communication on equal terms improves mutual acceptance
- New digital tools (see Action 1) are used for communication and simulation of relevant factors, plans and strategies

Verband Region Stuttgart is responsible for initiating and moderating the workshops, supported by external moderation.

2.4 Funding and Resource Mobilization for Action 2

The costs for this action mainly consist of personnel costs. In addition, there are costs for an external moderator and, if necessary, costs for renting larger event rooms to hold the workshops. Since updating the regional plan is one of the VRS's mandatory tasks, all costs for Action 2 are covered by the association's current budget.

2.5 Monitoring and Evaluation for Action 2

The implementation of Action 2 will be monitored and evaluated through the following measurement framework:

A. Municipal Engagement Coverage

Objective

- Ensure broad, active participation across all 179 municipalities, reduce resistance to regional planning, and strengthen acceptance of regional development objectives.

Key Performance Indicator

- Percentage of municipalities participating in at least one structured engagement activity (workshop, bilateral meeting, consultation, mapping exercise, survey).

Target Values

- ≥ 85% participation overall
- Balanced participation across municipality size classes and counties

Responsible Stakeholders

- Verband Region Stuttgart

B. Integration of Sectoral Expertise into Plan Drafts

Objective

- Ensure that the regional plan update reflects expert knowledge, legal requirements, environmental considerations, and technical feasibility.

Key Performance Indicators

- Number of authorities having participated in workshops

- Number of expert recommendations incorporated into plan drafts

Target Values

- ≥ 80% participation in workshops
- Clear documentation of how each input influenced revisions

Responsible Stakeholders

- Verband Region Stuttgart

C. Utilization of Regional Development Opportunities by Municipalities

Objective

- Address the core issue: Activate unused residential and commercial areas designated in the regional plan. Engagement activities should lead municipalities to adopt or re-evaluate these areas in their local land-use planning.

Key Performance Indicators

- Number of previously inactive areas now included in local planning intentions
- Identified barriers and number of barriers resolved (infrastructure, environmental constraints, ownership issues, etc.)

Target Values

- 30% of currently inactive development areas receive a renewed municipal commitment or planning intent

Responsible Stakeholders

- Verband Region Stuttgart

2.6 Challenges and Risk Mitigation for Action 2

A successful stakeholder-involvement process must address several risks that could hinder the update of the regional plan.

Potential barriers include low municipal engagement due to concerns about losing local autonomy, and delays caused by overburdened sectoral authorities.

To manage these risks, the strategy focuses on clear assessment and targeted mitigation. Municipal reservations will be addressed through early bilateral outreach, tailored

engagement formats for different municipality sizes, and transparent communication of the concrete local benefits of regional planning.

Insufficient expert input will be prevented by forming expert working groups with clear deliverables, and using structured templates to ensure completeness and comparability of contributions.

Action 3: Citizens' Forum

Action 3 is the implementation of a citizens' forum. The citizens' forum is a public, forum-style event where citizens can find out about the updating of the regional plan, exchange ideas and get the opportunity to talk to decision-makers. The aim is to create transparency, hear different perspectives and develop solutions together.

3.1 Needs assessment for Action 3

Many citizens lack knowledge of, and understanding about the tasks, tools, objectives and legitimacy of regional planning. These gaps in knowledge make it difficult to conduct simple citizen surveys, whether the questions are abstract or concrete. Complex issues often cannot be meaningfully condensed into yes/no questions.

At traditional information and discussion events, older men are often overrepresented.

Similar to dialogical citizen participation, which is regulated by state law, the aim of this action is first to provide randomly selected citizens with comprehensive information on regional planning issues in a citizens' forum. They will then compile a report reflecting the views of the population. When selecting the citizens, criteria such as gender and age distribution can be taken into account.

As these citizens are informed at events, they can consider different arguments and express their reasoned opinions more nuancedly.

The process is informal, and the results summarized in the final report are not binding.

3.2 Stakeholder Engagement and Governance for Action 3

Stakeholders engaged in Action 3 are citizens of the Stuttgart Region. Citizens will be randomly selected in cooperation with the municipal registration authorities. These randomly selected participants take part in the citizens' forum on a voluntary basis and are invited to a series of participative events.

3.3 Implementation of Action 3

The action will be implemented via the following steps and milestones:

Short term (by the end of 2026): Preparation

- Definition of the topic and objectives
- Invitation of relevant stakeholders (committees, administration, specialist departments, experts)
- Selection of the citizens to be invited
- Elaboration of timetable

Medium-term (by 2028): Implementation of Participative Events

- Moderation: Neutral moderation ensures fair discussion, clear rules (speaking times, requests to speak, respectful interaction) and documentation of the results.
- Formats: Public lectures/keynote speeches, discussion panels, workshops, round-table discussions, working groups.
- Participation: Selected random citizens, accessibility, translation/participation opportunities.
- Information: Provision of background information, visualisations, plans or data; transparent presentation of evaluation and decision-making processes.
- Documentation: Minutes, statements, summary results.

Long-term (2028+): Follow-Up

- Evaluation of contributions, publication of results, follow-up meetings or binding feedback to participants, if necessary.
- Decision: Acceptance of the final report by the planning committee.

3.4 Funding and Resource Mobilization for Action 3

The costs for the implementation of the Citizens' Forum are estimated as follows:

1. Moderation and process design

Professional moderation is a central element of a citizens' forum. This includes:

- Fees for moderators
- Preparation, process design, documentation

Cost range: EUR 2.000 – 10.000

2. Venue and technical equipment

The Citizens' Forum may include up to 50 participants and last several days. Costs include:

- Rental of event spaces
- Technical equipment (projector, sound, online tools, hybrid setups)

Cost range: EUR 1.000 – 3.000

3. Catering for participants

Catering costs arise for:

- Drinks
- Snacks
- Lunch

Estimated costs: EUR 40 per person per day

4. Materials and supplies

The Citizens' Forum uses facilitation methods such as pin-board moderation or visualization. Costs include:

- Facilitation materials
- Pinboards, cards, markers
- Printed documents
- Participant materials

Estimated costs: EUR 1.000

5. External experts and speakers

If experts are invited to the citizens' forum to provide specific information to participants, this might cause additional costs in the range of EUR 1.000 – 3.000.

6. Participant compensation

Compensation for participants might be provided.

This might cause additional costs such as EUR 30 – 100 per participant per day.

7. Organisation and project management

Internal costs arise for:

- Invitations and participant management
- Logistics
- Communication and public outreach

Cost range: EUR 1.000 – 5.000

Overall Cost Summary

Based on calculation, a cost range of EUR 10.000 – 30.000 is to be expected for the implementation of the regional citizens' forum.

Since updating the regional plan is one of the VRS's mandatory tasks, all costs for Action 3 are covered by the association's current budget.

3.5 Monitoring and Evaluation of Action 3

1. Representativeness of Participants

Objective

- Measuring how well the Citizens' Forum reflects the diversity of the regional population.
- The forum aims to overcome the typical overrepresentation of older men and to include a broad range of perspectives. Legitimate outcomes depend on balanced participation.

Key Performance Indicators

- Percentage deviation between participant composition and regional population data (e.g. gender, age groups).

Target values

- Gender distribution within ±5% of regional demographics
- Balanced participation from at least 3 defined age cohorts (e.g. 18–30, 31–65, 65+)

Data Sources

- Attendance lists
- Statistic demographic data

Responsible Stakeholders

- Verband Region Stuttgart

2. Knowledge Gain on Regional Planning

Objective

- Evaluate whether participants meaningfully improve their understanding of regional planning tasks, tools, objectives and legitimacy.
- The forum's core rationale is that informed citizens can express more nuanced, reasoned opinions than uninformed survey respondents.

Key Performance Indicators

- Pre- and post-forum self-assessment

Target values

- Average increase in self-reported understanding of regional planning by at least one scale point
- ≥70% of participants report feeling "well informed" after the forum

Data Sources

- Short questionnaire before and after the Citizens' Forum

Responsible Stakeholders

- Verband Region Stuttgart
- Participating citizens

3. Quality and Usability of the Citizens' Report

Objective

- Measure the extent to which the final report captures diverse perspectives and is usable for decision-makers.
- Although non-binding, the report is the main output of the forum and the key link to political and planning processes.

Key Performance Indicators

Qualitative assessment against defined criteria, such as:

- Inclusion of multiple, clearly differentiated viewpoints
- Presence of reasoned arguments (pros/cons, trade-offs)
- Concrete references to current regional planning issues

Data Sources

- Final Citizens' Forum Report

Responsible Stakeholders

- Verband Region Stuttgart

3.6 Challenges and Risk Mitigation for Action 3

Risk of dissatisfaction among participants

A key risk of the Citizens' Forum is dissatisfaction among participants if their proposals are not fully implemented. This can be mitigated by clearly communicating from the outset that the forum is consultative and non-binding, and by explaining how its results will be used within the regional planning process.

After the forum, participants should receive structured feedback showing which recommendations were taken up, which were not, and why. Even where proposals cannot be implemented, acknowledging them and explaining constraints (legal, financial or political) helps maintain trust and perceived fairness.

Risk of opinions diverging from political majorities

Another risk is that the opinions expressed in the Citizens' Forum diverge from existing political majorities. To mitigate this, decision-makers shall be involved early and visibly in the process, for example through participation in dialogue sessions and in the presentation of the final report.

It shall be made explicit that differing perspectives are a valuable input rather than a binding mandate, and that the forum's role is to broaden the evidence base for political decisions, not to replace democratic institutions.

Risk of delays

Delays caused by insufficient or slow feedback can be reduced by establishing a clear timeline with defined responsibilities before the forum begins. This includes deadlines for drafting, reviewing and publishing the final report, as well as identifying who is responsible for consolidating feedback from experts and decision-makers. Allocating sufficient administrative resources and using standardized templates for documentation and feedback can further reduce the risk of bottlenecks.

Risk of criticism by citizen initiatives

Criticism of the method by citizen initiatives can be addressed through proactive and transparent communication. The selection process, methodology and objectives of the Citizens' Forum shall be publicly explained, including why random selection is used and how diversity is ensured. Communication via social media is very important as it reaches a broader audience.

Where possible, citizen initiatives shall be invited to observe the process or to contribute written statements, making clear that the forum complements rather than replaces other forms of participation. This openness helps reduce perceptions of exclusion and increases the legitimacy of the forum as one element within a broader participation landscape.

Action 4: Innovative Metropolitan Prototyping

In parallel with Actions 1 to 3, a topic of major importance will be selected and be explored in greater depth through the tool of Innovative Metropolitan Prototyping that has been developed as a new solution for metropolitan governance within the MECOG-CE project.

4.1 Needs assessment for Action 4

The Stuttgart region is undergoing an economic transformation and is facing challenges related to technological, energy and demographic changes. The region's globally competitive automotive cluster, which used to specialize in combustion engines, is under great pressure to change. Functioning value chains are at risk, new technologies need to be developed, and competition from abroad is intense. The region's previously high level of innovation and strong value creation are under threat, as are the associated jobs. There must be a concerted effort to train employees, not only because a large proportion of the working population — the baby boomer generation — will retire within the next 10 years.

At the same time, the region is facing the effects of climate change: Urban centers are heating up, the frequency of heavy rainfall events and flooding in residential and commercial areas is increasing, and the need to transition to renewable energy is becoming a political imperative. In addition, there is a lack of affordable housing and large industrial sites for future technologies, as well as strong pressure on urban open spaces. All of these changes could have a significant impact on the social fabric and economic resilience of this previously strong region.

The Stuttgart Region is responding to these challenges with targeted regional development. The main objective is to consistently use the potential of the region for further development into a resilient, economically strong and attractive region.

Using the instrument of the Regional Plan, the region has been pursuing sustainable residential and commercial development for many years, paying particular emphasis on preserving open space for climate and environmental protection goals. Regional commercial core areas serve to provide the necessary commercial space. Transit-oriented development, i.e. residential and commercial development along the regional rail axes, is a driver of regional development and contributes to the region’s livability. Strategic investment in green infrastructure through the Region’s Landscape Park instrument and the realization of a regional landscape exhibition promote the maintenance and

development of open space and make a significant contribution to the region's attractiveness for workers and businesses.

However, traditional planning instruments have their limitations. There is a growing need for more participatory approaches.

The participatory approach of the Innovative Metropolitan Prototyping allows the diversity of challenges to be identified from the outset and all relevant stakeholders to be brought together.

Innovative Metropolitan Prototyping is an experimental and flexible tool that allows to address a specific challenge by involving the relevant community. The tool involves a participatory process that leads to co-creating and piloting solutions before final decisions are made. The prototyping process is very interesting because the final result is not known at the beginning but is developed together during the prototyping process.

VRS decided to integrate this tool into the Action Plan because it is very flexible and can be adapted to different fields of action, e.g. in the fields of resilient industrial sites, landscape development or housing.

The open end of the prototyping process is seen positively. As "the journey is the goal", there can be no failure. Every result is a gain, even if it ends in relatively small measures such as the establishment of a regular round table. The fact that the result may ultimately differ from the solution assumed at the beginning is what makes the process so exciting and valuable.

4.2 Stakeholder Engagement and Governance for Action 4

The core of Innovative Metropolitan Prototyping is stakeholder engagement. Metropolitan stakeholder groups will be identified according to the selected topic.

Potential stakeholders include representatives of the local administration, politicians, companies and their employees, property owners, service providers, residents, citizens initiatives, NGOs, representatives from education etc. The final selection of stakeholders will depend on the topic chosen. These stakeholders will be thoroughly involved in the subsequent phases of the participatory approach.

4.3 Implementation of Action 4

The core of the Innovative Metropolitan Prototyping is to develop prototypes for current metropolitan challenges. This can be a challenge in 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 housing market, as well as newly rising challenges that cannot be foreseen yet.

The prototypes are

- developed in the metropolitan dimension, then
- tested on an urban scale, broken down to local conditions,
- then upgraded back to the metropolitan level.

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, rising their creativity and collective problem-solving capacity, a prototyping concept (e.g. a thematic metropolitan strategy or guidelines for further settlement-development or new governance approaches) is developed.

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 documentations or the evaluation of previous research.

The prototyping concept is first to be tested and evaluated in different cases within the metropolitan area, e.g. in one or different local authorities. Based on the evaluation of the prototyping concept, a new solution (a final concept) for the metropolitan challenge is developed.

Action 4 comprises the following phases:

Short term (by the end of 2026): Preparation

- Identification and selection of a challenge to be tackled through the Innovative Metropolitan Prototyping
- Definition of scope and objectives
- Identifying relevant stakeholders
- Commissioning of an external moderator for the workshops
- Invitation of the stakeholders to the first workshop

- Basic data collection and analysis

Medium term (in 2027): Participative Prototyping Process

- Kick-off Workshop
- Workshop on problem definition
- Workshops on the development of measures
- Implementation of prototyping measures on local level
- Evaluation and upscaling to metropolitan level
- Finalisation, Sum up of lessons learned

Long-term (2028+): Follow-up

- Integration of lessons learned in Regional Plan updating process

4.3 Funding and Resource Mobilization for Action 4

The following costs are to be expected:

- External moderation for workshops
- Rent for workshop locations
- Catering during workshops
- Costs for the realisation of prototyping measures

All these costs depend on the topic and scope of the Innovative Metropolitan Prototyping.

As the Innovative Metropolitan Prototyping is integrated in the updating procedure of the Regional Plan, all costs can be covered by VRS's annual budget.

4.5 Monitoring and Evaluation of Action 4

The success of the Innovative Metropolitan Prototyping is difficult to monitor quantitatively. As mentioned before, "the journey is the goal", and every Innovative Metropolitan Prototyping is a success by itself as it brings together diverse stakeholders, tackles a major metropolitan challenge, creates unforeseeable solutions and motivates to finding compromises.

The result of the Innovative Metropolitan Prototyping will be evaluated in the final report. Aspects such as stakeholder engagement and satisfaction, the intensification of metropolitan cooperation, transferability and scalability of the prototype as well as the significance for metropolitan development will be evaluated qualitatively.

4.6 Challenges and Risk Mitigation for Action 4

Risk of dissatisfaction among participants

As for the Citizens' Forum, a significant risk of the Innovative Metropolitan Prototyping is dissatisfaction among participants if their proposals cannot be implemented. This can be mitigated by clearly communicating from the outset that the Innovative Metropolitan Prototyping is experimental, consultative and non-binding, and by explaining how its results will be incorporated in later regional planning processes.

After the Innovative Metropolitan Prototyping, participants shall receive structured feedback describing the joint solutions that have been developed. Even where proposals cannot be implemented, acknowledging them and explaining constraints (legal, financial or political) helps maintain trust and perceived fairness.

Risk of losing interest

A major challenge is keeping participants engaged. The process must be designed in such a way that interest in participation and the prospect of serious consideration of the respective issues are maintained over a longer period of time. To this end, the workshops must be scheduled in quick succession but without overwhelming the participants. In addition, the workshops must be designed to be appealing and interesting, and participants must feel that they are being taken seriously. A good and experienced moderation is crucial.

Risk of no solution

In the case of extremely difficult challenges, there is certainly also the risk that no solution will be found that is supported by everyone. In this case, partial solutions may be found that do not fully contribute to solving the problem. This again creates the risk of dissatisfaction among the participants involved. Ultimately, however, this risk must be accepted, as any partial solution that is developed is better than no solution at all.