City of Mostar

INTEGRATED ACTION PLAN

METACITY

2025

CITY OF MOSTAR
INTEGRATED ACTION PLAN

URBACT

Co-funded by the European Union
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INTRODUCTION

URBACT is a European Territorial Cooperation program that promotes sustainable urban development through integrated and participatory approaches. By facilitating knowledge exchange and collaboration among cities across Europe, URBACT aims to enhance the capacity of urban areas to tackle common challenges such as social exclusion, environmental sustainability, economic development, and governance. The program operates through thematic networks, where cities work together to develop, implement, and disseminate good practices and innovative solutions. Bosnia and Herzegovina's (BiH) involvement in URBACT is part of its broader engagement with European initiatives aimed at improving urban governance and development. Cities in BiH, like Mostar, have benefited from URBACT's resources and networks, enabling them to share experiences with other European cities and apply successful strategies to local contexts.

METACITY Project

The METACITY project is an initiative aimed at addressing the multifaceted challenges of metropolitan areas through integrated urban policies and innovative governance approaches. The project encourages collaborative learning and the sharing of best practices among participating cities to foster more cohesive and effective metropolitan regions. By engaging various stakeholders, METACITY aims to improve urban living conditions and promote sustainable development across metropolitan areas in Europe. Mostar's participation in the METACITY project is focused on fostering innovation, cultural heritage preservation, and community engagement. This project helps Mostar enhance its urban planning and development strategies, leveraging the collaborative framework of URBACT to implement small-scale actions and policies that improve the quality of life for its residents. By participating in URBACT, Mostar is better positioned to align with European standards of sustainable urban development, contributing to the country's integration within the European context. The URBACT METACITY project represents a significant step towards Mostar's transformation into a digital and innovative urban center, aligning with the city's strategic goals for sustainable development and economic growth.

PROFILE OF THE CITY

Mostar is a picturesque city located in the southern part of Bosnia and Herzegovina, within the Herzegovina-Neretva Canton. Its geographic location is strategically significant, positioned at the crossroads between the Adriatic coast and the interior of the Balkan Peninsula. Surrounded by rolling hills and mountains, Mostar enjoys a moderate continental climate, characterized by hot summers and mild winters. The city covers an area of approximately 1,175 square kilometers and has a population of around 105,000 residents, featuring a diverse mix of ethnic groups Bosniaks, Croats, Serbs, and others.

Figure 1. Area, population, average age and employment rate in the City of Mostar.
Source: Agency for Statistics of Bosniaand Herzegovina.

Mostar's economy is multifaceted, with key sectors including tourism, manufacturing, and agriculture. Tourism is a major economic driver, thanks to the city's rich cultural heritage and natural beauty. The city attracts visitors from around the world, eager to explore its historic sites, enjoy local cuisine, and participate in cultural events.

The manufacturing sector in Mostar includes industries such as aluminum production, which plays a significant role in the local economy. Additionally, agriculture remains important, with the region producing various fruits, vegetables, and wines. Efforts to modernize and diversify the economy are ongoing, with initiatives aimed at boosting entrepreneurship and innovation.

Mostar is a hub of education and research, home to several higher education institutions. The University of Mostar and Džemal Bijedić University offer a wide range of academic programs, contributing to the city's reputation as an educational center. These institutions collaborate with international universities and organizations, enhancing research opportunities and academic exchange.
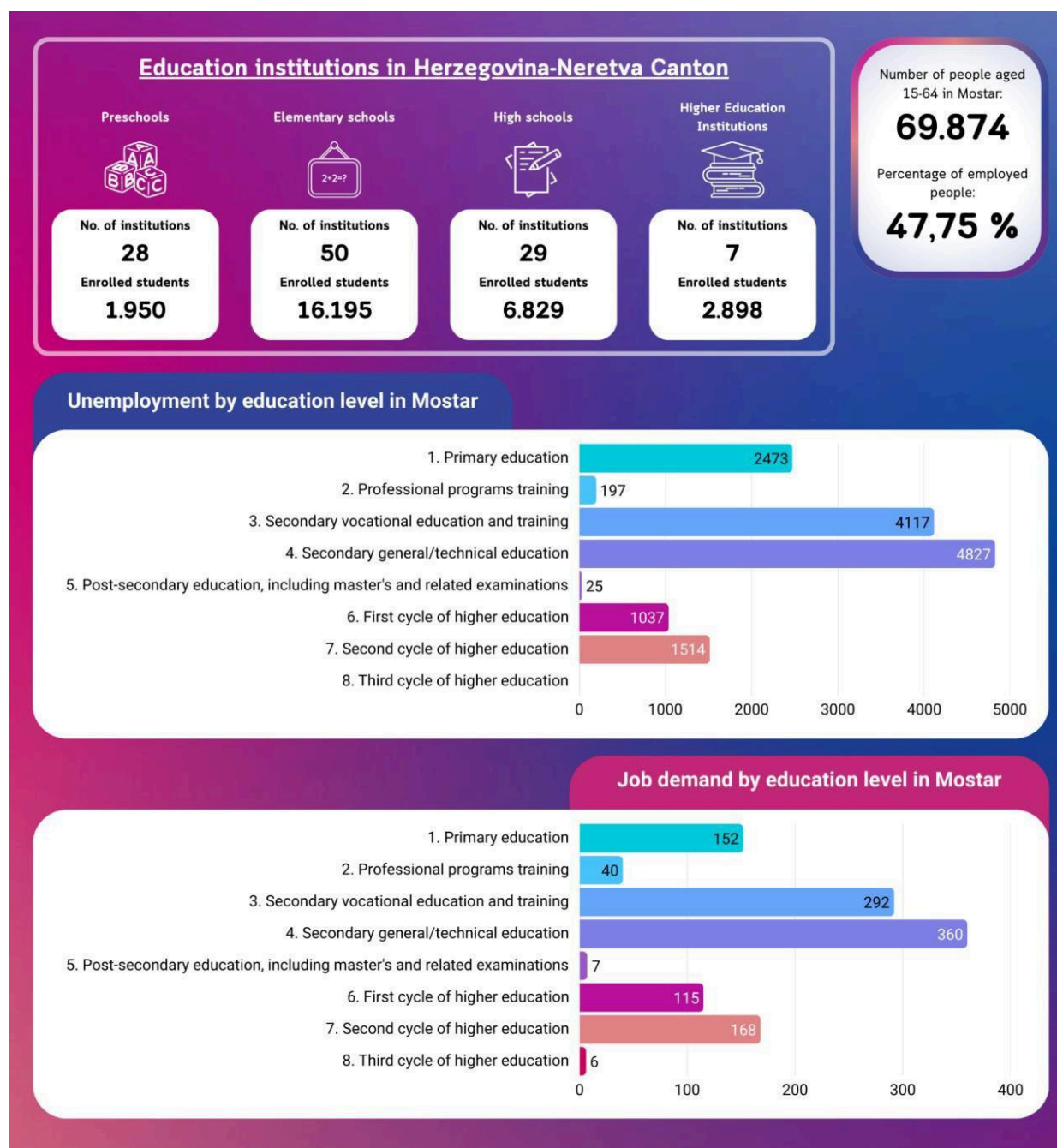

Figure 2. Education institutions in Herzegovina-Neretva Canton, percentage of employed people, unemployment by education level and job demand by education level in Mostar.
Source: Agency for Statistics of Bosnia and Herzegovina.

Mostar boasts a vibrant cultural scene, with numerous festivals, art exhibitions, and music events throughout the year. The Mostar Summer Festival is a highlight, featuring performances by local and international artists, theater productions, and various cultural activities. The city's cultural diversity is reflected in its rich tapestry of traditions, cuisine, and arts, offering a unique blend of influences from different ethnic and religious communities.

Mostar is also known for its artisans and craftspeople, particularly in the historic Kujundžiluk bazaar area, where visitors can find handmade jewelry, textiles, and other traditional crafts. This cultural vibrancy contributes to a lively and engaging social atmosphere, attracting both residents and tourists.

Urban development in Mostar focuses on enhancing infrastructure, public spaces, and sustainability. Recent projects aim to enhance transportation networks, including roadways and public transit systems, to improve connectivity between different parts of the city.

Efforts to enhance waste management and promote eco-friendly practices are also underway, contributing to a cleaner and more sustainable urban environment. Green spaces and parks are being developed to provide recreational areas for residents and improve the overall quality of life in the city. These initiatives align with broader goals of fostering a healthy, vibrant, and resilient community.

However, the city faces several challenges that hinder economic growth and effective urban management:
Operational inefficiencies in industrial zones,
Fragmented collaboration between the public and private sectors, and
Limited use of data-driven technologies in governance and planning.

DIGITAL TRANSITION IN MOSTAR

Bosnia and Herzegovina (BiH) started the process of introducing e-Government with the adoption of the Information Society Development Policy and Strategy by the Council of Ministers (CoM) of BiH in November 2004. The documents were complemented by the Action plan, consisting of several precise projects and goals. The Policy, Strategy, and Action plan was devised by an UNDP BiH team, but although adopted and declaratively supported, the vast majority of envisioned policies and actions have never been implemented because state institutions didn't have the internal capacities to implement them. The project was ultimately declared a failure. The following effort came with the ongoing Public Administration Reform (PAR) project, which incorporated some of the policies and actions stated in the previously mentioned documents. The Strategy and Action plan for PAR was adopted in 2006, again by the CoM BiH, with the aim of reforming the public administration and substantially improve it by 2016. PAR project is grounded in a vision to develop a public administration that is more effective, efficient, and accountable; that will serve the citizens better for less money; and that will operate with transparent and open procedures. An inadequate and, to some extent, outdated legal and regulatory framework will continue to be the most important obstacle to the digital transformation of public administration in BiH.

2004	2006	2022
Adoption of Information Society Development Policy and Strategy	Adoption of Strategy and Action plan for Public Administration Reform	Adoption of the Digital Transformation Strategy of the City of Mostar

One of the biggest issues is the capacity of BiH institutions to maintain and further develop ICT systems that will support further development of e-services. At the 21st session of the City Council of the City of Mostar, held on May 12, 2022, the Decision on the adoption of the Digital Transformation Strategy of the City of Mostar was adopted. This document is the result of the cooperation of the City of Mostar with UNDP in BiH, with the support of the Government of the United Kingdom through the project "Digital transformation in the public sector in BiH". The initial activity preceding the drafting of the Strategy for digital transformation was the Digital Readiness Assessment of the City of Mostar, based on a customized methodology of the World Bank. The assessment resulted in a Roadmap for digital transformation, which guided Mostar towards changes in the business world. Digital transition in Mostar is an ongoing process aimed at integrating digital technologies into various aspects of urban life, governance, and economic activities. This transition involves initiatives and projects focused on enhancing the city's technological infrastructure, improving public services, and fostering a culture of innovation and entrepreneurship.

Development strategy of the City of Mostar

One of the strategic focuses of the city includes 'developing the city as a desirable and recognizable environment for business development and investment based on smart, creative, and innovative solutions and new technologies'. In the <u>strategic plan for the development of the city 2022-2027</u>, it is highlighted that the city should strive to be:

Mostar's development strategy

| Smart city | Creative city | Innovative city | Digital city |

Smart city – development and application of smart solutions which will improve the quality of life in every aspect.

Creative city – development of the city as a creative destination where young people will see opportunities to affirm their ideas, based on the following components: investment in creative industries, city branding/destination management, cultural districts, intellectual property, public spaces/art, landmarks/architecture, educational sector/students.

Innovative city – support and development of actions and projects which will stimulate innovation and innovative solutions in the economy and community.

Digital city - The Digital Plan for Europe, or digital compass, focuses on four key areas, translated to the micro level of the City of Mostar, the foundation of digital transformation in the next period should primarily focus on creating a secure and sustainable digital infrastructure accessible to all citizens and businesses in the City of Mostar, and then strengthening digital skills across the population regardless of age, education, or occupation. Development focus is aimed at digitizing public services in all sectors from public administration, education to healthcare, significantly improving the quality and speed of services provided and supporting the development of the IT sector as the fastest-growing sector of the City of Mostar,[d] as well as supporting the digital transformation and competitiveness of companies from other sectors.

Relevant projects

The GIS (Geographic Information System) database in Mostar plays a pivotal role in urban planning, resource management, and decision-making processes within the city. By integrating spatial data with various municipal information, the GIS database facilitates efficient analysis and visualization of geographical data. It supports city officials in optimizing infrastructure projects, land use planning,and environmental management. Additionally, the GIS database enhances emergency response capabilities by providing accurate spatial information during crises.

Wrecks4All project integrates immersive technologies such as augmented reality (AR) and virtual reality (VR) to bring unreachable sites closer to tourists. Sarajevo Graphics Group/DIGI.BA have created a VR experience for this project,allowing users to explore underwater archaeological sites at HutovoBlato, Kopčići, and Desilo. The project was implemented in the period of 15.08.2020 – 14.08.2022. Users can discover remains of mosques,World War II weapons, and submerged objectsin Ramsko and Jablaničko lakes.VR showrooms have been established in Croatia, Montenegro, and Bosnia and Herzegovina, where the application is accessible to visitors. The project also supports the development of training programs adapted to the needs of the digital cultural heritage sector and explores the benefits and potentials of the scuba diving tourism industry.

e-Citizen App: Facilitating Citizen–Government Communication
The eCitizen mobile and web application was developed to improve communication between the City of Mostar's administration and its citizens. The platform enables residents to report issues, submit service requests, and follow the resolution status directly through their smartphones or computers.
By streamlining interactions with municipal departments and offering greater transparency, the app strengthens civic engagement and responsiveness of local government services. As part of a broader digital governance effort, the e-Citizen initiative represents a key step toward more participatory and accountable urban management.
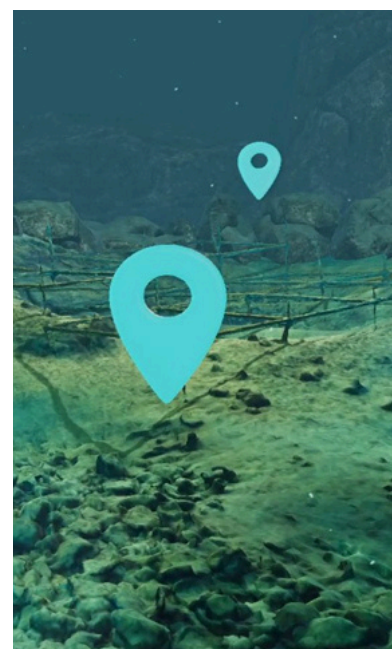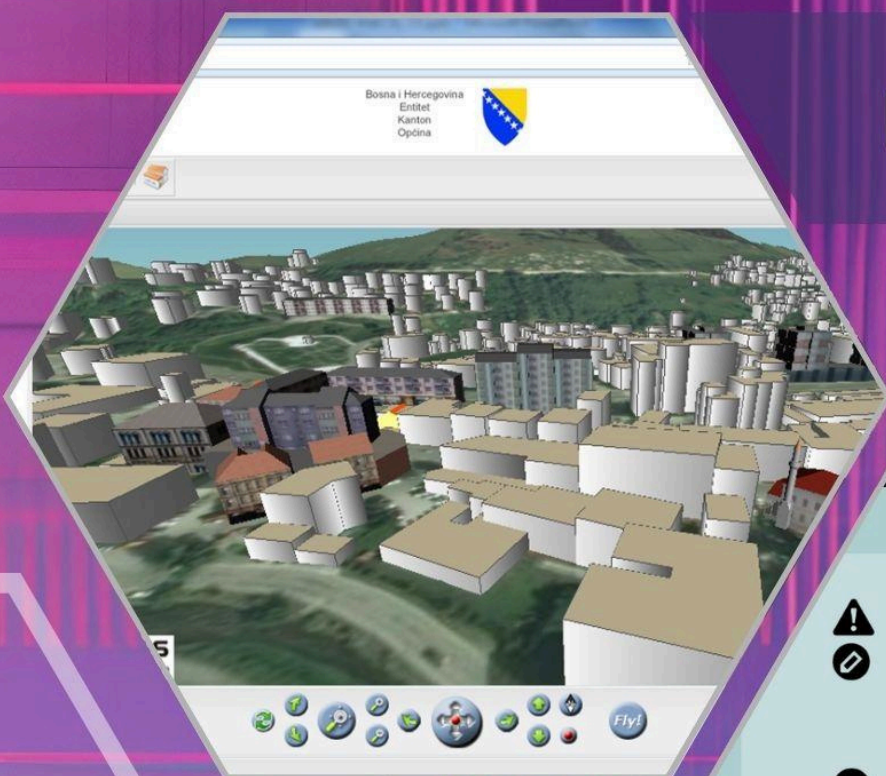
Wrecks4all

MostarGIS
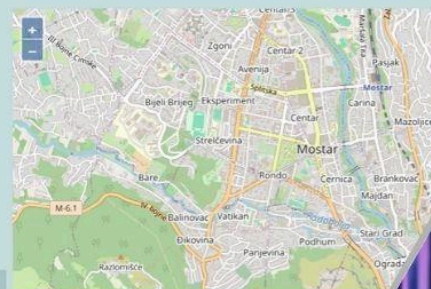
eCitizen

URBACT LOCAL GROUP

URBACT Local Group (ULG) is a collaborative platform within the URBACT network, bringing together a diverse mix of local stakeholders, including government officials, community leaders, NGOs, educational institutions, businesses, and independent experts.

The goal of the ULG is to ensure that urban policies and actions are shaped not only by institutions, but also by those who live, work, and innovate in the city. Through regular meetings, workshops, consultations, and co-creation sessions, ULG members jointly explore challenges Mostar faces, propose solutions, and contribute knowledge from their respective sectors. This multidisciplinary approach helps the city design practical, inclusive, and forward-looking interventions.
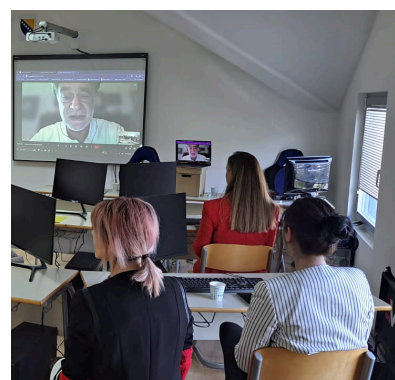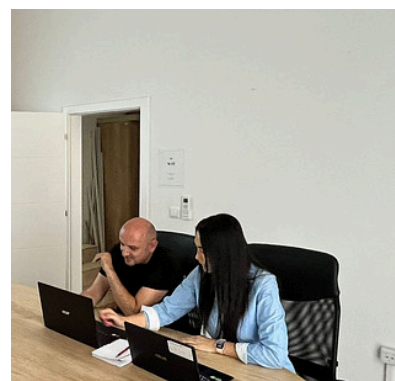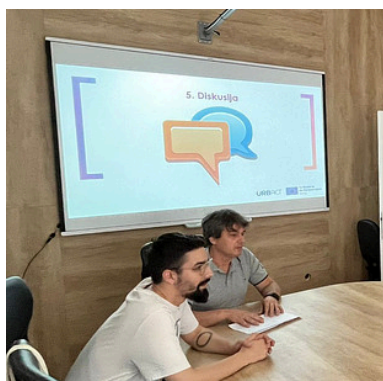
NUMBER OF THE TOTAL MEETINGS HELD 8

ULGs promote knowledge sharing, capacity building, and collective problem-solving, ensuring that diverse perspectives contribute to more effective urban development.

By encouraging open dialogue and the exchange of best practices with other European cities, URBACT Local Groups help improve governance models, strengthen local innovation ecosystems, and support more sustainable, resilient, and citizen-focused urban policies.


21 ULG MOSTAR MEMBERS

URBACT Local Group in Mostar so far consists of 21 members with various academic and professional backgrounds.
In total, eight (8) ULG meetings were held where the stakeholders were introduced to the METACITY project and had opportunities to share their ideas and engage in discussions regarding the project. The full list of current ULG members includes:

Name	Organization	Category
Adis Pendić	University of Džemal Bijedić	Academia
Admir Kulin	Blum Institute for Artificial Intelligence and Robotics BiH	Research
Ajla Gosto	Student Union	Academia
Amela Sjekirica-Suljić	City of Mostar	Local Government
Aner Kruškonja	Univerzal d.o.o.	Business
Anida Čmanjčanin	Makerspace Garage	CSO
Boris Jovanović	High school of art "Gabriel Jurkić"	Academia
Darko Knezović	City of Mostar	Local Government
Darko Zelenika	Port 8 d.o.o.	Business
Dijana Bošnjak	Center for Investments and Entrepreneurship Development	CSO
Dragi Tiro	University of Džemal Bijedić	Academia
Dženana Dedić	Local Democracy Agency (LDA) Mostar	CSO
Fuad Ćatović	University of Džemal Bijedić	Academia
Ines Ćorić	City of Mostar	Local Government
Ivan Dodig	Turistic cluster of Herzegovina	Development Agency
Mia Drmać	City of Mostar	Local Government
Mirza Šahović	City of Mostar	Local Government
Mohamed ElZayyat	Faculty of Information Technology	Academia
Nerman Turkić	Makerspace Garage	CSO
Senada Demirović-Habibija	City of Mostar	Local Government
Vedran Šimunović	Technology Park INTERA	Research

Figure 4. Mostar URBACT Local Group (ULG) members. Source: City of Mostar.

LOCAL VOICES.
SHARED VISION.
BETTER CITY.
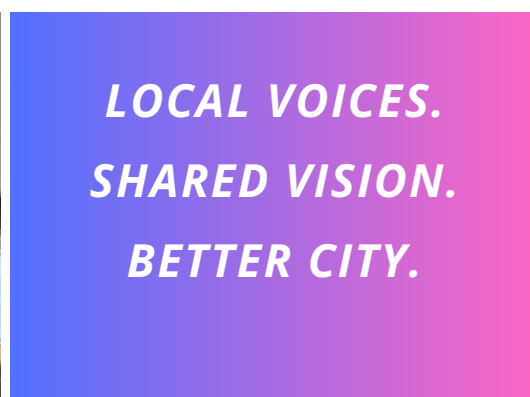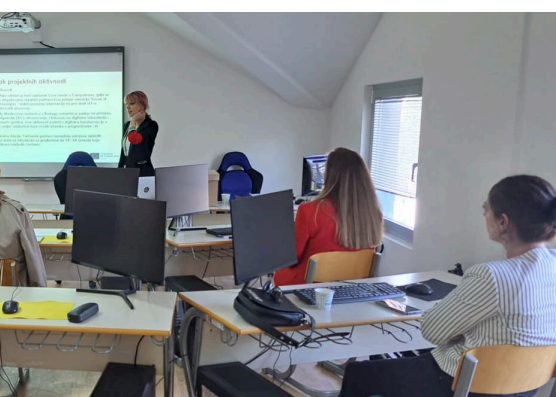
MOSTAR INTEGRATED ACTION PLAN

The Mostar Integrated Action Plan (IAP) aims to transform the city into a smart, innovative urban hub by focusing on 3D conceptual visualization development, enhanced public services, and smart tourism. Key actions will foster collaboration across public, private, and academic sectors to ensure sustainable growth and improved quality of life. This IAP is co-created with input from the URBACT Local Group (ULG), which included 21 stakeholders from academia, government, and NGOs. The process involved 5 workshops and consultations, ensuring alignment with Mostar's strategic vision.
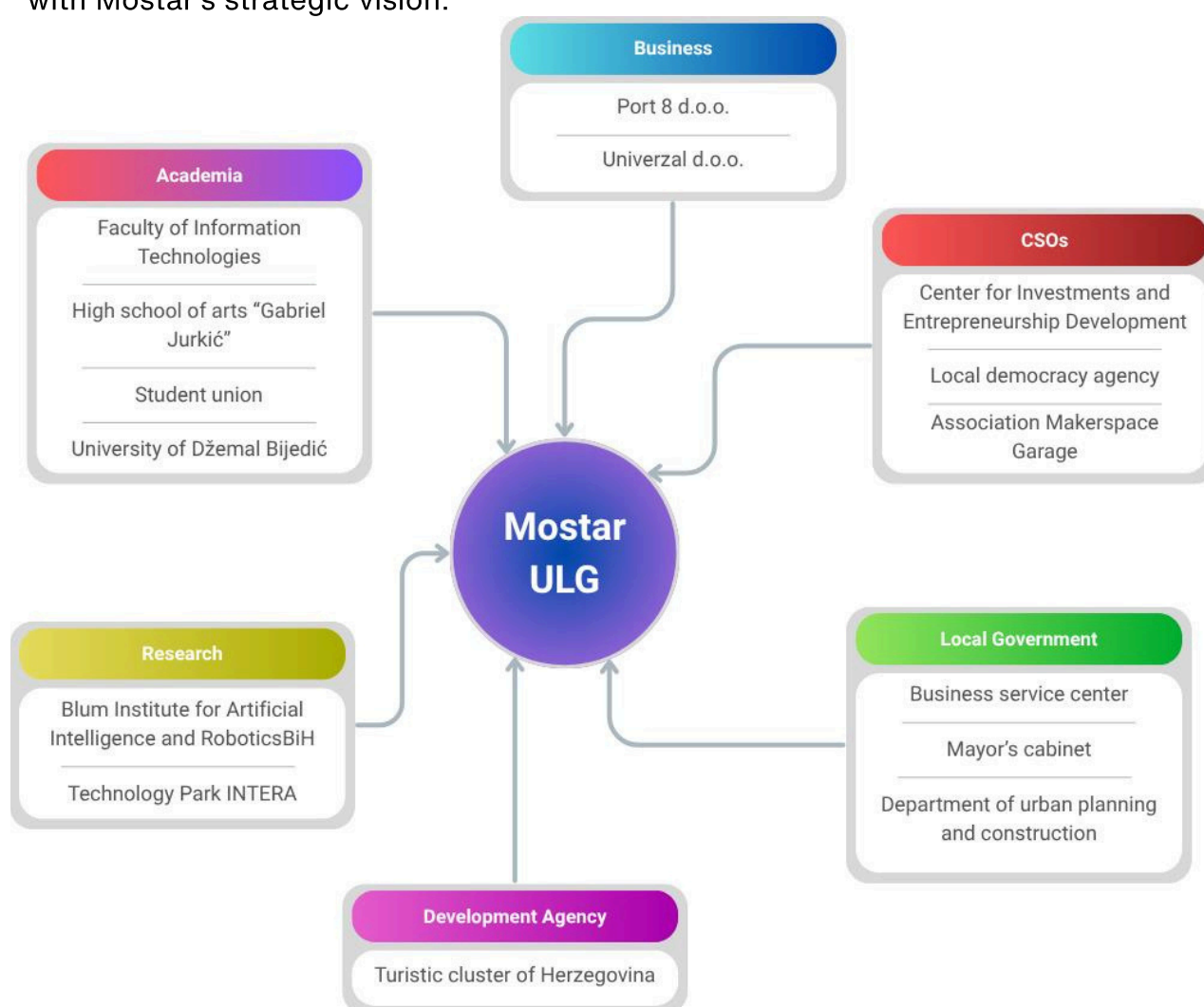

Figure 5. Structure of the Mostar URBACT Local Group (ULG). Source: City of Mostar.

The Integrated Action Plan (IAP) for the City of Mostar was developed through a participatory, iterative, and evidence-based process, based on the URBACT principles of integration, participation, and action-oriented planning. The methodology combined tools from the URBACT Toolbox with local knowledge and policy context to co-design actions that respond to Mostar's digital transformation ambitions.
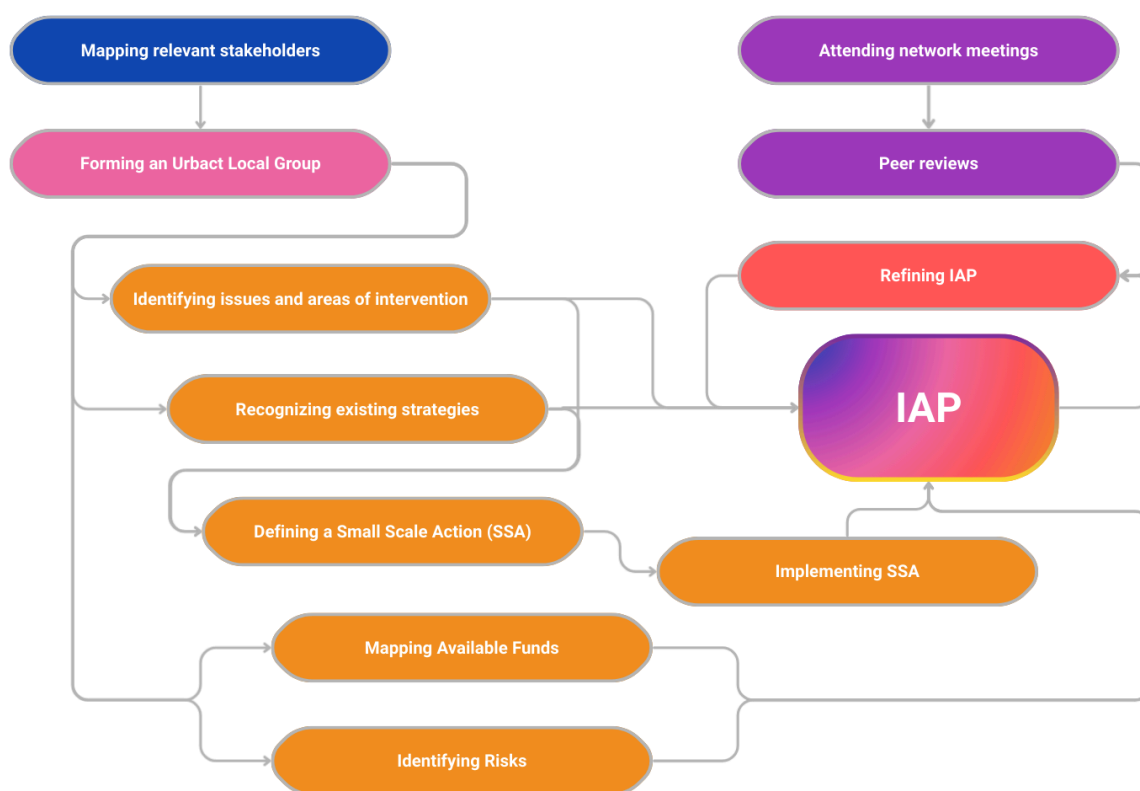
Figure 6. Process of developing the Integrated Action Plan (IAP) for the City of Mostar within the URBACT framework. Source: City of Mostar.

Using tools such as the Stakeholder Mapping Matrix and SWOT Analysis, the team conducted a detailed diagnosis of the local context. This included identifying priority needs in underserved urban areas, such as the Miljkovići Industrial Zone, as well as gaps in digital infrastructure and access to digital services. The diagnosis phase also included a policy mapping to align the IAP with ongoing city strategies and initiatives, and to avoid duplication while identifying potential synergies.

The near-final draft of the IAP was shared with institutional partners and the ULG.

A structured feedback and validation process was conducted through:
- Targeted meetings with city departments
- Bilateral consultations with technical experts
- Informal interviews with local stakeholders

The plan was refined based on input, particularly focusing on clarifying responsibilities, improving feasibility assessments, and enhancing the long-term vision.

SWOT Analysis

To effectively guide the digital transformation and urban development of the City of Mostar, a comprehensive SWOT analysis was conducted. This strategic tool evaluates the city's internal strengths and weaknesses, as well as external opportunities and threats, providing a structured foundation for action planning. The SWOT analysis was developed collaboratively with input from the URBACT Local Group and key stakeholders, ensuring it reflects both expert insight and local realities.
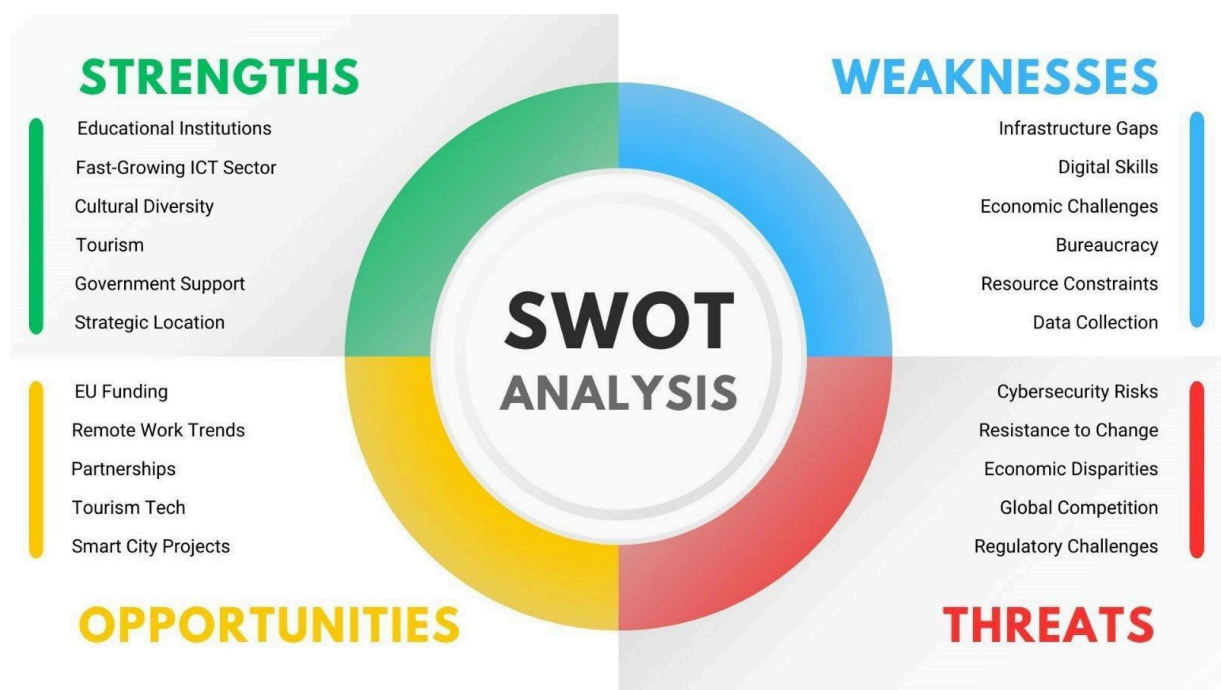

Figure 7. SWOT analysis illustrating strengths, weaknesses, opportunities, and threats relevant to digital and urban development of Mostar. Source: City of Mostar.

Strengths S

- Educational Institutions: Presence of universities and educational institutions that can provide tech talent and foster innovation.
- Fast-Growing ICT Sector: A rapidly expanding ICT sector that can provide the necessary technological expertise.
- Cultural Diversity: Rich cultural heritage and diversity can be leveraged for creative and digital content.
- Tourism: A strong tourism sector that can benefit from digital marketing and e-commerce platforms.
- Government Support: Potential support from local government for digital initiatives and smart city projects.
- Strategic Location: Geographic location as a bridge between the Eastern and Western Europe which can attract international tech companies and startups.

Weaknesses **W**

- Infrastructure Gaps: Limited digital infrastructure and broadband connectivity in some areas.
- Digital Skills: Lack of widespread digital literacy and skills among the general population.
- Economic Challenges: Economic instability and limited funding for digital projects. Bureaucracy: Bureaucratic hurdles and slow adoption of digital governance.
- Resource Constraints: Limited financial and human resources dedicated to high-tech projects.
- Data Collection: Challenges in gathering accurate and comprehensive data.

Opportunities **O**

- EU Funding: Access to EU funds and programs dedicated to digital transition and smart city initiatives.
- Remote Work Trends: Increasing global trend towards remote work, which can attract digital nomads and remote workers.
- Partnerships: Potential for partnerships with international tech companies and educational institutions.
- Tourism Tech: Development of digital tools to enhance the tourism experience and attract more visitors.
- Smart City Projects: Opportunities to implement smart city solutions to improve urban living and efficiency.
- Growing citizens' engagement: Increasing civic activism and strengthening CSOs capable of recognizing and using tools and opportunities for participation in decision-making. Only by making their voice heard can citizens make a change in society.

Threats **T**

- Cybersecurity Risks: Increased risk of cyber attacks and data breaches as digital adoption grows.
- Resistance to Change: Resistance from certain segments of the population or local businesses to adopting digital technologies.
- Economic Disparities: The Digital divide between urban and rural areas exacerbates existing economic disparities.
- Global Competition: Competition from other cities and countries that are also advancing in their digital transitions.
- Regulatory Challenges: Potential regulatory hurdles and compliance issues related to data privacy and digital services.

Vision for the IAP

The Mostar Integrated Action Plan (IAP) envisions transforming Mostar into a model of sustainability, digital advancement, and social inclusion, aligned with strategic EU initiatives such as the Green Deal and Digital Compass.

The IAP focuses on creating a forward-thinking urban environment by integrating innovative technologies, promoting environmental stewardship, and fostering inclusive participation to enhance the quality of life for all residents.

The IAP builds on the City of Mostar's Digital Transformation Strategy (2022) and the Development Strategy (2022–2027), supporting their goals of digital infrastructure, smart public services, and inclusive governance.

The SSA visualization aligns with the strategic priority of establishing Mostar as a 'Smart and Creative City'. Its development demonstrates how digital spatial tools can enhance planning processes, support evidence-based decision-making, and provide a foundation for more advanced digital twins and smart-city applications.

MOSTAR

A globalized, creative, green, employed, and inclusive city,
a city of a healthy and safe childhood, satisfied people, and a joyful old age.

As part of this strategic direction, the IAP defines a clear vision for how Mostar will steer its digital and sustainable transition in the coming years. This vision is translated into a set of concrete Vision Objectives that guide the city's priorities, operational focus, and the integration of innovative tools such as the SSA visualization. These objectives outline the specific areas where Mostar seeks measurable progress, ensuring that the broader ambition of becoming a smart, creative, and future-ready city is supported by targeted, actionable steps.

The IAP is structured around **three primary vision objectives (VO):**

VO1: Enhancing urban and industrial management
A 3D visualisation will be developed for the Miljkovići Industrial Zone to optimise operations, enhance resource management, and test scalable digital solutions for broader city applications. This pilot initiative will provide actionable insights into operational efficiencies and sustainability impacts.

VO2: Stimulating innovation and entrepreneurship
The IAP will cultivate an innovation-driven ecosystem by providing infrastructure and digital tools to support startups and small enterprises. Collaborations with academic institutions and research centers will further strengthen the foundation for technological and entrepreneurial growth.

VO3: Improving quality of life through smart city solutions
Smart technologies will be deployed to enhance public services, improve urban mobility, and advance environmental sustainability. These measures will directly benefit residents, businesses, and visitors, positioning Mostar as a competitive, vibrant, and sustainable urban hub.

VISION OBJECTIVES
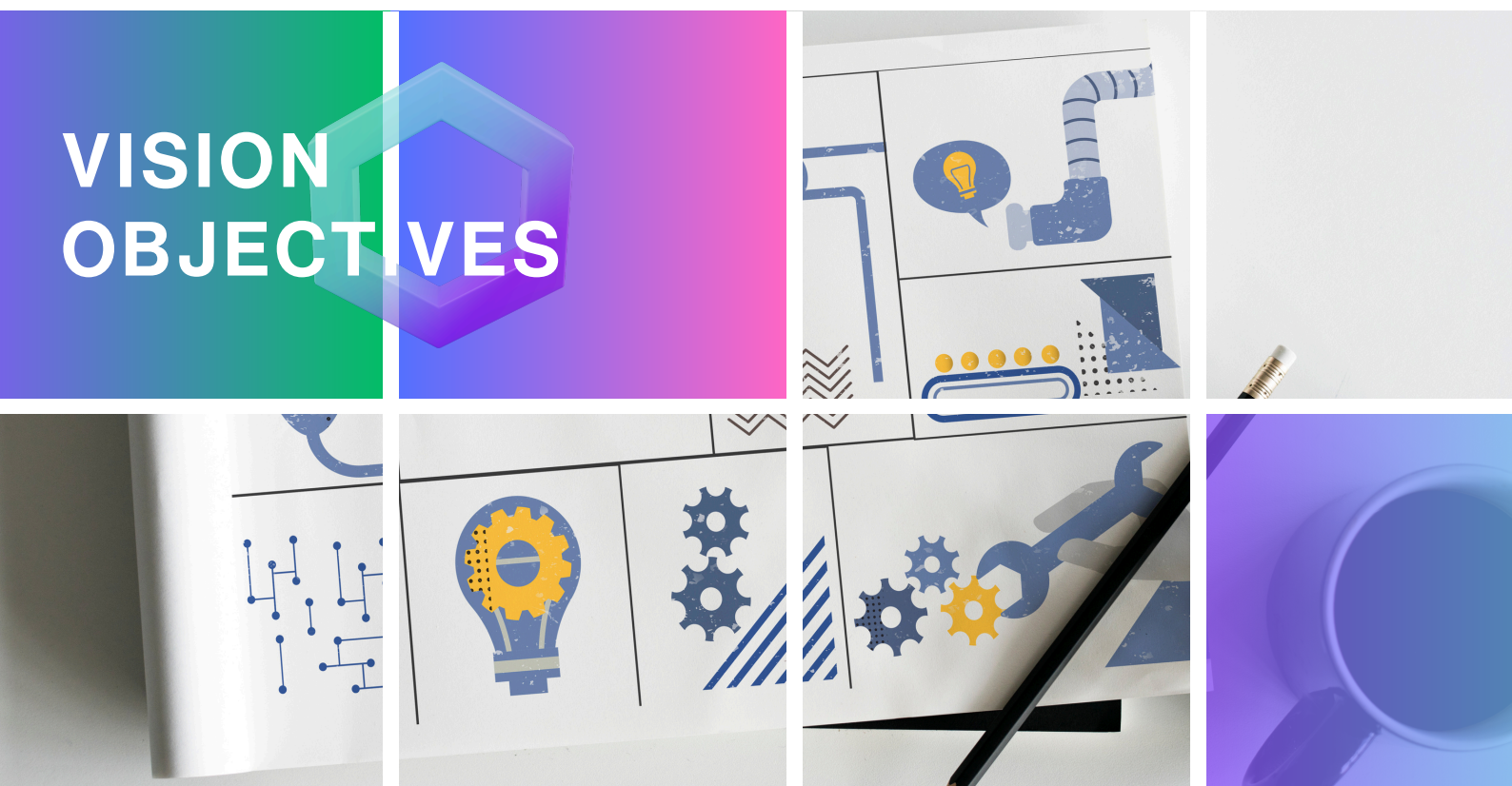
The success of the IAP depends on effective collaboration among stakeholders:

City Administration
- Leads the development of the IAP, ensuring alignment with strategic urban plans.
- Provides oversight and coordination across public and private actors.

Industrial zone operators
- Provide operational data and actively participate in the testing phase of the 3D visualization.
- Offer feedback to refine the 3D conceptual visualization of the Miljkovići Industrial
- Zone and support its long-term scalability.

Private Sector and Businesses
- Use insights from the 3D conceptual visualization to optimize resource management and enhance competitiveness.
- Engage in collaborative initiatives to align digital transformation efforts with business growth.

Academic Institutions
- Lead research, monitoring, and evaluation efforts, providing data-driven insights to guide project implementation.
- Offer expertise in smart city technologies and foster innovation through research partnerships.

Non-Governmental Organizations
- Ensure community engagement and public participation, promoting inclusive governance.
- Facilitate communication between citizens, businesses, and the city administration to align the IAP with social sustainability goals.

Research Centers
- Contribute advanced technical knowledge for the development and testing of smart city solutions.
- Collaborate with city administration and businesses to ensure evidence-based policy recommendations.
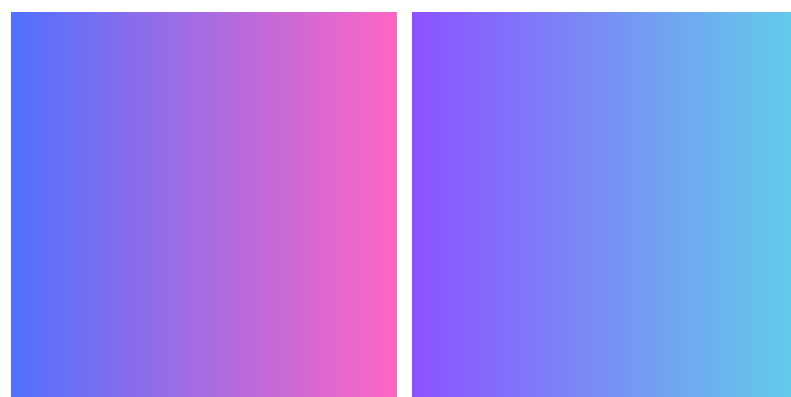
Small-Scale Action (SSA)

The Small-Scale Action focuses on the design and implementation of a 3D visualization for the Miljkovići Industrial Zone. This SSA is a critical tool to develop and refine the IAP, ensuring the proposed solutions are effective and aligned with stakeholder needs. The SSA consisted of the creation and delivery of a 3D conceptual visualization of the Miljkovići Industrial Zone, integrating OSM terrain, roads, and simplified building concepts. It will serve as a communication and engagement tool for stakeholders and support future planning processes. The visualization was delivered as an interactive mobile application accessible with credentials.
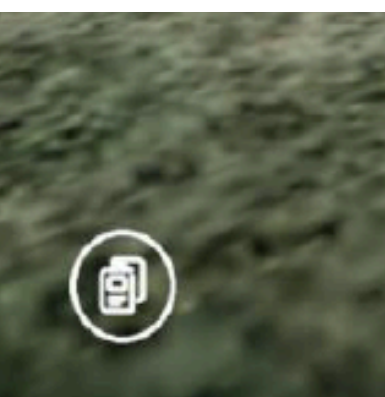
This action can:

- Test 3D visualization and simulation solutions to improve operational management,
- Provide real-time data to support strategic planning, and
- Enhance collaboration among stakeholders through shared access to data and visualizations.

Turning Data into Vision —
Vision into Action.
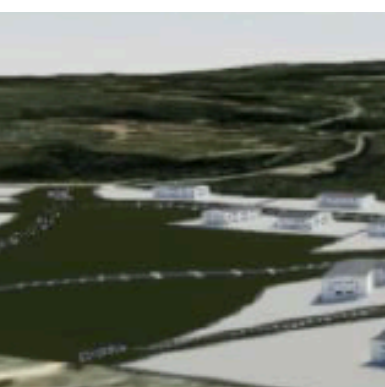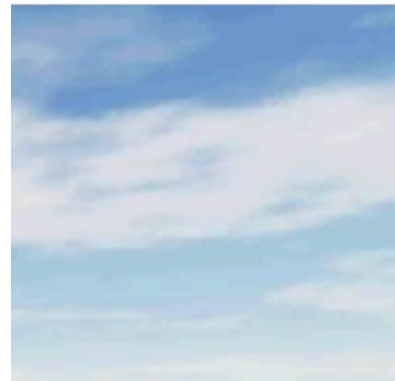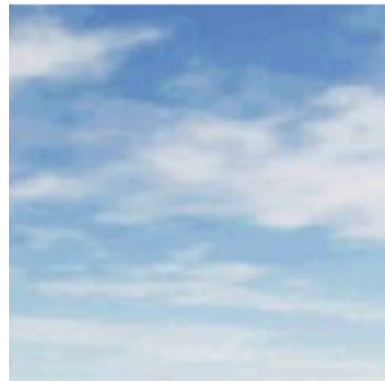
Data you can see.

Digital
Transformation

The developed 3D visualization app for the City of Mostar provides a conceptual, interactive model of the industrial zone based on the city's regulatory plan.

It includes terrain and road data sourced from OpenStreetMap, along with building concepts, offering a clear, user-friendly overview of the zone's planned structure.

Built using SketchUp, Blender, Unity, and a custom 3D application, the visualization is delivered through an interactive mobile app that features static 3D elements complemented by dynamic infographics.

While the model is only partially georeferenced using satellite terrain, it allows city officials and stakeholders to log in via the App Store and explore the zone intuitively.

The SSA represents a testing phase that will inform the development of the IAP by providing practical insights into the 3D conceptual visualization effectiveness, functionality, and scalability.
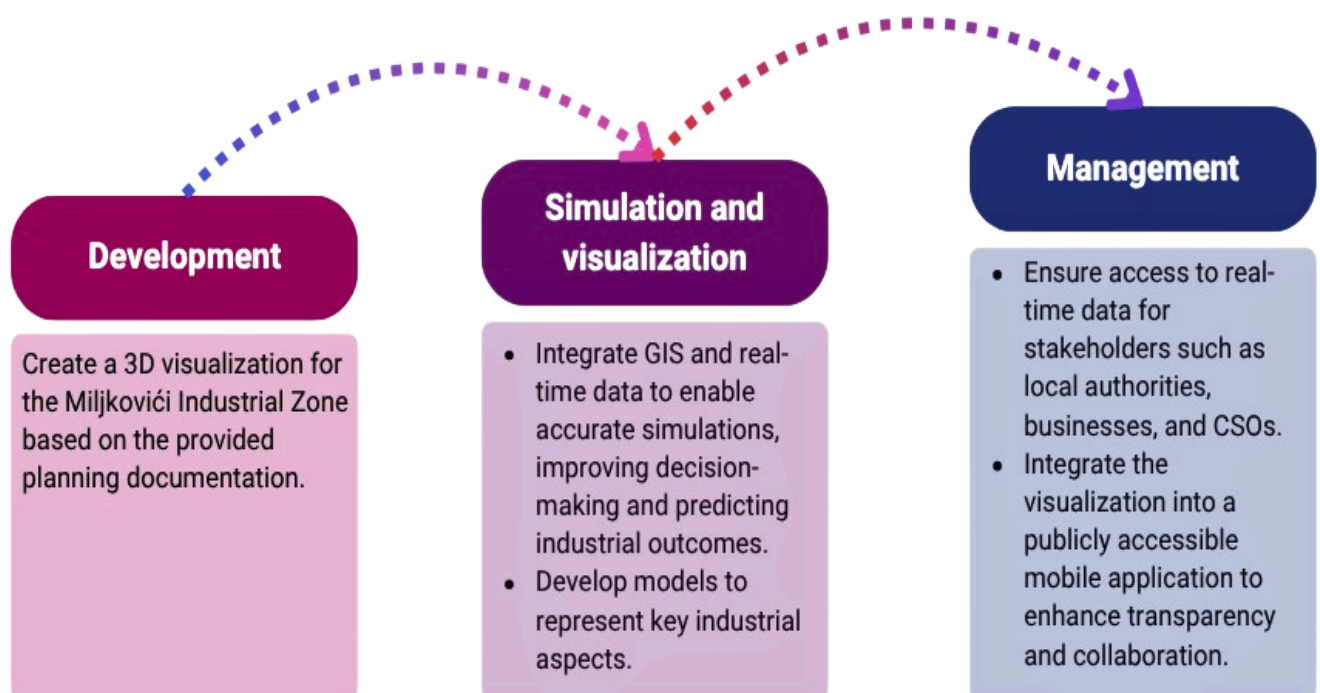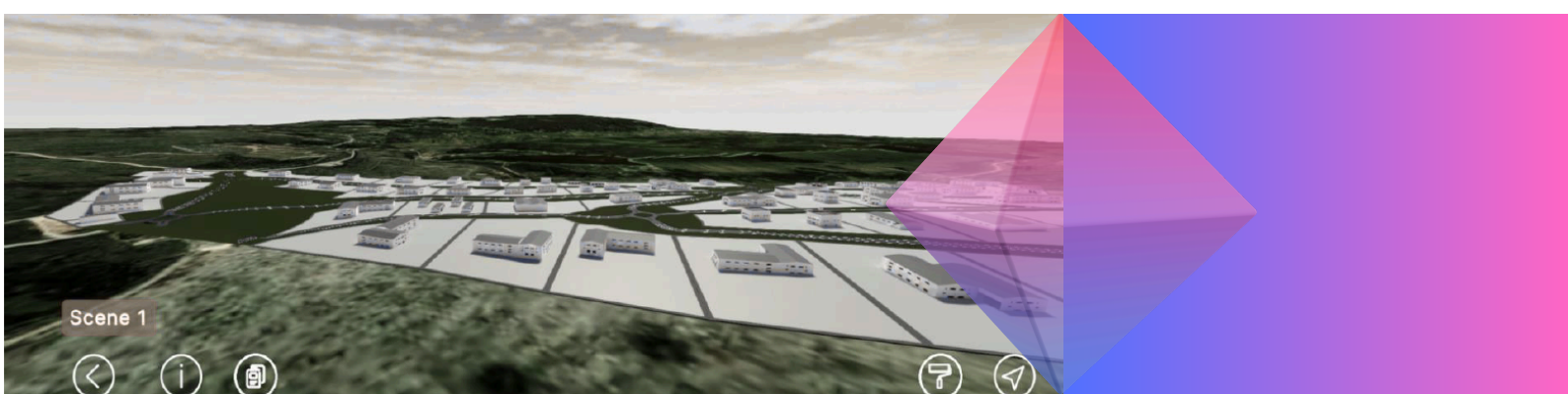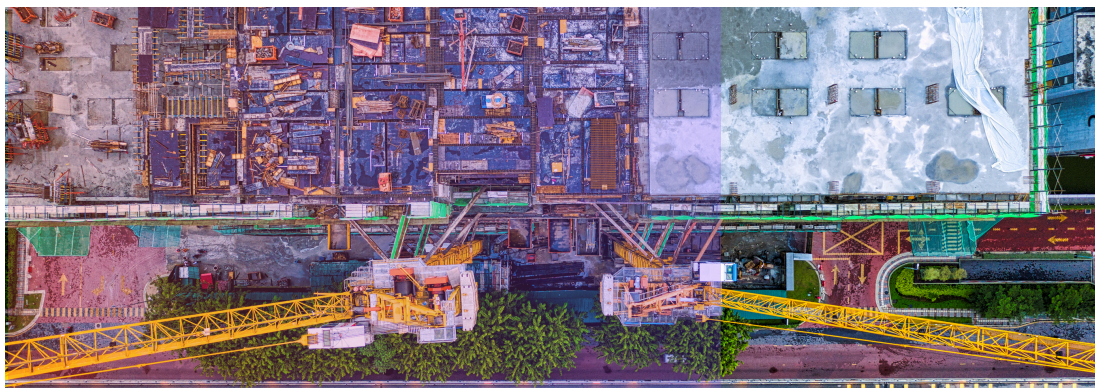

Development

Create a 3D visualization for the Miljkovići Industrial Zone based on the provided planning documentation.

Simulation and visualization

- Integrate GIS and real-time data to enable accurate simulations, improving decision-making and predicting industrial outcomes.
- Develop models to represent key industrial aspects.

Management

- Ensure access to real-time data for stakeholders such as local authorities, businesses, and CSOs.
- Integrate the visualization into a publicly accessible mobile application to enhance transparency and collaboration.

Figure 8. Small-Scale Action (SSA) Phases. Source: City of Mostar.

Scene 1

Scope of SSA Services

While the 3D visualization is not yet a fully operational digital twin, it represents a foundational step within the Integrated Action Plan (IAP). Its primary value lies in serving as a practical, low-risk testing environment where the City of Mostar and its partners can explore the role of digital spatial tools in evidence-based urban planning. By providing a clear, intuitive view of the Miljkovići Industrial Zone, the visualization supports joint decision-making, encourages cross-departmental dialogue, and strengthens coordination with private-sector and academic stakeholders.

Within the broader IAP framework, the SSA acts as a catalyst for identifying systemic needs essential for future smart-city integration. The development process highlighted several priority areas for Mostar's digital transition: structured data collection across departments, establishment of coherent data governance models, improved interoperability of municipal systems, and targeted upgrades to digital infrastructure. These insights are critical for aligning future actions, ensuring that upcoming interventions are both technically viable and strategically coherent.

In this way, the 3D model is more than a standalone product — it is an enabling tool that informs long-term planning, supports the city's shift toward data-driven governance, and lays the groundwork for a scalable digital twin framework. Its role within the IAP is to demonstrate what is possible, reveal what is needed, and guide the city toward smarter, more integrated, and more sustainable urban development.

Upscaling potential and future integration

The Small-Scale Action (SSA) carried out within the METACITY project has provided the City of Mostar with its first hands-on experience in developing and applying digital visualization tools in urban planning. Although conceptual in nature and limited in scope, the 3D visualization of the Miljkovići Industrial Zone has proven to be a valuable pilot initiative— demonstrating how visual representations can support urban management, stakeholder engagement, and long- term strategic thinking.

01. INITIATE DEVELOPMENT
Develop a 3D visualization for the Miljkovići Industrial Zone to improve operational management, sustainability, and resource efficiency.

02. TEST AND REFINE
Conduct testing of the 3D visualization by integrating GIS and real-time data, gathering stakeholder feedback, and refining the system to meet industry needs and ensure accurate simulations.

03. SCALE UP FOR IMPACT
Use insights from the testing phase to expand the application across Mostar, enhancing urban management and establishing the city as a leader in smart innovations.

Figure 10. Small-Scale Action (SSA) upscaling potential and future integration. Source: City of Mostar.

Building on this experience, the City of Mostar recognizes the potential for scaling and integrating such tools into broader municipal processes. The SSA has served as both a learning opportunity and a steppingstone toward the development of more advanced digital capabilities. It has also revealed the importance of technical capacity-building, structured data governance, and institutional cooperation in enabling meaningful digital transformation.

In the next phase of implementation, the City of Mostar plans to pursue the following directions for upscaling and integration:

Expansion to other urban zones
Based on the positive feedback from stakeholders, future 3D visualization efforts will target additional areas of the city, including key public spaces, brownfield sites, and zones identified for regeneration or investment promotion.

Enhanced data quality and technical accuracy
While the current model is conceptual and only partially georeferenced, future visualizations will aim for higher precision and realism, incorporating detailed GIS layers, regulatory plans, and—where feasible—real-time or sensor-based data.

Toward a modular digital twin framework
The long-term ambition is to evolve from standalone visualizations to an integrated, modular digital twin platform that can serve as a decision-support tool for infrastructure planning, public service management, and sustainability monitoring. This transition would involve collaboration with academic institutions, local GIS experts, and regional innovation actors.

Public engagement and transparency
The existing mobile application will be further developed to provide citizens with access to urban planning content, visual data, and consultation opportunities. By making digital tools accessible to the public, the city aims to foster greater transparency, civic trust, and participatory governance.

Institutional anchoring and policy integration
Lessons learned from the SSA will inform future urban development policies and digital strategies. The City of Mostar intends to establish internal workflows, data standards, and inter-departmental coordination mechanisms to support the continued use and integration of digital visualization tools.
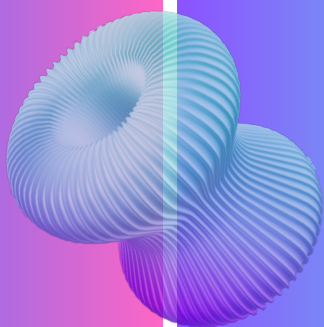
ACTION TABLE AND SCHEDULE

| OBJECTIVE	ACTIONS	STAKEHOLDERS	EXPECTED OUTPUTS	INDICATORS	TIMESCALE
VO1: **Enhancing urban and industrial management**	*Develop a 3D conceptual visualization of the Miljkovići Industrial Zone.*	City of Mostar, GIS experts, Makerspace Garage, local businesses	3D conceptual visualization of the Miljkovići Industrial Zone	• 3D model completed and accessible • % of stakeholders actively using the app • Number of internal planning meetings using the visualization tool	Q1 2025-Q3 2025
	Create a Real-Time Environmental Monitoring System	City of Mostar, Environmental Protection Agencies, local universities	Deployed air, noise, and water sensors linked to city data dashboard	• Number of sensors installed • Number of quarterly reports generated	Q4 2028-Q1 2030
VO2: **Stimulating innovation and entrepreneurship**	*Conduct digital literacy workshops for youth*	University of Mostar, Makerspace Garage, LDA Mostar, local schools	8 workshops for digital skills training	• Total number of participants (disaggregated by age and gender) • % of attendees reporting increased digital skills • Follow-up engagement rate after 3 months	Q1 2025 – Q2 2026
	Establish Annual Mostar Digital Innovation Challenge for Youth	Makerspace Garage, local tech companies, universities, NGOs	Annual hackathon/competition with mentorship and startup seed support	• Number of applications submitted per year • Number of prototype solutions developed • Number of start-ups formed or funded	Q1 2027 – Q4 2029

| VO3: Improving quality of life through smart city solutions | Implement AR/VR for cultural heritage sites | City of Mostar, Makerspace Garage, Tourist Cluster of Herzegovina | AR/VR experience launched for Old Town sites | • Number of heritage sites integrated with AR/VR
• Tourist app download and usage metrics
• Tourist satisfaction rating | Q4 2025 – Q3 2026 |
| | Digitize municipal services and improve accessibility | City of Mostar, IT developers | Online platforms for 10 key services (e.g., permits, applications) | • Number of services digitized and online
• % reduction in average service delivery time
• Number of users completing services online | Q4 2026 – Q4 2027 |

Table 1. Action table and schedule for implementation of the Integrated Action Plan. Source: City of Mostar

MOSTAR: SMARTER, GREENER, MORE CONNECTED.
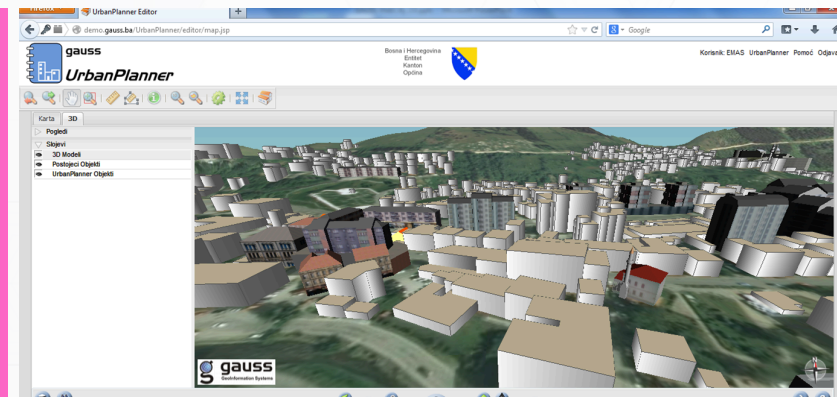
MONITORING AND EVALUATION FRAMEWORK

Vision Objective	Action	Indicator	Baseline	Target	Frequency	Responsible
VO1: Enhancing Urban and Industrial Management	Develop 3D visualization of Miljkovići Zone	Delivery of conceptual 3D model	N/A	Delivered prototype & app by Q2 2025	One-time	City of Mostar, COX4
		Number of presentations using the model for planning or investment promotion	0	3 by end of 2025	Annual	City Planning Department
	Create real-time environmental monitoring system	Number of deployed environmental sensors (air, noise, water)	0	15 sensors in zone by 2029	Annual	City of Mostar, Environmental Agency
VO2: Stimulating Innovation and Entrepreneurship		Number of reports generated for city planning	0	6 reports by end of 2029	Annual	Environmental Dept., GIS team
	Digital literacy workshops for youth	Number of workshops delivered	0	8 workshops	Quarterly	Makerspace Garage, LDA Mostar
		Number of participants (with gender balance)	0	200 total, min. 50% women	Quarterly	Workshop Coordinators
	Annual Mostar Digital Innovation Challenge	Number of hackathons/competitions held	0	3 events (2027–2029)	Annual	Makerspace Garage, Tech Community
		Number of projects supported or implemented	0	5 implemented projects	Annual	Organising Team
VO3: Improving Quality of Life through Smart City Solutions	Digitize municipal services	Number of digitalized public services online	0	10 services	Biannual	City of Mostar, IT Department
		Average processing time for selected services	TBD	30% reduction	Biannual	City IT Team
	Implement AR/VR for cultural heritage sites	Number of heritage sites with AR/VR	0	5 sites	Annual	City of Mostar, Makerspace, Tourist Cluster
		Tourist feedback score (via app/survey)	TBD	80% satisfaction	Annual	Tourism Office

Table 2. Monitoring and Evaluation Framework for implementation of the Integrated Action Plan. Source: City of Mostar.

RISK MANAGEMENT & FEASIBILITY PLANNING

To ensure the successful implementation of the Integrated Action Plan, it is essential to identify potential risks early and establish clear mitigation strategies. A strengthened risk management approach allows the City of Mostar to anticipate challenges, respond proactively, and increase the feasibility of planned actions. The following table outlines the key risks identified in relation to the IAP, along with corresponding mitigation measures:

IDENTIFIED RISK	MITIGATION STRATEGY
Unclear ownership of implementation	Assign a dedicated coordinating department within the City Administration to oversee the implementation, monitoring, and reporting of IAP activities.
Limited financial resources	Proactively pursue EU funding opportunities (e.g. Horizon Europe, Digital Europe) and explore co-financing models such as public-private partnerships (PPPs).
Fragmented institutional coordination	Strengthen internal coordination mechanisms and utilize the URBACT Local Group (ULG) as a platform to align efforts across departments and external stakeholders.
Low stakeholder engagement	Increase visibility of IAP actions through regular communication, inclusive consultations, and incentives for civil society, academia, and private sector participation.
Technical capacity limitations	Provide targeted training and technical support for municipal staff and local partners involved in the digital and smart city components of the plan.

Table 3. Risk and risk mitigation strategiesfor implementation of the Integrated Action Plan. Source: City of Mostar

This structured approach ensures that the IAP remains both realistic and adaptable, enabling the City of Mostar to address unforeseen challenges while maintaining momentum toward its strategic objectives.

GOVERNANCE AND RESOURCE MANAGEMENT

Effective governance and resource management are critical to ensuring that the Mostar Integrated Action Plan (IAP) moves beyond strategic intent and results in measurable, sustained impact. This section defines the institutional arrangements, coordination mechanisms, and financing strategies that will guide implementation and guarantee that actions are delivered in a coherent, timely, and accountable manner. It also clarifies how the city will organise internal structures, mobilise external partnerships, and secure the resources needed to scale digital and sustainable transformation efforts.

In line with URBACT's core principles of integrated, transparent, and participatory governance, the City of Mostar is adopting a governance framework designed to strengthen interdepartmental cooperation, deepen collaboration with external stakeholders, and reinforce public trust. This framework clearly allocates roles and responsibilities across municipal departments, establishes regular coordination routines, and promotes citizen-oriented decision-making.

A central feature of this approach is the ongoing involvement of the URBACT Local Group (ULG), which functions as a participatory platform bringing together representatives from academia, the private sector, civil society organisations, innovation actors, neighbourhood communities, and municipal services. Through this structure, the city ensures that diverse expertise and viewpoints are reflected in the implementation process, enabling more inclusive, realistic, and demand-driven solutions.

The governance model also integrates mechanisms for performance monitoring, risk management, and adaptive planning, ensuring that the IAP can respond to new opportunities, emerging challenges, or changes in funding conditions. Together, these elements form a comprehensive system for coordinated action, long-term sustainability, and effective resource mobilisation, positioning Mostar to implement the IAP in a responsible, participatory, and future-oriented manner.

Ownership and coordination

The City of Mostar will assume full ownership of the IAP and lead its implementation. Strategic oversight will be provided by the Department for Urban Planning and Construction, which will ensure that all IAP actions are aligned with the city's development policies, spatial planning documents, and regulatory frameworks.

Its responsibilities include:
- Monitoring and evaluation: tracking progress against deliverables, timelines, and performance indicators, and identifying risks or delays requiring corrective action.
- Reporting: preparing structured progress reports for the City Council, Steering Committee, and funding partners, ensuring full transparency and documentation of achievements and challenges.
- Interdepartmental coordination: facilitating cooperation with other municipal departments such as environment, ICT, education, tourism, finance, and public services, ensuring that each action has the appropriate institutional support.
- External liaison: serving as the primary contact point for EU programmes, international agencies, research partners, private sector actors, and donors involved in co-financing or implementing IAP activities.
- Quality assurance: ensuring that all technical outputs, digital tools, and planning instruments meet city standards and align with broader urban development.

To ensure inclusive and informed decision-making, a dedicated Steering Committee will support and guide the implementation process. The committee will include representatives from the city administration, academic and research institutions, private sector stakeholders, civil society organisations, innovation actors, local government units, and citizen groups.

Implementation will be supported by regular coordination meetings, thematic working sessions, and structured communication channels. These mechanisms enable consistent information flow between departments and stakeholders, reduce fragmentation, and enhance institutional capacity for project-based cooperation. Transparent reporting tools and accessible documentation processes will further reinforce accountability and support the integration of IAP activities into the city's broader planning and budgeting cycles.

Resource Mapping

Recognizing the financial challenges, especially for IPA countries, a structured funding strategy will be developed to identify and secure diverse funding sources essential for the plan's implementation. This includes leveraging European Union funds (e.g., IPA, Horizon Europe), national and regional development programs, public-private partnerships, and international donor agencies.

IAP Priority / Action	Funding Source	Type of Support	Status
3D visualization of Miljkovići zone (SSA)	URBACT IV	Technical development	Funded (Q1 2025)
Scaling digital tools to other zones	Horizon Europe, Private sector (PPP)	Technical & infrastructure investment	Concept stage
Digital literacy workshops	City Budget, Local NGOs, Interreg	Financial & operational	Funding being explored
AR/VR for tourism	EU Creative Europe, Tourist Cluster, Interreg programmes	Co-financing, technical collaboration	Potential partnership
Municipal service digitization	Digital Europe Programme, City budget, Interreg programmes	Co-funding, software procurement	Pending application

Table 4. Resource mapping for implementation of the Integrated Action Plan. Source: City of Mostar.

The City of Mostar willdesignate a financial coordinator to lead initiatives forgrant applications, foster partnerships with local businesses for sponsorships, and explore innovative financing mechanisms likeperformance-based contracts. Early identification and mobilization of funds will be integralfor sustaining both short-term actions and future long-term development initiatives.
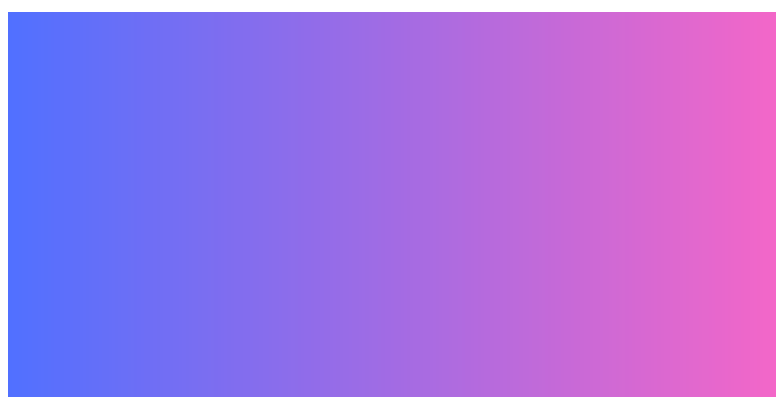
Governance and Coordination Structure

The implementation of the Integrated Action Plan (IAP) will follow a clear governance structure based on defined roles and institutional responsibilities. The City Council holds the political mandate and provides strategic approval for all major urban development initiatives, including those related to the IAP.

Day-to-day coordination and oversight of IAP implementation will be managed by the Department for Urban Planning and Construction. This department is responsible for aligning IAP activities with city-wide strategies, preparing regular progress reports, and ensuring effective communication with internal and external partners.

Implementation of specific actions will be carried out in collaboration with relevant municipal departments, such as those responsible for education, tourism, environment, and public services, depending on the thematic focus of each activity. The governance model also includes a participatory component through the continued engagement of the URBACT Local Group (ULG).

The ULG will function as an advisory and consultative body, bringing together representatives from the private sector, academic institutions, civil society organizations, and local experts. This group will support the city in identifying priorities, providing feedback on implementation, and promoting inclusive and transparent decision-making. Where relevant, external partners, such as EU project consortia, consultants, and technology providers, will be engaged to deliver specialized services or co-finance project components. Their work will be guided and monitored by the relevant city departments to ensure compliance with local standards and strategic objectives.

CONCLUSION

The Integrated Action Plan (IAP) for the City of Mostar represents a strategic and participatory roadmap toward a more innovative, sustainable, and digitally connected urban future. Anchored in the frameworks of URBACT and the METACITY project, the IAP aligns with Mostar's Development Strategy (2022–2027) and Digital Transformation Strategy (2022), translating these ambitions into actionable goals. Through its three core vision objectives— enhancing urban and industrial management, stimulating innovation and entrepreneurship, and improving the quality of life through smart city solutions—the IAP outlines clear interventions supported by local stakeholders and evidence-based planning.

The Small-Scale Action (SSA), particularly the development of a 3D visualization for the Miljkovići Industrial Zone, demonstrates the city's readiness to adopt digital tools for planning and management. The broader potential for upscaling such technologies across Mostar indicates a strong foundation for smart city growth, digital governance, and inclusive urban development.

This document further emphasizes the importance of strong governance structures, diverse funding mechanisms, and effective stakeholder coordination. The integration of local knowledge, technical expertise, and community participation ensures that the IAP remains responsive, feasible, and impactful.

By continuing this collaborative approach, Mostar is well-positioned to become a model city in the Western Balkans for digital innovation and sustainable urban transformation.
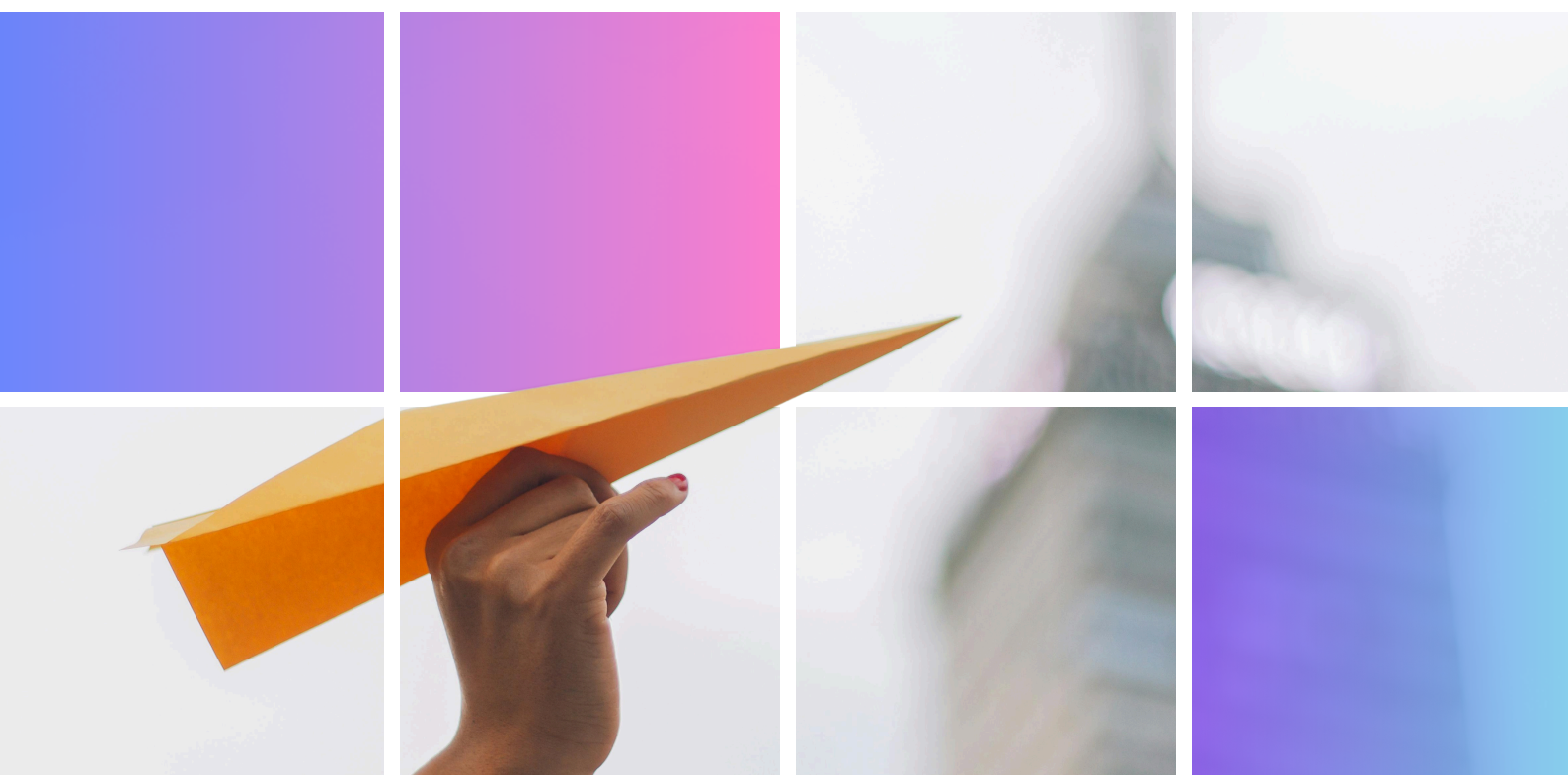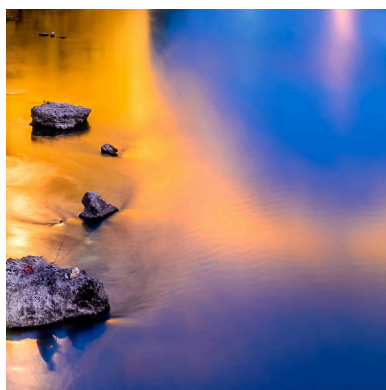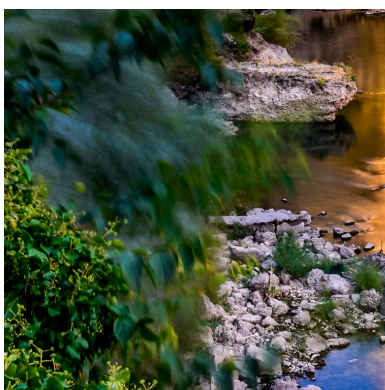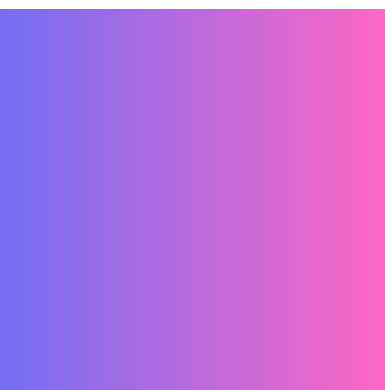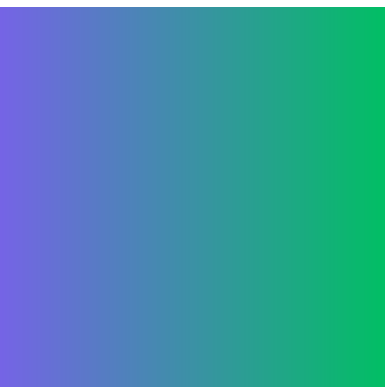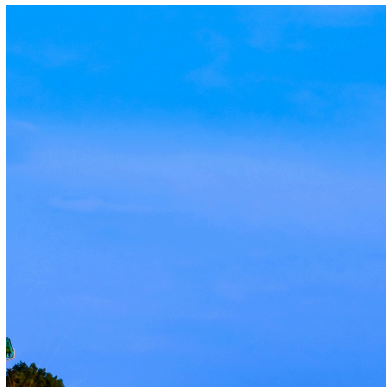
Thank You

Mostar is committed to building a smarter, more inclusive, and more sustainable future—together with our partners across Europe.

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