

Inspire Policy Making with Territorial Evidence

# **TARGETED ANALYSIS //**

# **IMAGINE**

Developing a metropolitan-regional imaginary in Milano-Bologna urban region

Scientific annex 7 // Position Paper

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# 1 Introduction

This position paper summarizes the main results of the ESPON IMAGINE research project and lays the foundations for the local stakeholders to set the background for developing a strategic vision and regional governance framework for the Milano-Bologna urban region. IMAGINE experts have prepared it to provide local stakeholders a position paper that could be the basis for developing an ITI proposal and, more in general, to consolidate the coordination of policies and governance in the Milano-Bologna urban region. As such, it tries to summarize the main contents that emerged by process of interaction that took place in 2020 and 2021, involving not only the official stakeholders' of the project but functional and territorial actors that took part in the participatory process designed to support the research activities of the project.

IMAGINE: spatial imaginaries for the definition of new territorial cohesion policies in the Milan-Bologna system - is a targeted analysis research project launched in June 2020 by ESPON EGTC to study the urban region between Milan and Bologna. IMAGINE aimed to respond to the social and economic challenges opened by the urbanization processes that have recently characterized the Milan-Bologna urban macroregion. The opportunities generated by the High-Speed corridor have been accompanied by growing inequalities between places and new forms of social marginality that threaten territorial cohesion; IMAGINE aimed at providing an overall picture of these processes.

Moreover, IMAGINE aimed at supporting local authorities in the urban macro-region, cities, provinces, and metropolitan cities to acknowledge the regional scale of the dynamics and processes underway. Through the active involvement of functional and territorial actors, it aimed at feeding the ability to build a shared strategic vision and identify possible governance devices at the height of the complexity and scale of these transformations.

In particular, IMAGINE explored the possibility of developing and using the ITI (Integrated Territorial Investment, introduced by article 36 of the "common provisions" regulation of the EC Funds in Cohesion Policy 2014-2020 and confirmed for 2021-2027) as a cross-scale coordination tool for EU policies, initiatives, and resources with different priority axes and operational programmes, integrated into a single strategy aimed at strengthening territorial cohesion.

This document is a position paper, issued as a significant synthesis of the project results: it defines the objectives and outlines of a possible integrated strategy for the development and governance of the macroregion as discussed with the Project Stakeholders and the local stakeholders and actors in the occasion of the Regional Forum, held on the 18<sup>th</sup>, May 2021.

# A regional perspective

The historic urban system of the ancient Via Emilia, which connects some of the largest and most important cities in northern Italy, has seen in recent decades a series of essential processes of social, economic, and spatial transformation, which have contributed to the formation of a large urban macro-region, recently reinforced by the construction of the country's main high-speed corridor. However, the governance of these dynamics and processes struggles to find design opportunities and the ability "to see" suitable for intercepting the macro-regional scale of the phenomena in progress, necessary to support development from a territorial cohesion perspective.

# 1. A polycentric macro-region, dense in strategic resources

The area between Milan and Bologna constitutes a polycentric, densely populated, and interconnected urban system that can count on an offer of highly qualified urban and regional infrastructures. The introduction of the high-speed rail has increased the historical attractiveness of this historic infrastructural corridor along which crucial strategic poles of supra-local rank are concentrated: universities, research and development centers, airports, exhibition centers, often in competition with each other.

### 2. A strategic bio-region, but with high environmental risks

The Po Basin, the articulated river network of its tributaries, the agricultural areas of the plains, and the Apennine areas south of the Via Emilia make this area a potential urban bioregion, characterised by a unique dialogue between the urban and non-urban components. However, this condition is threatened by high levels of air, soil, and water pollution: industrial and domestic emissions, road traffic, intensive agriculture, and livestock make this area one of the most problematic in Italy from an environmental point of view and public health, where the balance between urban, rural and mountain landscapes is often compromised. The transition to a smarter, greener and more sustainable path of development is a crucial policy issue, which deserves a wider regional perspective to build upon the concept of ecosystem services.

### 3. A dynamic and rich urban region, but also heterogeneous and polarised

The corridor between Milan and Bologna is one of the areas with the highest incomes in Italy in which, however, there are some critical development and growth differentials. Significant gaps undermine territorial cohesion, particularly between the areas near the infrastructural corridor and more "marginal" territories. The high-speed rail corridor (together with the motorway system) functions as a "magnet" that generates value and attracts population and investments. However, it peripheralizes some Apennines and the plain municipalities, weakening them both from a demographic and a socio-economic point of view.

## 4. New territorial hierarchies shaping people mobilities

The Milan-Bologna axis is characterized by high commuting mobility and a strong interconnection of local labour systems (SLL). The organization model of local and regional mobility is less hierarchical and polarized than in other urban areas. The introduction of the high-speed line, not counterbalanced by effective and coordinated collective mobility policies on a sovra-regional scale, has enhanced long-range accessibility in the cities served directly by the high-speed stations (Milan, Reggio Emilia, and Bologna), disadvantaging those not served, in particular in the localities on the border between the two regions, especially in terms of local connectivity. A new hierarchy is emerging at the local scale, which is not favouring the urban region integration.

# 5. An innovative and competitive manufacturing system missing a macroregional strategy

In this rich and productive macro-region, there are internal competitiveness gaps. On the one hand, productivity along the Milan-Bologna corridor is very high and in the regional capitals and the major centers of the Emilian part of the axis. On the other hand, there is a discontinuity in the provinces of Pavia, Lodi, and Bologna, in the border areas between the two regions and the internal areas on both sides of the Milan-Bologna axis. The analysis of the creative industry and logistics sectors seems to confirm the fragmentation of planning and regulatory interventions and a different pattern between the two regions. While the creative industry highlights localization dynamics that are not uniquely centered on traditional urban poles (see in particular the data relating to the Reggio-Emilia and Modena system), logistics have followed a logic of localization that is only partially coordinated and organic, with impacts sometimes significant in socio-economic and environmental terms, producing new pressures on peri-urban areas in particular.

# 6. A macroregion able to attract and move critical public resources but suffering from ties and limits generated by traditional administrative geographies

The territories analyzed appear capable of attracting significant resources from European funds through regional and national planning tools, with significant differences between Lombardy and Emilia-Romagna. Although in both regions, the per capita distribution of EU investments seems to penalize the major centers, in the first, the investments are concentrated mainly in the inner areas; in the second, there is a greater concentration along the infrastructural corridor, while the border territories between the two regions appear penalized. While this situation seems to have had positive effects on the spending capacity of intermediate municipalities, provincial capitals and metropolitan cities appear to be relatively weak actors, and their financial dependence on ordinary and extraordinary transfers seems to limit their ability to access and manage investments on a larger scale.

# 7. A tradition of cooperation that looks for a macro-regional scale, between the new role of public utilities and the fragmentation of institutions

The macro-region is characterized by a galaxy of organizations, networks, and cooperation networks resulting from the sedimentation of historical relationships that have overlapped over time but lack a design capable of reordering their complementary functions and relationships— mainly where it is intended to address issues and policies on a large scale. Weak metropolitan bodies and a heterogeneous pattern of inter-municipal cooperation were accompanied by the emerging role of public utilities, entrusted with increasingly relevant skills in managing local services. This sector faces a process of concentration that makes them possible privileged interlocutors of a macro-regional governance system.

# 2.1 The stakeholders and territorial actors' point of view

The discussion with the economic, functional, and territorial actors carried out within the project (43 stake-holders of different public and private organizations, local authorities, and economic and institutional actors of the territory) has identified some essential correspondences with the above-reconstructed framework, highlighting the interest in the construction of a regional scale perspective around some key points:

# 1. A perspective of environmental sustainability must be funded on a new relational and regional vision

Today administrations are very sensitive to environmental issues and the connections with quality of life and economic development. Developing a vision of sustainable development requires considering new objectives and actions for future policies relating to land management and quality of life. Moreover, it means considering new spatial arrangements, different from those defined by the current administrative borders. The system between Milan and Bologna has been the subject of many transregional cooperation projects in the last twenty years: forms of agreements or cooperation consolidated from an institutional point of view such as the Land Reclamation Consortia, the Regional Parks, the Natural Reserves, the Po River authority, already operate in this sense and could constitute the active nucleus of a new integration between the natural and anthropogenic system. Quality of the environment and air, energy supply, waste management, and disposal constitute timely innovation sites. However, this urban region generally requires the ability to activate an innovative vision of ecosystem services, recognizing the close interaction between urban territories and reserves of naturalness and environmental resources. On this issue, the importance of the Po river

emerged, in particular, as a naturalistic and functional axis transversal to the infrastructural networks of the Milan-Bologna corridor.

# 2. The functional integration of the urban region requires new investments in intermediate mobility and stimulation of intermodality

Regarding the railway system dimension, a clear break has emerged between the regions: the high-speed railway line seems to have led to drops in terms of accessibility in the areas not covered by its stations due to the lack of interregional trains able to guarantee the connection to the high-speed rail. This already complex picture further suffered by the Covid-19 crisis, which has changed the demand for mobility and the pace of commuting. In order to improve the widespread accessibility of the territory, it is necessary to abandon the idea of a traditional railway service system with fixed timetables, to rely on flexible services built based on demand and actual local needs. It is also necessary to organize on a system scale governance capable of favouring intermodality (between road, train, urban sharing operators) to reduce the use of private vehicles in both inter-and intra-urban journeys, overcoming the differences caused by belonging to different provinces and regions.

# 3. Problematic management of logistics systems in rapid transformation

The Milan-Bologna area has a very marked logistical vocation, with an intense concentration of companies and structures, but with the tendency of companies to locate themselves outside the cities, in areas with good accessibility to the road network, occupying large spaces at lower costs. A sovralocal policy able to govern the growth in logistics demand is absent, although the growth trends of e-commerce have been significant, even before the pandemic. The need has emerged to set up a planning of the logistic activity, intervening on a large area dimension to aim both at the integration of the nodes of the mobility systems, reducing the competition between territories, and at developing new efficient urban facilities (e.g., last-mile logistics, which has a substantial impact on urban sustainability).

# 4. Sustainable production systems

An essential part of the northern Italian production system is concentrated between Milan and Bologna, with numerous supply chains oriented towards innovation and export and multiple university institutes, research centers, and technopoles engaged in developing and disseminating new knowledge and technologies. Support to the sustainable innovation of this production system (and all the national and transnational supply chains that have their own "brain" in this area) means strengthening the networks between territorial clusters and research institutions, with forms and incentives that facilitate stable collaborations between actors. In particular, it means involving SMEs and supporting the exploration of new ways of "mixing" and crossing between disciplines, particularly in agriculture. Fight against climate change, circular and foundational economies are challenges capable of renewing local specializations.

# 5. Sustainability and efficiency of utilities

In the Milan-Bologna system, three out of the four leading national public utility operators, all currently engaged in a strategic effort to aim for the resilience of networks and services, ensure quality and capillarity of supply counteract air pollution by decarbonization and the reduction of climate-altering emissions. Thanks to these operators and important research centers, the Milan-Bologna area can become a laboratory for the development and experimentation of sustainable innovations of utilities, especially if an action by the institutions accompanies the efforts of the individual actors. This perspective can provide the premises to regulate the "competition" and favour the coherence of the offer with the planning objectives.

# Ordinary planning tools struggle to govern the variety and complexity of the environmental, socio-technical, and institutional ecosystem of the macro-region

Local administrations face significant challenges that need to be governed on a larger scale than those provided by administrative boundaries, especially in the face of scarce resources' availability. There is, therefore, a need for governance tools that allow greater cooperation with other public bodies and with private

entities, according to a logic of open territorial aggregations, responsive to specific needs. A shared vision of urban development must necessarily start from the recognition of the differentiation of the Milan-Bologna system: the way forward is not that of standardization, but the recognition of the value of differences and variety, thinking of collaboration strategies between more vital territories and the weaker ones, accompanying the changes in residential and work processes generated by social change and the pandemic. On the metropolitan scale, themes of strategic importance enhance public heritage, sustainable mobility, the revision of settlement models, and urban regeneration. The theme of territorial equalization (already explored by the Metropolitan City of Bologna and the Metropolitan City of Milano) can also be interpreted on a large area scale, thinking about the functions and specializations of medium-sized cities and designing compensatory mechanisms. It is also necessary to support the technical skills of public administrations, which often lack the expertise required to include their projects within the framework of a vast area system of which they do not have an overall vision.

## 7. A macro-region in search of a local and European identity

In the absence of a perception by local actors of belonging to the same system, the construction of shared visions and cooperation is more complex and risks being only episodic. Processes to strengthen awareness of the interconnections between the territories belonging to the system and the sense of citizenship are desirable (and possible starting from the data and proposals developed in the ESPON IMAGINE project). From the discussion with the stakeholders, it emerged the importance of considering the nature of the Milan-Bologna corridor within the dimension not only of northern Italy but also of Europe, highlighting the need for joint action of tools and actors within a glocal dimension, which goes beyond administrative borders to pursue objectives of the more outstanding quality of life and competitiveness.

# **Regional scenarios**

The path of discussion and reflection on the scenarios conducted with the project stakeholders made it possible to trace the contours of a mobilizing action framework for the Milano-Bologna macro-region that looks at the "green new deal" as a possible reference horizon for the articulation of its multiple actions.

#### 3.1 The participatory construction of a shared scenario

A first shared reflection on the possible future of the Milan-Bologna urban region was developed on the occasion of the Regional Scenario Workshop (organized on 12 February 2021).

The starting point of the reflection was the first set of three exploratory scenarios built by the research group **ESPON IMAGINE:** 

- 1. The Milan-Bologna corridor as a magnetic 'tube,' which prefigured the permanence of the two historic territorial systems united by the high-speed railway line: the Lombard radio-centric polycentrism system (also extended to the city of Novara, in Piedmont), having Milan as its metropolitan heart, and the linear polycentric system of the Via Emilia, from Rimini to Piacenza.
- 2. The Milan-Bologna corridor as a backbone, which foreshadowed the corridor's future development in a more integrated and balanced polycentric territorial system, capable of attenuating the polarization between the large regional capitals, medium-sized cities, core urban centers, and inner areas.
- 3. From the corridor to the Milan-Bologna territorial platform, which foreshadowed a radical change in the corridor structure, favoured by an ever more excellent attractiveness, for the location of families and businesses, intermediate areas, and those at the foot of the Apennines.

The three scenarios were intended and proposed to stakeholders not as images of possible futures which are in themselves 'organic' and alternate with each other, but as coherent clusters of dynamics and trends: useful for triggering discussion and orienting reflection towards a possible selection of relevant issues, combined into a practical and concretely feasible vision of the future.

The individual reactions of the stakeholders and the interaction between all the participants in the Regional Scenario Workshop have led to a general convergence towards the image of a more integrated and balanced urban region (attributable to the scenario 2), but capable of acknowledging some possible dynamics of innovation and change (attributable to scenario 3) which in the future could acquire relevance also due to the effects of the Covid-19 pandemic on housing and work propensities of plural populations take up residence within the corridor. During the Regional Scenario Workshop, the confrontation that took place made it possible to bring out opportunities and external factors harbinger of potential resistance and inertia to the construction of the framework for action aimed at achieving a new Milan-Bologna urban region.

The debate that emerged from the different sessions highlighted numerous strategic issues in the development of the Milano-Bologna system:

- · Stakeholders' preferences focused mainly on scenarios 2 and 3 from which elements already present in the discussions on metropolitan plans and sustainable mobility had emerged. The positions taken on this matter were different: particular interest was shown in the possible management of a scenario oriented towards polycentrism and redistribution. Some stakeholders highlighted the difficulty of control and regulation inherent in the third scenario, which provides an extreme distribution of functions and polarity throughout this vast area.
- The importance of having a broad knowledge of current dynamics to recognize current trends, but also to promote a consistent reaction to changes. In this process, the scenarios illustrated by the research team can provide essential guidance indications.
- The hypothesis of a possible integration of scenarios 2 and 3 was put forward to be implemented progressively - promoting an evolution towards diffusion (it is essential to imagine new functions

presently absent). A new paradigm is emerging concerning territorial networks and mobility systems, allowing new forms of territorial distribution of functions thanks to new technologies.

- The third scenario was considered the most challenging, primarily due to the role of metropolitan areas
  in relation to smaller centers. The attractiveness of peripheral and mountain areas was considered a
  critical issue due to the difficulty of locating services typical of urban areas. Nonetheless, the scenario
  could open alternative prospects for action and focus on new economies and new systems of territorial
  protection.
- Metropolitan areas as places of experimentation for the construction of policy. The tendency towards greater integration and polycentrism can be a strongly characterizing element in the policies of metropolitan areas (also favoured by medium-sized cities). This aspect still shows signs of uncertainty, especially if not supported by a strengthening of the institutional role of metropolitan cities. Therefore, the ability to generate inter-institutional collaborations through more effective administrative tools must be reinforced, starting from the promotion of experiences of large-scale agreements and alliances (which have already given good results)- i.e. for the promotion of territory and tourism or for managing the airpollution affecting all the Pianura Padana. Or to consider urban regeneration as a transversal driver that includes metropolitan areas and intermediate poles, able to offer an alternative to new buildings and stem the possible dynamics related to the generative effect of sprawl. The expansion of agreements between different territories and institutions must include public and private stakeholders and consider consultations a foundational element of dialogue.
- Mobility becomes central in the development of scenarios. Mobility systems are the subject of numerous projects already underway and present significant possibilities for innovation about sustainable urban mobility and local and regional transport systems. The relationships between the different regional mobility systems shall be reinforced, requiring greater integration and capacity to support a highly interconnected urban region. To establish a renewed relationship between urban and rural areas, the redesigning of services and public facilities must be thought of following the reorganization of mobility systems.
- The topic of logistics was dealt with mainly within the second scenario. The development of this scenario can positively contribute to bridging the lack of a "culture of governance" in this sector, inserting it into a wider framework of reflection and rethinking called for by the consequences of the Covid-19 pandemic.
- Multiutilities can play a unifying role in resource management. Water management policies and projects have been mentioned as a fascinating field of experimentation, showing how metropolitan and regional scale multiutilities can facilitate collaboration between subjects within a fragmented cooperative framework. Extended over an interregional scale, these functional actors can become very relevant in encouraging greater integration between territories but might face considerable resistance due to strong local interests. To this end, it is necessary to identify actors capable of innovatively orienting the provision of service towards a new engages demand, helping multiutilities modify their supply and service models within the territory.
- A question of territorial balance was raised, evidently seen above all as a risk factor in the first scenario but also present in the others. The relationship between urban and rural has acquired greater strength following the pandemic: starting from the natural heritage of the peripheral areas (mountain or river plain), which signifies innovatively focussing on the ecosystem and eco-territorial services of the territories can offer. Metropolitan institutions are already sensitive to the development of new relationships within most marginal areas, thanks to the assignment of new competencies to metropolitan cities concerning rural areas.
- Putting the question of identity at the center of corridor policies. The importance of identity as a founding factor for territory is emphasized and the more traditional factor of competitiveness. But, given the historical differences along the corridor and the path-dependencies patterns, developing a shared identity may not be an easy task. To this end, the possibility of considering common problems (for example, those concerning relations between urban and rural areas) as a starting point for addressing the identity issue was underlined. The construction of a shared identity can also come about through a process of defining a shared vision that the process of applying for an ITI could generate. However, to obtain concrete results, it is necessary to establish clear objectives as a basis for the implementation of different planned actions.

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- Throughout the sessions, the participants recognized and brought to attention the presence of critical, unclear and difficult-to-manage aspects of the hypothesized scenarios:
- The tendency towards concentration is perceived as the main threat to peripheral areas. The first scenario puts the distribution of wealth at greater risk to the detriment of the more fragile mountain or lowland areas and the difficulty of adopting adequate tools that allow metropolitan areas to act in favour of redistribution of urban planning interventions within the territory.
- The complex logistics system still carries numerous uncertainties even though it represents an important aspect for the development of the Milano-Bologna urban region. Some difficulties have been encountered in the coordination and management of logistical dynamics insistent on medium distances towards the smaller poles, reflected in a more casual and less organized distribution of logistical nodes and a lower capacity for governance on central areas. In support of this necessity, the risk was pointed out that a more polycentric scenario (also from the point of view of logistical nodes) could create more soil consumption problems than benefits.
- Parallel to the logistics issue is the issue of governance of the local and regional transport system. Currently, the railway system is almost wholly removed from integration with other carriers. The Regions manage the local railway system and the vectors (TPL, Local Public Transport) managed by mobility agencies on an urban basis (by bodies and entities with complex governance). Consequently, when cities think about sustainable mobility issues, it is complicated to integrate transport systems with the rail system governed on a larger scale (regional and supra-regional) and by the need for economic efficiency. A greater capacity to integrate systems would favour a more effective and flexible service for the benefit of people. The third scenario also requires a profound reflection on public transport opportunities, so that the possibility of re-inhabiting the Apennines (or more generally the marginal areas) does not become a generator of private traffic and pollution.
- The concept of a "territorial platform", hypothesized in the last scenario, has been debated in relation to the uncertainties and risks underlying widespread urbanization, when unregulated. A need was expressed to avoid the distribution of well-being translating into the disfigurement of the territory's elements of value caused by undisputed urban sprawl and land consumption. Nevertheless, the real estate market trends - towards a lower use of work and production spaces in the central areas - are still not clear and new ways of providing work (especially for the tertiary sector) are still a novelty to be evaluated. To this end, the risks of environmental degradation imaginable in this scenario are difficult to predict, given the ever-evolving situation of the pandemic.

The outcomes of the discussion of the three territorial scenarios paved the way for a first shared reflection on the opportunity to create an ITI (Integrated Territorial Investments): a multidimensional tool for regional integration.

#### 3.2 An opportunity for action and a frame of meaning

How to pass from a scenario-making exercise to a frame of meaning capable of inspiring policy and planning? The European framework is an essential element for this reflection: IMAGINE is a project funded by ESPON, a vital tool of the European integration project, which aims to build knowledge capable of inspiring policy-making in the face of the challenges posed by the processes of territorial transformation.

In this perspective, real inspiration came from the policy framework introduced by the Green New Deal, promoted by the EU. The European cities and metropolitan areas, gathered in the EMA (European Metropolitan Areas Association), have expressed with great clarity the reasons they are applying to be key players in the Green New Deal and the Recovery Plan. They made themselves available indeed to interpret the challenges of the Green New Deal, helping national and European governments to identify strategic actions concerning the issues of economic recovery and environmental sustainability, climate change and energy renewal of built heritage, sustainable mobility, digital connectivity, support for new businesses, inspired by new production models. In other words, cities and metropolitan areas have applied to play the role of drivers of the "green, digital and just transitions that Europe needs for recovery". Likewise, more recently, they have declared, within Eurocities, the need to put the cities and metropolitan areas of Europe at the center of the Recovery Plan.

In this direction, the elements that emerged during the reflection on the scenarios illustrated above allow us to glimpse a possible trigger, an opportunity: the Milan-Bologna urban macro-region could explore the

possibility to apply at the national and European level to build a pilot project /incubation space inspired by the New Green Deal.

# ITI as an opportunity for Milano-Bologna urban region: governance scenarios

The ITI (Integrated Territorial Investment) was introduced in the context of Cohesion Policies as a territorial tool, a mechanism for the "delivery" of structural funds, helpful in implementing integrated development strategies. Thanks to its flexibility, the ITI has been used to help implement different projects at different scales and with structural value strategies. This flexibility enhances its function of territorial "aggregator," capable of providing a reference framework for identifying and networking local authorities and their requests. In the context of the ITI it is possible to rethink the delegations and governance balances concerning priority and shared projects. Moreover, in an economic sense, the ITI has the real potential of providing funding security to innovative measures, both in terms of content and management, promoting new forms of aggregation between authorities and beneficiaries. Like any tool, however, the ITI does not have a life of its own and it requires a strategic effort at the base, capable of giving strong content to a shared governance/action frame-

To define the challenges and the opportunities for ITI in the Milano-Bologna urban region, this research went through: a) a review of the literature and an exploration of the data at disposal from the European Commission; b) an analysis of the central potentials for the ITI application in the study area; c) seven case studies analysed through interviews and documents; d) three possible scenarios of application of ITI in the emerging Milano-Bologna urban corridor.

The research analysed the literature for the crucial success factors:

- ITI is the most used delivery mechanism in less developed regions, where the amount of funding is higher and critical for the realisation of the strategy. However, regions "in transition" used the ITI for implementing their territorial strategy.
- we can consider it a success mainly due to its novelty only partially linked to its financial outreach ( only 11% earmarked more than €100 mln);
- A clear tendency is to use ITI in urban/metropolitan contexts;

In the analyses carried out concerning a sample of ITI experiences in Europe, characterized by elements of territorial experimentation, some successful characteristics emerged:

- The potential for territorial and governance integration: ITI proved to be a "reliable" framework (that of European funds) to base a targeted collaboration open to solicitations from below.
- The experimental attitude of the tool has prompted many local actors to put new expectations into play and try approaches different from traditional fund management, often using it as a complement to more structural policies.
- The strategic ability to move the "cognitive" barriers of the actors involved towards new imaginaries by expanding the knowledge available to them and stimulating interventions that tend to shift public action due to their experimental nature towards clearly defined problems and opportunities.

Conclusions are drawn from the following considerations: first, the Milan-Bologna corridor presents specificities related to territorial, governance and strategic peculiarities; second, key features of the ITI are collaboration potential, experimental attitude and local capacity-building.

#### 4.1 Three possible governance scenarios for the Milan-Bologna corridor ITI

The ITI could be an effective instrument in more than a phase of the strategic process and in multiple ways. On the base of the analysis realised by the ESPON IMAGINE working group, a non-univocal approach based on three scenarios of ITI can be assumed and evaluated:

A unique interregional ITI: the construction of a unique ITI can be facilitated by the delegation of operative functions to a single ad hoc agency/structure with legal personality, relieving the pressure on involved administrations and enhancing the efficiency of the process. A super-partes body will help obtain the trust of all stakeholders and concentrate the efforts on common interests. The compresence of such an intermediary actor, of a common imaginary and a strategy focused on few central issues, could be the cornerstone of this ITI. In an initial phase, the interregional ITI could have an explicit experimental attitude. The scope could enhance the relationship between public bodies and generate a collaborative strategy on selected relevant themes, with both global and local importance. Looking at the UN and EU agendas, crucial issues characterise the region that needs joint efforts, such as the climate change challenge, the pollution in urban and rural areas, the maintenance and protection of natural resources, or, for instance, in the Po ecosystem. A macro-regional strategy can also work as a framework for different programmes, support the coherence of different funding resources and help to establish synergies between macro-regional actors (Böhme, Toptsidou, 2019). This approach needs a strong effort at the funds coordination level but can help gather a significant amount of resources, drawing funding from multiple OPs in both regions.

- Two regional ITIs: the possibility of two separated regional ITIs has an advantage in terms of initial organisation but implies a substantial political and administrative complementarity. Creating an ITI office for inter-regional cooperation inside the current administrations for managing multiple funds could be a strong advantage. At the same time, the creation of forums and appointments for exchanging information appears crucial. The management infrastructure would also benefit from identifying intermediate bodies to have a closer relationship with the local authorities. The office could be located in the two metropolitan cities involved. The central aim of this ITI is the harmonisation and complementarity between the two regions on specific topics and projects. In this case, the strategy should be designed upstream through regional agreement, rooted in the common priorities listed in the related operational programs. The advantage of two separated ITIs is selecting indicators and organising project competitions more tailored to each local context. A portfolio of joint projects financed in separate tranches by the two ITIs could give continuity to the funding flux to quarantee a seamless project. Finally, bilateral acts in the framework of the ITI could allow (or even foster, using selection criteria) groups of public and private actors from both regions to apply as beneficiaries and propose joint projects, having a unique representative. This approach will help to reduce the competition among actors and help an equal distribution of funds according to each regional budget allocation. At the same time, it tackles the problem of territorial interdependence (cross-regional issues and territories), whose circumstances are often excluded from programmes (Mehlbye and Böhme, 2018). Further attention should then be given to indicators: each strategy will consider spillovers and complementarity with the policies and plans in areas outside the ITI limits. Even the two operational programs could recommend a budget for territorial cooperation and ask to specify how each ITI contributes to this aim as a mandatory selection criterion.
- Multiple ITIs at the local scale: the common element among the ITIs presented in the two regions could not be a specific issue but a scale of planning to entrust ITI design. For instance, the Unions of municipalities, of the Zone Omogenee (as identified by the metropolitan cities reform) or on purpose agglomerations of cities, borrowing the system in place for Internal Areas of Italian SNAI). In this case, the urban region strategy could give funding and decisional power to the less advantaged territories from the presence of the high-speed railway, redistributing the regional resources for development in a similar way. These ITIs would need a strict complementarity between policies in urban and non-urban territories, between more and less accessible areas, enhancing cohesion among any other attributes. This approach implies an introductory phase of dialogue between management bodies and stronger technical assistance to build the capacity of the involved municipalities. In this way, the ITI would have a collaborative aim, fundamental to stimulate bottom-up proposals, and an operative dimension, fostering the autonomy of second-tier administrations to realise their projects. In this sense, the ITI could be linked with the use of the CLLD and the creation of local action plans. A more fragmented panorama of ITI does not mean a less focused commitment: every ITI application could be subordinated to the conformity with specific indicators, for instance, the existence of more than one beneficiary, or the inclusion of actors from the other region, or the inclusion of particular topics of inter-regional interest. Finally, although more traditional, the design of the governance infrastructure will benefit from the existence of formal agreements between regions and the presence of specially dedicated axes in each ERDF OPs to set clear expectations for each local strategy. The choice to proceed with one or more of these scenarios simultaneously depends on the actors' will and existing organisational capabilities. The ITI is a complementary instrument, necessarily rooted in political will, both because embedded in a complex bureaucratic framework both because lacking a thorough definition of its contents and finalities. For these reasons, the ITI appears at the same time as a flexible and destabilising tool. ITI's economic, innovative and strategic potential is thus subordinated to the actors' capacity to enter the discussion on new

forms of territorial management and commit considerable resources to the effort. Notwithstanding these demands, the ITI still results in an appropriate tool among the EU territorial instruments to accompany a regionalisation, aligning needs and expectations from European regions to the global challenges raised by the EU cohesion policies.

# Policy scenarios for Milano-Bologna urban region: proposal for promoting an

The Regional Forum final event, held on May 2021, contributed to filter and select the first arguments to develop upon in order to draft a roadmap and agenda for a possible ITI, addressing both governance and policy challenges, based on the recognition of common problems but also shared aspirations towards a strategic regional action framework.

From the governance point of view:

- There is a clear need to govern the strong interdependencies between territories along the corridor; however: administrative fragmentation makes it very difficult to produce effective governance and policies for this trans-territorial system. Despite the reforms of the recent years, the boundaries within which the regulations of territorial systems are built have remained the same: issues regarding mobility, logistics, education, tourism, and environmental protection are dealt with at the municipal level, even when they extend well beyond. Fragmentation of governance also affects economic functions, producing competition and duplications in the offer of local collective competition goods and impacting the competitivity of companies and businesses in international markets. In particular, a critical area is the innovation sector: the research networks of Lombardia and Emilia-Romagna are not exchanging information and contacts, limiting their capacity to produce alliances that are able to compete in the European scenario.
- There is urgent scope for regulating functions organized at a trans-territorial scale: logistics, mobility, utilities, environmental functions need to reflect and act beyond the municipal and regional scale. The main obstacles to the innovation of utilities are those arising from the fragmentation of territories, which limit efficiency and cause a massive delay in the diffusion of new technologies. Moreover, the potential of innovation in policy design can be highly hindered by their reduced scale of action.
- · From the territorial point of view:
- the role of medium-sized cities in the regional scenario needs to be recognized and enforced. Mediumsized cities are affected by the growing attractivity of the metropolitan areas: Milano and Bologna have recently experienced significant growth, but at the same time, the intermediate cities along the axis have expressed a slower dynamic. The challenge for the future will be trying to find a way to redistribute development, reducing the imbalance between territories, before competitive advantages still available in the smaller center are consumed by the competition of the two larger cities. All stakeholders agreed that the competitiveness of these actors is to be enforced and supported to grant the replication of polycentricity that is an essential element of the Milano-Bologna system.
- The attractiveness of peripheral and mountain areas is a critical issue due to the lack of infrastructures and services: the tendency towards concentrating functions in metropolitan areas is perceived as the main threat to peripheral areas. The integration of the marginal regions in the corridor is also affected by the fragility of small municipalities, where an absence of technical skill in the public administration severely limits the ability to understand and implement the aims set by regional and European programming and to insert its planning within the frame of a system covering a vast area. There is a strong need for forms of communication and diffusion capable of transferring the results of debates on the Milano-Bologna area even to the smaller municipalities.
- · From the policy point of view:
- Mobility is a key factor for integrating the corridor: the high-speed railway line seems to have led to drops in terms of accessibility in the areas not covered by its stations due to the lack of interregional trains able to guarantee the connection to the high-speed rail. This already complex picture further suffered by the Covid-19 crisis, which has changed the demand for mobility and the pace of commut-
- Regarding logistics systems, the corridor's strategic importance for freight flows brought to congestion, land use, and competition between hubs. There is a need for a more vigorous dialogue between the worlds of logistics and institutions, which are governed by different logics and rhythms: the rigidity of

institutional assets does not allow for the upgrades of infrastructure systems that would be necessary to accompany the change of economic geographies.

 Last but not least, all stakeholders agreed that an integrated vision of the Milano-Bologna area should consider the system not only as a large metropolitan region but also as a significant bioregion, to investigate the possibilities of integration between the natural system (starting from the Po river, which is the most crucial ecologic corridor in the area, and from rural areas) and the urban system, in the direction of better sustainability. An issue that became more urgent during the Covid-19 crisis, which demonstrated the correlation between environmental quality, quality of life and public health.

Starting from these critical issues, the discussion carried out by economic, functional and territorial actors within the IMAGINE's program of focus groups, seminars and forums expressed a common interest in the construction of a regional scale imaginary around some key points: sustainable development, a contrast to climate change, reduction of soil consumption, mobility, but also new issues exacerbated by the Covid-19 pandemic, like urban logistics, use of public spaces, changes in residential dynamics

### 5.1 A draft basis and a roadmap to developing an ITI under the **Green Deal perspective:**

### A roadmap to an ITI

Based on these assumptions, it has been first discussed the opportunity to consider The EU Green Deal as a framework for new trans-local alliances to regulate many of these issues, which require actions organized at the corridor scale to produce good results. Indeed, the Green Deal seems to offer an opportunity for this urban region to take action along its main objectives; at the same time qualifying itself under the EU Green deal framework as a pilot territory working at it from a regional perspective, seemed a unique and challenging opportunity to show how the sustainability objectives supported by the Green Deal can find in the regional scale a crucial level of action.

Secondly, it was agreed that new multi-level governance models are needed to regulate the variety and complexity of the macro-region's environmental, socio-technical, and institutional ecosystem. The increasing mobility and evolution of functions in the Milano-Bologna corridor and the challenges of sustainability, contrast to climate change, transition from linear to circular economy, highlight the mismatch between functions and institutions. These issues demand a glocal approach: changes in the institutional framework must govern matters organized transversally to administrative boundaries. The organic connection between local and global levels requires, in fact, the ability of the territory to reorganize itself through a "political" compromise with its functions. Many local stakeholders already started horizontal networks to regulate functions surpassing administrative boundaries: chambers of commerce and industry association for governing economic functions; urban and metropolitan institutions, and ANCI, for the governance of urbanization processes; the Po River Basin Authority and Bank foundations for environmental functions. Yet, the lack of funds and institutional tools for the management of trans-territorial issues is a critical problem.

Nevertheless, both Metropolitan institutions and provinces experience substantial limitations to support the multilevel approach needed to go in this direction. The changes in the functional scenario require a revolution of the institutional practices towards an improved capacity of the administrations to work together on common goals. New multi-level governance models are needed, based on the distribution of power among different levels and on strong cooperation between public and private actors both on the horizontal and vertical axis. These new governance models should also be able to work on variable geometries in order to intervene on the different functions, since neither an "optimal size" nor "optimal shape" emerges to govern the Milano-Bologna system: a shared vision of urban development must necessarily allow open territorial aggregations, responsive to specific needs, recognizing the value of differences and variety.

Third, in order to go in this direction, a shared identity and vision for the Milano-Bologna region is a prerequisite for successful cooperation between local administrations and stakeholders. The Milano-Bologna corridor needs to recognize itself as a system. In the absence of perception by local actors of belonging to the same system, constructing a shared vision is more complex and risks being only episodic. Building a subjectivity of the territorial system, helping stakeholders and local actors develop a sense of sharing and belonging, is a crucial prerequisite for a greater density of collaboration. This can only be achieved with the inclusion of private actors and local communities in the governance: not only to ensure the alignment of demand and solutions but also to diffuse the awareness of the interdependences between metropolitan areas, small cities, marginal areas.

The process of defining a common identity and vision through the ITI tool could be fundamental to interpret the challenges of environmental and social sustainability as an opportunity to achieve a more efficient and fair spatial organization of social and economic functions and to build new opportunities for development. Developing a sense of territorial identity will also allow the Milano-Bologna system to dialogue with public institutions at the national and European levels. The IMAGINE project can therefore represent a starting point for the development of strategic networks and programs able to govern the transformation of urban and regional scenarios both within the Milano-Bologna corridor as well as by acting as a model for other corridors, in line with the European Union's urban and regional development policies.

Fourth, as a first step towards the activation of an ITI for the Milano-Bologna region, the final event of the project launched the proposal to transform the IMAGINE network in a Permanent Milan-Bologna URBAN REGION forum to foster the production of intellectual capital (information exchange) social capital (creation of trust among the actors) and political capital (alliances for the future cooperative actions). An ITI for the Milano-Bologna region, inspired by the EU Green Deal perspective, could produce a common strategy for the transformation of urban and regional scenarios, on which local projects, each taking resources from different European and national programs, could be based, starting from the identification of one or more critical issues to be fronted with "flagship projects" (i.e., the regulation of logistics and mobility systems along the corridor).

### The contents of an ITI

The possible contents of an ITI for the Milano-Bologna region, aimed at the production of a common strategy on which local projects could be based, have been discussed, leading to the agreement of some indications and criteria to inspire future cooperative actions, which can provide a solid basis for an incremental process which could lead to an ITI.

- 1. Sustainability as the basis for the development of a shared vision for the integration of the Milano-Bologna region. Sustainable development requires the redefinition of objectives and actions regarding environmental quality, land management, quality of life, the transition from linear to circular economies, as well as the ability to activate an innovative vision of ecosystem services, recognizing the close interaction between urban territories and reserves of naturalness and environmental resources. In order to define a coherent program for sustainability, new spatial arrangements, different from those defined by the current administrative borders, must be made. Many local governments and stakeholders in the Milan-Bologna corridor already organized actions towards improved sustainability based on horizontal cooperation: Regions, Metropolitan cities, Bank Foundations, the Po River Basin Authority. These actors could play a pivotal role in creating a new model for integration between the natural and anthropogenic system at the corridor scale, generative of a new partnership between the urban/rural. Still, the inclusion in the governance of other public actors and private stakeholders (i.e., utilities providers, mobility providers, third sector) will be critical to allow the gathering of intelligence and resources (including the ones made available by the PNRR) needed to build and implement an effective strategic plan for sustainability.
- Mobility and logistics are key factors in the governance of urban processes and economic competitiveness in the Milan-Bologna area in the new scenario dominated by increased mobility of people, goods and information, mobility and logistics became crucial issues. The debate highlighted the need to move from a "corridor" to a "platform" approach in the governance of mobility in the Milan-Bologna system, to provide an efficient answer to the changes in the demand generated by the Covid-19 breakout. Around the skeleton of the corridor, where infrastructures and functions are concentrated, a "nervous system" must be built to assure that the people can get to their destination in a reasonable time from all the territories of the area (this will also be functional to the revitalization of marginal areas). Such a system requires better utilization of existing assets and more intense use of intermodality (both in regional and urban mobility): local governments should define common objects and criteria to allow operators to organize their projects and integrate their mobility offer in an efficient way. Similarly, logistics systems require the definition of shared rules and objectives at the corridor level, surpassing local and regional differences to foster the integration and efficiency of the existing platforms, to create new services and infrastructures (i.e., urban distribution systems, new logistic hubs) minimizing their impact on human and environmental systems, to pursue traffic

- concentration as a mean to achieve a better connection to the Mediterranean ports, to increase train use, to reduce load breakings.
- 3. Research and innovation systems require stronger integration. An essential part of the northern Italy production system is concentrated between Milan and Bologna, with numerous supply chains oriented towards innovation and export and multiple university institutes, research centers, and technopoles engaged in developing and disseminating new knowledge and technologies. Yet, each region has its own platform for sharing projects and created different styles of governance for the innovation system. This situation causes duplications and competition between research centers. Experiences of trans-regional innovation programs should be encouraged to share experiences and projects between the two regions, particularly regarding the innovation of SME (starting from functional networks already operational such as the EEN SIMPLER consortium). A more robust integration between the innovation networks of Lombardia and Emilia-Romagna could help the research system to front the challenges posed by climate change, circular and foundational economy.
- 4. Efficiency and innovation of utilities must be pursued to achieve better sustainability and quality of life. In the Milan-Bologna system, we can find three out of the four leading national public utility operators, all currently engaged in a strategic effort towards the resilience of networks and services, improving quality and capillarity of their offer, the reduction of climate-altering emissions. Thanks to these operators and the presence of important research centres, the Milan-Bologna area can become a laboratory for the development and experimentation of sustainable innovations of utilities, especially if an action by the institutions accompanies the efforts of the individual actors. This perspective can provide the premises to regulate the competition and favour the coherence of the offer with the planning objectives.



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