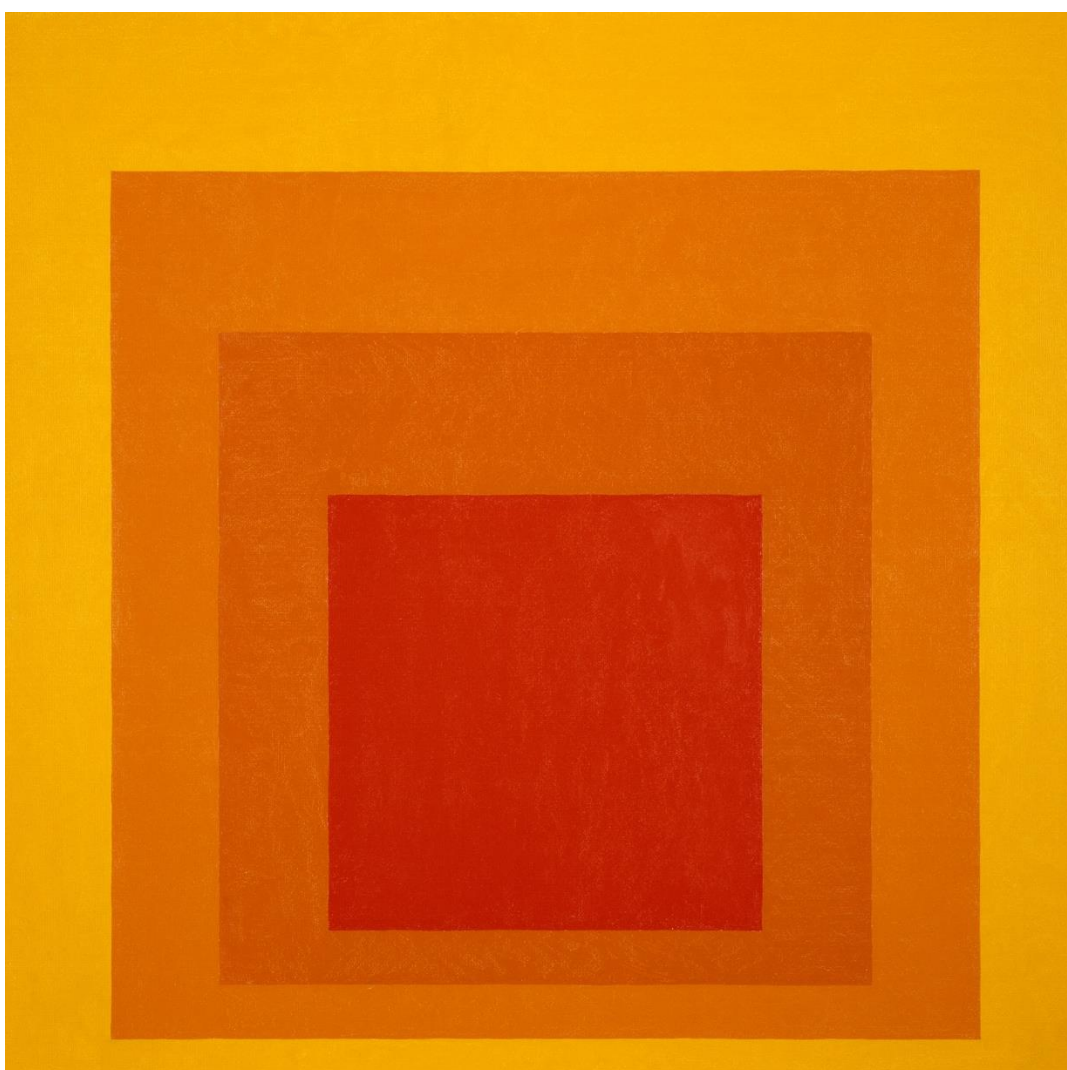


Smart Specialisation at City Level

InFocus final report

Miguel Rivas



Smart Specialisation at City Level

InFocus final report

“ Experience will guide us to the rules. You cannot make rules precede practical experience ”

“Night Flight” (1931) Antoine de Saint-Exupéry

Cite this work as:

Rivas, M. (2018) Smart Specialisation at City Level. URBACT-InFocus final report.

Cover image: Joseph Albers, "Homage to the Square: Glow" 1966.

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Acknowledgements

Within the framework of the URBACT programme, InFocus has been an action planning network joined by 10 European cities, which in turn have mobilized a significant number of stakeholders with the mission to re-think their agendas on business-led economic development and test how the smart specialisation concept might work as a driver. Hence, a huge number of practitioners, elected representatives and experts, around two hundred, have contributed in one way or another to the discussion that this report intends to sum up. We would like to give a special thanks to some of them. Those who have played a more primary role in organizing the discussion locally or feeding it at network level.

First, thanks to Eva Salcedo from Bilbao Ekintza who coordinated the whole InFocus partnership together with her colleagues Teresa Hormaeche, Oihana Eizmendi and Marije del Blanco, to Willem van Winden from Amsterdam University of Applied Sciences and Sally Kneeshaw, who gave an extensive support as URBACT experts, and thanks to Martina Pertoldi from the Smart Specialisation Platform at the Joint Research Centre of the European Commission for her interest in the project since the very beginning and continuous follow-up.

At city level, our gratitude goes to Xabier Ochandiano, **Bilbao** City Councillor for Economic Development, Trade and Employment, Nora Sarasola Director at Bilbao Ekintza, Eurne Magro and James Wilson from

Orkestra-Basque Institute of Competitiveness, Juan Domingo Olabbarri, SPRI, Cristina Murillo, Cluster Services Manager at GAIA, Iván Jiménez, Bizkaia Talent, Aleksandra Podsiadlik, Department of Strategy and Economic Development at Municipality of **Bielsko-Biala**, Stanisław Ginda and Jan Sienkiewicz, Bielsko-Biala Regional Development Agency, Monika Kruszelnicka, Marshal's Office of the Silesian Voivodeship, Marcin Baron, Katowice University of Economics, Olivier Mauret, Yves Miaud and Cécile Couraudon from **Bordeaux** Métropole, Florence Forzy-Raffard, Councillor for International Economic Affairs and for European Affairs at City of Bordeaux, Françoise Le Lay, Project manager for attractiveness at Bordeaux Métropole, François Baffou, Bordeaux Technowest, Olivier Girel, Pôle Alpha Route des Lasers, Camile Uri, Bordeaux Aeroparc, Rémi Vignes, Aquitaine Développement Innovation, Mihai Botea, officer at **Bucharest-3rd district**, Cezar Simion-Melinte and Daniel Jiroveanu, both at Bucharest University of Economics, Marius Hanganu, President at Tremend, Zenica Turza, former manager at Different Angle Cluster, Catalin Lacatusu, manager at Bucharest-Ilfov Regional Development Agency, Anna Maria Vasile and Nicoleta Dinca, both formerly at Bucharest-3rd district, Ansgar Roese, Head for Urban Development, Local Policy, Real Estate, Logistics & Mobility at FED **Frankfurt** Economic Development GmbH, Carolin Lebzien, EU projects at FED, Manuela Schiffner Frankfurt Center of Creative Industries, Doris Brelowski, Director for Business Startups at FED, Sebastian Schäfer, FinTech Community

In focus

Frankfurt GmbH, Kerstin Frings, Hessen Agentur GmbH, Jan Fiedler and Anselm Stahl, both at FrankfurtRheinMain GmbH, Alexander Ebner, Schumpeter Center for Innovation and Public Policy at Goethe University Frankfurt, Gabriel Voisin-Fradin, **Grenoble-Alpes** Métropole, Pascale Fressoz, Millenium, Claus Habfast, Vice President for Higher Education, Research, Innovation and International at Grenoble-Alpes Métropole, Guillaume Tournaire, European Affairs at Grenoble-Alpes Métropole, François Peyronnet and Cyril Isabello, Unit for Attractiveness and Economic Development at Grenoble-Alpes Métropole, Fabienne Cheze Ceroni, Invest IN Grenoble-Isere/AEPI, Véronique Pequignat, Invest IN Grenoble-Alps, Mathilde Gandon, French Tech in the Alps, Ondrej Dostál and Katerina Bonito, City of **Ostrava**’s Department of Strategic Development, Daniel Konczynna, BeePartner, David Pawera, Agentura pro Regionální Rozvoj, Zdeněk Karásek, RPIC-ViP consultants, Katerina Travnicková, Impact HUB Ostrava, Dagmar Matznerová, Ostrava Science and Technology Park, Ladislav Glogar, Moravian-Silesian Automotive Cluster, Fernando Pizarro, Mayor of **Plasencia**, José Antonio Hernández and Sonia Grande, Town Councillors, Lola Lucio, Antonio Vega and Isabel Hernández, Plasencia Town Council, Mario del Viejo, Fundecyt, Pedro Baganha, **Porto** City Councillor for Urban Planning, Ricardo Valente, Porto City Councillor for Economy, Tourism and Commerce, Margarida Campolargo, Porto Digital, Qian Ribeiro, Economic Development

and Investment Attraction at the Municipality of Porto, Luis Carvalho, University of Porto, Ana Teresa Lehmann, former director at InvestPorto, José Sequeira, Pedro Rocha, cluster Produtech, Joaquim Cunha, Health Cluster Portugal, Rui Santos Couto, Founders Founders, Diana Amado, Porto Tech Hub, Mario Lupo, Valeria Sparano and Claudia Milone from **Città Metropolitana di Torino**, Marco Fasiolo, Poliedra, Giuseppe Serrao, 2i3T incubator and Pasquale Marasco, Fondazione Torino Wireless.

Other invited experts and practitioners have also provided valuable inputs at some point, like Jan Vozab, principal at Berman Group, Petr Chládek, South Moravian Innovation Centre, Kevin Morgan, School of Geography and Planning at Cardiff University, Sonja Wollkopf, CEO at Greater Zurich Area AG, Mervi Huhtelin, KampusAreena Tampere and Katerina Ciampi-Stancova and Elisabetta Marinelli from the S3 Platform at the Joint Research Centre.

The interaction with all of them, at different degrees, has been a great stimulus and source of ideas to our common work for better policies on local economic development, where smart specialisation can be a driver whose potential is yet to be exploited.

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Lead expert for URBACT-InFocus

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“ We understand the smart specialisation as the continuous process of identifying and validating the growth potentials of our local economy, e.g. how can we best use our know-how in heavy industry and engineering in the context of green economy, biomedicine or advanced manufacturing? ”

City of Ostrava ´s Department of Strategic Development

A pioneering enquiry on the role of cities in smart specialisation

Smart specialisation and its subsequent method known as Research and Innovation Strategies for Smart Specialisation (RIS3)¹ have been assessed as “the most comprehensive industrial policy experience being implemented in contemporary Europe”. In a nutshell, the concept can be seen as **an innovation-oriented policy-mix on economic development with a focus on a short range of priority areas, which is governed in a collaborative (and entrepreneurial) way.**

Within this new policy framework and within the URBACT Programme, the city of Bilbao (ES) promoted the InFocus network, in collaboration with Bielsko-Biala (PL), Bordeaux Métropole (FR), Bucharest-3rd district (RO), Frankfurt (GE), Grenoble-Alpes Métropole (FR), Ostrava (CZ), Plasencia (ES), Porto (PO) and the Metropolitan City of Torino (IT). It was born to contribute, from the city perspective, to both the **smart specialisation concept** and the **RIS3 method**, pursuing a twofold goal.



First, testing the smart specialization approach as a driver to re-invigorate the work cities and their stakeholders are doing (or can do) in local economic development. To that aim, we deconstructed the urban and metropolitan agenda on business-led economic development in four main pillars: cluster development, entrepreneurship, space provision and attraction of investment and knowledge. A kind of essential policy-mix.

**Testing smart
specialization as a driver
to re-invigorate the
urban agenda on
business-led economic
development**



Secondly, building a bridge with the ongoing RIS3 strategies that are displayed at regional level. Many recognize that the role of major cities in the processes that have led to the different RIS3 formulations across the EU has been quite superficial. Let’s say it has been closer to a conventional public consultation logic rather than real co-production. Now, at the crucial time of RIS3 implementation, many local and metropolitan authorities feel they have much to contribute in taking those visions and roadmaps forward.

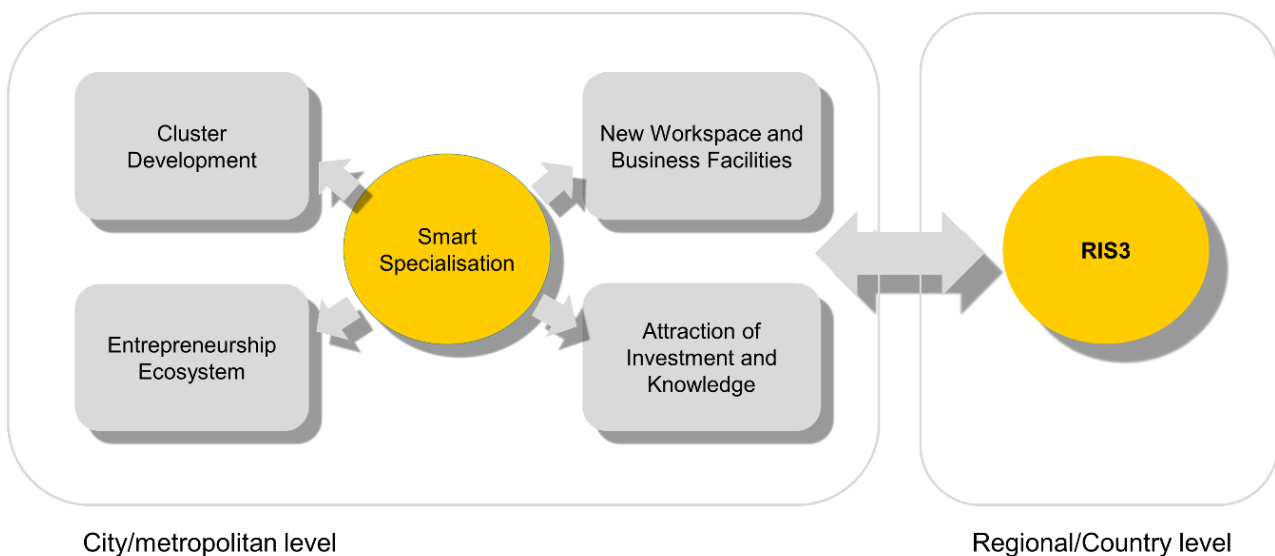
In this prospect, the four main horizontal policies above mentioned have been addressed as connectors to regional RIS3 and source for a genuine contribution from (major) cities to RIS3. For

¹ In France, Stratégies Régionales d’Innovation en vue d’une Spécialisation Intelligente (SRI-SI).

instance, inward investment and talent attraction are very dynamic work areas at city level, much more than at regional/country level. They could benefit from the focus and direction provided by S3 roadmaps, and vice-versa, regional RIS3 should take advantage of the city's know-how in branding and marketing itself as business and innovation ecosystem. The same with regard to the numerous local initiatives aimed at shaping new spaces for innovation and work. In short, this is simply a matter of vertical multi-level governance and not about reproducing RIS3 at local level.

It's a timely issue indeed, since the debate on how to embed smart specialisation into the territory is now open. In fact, the engine force of the InFocus experience has been turning cities into **RIS3 key actors**, at least those major cities with a significant background in economic development and innovation policies².

Furthermore, tackling the challenge of a more effective city-to-region articulation with regard to smart specialisation will raise the status of local and metropolitan authorities as innovation and industrial policy-makers, which makes full sense giving the main role major cities play in today's global competition.



Testing how smart specialisation may refine the policy-mix on business-led local economic development

² According to the S3 Platform at the Joint Research Centre, "S3 actors play a crucial role in regional and national smart specialisation strategies. They specifically: participate in entrepreneurial discovery process, contribute to the development of S3 strategies and their implementation, provide advice on how to match regional development needs with R&I and vice versa, support particular technologies, industries or clusters, provide an adequate innovation ecosystem, form the quadruple helix of innovation actors, are involved in international networks and thus they add the needed external and outward-looking dimension to smart specialisation strategies". Undoubtedly, there are a good number of cities and metropolitan areas rolling out work agendas meeting those requirements.



This enquiry was shaped as an **action planning network** involving the ten cities in a joint work plan that have included a six-month preparatory phase, five international thematic workshops plus a formal peer-review exercise.

Such a large-scale peer-learning was designed to feed a sound work at local level that has mobilized over 200 key stakeholders and crystallized in the production of an Integrated Action Plan in each of the participating cities. That's the URBACT framework, as this European Programme is defined by three key aspects: i) it's about cities working together to build innovative solutions to common challenges; ii) it works with all parties who have a stake in the city: the so-called URBACT Local Groups; iii) and it is a result-oriented programme.

After 30 months of intensive peer learning and exchange, InFocus has definitely pioneered on how the policy concept of smart specialisation applies to the city. Never before, no transnational initiative had addressed this issue so systematically. It therefore paves the way to other cities trying to examine how S3 can work as a driver to re-think the urban agenda on economic development.



Two key messages can be highlighted from this action-research project. The first is about the need for cities to **place innovation at the core** of their economic agendas, where smart specialisation can play a primary instrumental role, as a cohesive force giving more consistency to the policy-mix on economic development. Second message is on the need for policymaking and governance more open to **co-production** and exposed to **experimentation**.

Furthermore, the InFocus experience provides a path for those regional teams who are leading the implementation of the different RIS3 underway and feel the need to embed those strategies into the territory as much as possible. All regional RIS3 involved in this experience, ranging from RIS3-Basque Country and RIS3-Extremadura to RIS3-Piemonte and RIS3-Silesia, are now stronger thanks to the Local Action Plans produced by the InFocus partners cities. At least, a specific **dialogue** has been initiated between those RIS3 leading teams and the city/metropolitan authorities (or their subsidiaries on innovation and economic development).

The motivation of the InFocus experience has been turning cities into RIS3 key developers



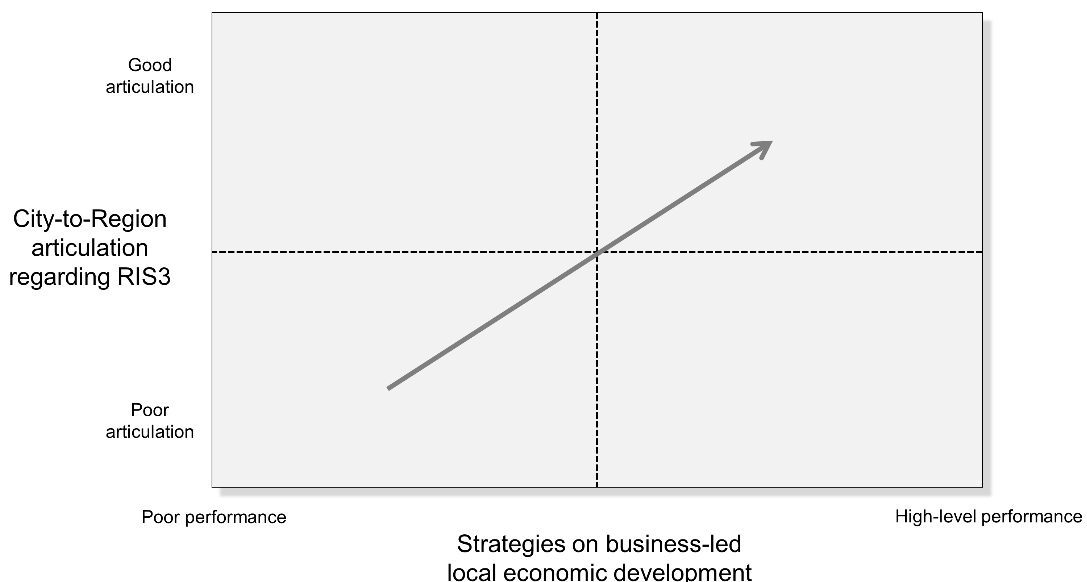
Ultimately, the initiative has raised a number of questions of interest for practitioners working at both regional and local levels:

- At the time of RIS3 implementation, all efforts, at different scales, must be activated. How to operationalise the city as RIS3 developer?
- What is the urban dimension of smart specialisation?

- Are Regional Authorities aware of the potential role of cities as S3 key actors? How to raise this awareness?
- In which way S3/RIS3 can boost or influence the urban agenda on economic development?
- To what extent a smooth articulation with RIS3 at regional level might be an accelerator for local economic development?
- In this regard, How could local authorities' motivation be ignited or stimulated?
- To what extent S3 can be a catalyst to increase a more efficient multi-level governance, beyond research and innovation? Could smart specialisation work as a driver for territorial development?



At this point, it is worth noting a significant **communication gap** with regard to smart specialization. It even affects to main stakeholders in the field of innovation and business development. Generally speaking, outside the relatively small circle of practitioners and experts more closely related to RIS3, who sometimes seem unable to go beyond their own jargon, the level of understanding of smart specialisation is still poor. And this is certainly a barrier to implement and embed RIS3 properly over the ground. Consequently, there is much to do by the S3 leading authorities in the field of communications and awareness rising.



Boosting the urban agenda on economic development while articulating better with regional RIS3

Six-month preparatory phase
September 2015 - March 2016

Thematic workshop 01 – Connecting RIS3 to the City: a two way bridge
Ostrava, September 2016

Thematic workshop 02 – Cluster-based
local economic development in the context
of RIS3
Frankfurt, November 2016

Thematic workshop 03 – Boosting the
entrepreneurial local scene: maximizing the
ecosystem approach
Torino, September 2017

InFocus peer-review exercise and workshop
Bucharest, June 2017

Thematic workshop 04 – Spaces for smart
specialization
Bordeaux, November 2017

Thematic workshop 05 – Attractiveness:
city's internationalization pathway to smart
growth
Grenoble, February 2018

Final conference
Bilbao, April 2018

Integrated Local Action Plans
co-produced together with URBACT Local Support Groups

Infocus work plan

01

RIS3: closing the city gap



The emergence of smart specialization as a policy concept

The concept of smart specialisation emerges as a main outcome of the discussion promoted by the European Commission between 2008 and 2011 in order to tackle the persistent innovation and productivity gap with the US - the so called "transatlantic productivity gap". Another engine driver was the determination to reorient the Structural Funds (mostly ERDF and its related OPs) from physical infrastructure investment to knowledge and innovation-based investment. To that aim, the Commission created the expert group "Knowledge for Growth", where Professor Dominique Foray, from the Ecole Polytechnique Fédérale de Lausanne, served as chairman. It was during his appointment as member of this Group that he developed the concept of smart specialisation.

This discussion capitalized on the EU background in innovation policies that was initiated in 1994 through the so-called Regional Innovation Strategies (RIS), which emphasized the ecosystem approach and stakeholder involvement. This time two additional elements were added: the value of prioritizing (of making smart choices) as starting point, and how to do it through an inclusive, bottom-up and permanent process called now "entrepreneurial discovery", emphasizing the role of research centres, universities, leading firms and entrepreneurs³. It quickly led to a new generation of the RIS method called **Research and Innovation Strategies for Smart Specialisation** (RIS3).

That is how the concept of smart specialisation emerges as a pillar of the EU Cohesion Policy, which is based on the principles of smart, sustainable and inclusive growth⁴. So, for the programming period 2014-2020, member states and their regions were required by Brussels "to set priorities in order to build competitive advantage by developing and matching research and

³ "It should be understood at the outset that the idea of smart specialisation does not call for imposing specialisation through some form of top-down industrial policy that is directed in accord with a pre-conceived "grand plan". Nor should the search for smart specialisation involve a foresight exercise, ordered from a consulting firm. We are suggesting an entrepreneurial process of discovery that can reveal what a country or region does best in terms of science and technology. That is, we are suggesting a learning process to discover the research and innovation domains in which a region can hope to excel. In this learning process, entrepreneurial actors are likely to play leading roles in discovering promising areas of future specialisation..." Foray, D. David, P.A. and Hal, B. (2009) Smart Specialisation: the Concept. Knowledge Economists Policy Brief n° 9. This short paper can be considered the origin of smart specialisation as policy concept in the EU.

⁴ European Commission (2010) Europe 2020: a strategy for smart, sustainable and inclusive growth, Brussels, 3.3.2010. COM(2010) 2020 final. In this broader context of territorial development, the concept of **Smart Growth** deals with job creation and entrepreneurship, knowledge and creative economy, the digital economy and business clusters. Inclusive Growth encompasses the fighting against both area-based deprivation and the exclusion risk of some population groups - immigrants, low-income families, youngsters..., and Sustainable Growth deals with energy efficiency, green economy, sustainable mobility or the promotion of the compact city.

In focus

innovation own strengths to business needs in order to address emerging opportunities and market developments in a coherent manner, while avoiding duplication and fragmentation of efforts⁵.



Three **key values** are closely linked to the smart specialisation concept.

- **Choice.** The value of prioritizing a number of productive/knowledge domains (vertical priorities, which can be assembled as a “specialisation pattern”) and the subsequent alignment of horizontal policies and initiatives around them.
- **Related variety.** Priorities are just the backbone for the “**specialized diversification**”, which is the real key concept. In exploiting related diversity and relationships between the different priority areas new opportunities and activities might emerge. In other words, it is about to fully activate the potential of a range of core competences and knowledge and sectoral specialisations, expanding them to other value chains and sectors. In this context, approaches like **cross-sector innovation** and sector hybridisation can be instrumental.
- **Collaborative leadership.** It’s about mobilizing stakeholders from the triple or quadruple helix to jointly prioritize and explore opportunities, which is named “**entrepreneurial discovery process**”. In this framework, entrepreneurial means getting focused on market opportunities and responding to major challenges (e.g. ageing population, climate change, digital transformation...).

This should be extended to a new style of co-producing policies and initiatives in the field of innovation and economic development. As Bilbao Ekintza Director Nora Sarasola said at the InFocus thematic workshop in Ostrava, leadership should be now understood as “the capacity of taking the initiative to manage, convene, promote, encourage and generate consensus”.

Leadership should be now understood as the capacity of taking the initiative to manage, convene, promote, encourage and generate consensus

Nora Sarasola, director at Bilbao Ekintza

⁵ European Commission (2014) National/Regional Innovation Strategies for Smart Specialisation (RIS3). Cohesion Policy 2014-2020 Factsheet. The Regulation (EU) 1301/2013 of the European Parliament and of the Council of 17 December 2013 is the legal base that defines smart specialisation strategy.

RIS3 AS A SIX STEP PROCESS

RIS3 can be seen as a method to shape specific regional paths to innovation-led economic growth. According to the "Guide to Research and Innovation Strategies for Smart Specialisations", the elaboration of a RIS3 strategy can be addressed as a 6 step process:

Step 1: Analysis of regional potential for innovation-driven differentiation. The analysis should cover three main dimensions: i) regional assets, such as technological infrastructures; ii) linkages with the international level, positioning at both world and Europe level; iii) and dynamics of the entrepreneurial environment, which in more colloquial terms means stakeholder analysis. According to the RIS3 guide, entrepreneurial actors are not only firms, but also any individual and organisation who has some "entrepreneurial knowledge".

Step 2: RIS3 design and governance – ensuring participation & ownership. It consists in setting up a dedicated collaborative platform that allows to bring a number of relevant stakeholders together in order to co-produce the strategy. The guide uses the term "collaborative leadership", in the sense that the entrepreneurial discovery process (EDP) should be (politically) backed and carefully facilitated. As governing framework for the elaboration process, the guide proposes a Steering Group or Management Team, a Knowledge Leadership Group or Mirror Group (normally comprised of key stakeholders and experts) and a number of thematic Working Groups (e.g. cluster-based, technology-based).

Step 3: Elaboration of an overall vision for the future, as an evidence-based comprehensive scenario of the regional economy to be shared by all stakeholders. This vision matters since RIS3 is a long-term strategy.

Step 4: Selection of priorities and definition of objectives. The choice should come from the collaborative process and should result in a short range of priority domains, where a region can realistically hope to excel.

Step 5: Definition of coherent policy mix and action plan. RIS3 is a strategy to be implemented, throughout a specific roadmap. Furthermore, to allow some degree of experimentation, the guide encourages to promote pilot projects with the aim to test "unprecedented mixes of policy measures at a small scale, before deciding on implementation at a larger and more expensive scale".

Step 6: Integration of monitoring and evaluation mechanisms. It implies defining measurable objectives and KPIs and establishing baselines for the result indicators and target values.

To support and spread the method, the European Commission established the [Smart Specialisation Platform](#) at the Joint Research Centre-Seville. This unit provides methodological support, expert advice, training, online library and peer-review workshops to member states, regions and their intermediate bodies in relation to S3 strategies

The unsolved question related to the city

Since RIS3 was fixed as an ex-ante conditionality for regions and member states to get ERDF funding for their Operational Programmes on innovation in the programming period 2014-2020, smart specialization and some related concepts like the aforementioned entrepreneurial discovery process (EDP) have entered the mainstream vocabulary in innovation and industrial policies.

However, since the planning phase (what happened under a good deal of time pressure, mainly since 2011 to 2015), a gap has emerged. It has to do with the articulation of those regional strategies for smart specialisation to the local level. In particular with those cities with a meaningful background in economic development, or cities with remarkable transformation agendas underway.

Generally speaking, the participation of cities in RIS3 designs (we mean local/metropolitan authorities and their relevant subsidiaries working on economic development) has been mostly superficial so far. This has been the assessment of most InFocus partners. For instance, officers from Grenoble-Alpes Metropole say “the Metropolis was asked to participate during the elaboration process [of RIS3], but just from a public information perspective rather than a real co-production approach”.

As a result, the idea of smart specialisation is barely assimilated at local level, which is a significant gap given the undeniable role of mayor cities as key actors in the world economy, in particular in the global circulation of innovations. Furthermore, it seems the smart specialisation approach fits well to the needs from modern urban economies. A widely publicized report of the Brookings Institution concludes that one of the ten traits of globally fluent metro areas is “specialisations with global reach”, meaning that cities often establish their initial global position through a distinct economic specialization, leveraging it as a platform for diversification⁶.

The idea of smart specialisation is barely assimilated at local level so far. It is a gap that can be seen as part of the growth process of a new policy approach

■ This gap can be seen as part of the growth process of a new method⁷. A first explanation comes from the early literature on smart specialisation and its transposition to the regional policy in the EU, where the **question of scale** has been mostly addressed as a matter of the right scale (largely

⁶ McDearman, B et al (2013) The Ten Traits of Globally Fluent Metro Areas. Brookings Institution. Washington.

⁷ The own RIS3 guide (Foray, D. Et al, 2012) introduces both the smart specialisation concept and the RIS3 method as evolving tools that can be shaped according to their praxis.

the regional one⁸) and at much lesser extent as interactions between scales. In any case, with regard to policymaking, when addressing the question of scale interaction, the focus has been on inter-regional coordination (notably country-region coordination) much more than city/region linkages.

At linking RIS3 to Structural Funds access, basically via Operational Programmes, automatically the NUT2 level has been privileged as the right scale to deal with the RIS3 method. This is a convention indeed, which may make sense anyway, as a matter of being operational, gaining critical mass and avoiding fragmentation. Nonetheless, the city has been totally absent from RIS3 guides, templates and discussion papers promoted or delivered by the European Commission for years. The very S3 Platform is cautious when targeting its ideal community of practitioners, warning at its website: “we strongly suggest you register at the most relevant territorial level with respect to the decision-making process on drafting innovation strategies and managing corresponding public funding tools”.



But now, at the **implementation stage**, a number of major cities offer great potential to collaborate in developing S3 over the ground, beyond their role as testbeds. It seems to be the right time for scale management, boosting relevant collaboration between regions and cities. Fortunately, the need for effective implementation has created a new framework where the issue of **multi-level governance** has seemingly been placed at the core. The RIS3 guide on implementation⁹ even includes a reference to the city level: “interaction and coordination between regions, territories and cities with regard to regional/national Smart Specialisation Strategies are required to avoid fragmentation and increase the impact of investments across Europe”.

However, in our view, the specific theme of the city as RIS3 actor is not yet visible enough. In other words, most practitioners agree it matters, but it has not been turned into an issue within the RIS3 agenda to tackle shortly.

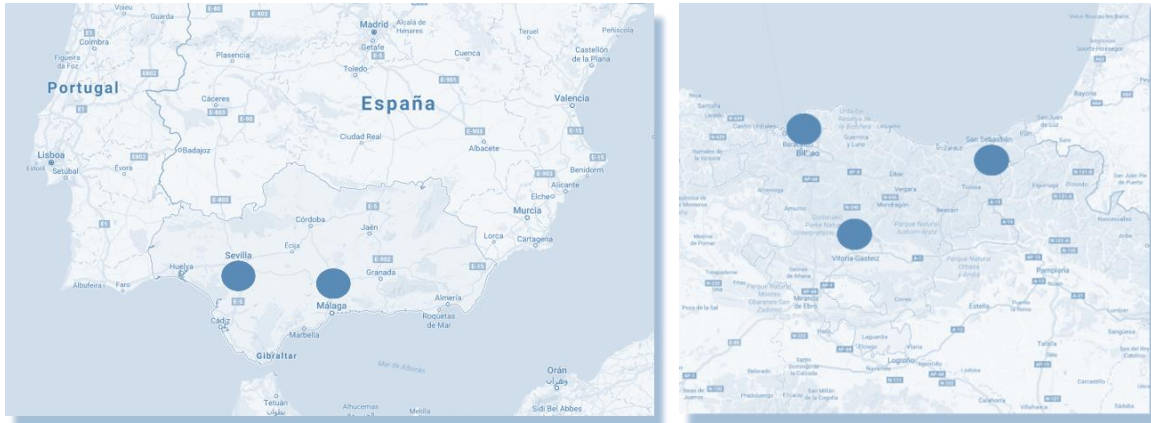
It is worth noting the issue of city-to-region articulation regarding RIS3 matters especially in certain regional contexts and territorial settings. For instance, the Basque Country hosts three core urban economies (Bilbao, Donostia-San Sebastian and Vitoria-Gasteiz), each with a very different profile and work agenda on economic development. Hence, those urban economies would request a sort of “customized” relationship with RIS3-Basque Country, in order to properly embed that strategy locally.

The question of the city as RIS3 actor is not yet visible enough. Most practitioners agree it matters, but it has not been turned into an issue of the RIS3 agenda to tackle shortly

⁸ As an example of this see Philip McCann and Raquel Ortega-Argilés (2011) Smart Specialisation, Regional Growth and Applications to EU Cohesion Policy. Economic Geography Working Paper, Faculty of Spatial Sciences, University of Groningen.

⁹ Gianelle, C., D. Kyriakou, C. Cohen and M. Przeor (eds) (2016) Implementing Smart Specialisation: A Handbook, Brussels. European Commission, EUR 28053 EN, doi:10.2791/53569.

In focus



Left: Sevilla and Málaga, two major cities within a vast region, whose economic profiles and agenda are somehow blurred under a single regional narrative on economy and innovation. A kind of “customized bridge” with RIS3-Andalusia would be needed for both. The same for the Basque Country (right)

Why RIS3 leading authorities should be interested?

The first reason to involve cities as tier-one RIS3 actors is that RIS3 implementation has begun, and that is a huge challenge, bigger than RIS3 design, where all efforts, at different scales, should be activated. To a large extent, effective implementation will be the litmus test for smart specialisation as a massive policy concept, since having followed the RIS3 template and complied with the ex-ante conditionality do not prevent the risk of rhetoric prioritizations and roadmaps - clearly set down on paper but poorly delivered in practice.

At this point, it’s good bringing up the importance of policy implementation (making things happen) and therefore the value of organizing relevant **delivery frameworks**. Today in Europe, what makes a difference is not so much strategy and policy design (a point where a high degree of harmonisation has been achieved, in terms of approaches and methods, and RIS3 is the perfect example) but implementation and results.¹⁰

RIS3 implementation has begun, and that’s a huge challenge, bigger than RIS3 design, where all efforts, at different scales, should be activated

¹⁰ In the field of innovation and economic development, a new type of policy analysis is emerging, with a focus on implementation and delivery rather than policy design, e.g. see Quesada-Vázquez, J. and Rodríguez-Cohard, J.C. (2015) Implementation challenges in cluster policy making: the case of the Andalusian Furniture Technology Centre, Prometheus.



In general terms and due to the **proximity factor**, many cities are performing pretty well when promoting and animating cohesive business ecosystems. More specifically, major cities and metropolitan areas with enough critical mass are recognized as the ideal environment for innovation.

As Dominique Foray recalls, “smart specialisation is a new word to describe an old phenomenon: the capacity of an economic system (a region for example) to generate new specialities through the discovery of new domains of opportunity and the local concentration and agglomeration of resources and competences in these domains” (Foray, 2015). The founding father of smart specialisation relates that concept to **agglomeration economies**, which is basically a concept that has been traditionally linked to cities rather than regions.



In any case, as a territorial innovation policy, RIS3 should have a spatial strategy, which is now a gap in our view. There is no reason why the city level has been, at its best, at the very periphery of this policy so far. If RIS3 is presented as a place-based innovation policy within the Cohesion Policy framework, then it should include a territorial strategy too.

The spatial gap has been pointed out from the rural perspective as well. Based on a number of pilots, the TAGUS LEADER Local Action Group (Extremadura, Spain) has drafted an exploratory proposal called “Smart LEADER” aimed at boosting the role of innovation in rural environments by using the smart specialisation concept and connecting to RIS3 at regional level (Pertoldi, M. et al, 2016). In a way, it is the InFocus counterpart for rural and sparsely populated areas.

Fortunately, something is changing and the new RIS3 guide on implementation acknowledges the importance of a “territorial approach” for RIS3, in order to properly “understand and integrate sub-national or sub-regional differences and how they can contribute to the overall implementation of a region’s strategy” (Gianelle et al 2016). This is certainly coherent with the idea of expanding the influence of smart specialisation beyond research and innovation, towards the broader field of territorial development, and so fully exploiting its condition as a pillar of the new Cohesion Policy¹¹.

If RIS3 is a place-based innovation policy, within the cohesion policy framework, then it should include a territorial strategy too



Last but not least, some innovative cities and metropolitan areas in Europe are currently promoting ambitious **transformation agendas**, e.g. Next Economy roadmap in Rotterdam inspired by Jeremy Rifkin’s ideas, Bilbao Next Lab, which is presented as an action-research approach for the economic transformation of Bilbao. Thus, RIS3 (a kind of strategy which is often presented as a

¹¹ In this regard, two international conferences on “Smart Specialisation and Territorial Development” have been promoted so far by the S3 Platform in collaboration with the Regional Studies Association, November 2016 and September 2018.

transformation agenda as well) and those visionary city roadmaps might mutually reinforce if both are duly connected and aligned.



However, are RIS3 leading authorities really aware of the potential of cities as S3 developers? In any case, this is a matter of **multi-level governance**, which implies getting out of the comfort zone. Moreover, the issue of multi-level governance is still addressed from a hierarchical, top-down approach.

Activating all efforts at different scales is a matter of multi-level governance, yet it implies getting out of the comfort zone

If governance is about control (in the sense of avoiding fragmentation) and alignment, multi-level governance is a main way to avoid fragmentation and dispersion. Persistent lack of effective multi-level governance has an impact in terms of transaction costs, and therefore undermines the overall quality of governance. This shortage should be more openly considered as a symptom of political decay in the EU - in Fukuyama's sense, that is, not as an overall decline of the whole political system but decay in terms of "institutional rigidity" and long-standing misperformance (Fukuyama, 2014).

GLOSSARY

Business-led economic development

Economic development strategies with a focus on firm performance. That is, strategies displaying initiatives and support tools to incubate, attract and expand firms.

Collaborative leadership

It is the governing style most appropriate to enhance participation and sense of ownership in a framework driven by the smart specialisation concept. The "entrepreneurial discovery process" should be duly backed and legitimized as well as carefully facilitated to get meaningful results. The RIS3 method considers three kinds of leadership: political leadership, managerial leadership and intellectual leadership.

Entrepreneurial discovery process

It is the co-production method proposed for the elaboration of RIS3 and further follow-up. An interactive and bottom-up way to identify and prioritize place-based opportunities for innovation and business growth by bringing together actors from the triple or quadruple helix – e.g. researchers, firms and entrepreneurs, relevant policy makers, end users.

Key enabling technologies (KETs)

KETs have been defined as those technologies that are crucial for the competitiveness and renewal of European manufacturing, namely: micro/nano-electronics, photonics, nanotechnology, biotechnology, advanced materials and advanced manufacturing systems (see DG for Internal Policies 2014). Key Enabling Technologies play an important role in S3 as crosscutting connectors, due to their potential to boost growth in a broad range of productive activities, including mature industries.

GLOSSARY**Research and Innovation Strategies for Smart Specialisation (RIS3)**

RIS3 is the new generation of regional innovation strategies promoted by the European Commission, which is based on the concept of smart specialisation. For the first time, the European Commission established that EU Member States and regions must have their RIS3s in place as an ex-ante conditionality to access ERDF funding via Operational Programmes. The RIS3 method is a 6 step process: analysis, organising the co-production method, overall vision, priorities, action plan and monitoring. As a governing framework for the elaboration of the strategy, the RIS3 method proposes a Steering Group or Management Team, a Knowledge Leadership Group or Mirror Group and a number of thematic working groups.

Smart specialisation

The policy concept of smart specialisation can be understood as a collaborative process aimed to identify where a region is or can be excellent in terms of science, technology and industry, while avoiding duplication and fragmentation of efforts. The origin of the concept comes from the expert group "Knowledge for Growth" that was created by the European Commission in 2008 and headed by Dominique Foray. Smart specialisation has become a very influential concept to promote Europe 2020 long-term strategy and for the current EU Cohesion Policy.

Specialised diversification

Priority areas (sectors, technological domains or fields of knowledge) should be seen as a starting point in the context of smart specialisation strategies not an end in themselves. As a matter of fact, RIS3 strategies provide a roadmap to the specialized diversification of a region, a sort of backbone by making the most of a range of priority technological domains and industrial competences. To some extent, RIS3 can be seen as a map for cross-sector innovation.

S3 platform

Established in 2011, the Smart Specialisation Platform assists EU countries and regions to develop, implement and review their Research and Innovation Strategies for Smart Specialisation. The Platform is a unit within European Commission's Joint Research Centre and it is located in Seville. It comprises a project management and research team; a Steering Team with representatives of several Commission Services; and a Mirror Group composed of academics and experts as well as representatives of networks such as EURADA, EBN and OECD.

Triple/quadruple helix

It refers to the collaborative model bringing together three types of stakeholders: university and research centres, the industry and the government. It is quadruple helix when the civil society as innovation users is considered as a fourth group. The concept of triple/quadruple helix has been widely used for years in the context of regional innovation systems.

Is the city ready to make the most of smart specialisation?

Tackling the question of effective city-to-region alignment on smart specialisation will elevate the status of some innovative cities as industrial and innovation policymakers, which makes total sense given the main role major cities play in today's global competition. Nevertheless, is the city ready to take full advantage of S3/RIS3? In this respect, we see two issues to bear in mind:

- **Motivation and (political) awareness.** For many cities RIS3 has nothing to do with them. As mentioned above, that short-sighted view comes from the time of RIS3 elaboration, when many (major) cities were mostly approached for "light consultation", instead of a real co-production aim. So, there is still much to do raising awareness on the meaning and potential impact of smart specialisation.
- **Adequate technical skills.** According to Jan Vozab, principal at Prague-based consultant team Berman Group, smart specialisation type of roadmaps are "more difficult, uncertain and risky" than previous models in industrial and innovation policymaking. Just putting the idea of "related variety" into practice is not an easy task. It needs for excellent technical skills, including innovation economics, business intelligence and facilitation techniques.

It's a fact that many practitioners involved in economic development find difficulties to fully understand the meaning and scope of smart specialisation as a policy concept, which seems to be somewhat constrained by its own jargon and method (RIS3). This evidence was got along many field trips at the InFocus experience, where even principal actors related to innovation and business development at the regional level did not believe so much in the real value for them of "yet another strategy" like RIS3. In this respect, greater communication effort should be done by the RIS3 leading authorities.

Bilbao is pioneering in making the smart specialisation approach work at city level. They are applying the entrepreneurial discovery method to engage the right pool of stakeholders in every focal area they have prioritized. Soon, they realized that such facilitator role, in a policy context more oriented to innovation and competitiveness, needed from new advanced skills. Consequently, an **ad-hoc training programme** has been designed targeting Bilbao Ekintza staff (the local development agency) more involved in delivering the new approach.



What it comes to the governing framework to make smart specialisation visions come true, perhaps it is simpler than the kind of "Schumpeterian" public administration that some from the academia may claim¹². In principle, getting good skilled people (with a bit of visionary touch) with the ability to work across different administrative levels and efforts could make a difference.

¹² In some research papers commissioned by the S3 Platform on governance, the "smart state" used to be described as risk-taking and a hotbed for managerial experimentations. Sure that would be an ideal framework, but it might not be very realistic. For a majority of cases, it would be a big step just putting into practice a few rules of good governance.

In this regard, **South Moravian Region (CZ)**, which *de facto* works as Brno city-region, can be a reference, since they are becoming an international benchmark in innovation policy. Their brilliant results in climbing up the ranking of knowledge-based economies in Europe – e.g. regional GDP invested in R&D has moved from 1,4% in 2004 to 3,8% in 2014, 50% private R&D investment – is a combination of great motivation and professionalism of the team involved.

They have neither explicit competences over research and innovation nor EU Operational Programmes at regional level. That is, producing a RIS3 type of strategy was not any ex-ante conditionality in this case, since in the Czech Republic that conditionality only applied to the national level¹³. Even so, the current South Moravia Regional Innovation Strategy 2014-2020 (RIS-JMK) has been produced following the key principles of smart specialisation. It's a long-term strategy that is managed on the day-to-day by JIC, the South Moravian Innovation Centre, which is a highly professionalized agency founded in 2003 – significantly JIC is an alliance of South Moravia region, the Statutory City of Brno and four Universities.

According to JIC officer Petr Chládek, Brno's great achievements regarding innovation and competitiveness can be explained by the following success factors:

- "Strong, stable political commitment;
- keeping strategic focus and result-orientation (*know what we want first, money comes next*);
- best people on board, stability of intermediaries and their people;
- being constantly in the field (openness to new ideas from new actors);
- robust governance structures;
- being close to policy research (e.g. insights from the S3 Platform)".

Certainly, working as a public manager in this way is a demanding task. In Chládek's words, rather than a document or a process, this type of policymaking should be addressed as a "state of mind".

Facilitating frameworks

Cities and metropolitan governments as well as their subsidiaries on economic development shouldn't wait *sine die* for an invitation from RIS3 leading authorities to fine-tune the local economic agenda to the smart specialisation strategy in place at regional level – that would be an invitation to make the city work as RIS3 key developer. In this regard we would encourage cities to take a first step, taking advantage of favourable framework conditions, if any. For instance, the following ones:

¹³ Czech RIS3 includes 14 regional annexes elaborated at the level of each NUTS3 region, as well as regional managers as part of the RIS3 governance framework.

■ INTEGRATED AND SUSTAINABLE URBAN DEVELOPMENT INITIATIVES (ART. 7 ERDF)

In the context of the current EU Cohesion Policy, by means of the Article 7 of the regulation 1301/2013 on ERDF, cities are being entrusted to design and develop Integrated and Sustainable Urban Development Strategies¹⁴. In this context, the Directorate-General for Regional and Urban Policy of the European Commission is encouraging all cities carrying out integrated and sustainable urban development schemes to bridge with their existing RIS3 at regional/national level¹⁵.

That's the case of the **Czech Republic**, where around 1 billion Euros have been allocated to Article 7 until 2020, mainly through the new financial instrument Integrated Territorial Investment (ITI) in each of the 7 largest functional urban areas of the Country. Such a concrete choice has resulted into a first indirect effect, which is boosting the question of metropolitan governance in the country - i.e. while the Statutory City of Ostrava comprises 13 municipalities and 300,000 inhabitants approximately, ITI-Ostrava encompasses an urban agglomeration of 1 million¹⁶. **ITI-Ostrava** is organized in three strategic goals (employment, entrepreneurship and environment) and eleven specific objectives. One of these objectives, as part of the strategic goal on entrepreneurship is specifically dedicated to "implement activities to support Moravian-Silesian strategy for smart specialization".

As many ITIs are supporting urban regeneration projects, these financial schemes may work to link smart specialisation strategies to local policies on social inclusion. That's the case of **ITI-Rotterdam**, which is pretty focused on the South Bank area regeneration and has made a bridge with RIS3-Western Netherland based on educational and training aspects.

■ METROPOLITAN GOVERNANCE EMPOWERMENT

Over the past few years, territorial reform in some member states, like France and Italy, has led to urban policies in major cities to be re-scaled up to the metropolitan level, in particular economic development policies. That's the case, for instance, of Bordeaux Métropole, Grenoble-Alpes Métropole and **Cittá Metropolitana di Torino**. The latter is the former province administration

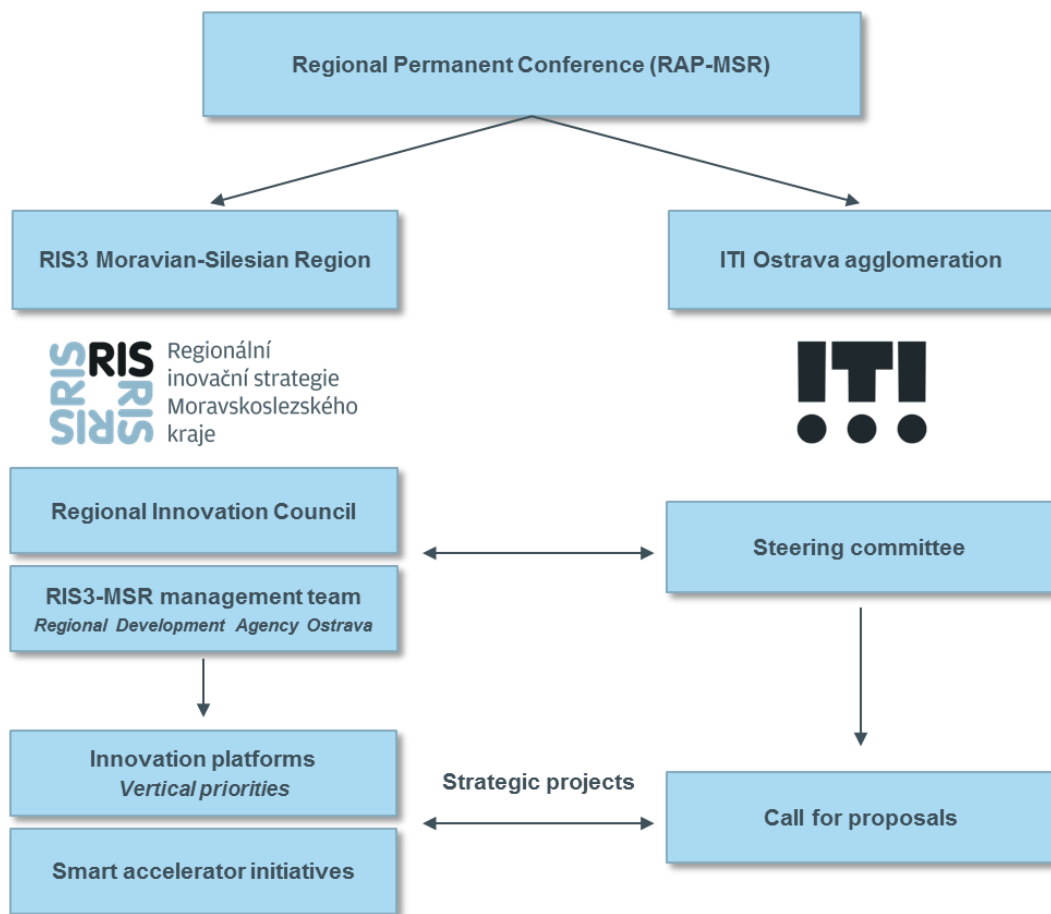
¹⁴ By means of article 7, every EU Member State should invest at least 5% of its ERDF budget for the period 2014-2020 in Integrated and Sustainable Urban Development, with deployment decided and managed by urban authorities. Three different arrangements for Article 7 of ERDF can be used: i) specific priority axis of an Operational Programme (OP) dedicated to Sustainable Urban Development; ii) specific OP devoted to Sustainable Urban Development; iii) Integrated Territorial Investments (ITI), mixing different priority axes from different OPs into the same financial tool.

¹⁵ Significantly, RIS3 development is under DG Regio's competence, not under DG Growth or DG Research & Innovation. So, this is something to take advantage of it.

¹⁶ The Integrated Territorial Investment of Ostrava agglomeration 2014-2020 is funded by six national Operational Programs: OP Environment, OP Enterprise and Innovation for Competitiveness, OP Research, Development and Education, OP Transport, Integrated Regional Operational Programme and OP Employment.

that has been now transformed into a metropolitan authority, serving 315 municipalities and a population of 2.3 million, of which almost 900,000 in the municipality of Torino.

The empowerment of the metropolitan level as relevant scale for policymaking is certainly a precious opportunity to revamp the economic agenda and set more meaningful workflows with the regional level. To both challenges, smart specialisation might work as a key driver.



Bridging between Integrated Territorial Investment (ITI) and RIS3 in Ostrava (CZ)

Source: David Pawera, adapted by M.Rivas.

■ RIS3 LEADING AUTHORITIES ENGAGING WITH FUNDING

Frankly speaking, regions were massively involved as RIS3 policymakers upon the condition of getting European funding. So, if regional authorities leading RIS3 roadmaps really aim to embed those strategies over the ground, why not using the funding issue as an incentive too?

That is the case for Catalonia, which is open to sub-regional initiatives called **Territorial Specialisation and Competitiveness Projects** (PECTs) wanting to bridge with regional RIS3 (RIS3CAT). PECTs should be innovation-oriented integrated initiatives that are developed by a partnership of four entities minimum led by a public administration at local, county or province level¹⁷. The Catalan government organizes periodical competitive calls for funding PECTs, which are actually addressed as a **RIS3 policy instrument**. The budget of the 2016 call was 50 million Euros to grant 50% of the approved projects, of which 20 million for the metropolitan area of Barcelona and 30 million for the rest. In this context Barcelona organized the strategy **RIS3BCN Growth**, which is explicitly introduced as an alignment attempt to **RIS3CAT**.

In any case, RIS3 leading teams should be more pro-active introducing RIS3 roadmaps to local authorities and other territorial actors and, why not, promoting specific working groups bringing together RIS3 management teams and city officers.

In a densely urbanized region like **Silesia** (Poland), its RIS3 leading team (the Regional Innovation Strategy Unit at the Marshal's Office of the Silesian Voivodeship) is approaching local authorities as a sort of living labs. Ambits to experiment and showcase ideas, technologies and work methods aligned to the regional specialisation pattern. In relation to this, the Marshal's Office published a guide in 2015 and started an auditing plan to analyse local authorities' capacity to absorb and produce innovations.

RIS3-Silesia is approaching local authorities as living labs. Ambits to experiment and showcase ideas, technologies and work methods aligned to the regional specialisation pattern

Matching priority areas from regional and local levels

Three steps might be considered to make cities work as S3 actors¹⁸:

- **Prioritization exercise.** This would not be so much about confronting priorities at both regional and local levels set independently of one another, but aligning the existing cluster dynamics and other research & innovation-driven assets at city level to the priority domains already agreed at regional/national RIS3 level.
- **Revisiting the policy-mix accordingly.** We mean the policy-mix on local economic development, since the aforementioned prioritization exercise along with other values related to smart specialisation are aimed to provide better focus and direction¹⁹.

¹⁷ Interestingly, as a very positive side effect, this initiative is working as a booster for inter-municipal cooperation in the field of innovation-oriented economic development.

¹⁸ Of course, besides this three-step path, there might be other opportunities align cities and regions with regard to S3 at more tactical level, for instance innovative public procurement.

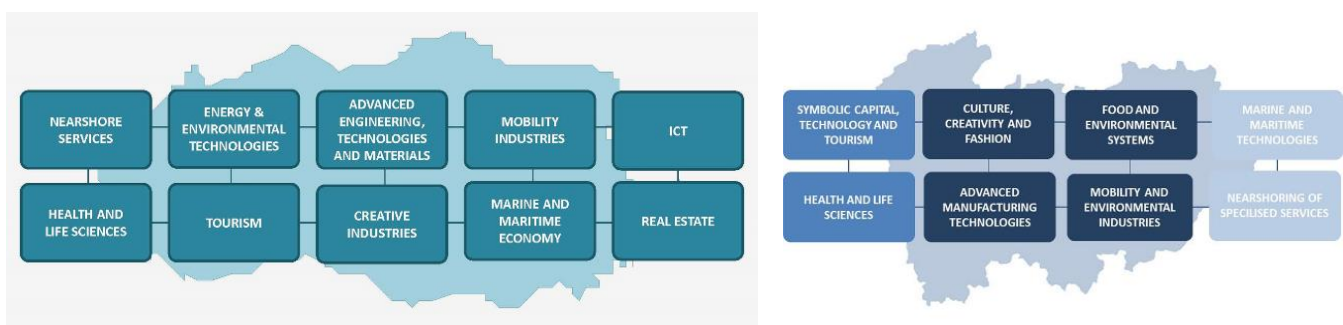
¹⁹ This point will be developed in section 2 "Smart specialisation as a driver to boost the urban agenda on economic development".

- **Evolving towards a more collaborative way of policymaking** by engaging more actively a pool of relevant stakeholders, notably those more closely linked to research, entrepreneurship, innovation in a broad sense and business development. For cities and their units and bodies dealing with economic development, this could lead to assume a role as main facilitators of “entrepreneurial discovery” type of processes.



This is justly what the city of **Bilbao** has done over the past few years, working on these three fronts. Indeed, the prioritization exercise started in 2014, when the Local Development Agency Bilbao Ekintza organized a planning process that was called “Innovation and Intelligent Specialisation Strategy for Bilbao”, with an eye on the Basque Country RIS3. As a main outcome, six clusters were identified at the time in a dynamic way according to their degree of consolidation as business frameworks: Knowledge Intensive Business Services (KIBS), Tourism, Urban Solutions (technologies and services related to urban regeneration), Arts & Culture, CleanTech and HealthTech.

Later on, within the InFocus experience, three out of those clusters were prioritized and re-organized in broader domains (Advanced Tertiary (KIBS), Creative Economy and Digital Economy) to then explore systematically connections among them. For instance, turning Bilbao-based KIBS sector into an engine force for the digital transformation, in particular regarding advanced manufacturing (Industry 4.0) which is the most prominent priority of the Basque RIS3. To unveil such a cross-sector innovation opportunities and turning them into meaningful pilot projects, Bilbao Ekintza is adopting the entrepreneurial discovery method.



Matching sector priorities from Porto metropolitan area (left) and Portugal Norte Region (right)

Realising the city potential to fuel the entrepreneurial discovery process

The entrepreneurial discovery process (EDP) is the co-production method proposed for designing and monitoring smart specialization strategies. According to Interreg Europe project *Beyond EDP*, entrepreneurial discovery is a “process of continual interaction between businesses, knowledge institutes and, preferably, users, which aids the development of new ideas and discoveries”.

There is still much left to do in this regard, despite RIS3 strategies are massively running all over the EU. A research conducted by Orkestra-Basque Institute of Competitiveness over eight European regions concluded that the EDP in place were government biased, with “little involvement of business and even less civil society” (Aranguren et al, 2016). The lack of civil society involvement was also pointed out by the European Parliament report on Cohesion Policy and RIS3 (European Parliament, 2016).

Now at the implementation stage, a major challenge for S3 type of strategies is to keep the EDP fresh and current on a permanent basis²⁰. And cities might have much to contribute on this task, since proximity is a significant enabling factor for stakeholder involvement. In particular, cities and local authorities could be of great help to engage end-users and civil society²¹. As Orkestra researcher Edurne Magro stated at the InFocus meeting in Ostrava, the more civil society’s role is emphasized, the more local authorities’ role should be raised.

Indeed, many cities in Europe have done a great job promoting vibrant start-up ecosystems by bringing together different actors from the quadruple helix. That would be reason enough to entrust local authorities and their subsidiaries on business development as **EDP facilitators**. Why not to capitalize such a city’s know-how to keep the entrepreneurial discovery alive and current? For instance, the City of Barcelona has established the so-called *Taula Barcelona Creixement* (Barcelona Growth Panel). It’s a platform organized in different cluster-focused working groups and two cross-sector discussion groups on technology and innovation ecosystem respectively.

Moreover, to a large extent, the EDP is fairly similar to living labs, an open innovation format with a significant track record of applications in the urban environment. According to ENoLL, the

The more civil society’s role is emphasized in S3 type of strategies, the more local authorities’ role should be raised

Edurne Magro, Orkestra-Basque Institute of Competitiveness

²⁰ See Marinelli E., Perianez-Forte I. (2017) Smart Specialisation at work: The entrepreneurial discovery as a continuous process, Publications Office of the European Union, Luxembourg, 2017.

²¹ As much the concept of innovation is getting broader -i.e. from just technological to practice-based innovation and social innovation too (European Commission, 2012)- the role of civil society will also gain importance, and consequently the EDP formats should evolve from triple to quadruple helix.

European Network of Living Labs, “a Living Lab is about experimentation and co-creation with real users in real life environments, where users together with researchers, firms and public institutions look together for new solutions, new products, new services or new business models”.²²

BILBAO’S ENTREPRENEURIAL DISCOVERY PROCESS

Three domains have been prioritized by the City of Bilbao as a result of the InFocus action planning experience: Advanced Tertiary (KIBS), Creative Economy and Digital Economy. Consequently, the Local Development Agency **Bilbao Ekintza** is promoting a systematic process aimed to prospect opportunities and connections within and among these focal areas. For instance, making Bilbao-based KIBS sector work as an engine force for the digital transformation, in particular regarding advanced manufacturing (Industry 4.0) which is the most prominent priority at Basque RIS3 level. To unveil such a cross-sector innovation opportunities and turning them into meaningful pilot projects, Bilbao Ekintza is organizing and facilitating an entrepreneurial discovery process (EDP), dedicating specific staff to it.

The process began developing **sector intelligence** for every priority domain, by gathering insights and knowledge (on market trends, emerging technologies, related societal challenges...) from a pool of leading firms, startups and other stakeholders from the quadruple helix. The entrepreneurial discovery was also addressed as a good opportunity to craft Bilbao Ekintza’s set of horizontal lines of work (entrepreneurship, urban internationalisation, space provision...) according to the more specific views and needs from the priority areas.

This proved to be a demanding job, since it is a continuous process that requires strong communication skills and work method oriented to decision-making and action. Facilitating the entrepreneurial discovery “asks for new, high level competences of the staff entrusted for that mission”. Accordingly, a **capacity building programme** called “Espacio de Facilitadores” (Facilitator Space) has been designed for Bilbao Ekintza staff, covering issues like facilitation techniques, EDP and smart specialisation. As stated by Eva Salcedo, Business Promotion Director at Bilbao Ekintza, “we are still learning and building together how the entrepreneurial discovery process can boost the smart specialisation in Bilbao”.

²² <http://openlivinglabs.eu>

02

Smart specialisation as a driver to boost the urban agenda on economic development



Why re-thinking the urban agenda on economic development?

The answer is to make it more instrumental in the transition towards a real knowledge-based economy. Paving the way to the New Economy should draw the attention of middle-income and high-income cities and regions in order to sustain, or better achieve, their positioning into the world economy. And to a large extent this is an organisational matter. It has to do with how cities are organizing, fuelling and facilitating themselves as business and innovation ecosystems.

That's the purpose of a local economic agenda. An in-depth research on the different evolution of Los Angeles and San Francisco, carried out by a team conducted by Michael Storper, concluded that these organizational arrangements increasingly matter to explain urban growth and urban stagnation.²³

It is not by chance that many of the cities involved in the InFocus experience are advanced practitioners in economic development. Some of them rank at top positions in international rankings on innovation and competitiveness. Those cities feel the need to refine the way they are promoting economic development, in order to accelerate their transition to the New Economy (digital-based economy, which is also driven by knowledge, innovation and creativity).

At this point, further to the need for more effective city to region articulation regarding the ongoing regional strategies for smart specialisation, the concept of smart specialisation (not necessarily connected to RIS3 method and jargon) is so powerful that can be addressed as a key driver to boost the urban agenda on **business-led economic development**²⁴, providing better focus.

Further to RIS3 method and jargon, the smart specialisation concept is so powerful that can work as a key driver to boost the urban agenda on economic development, providing better focus

An agenda that herein we have de-constructed into four key policies: cluster development, entrepreneurship, space provision and attraction of investment and talent.

²³ Storper, M. et al (2015) *The Rise and Fall of Urban Economies. Lessons from San Francisco and Los Angeles*. Stanford University Press.

²⁴ Time ago, Storper (1997) defined city competitiveness as "the ability of an economy to attract and maintain firms with stable or rising market shares in an activity, while maintaining stable or increasing standards of living for those who participate in it". That's closely related to the capacity to incubate, attract and expand firms. Under this perspective, focusing on **firm-level performance** is absolutely a key feature when nurturing the competitive city. That is why we are using in this report the term **business-led local economic development**, just to emphasize the central role of firm performance in shaping today's place-based strategies promoting economic growth. In this context, the key question is, "what can cities do for firms"? What kind of enabling factors? What mix of policy levers?

BORDEAUX'S NEW AMBITION ASKS FOR A "NEW (POLICY) ORDER"

Bordeaux is a growing economy that has undergone a spectacular urban transformation. Over the past few years, Bordeaux Métropole, the metropolitan authority, has been strongly empowered as economic development policymaker thanks to the MAPTAM law (*Modernisation de l'Action Publique Territoriale et d'Affirmation des Métropoles*). Furthermore, due to new regionalization in France, Aquitaine has been merged with Poitou-Charentes and Limousin and Bordeaux is now the capital of a region as big as Austria. So, this new status, in terms of performance and influence, is asking for a "new (policy) order", a kind of upgraded economic agenda where smart specialisation may work as an overarching approach



Another answer to the question of why revisiting the local policy-mix on business-led economic development is to better contribute to RIS3 visions and roadmaps in place at regional level. Indeed, changing or just influencing the "strategic agenda from existing operators" is one of the main paths to move RIS3 from strategy into action (Gianelle et al 2016). When that existing operator is a major city with an extensive background in economic development, such a delivery channel is called to play a primary role.

Changing or just influencing the "strategic agenda from existing operators" is one of the main paths to move RIS3 from strategy into action. When that operator is a major city with an extensive background in economic development, such a delivery channel is called to play a primary role



Furthermore, well-developed working areas at city level, such as space provision or inward investment and talent attraction, cannot easily be found in many RIS3 designs at national/regional level. Taking them into account will result in the refinement of the horizontal policy-mix that is usually linked to RIS3. That is why the challenge of connecting RIS3 to the city should be understood as a **two-way bridge**.

In fact, the RIS3 method is seen as a sort of backbone to which a number of side policies and branches can be connected (Foray, D. et al 2012). An evolving tool that can be shaped according to the praxis. Indeed, as president of The Competitiveness Institute Christian Ketels said, smart specialisation is "a new policy concept to organize many existing (and a few new) policy tools"²⁵. We actually see **smart specialisation as an organisational driver** aimed to promote innovation-led growth.

²⁵ Presentation at WIRE Conference, Cork, Ireland, 6 June 2013. Ketels chaired the Expert Group on the role of clusters as vehicles for smart specialization in European regions, set up by DG Research & Innovation.

Cluster-based local economic development in the context of smart specialisation

The cluster approach is likely the most influential one in modern industrial policy worldwide and the arrival of smart specialisation has even emphasized this influence. Put differently, smart specialisation has opened a window of opportunity for cluster policies to be revised and improved. So, how might local authorities take advantage of this momentum to enhance their role as promoters or facilitators of cluster initiatives? What new drivers are now working in the field of cluster development?



As a first assumption, it is worth noting that domains of smart specialisation or S3 priority areas are often different to clusters and cluster initiatives. The former usually are challenge-based and broader than clusters (advanced manufacturing, low-carbon economy...), while clusters are mostly configured as an assemblage of product/markets that are linked along specific value chains. S3 priority areas are more oriented to structural change, while cluster's agendas are more centred on business growth.

The cluster approach is likely the most influential one in modern industrial policy worldwide and the arrival of smart specialisation has even emphasized this influence

Thus, "the full potential of clusters and cluster policies will be reached if the smart specialisation strategies integrate cluster policies into a broader transformation agenda for the entire regional economy"²⁶. For instance, IT clusters are called to play a primary role to digital transformation, but S3 leading authorities along with cluster policymakers and cluster managers are who should unlock this transforming potential if necessary. That is why RIS3 is working (or should work) as a booster for cluster policies.

Moravian-Silesian region (CZ)'s RIS3 priorities are the following: materials engineering, specialized machinery, mechatronics, regenerative medicine, processing of mineral resourcing, smart grids, integrated security systems and supercomputing methods. The automotive sector, which is one of the most significant industries in the region in terms of turnover and employment, is consciously missing. However, the Moravian-Silesian automotive cluster will have much to do in moving some of those priority research and knowledge domains forward. As a triple helix type of platform, clusters should have more capability to mobilize actors into relevant agendas leading to innovation and growth.

At the other side of the Czech/Poland border, Silesia Automotive is a cluster initiative of Katowice Special Economic Zone, whose vision is making the Opole and Silesian Voivodeships a hotspot for the automotive industry in Europe. It basically works as a cooperation platform between companies and higher education institutions. Significantly, the cluster has been renamed to include a cross-

²⁶ European Commission (2013). The role of clusters in smart specialisation strategies. Directorate General for Research and Innovation.

sector competence and now it is Silesia Automotive and Advanced Manufacturing cluster, showing the willingness to be actively engaged in one of RIS3-Silesia's priority domains (advanced manufacturing).



This capacity of clusters as “bridge builders” (European Commission, 2013) has now to be exploited as much as possible, since priority sectors should be seen as a starting point in the context of smart specialisation not an end in themselves. As a matter of fact, what S3 strategies provide is a roadmap to a sort of “**specialized diversification**”, taking advantage of a (short) range of priority sectors and tech domains. RIS3 should be seen as a pathway to fully activate the potential of a set of core transforming (technological and industrial) competences, expanding them through a variety of sectors and value chains. That is why S3 can be seen as a mapping for cross-sector innovation.

The capacity of clusters as “bridge builders” has to be exploited as much as possible, since priority sectors and knowledge & tech domains should be seen as a starting point in the context of smart specialisation not an end in themselves

Under this perspective, clusters that are organized around a key industrial or technological competence, instead of a sum of linked sectors and industrial branches, are much appreciated. For instance, that's the case of Bordeaux cluster on laser and photonics (see text box) or **ProduTech**, the Porto-based Production Technologies Cluster, which gathers manufacturing technology providers ranging from mechanical engineering to embedded software.

BORDEAUX CLUSTER ON LASER AND PHOTONICS

Clusters based on a key, distinctive competence enables linking to a variety of different value chains and product/markets more easily. The Bordeaux-based cluster on lasers and photonics is a paradigmatic case of a business and innovation ecosystem organized around a specific competence. Branded as **Route des Lasers**, the cluster (170 members in 2016, of which 120 are companies) offers advanced solutions to a variety of industrial sectors, such as aerospace, healthcare, energy, chemistry, electronics and even the food industry. The cluster joins a number of flagship initiatives, like Laser Mégajoule, which is the largest industrial laser facility in France, *Cité de la Photonique* business park, the technology transfer platform ALPhaNOV and the in-service training platform PYLA. The cluster even runs its own vehicle for real estate development and management, SEML Route des Lasers, targeting worldwide companies working in the optical, photonics and lasers fields.

Clusters are increasingly becoming more specialized and therefore more globalized. They tend to focus on a unique industrial/technology competence (or several) and exploit it/them as much as possible across global markets and value chains.



Anyhow, cluster-based readings of the urban economy often have a sort of revitalizing effect. They are a precious opportunity to discover new emerging productive dynamics or simply highlight those activities with a special link to the city, a kind of “**city making clusters**”. For example, in the Basque Country, **Surfcity Donostia** represents a unique communion between economic activity and the city, and **Bilbao Urban Solutions** is a cross-sector business network aims to capitalize the brand Bilbao as a world-class reference in urban regeneration.

The progressive digitization of both urban management and the urban experience is creating continuous business opportunities. New clusters around the smart city concept are emerging in many cities, closely linked to their corresponding smart city projects. Thus, IT cluster **Different Angle**’s mission is to “promote and support research, innovation and education in order to develop and implement solutions meant to transform Bucharest into a smart city”. Also in Bucharest, the **Go Electric** cluster has been founded by the Polytechnic University of Bucharest to concentrate efforts in order to develop electric mobility in the capital of Romania.

Certainly, local authorities play a key role in rolling out smart city visions and roadmaps – e.g. enabling open data environments, evolving to more open governance, piloting, providing the necessary IT infrastructure, attracting global firms to cooperate with local SMEs, etc. And this can be a strong link with RIS3, since **smart city megaprojects** are largely addressed not only as accelerators for the digital agendas but catalysts for S3 as well.²⁷

Local authorities play a key role in rolling out smart city visions and roadmaps, and those smart city megaprojects are largely addressed as catalysts for RIS3

Entrepreneurship: maximizing the ecosystem approach

There are a huge number of cities that are very dynamic in promoting themselves as entrepreneurial environments. The Municipality of **Torino** is pioneering in making social innovation work as a driver to fuel the local entrepreneurial ecosystem. Throughout **ScaleUp Porto** initiative, Porto City Council is being a great facilitator of a really vibrant local startup scene, going far beyond the validation of business ideas and increasingly focusing on business development and growth. Dublin has established the **Commissioner for Startups**, which is a rather uncommon figure so far. Some cities are partnering with venture capital firms to launch city-based investment funds to support startup growth.

RIS3 developments should take advantage of this city’s background, and vice-versa, there is an untapped potential in the smart specialisation concept that might contribute to foster the entrepreneurial city.

²⁷ See the European Parliament report on Cohesion Policy and Research and Innovation Strategies for Smart Specialisation, of April 2016.



For example, scale-up and acceleration programmes require more business and market intelligence in order to rapidly make the most of niche opportunities as well as turn societal demands and challenges into business opportunities. Entrepreneurship support is no longer a matter of space provision, coaching & mentoring and access to finance only. There is therefore a growing need for major cities to organize their own business intelligence units, necessarily in close cooperation with business-driven actors. This may turn those cities into EDP facilitators.

To meet the expectations, business intelligence must be focused. It was Bilbao's choice to spotlight on three main fields - advanced tertiary, digital economy and creative economy – what made somehow feasible to arrange **EDP-sourced business intelligence** units in each of those domains.



EDP and other features related to smart specialization can also work to give impulse and operational shape to new concepts on entrepreneurship support. For instance the **challenge-based approach**, which is inherent in the S3 type of roadmaps. Launching challenges and specific problems to solve may work as energizer for the startup local scene. A kind of fast track to business creation and growth.

Furthermore, this approach turns cities into great testlabs, which is mainstream on how regional/national authorities usually address the role of cities in RIS3. For instance, **Smart Dublin** (an initiative of the four local authorities of the Dublin area, with the docklands district as main testbed) in partnership with Enterprise Ireland periodically launch what they call "Small Business Innovation Research" challenges. The last call of April 2018, with 800,000 € in funding, was seeking for innovative solutions on five specific challenges: to encourage engagement of the 'unheard voices' in decision-making; to address identification and communication of bathing water quality; to test shared and sustainable workplace mobility options for staff; to facilitate connections over an IoT radio frequency mesh network; and to optimise last mile delivery in urban centres.



Nonetheless, the challenge many cities are still facing with regard to their entrepreneurship support systems has largely to do with getting a clearer distribution of roles among the different actors within the system, avoiding unnecessary fragmentation and overlapping, as well as exploiting connections and synergies, which is the essence of the ecosystem approach indeed. Once more, smart specialisation approach could be helpful in this regard, providing focus and greater direction.

There is an untapped potential in the smart specialisation concept that might contribute to foster the entrepreneurial city

FRENCH TECH: A BENCHMARK ON MULTI-LEVEL GOVERNANCE

French Tech is an umbrella initiative that was launched in 2013 to articulate the different local start up ecosystems in France. With a focus on scaling-up, internationalization and the digital economy, French Tech has been quite supportive to brand the local ecosystems and create sense of belonging to entrepreneurs and startups in relation to the local communities they belong to. At the same time, those startups join a network under the brand France that is very active internationally.

13 place-based startup ecosystems have been promoted so far. French Tech in the Alps is the brand of the community based in Grenoble, which is focused on five areas: HealthTech, IoT, EdTech (entertainment, education), CleanTech and Sports.



Spaces for smart specialisation

The new economy, still to shape, is promoting changes in the **spaces of production and innovation**. For instance, science and tech parks, which are commonly cited as RIS3 key actors in the literature on smart specialisation, are increasingly multi-functional and getting a more urban character. They are evolving towards urban innovation districts²⁸. The CBD concept (Central Business District) is now much more than a financial district and it welcomes other activities related to the digital and creative economy. University campuses are changing likewise, from spaces of just research & learning to host a wider variety of urban functions. A growing number of new company headquarters are inner city-located, by opposite to suburban corporate campuses.

²⁸ This concept has been popularized by Bruce Katz and Julie Wagner (2014) *The Rise of Innovation Districts: A New Geography of Innovation in America*. Brookings Institution, Washington. This report includes a set of receipts to boost these new urban spaces for innovation, and one of them is about clarifying their competitive advantage and activity focus, and in this sense the authors mention the European smart specialisation as a useful approach for that (page 16).



Smart specialisation can no doubt be helpful in providing guidance to these new spatial trends and settings. For instance, in three ways:

- **Activity focus.** Particularly, the idea of “specialisation pattern” may help to solve the specialisation/diversification dilemma that many managers of science and tech parks and other innovation spaces face. A specialisation pattern can be understood as a short range of non-excluding core specialisations, which give character and distinctiveness to a space and create linkages to other activities that are welcome likewise.

The idea of “specialisation pattern” may help to solve the specialisation-diversification dilemma that many managers of science and tech parks and other innovation spaces face

On a surface of 740 hectares, Bordeaux-Euratlantique is as a major urban redevelopment project aimed at maximizing the impact of the new high speed train connection to Paris. To some extent, it’s an attempt to re-invent the CBD concept following a specialisation pattern that includes advanced tertiary, digital and creative economy, green growth and the wood sector (the area as a live showroom of Aquitaine-based capacities in wood solutions to sustainable construction).

- **Co-location.** Bringing into the same location different industries with potential to mutually benefit in terms of cross-innovation or B2B – e.g. co-locating knowledge intensive services, IT and creative industries.

In relation to this, Bordeaux Métropole has committed to make the S3 idea of “related variety” work at Bordeaux’s three biggest urban projects now underway: the aforementioned Bordeaux-Euratlantique, Bordeaux Aeroparc (aerospace-defence) and Bordeaux Inno Campus (with a focus on health sciences, laser & photonics and other technologies). It means to consciously boost specific cross-sector innovation and co-location, as well as to manage those megaprojects in a way that they can be more exposed to experimentation.

For years Bordeaux has been providing spaces to cover specific needs from local clusters, resulting in a portfolio of cluster-focused business and tech parks, e.g. Aeroparc, Bioparc Bordeaux Métropole (health cluster), Ecoparc (cleantech), Cité de la Photonique (lasers & photonic). The ultimate project in this regard is The Digital City (Cité Numérique). Located in a former post office transit building, as part of Bordeaux Euratlantique, the Digital City is a good example of new urban workspaces, closely linked to the digital economy and in particular the cluster Pole Numérique Aquitaine.

- In this context, the **entrepreneurial discovery process** might be extended beyond unveiling business and innovation opportunities, to get to know better the specific needs from a number of priority sectors in terms of location, architectural and interior design,

In focus

etc. This would allow city units in charge of urban planning and local economic development to get their respective goals closer.

That's the way Porto is now prospecting in order to maximize the urban economy impact of its two major urban projects: Campanhã (most likely, next most ambitious brownfield redevelopment in Portugal) and Asprela (the transformation of one of the University of Porto campuses into a urban innovation district).

Indeed, bringing both urban planning and economic development under the same general directorate and councillorship may explain (along with the metropolitan level as effective work scale) why Bordeaux is so good dealing with the new (urban) industrial space²⁹.



As primary spacemakers, many local and metropolitan authorities are promoting large-scale regeneration projects that might be addressed as unique **testbeds** for new work and innovation spaces. Therefore, testbeds for S3 type of visions and roadmaps. For example, Bilbao's Zorrotzaurre project is called to be the biggest brownfield redevelopment in Spain in the years to come. Bilbao City Council has envisioned it as an urban innovation district, where multi-functionality will be its most remarkable feature - 85 Has. of which 75% residential and 25% devoted to economic activity, according to the master plan. Business location decisions concerning this area will be closely guided by both Basque Country RIS3 and Bilbao's newly S3-driven economic agenda.



Zorrotzaurre island project, next door to downtown Bilbao

²⁹ Direction Générale Valorisation du Territoire that includes DG du Développement and DGA Aménagement.

Summarizing, location and space can be powerful connectors between RIS3 and the city, i.e. the vehicle to cultivate a more **tangible, urban dimension to S3**. Cities, and in particular those major urban regeneration projects, represent the best test lab to roll out the increasingly integrated nature of innovation, that which requires reconciling economic, environmental and social challenges.

Location and space can be powerful connectors between RIS3 and the city, i.e. the vehicle to cultivate a more tangible, urban dimension to S3

Branding and marketing the city as innovation ecosystem

Increasingly cities devote more energies and resources to market themselves as great places to live, work and invest. Just considering the InFocus partnership, enhancing Porto's attractiveness and visibility in the global arena was one of the main priorities of Mayor Rui Moreira, who set up Invest Porto in 2014 as a small, agile team to spread Porto's value proposition worldwide. Mission Bordeaux Attractiveness was launched in 2017 by Bordeaux Métropole as a long-term strategy not jumping just into a logo/motto/campaign logic. Frankfurt took a giant step into inward investment attraction by organizing this work in a way that the same team and strategy is serving the whole metropolitan region Frankfurt Rhein-Main - an area of 5.8 million that stretches across three different Länder and including other major cities like Wiesbaden and Darmstadt. Ostrava, in the Czech Republic, has just launched in 2018 an ambitious strategy on talent attraction, targeting skilled workforce, researchers, students and creative people.

That's the **communication dimension** of a modern local economic agenda. In this regard, how can smart specialization be helpful?



Indeed, the idea of smart specialisation has a significant outward-oriented dimension. The link to the outside is something that is emphasized by the RIS3 method - "this process is carried out with an eye on the outside world" (Foray et al, 2012). In fact, S3 was born as a response to the need for better positioning the EU regions in the global competition. That is why RIS3 should take advantage of the numerous city branding & marketing practices that are now underway targeting international audiences. Both types of strategies reinforce each other.

Smart specialisation has a significant outward-oriented dimension. The link to the outside is something that is emphasized by the RIS3 method

In this respect, it should be noted that that wide-scope communications are usually missing in many RIS3 strategies at regional level. An exception to this is South Moravia Regional Innovation

In focus

Strategy 2014-2020, where interestingly **Image** is one out of the 5 key horizontal policies, alongside Innovative Governance, Science, Innovative Companies and Education. South Moravia actually works as Brno city-region and perhaps it might explain (i.e. the prevalence of an urban scale logic) this central role given to place branding and attractiveness at the innovation policy.



South Moravia Regional Innovation Strategy 2014-2020 (RIS JMK)
Source: South Moravian Innovation Centre

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With regard to territorial economic development, innovation is not only related to the capacity to produce new knowledge locally, but also to absorb global innovations generated elsewhere. Therefore, the "anchor capacity" of cities and regions to attract investment and firms, knowledge and innovation, talented people... matters a lot. One can refer to this anchor capacity as **attractiveness**, which is a popular concept in France (*attractivité*), although it is used much less in the rest of Europe.

In this respect, S3 priority sectors and knowledge domains should work as linking pathways to the outer world. In other words, if well done, S3 can provide greater direction and much more precise focus for cities and regions marketing themselves as business location. For instance, Ostrava's brand new strategy on talent attraction benefits from the techno-productive priority areas set at Moravian-Silesian RIS3 (from materials engineering to supercomputing methods). The latter works as an additional segmentation to Ostrava's four main target groups (qualified labour force, innovative researchers, excellent students and the creative class). Such a crossed-segmentation may lead to higher quality performance of the marketing and attraction activities with no doubt.

THE VALUE OF GETTING FOCUSED: INWARD INVESTMENT ATTRACTION IN ZURICH

As non-member state of the EU, Switzerland and Zurich are out of the influence radius of RIS3. However, it's good to see how they work in FDI and knowledge attraction to appreciate the value of getting focused. According to the Global Talent Competitiveness Index 2018, Zurich is the most attractive city in the world to grow, attract and retain talent. Indeed, the economic capital of Switzerland has reached a sort of global city status despite its modest size (400,000 inhabitants, 1.8 million in the Greater Zurich area including Winterthur), due to a unique business and research environment, which is a magnet for young researchers, skilled workers and knowledge intensive firms from all over the world.

Greater Zurich Area AG (GZA) is the public-private partnership in charge of inward investment attraction, whose strategy stands out due to a clear target prioritization within the FDI global market. On the one hand they have focused on precision technologies, whatever the industry. And on the other hand on directional functions of transnational companies (international strategy, management, law, finances & treasury, controlling, logistics) since they have promoted themselves as best location for global and European headquarters, especially to firms from America and Asia - what they call "premium segment". Thus, GZA has 4 permanent representations outside Switzerland, in the United States (New York and San Francisco) and China (Shanghai and Beijing). Representation in Brussels is not relevant to them.

This strategy has been nonetheless revisited recently as a result of a paradigm shift. The "What can Greater Zurich do for a company?" has been turned into "What can a company do for the region?", and the latter has led to a new USP: Greater Zurich as **best place to research and develop technologies of the future**. Accordingly, GZA's characteristic focused approach has been even emphasized, though largely revisited. In this respect, three main changes can be highlighted:

- 1.- This is not about direct investment only, research collaborations matter too, as a first step to a future location.
- 2.- Metropolitan regions rather than countries as target geographical areas. It's no longer Switzerland versus other countries, it's about Zurich competing with other metropolitan regions in the world.
- 3.- Cutting-edge technologies rather than industries. To that aim, 15 key technologies has been selected to attract knowledge, talent and investment, namely: machinery, sensors, photonics, robots/drones, wearables, materials, pharma, medtech, biotech, energy, process automation, artificial intelligence, IoT, fintech and gaming.



In focus



City branding is an organizational challenge, a matter of stakeholder mobilization and alignment, notably those who often interact with international audiences. When branding and marketing the city as business environment, those stakeholders are no other than firms, startups, local innovators, higher education institutions, cluster initiatives, tech parks, etc. Sometimes, it is the private-sector which takes the lead to market the city to specific audiences. That's the case of **Porto Tech Hub**, an initiative promoted by three Porto-based leading IT firms (Blip, Critical Software and Farfetch) aimed to give Porto more international visibility as innovation ecosystem.

Engaging the private sector makes a difference, but it can usually be a hard task. A fundamental question is therefore how to capture the attention of local firms, startups and innovators to involve them in marketing the city as business and innovation ecosystem. In this regard the **entrepreneurial discovery** method can be valuable not only to find out innovation pathways and business opportunities, but also to co-produce business-driven Invest-IN and talent management strategies.

Entrepreneurial discovery can be a valuable method not only to find out innovation pathways and business opportunities, but also to co-produce business-driven Invest-IN and talent management strategies



S3 values and the urban agenda on economic development

At this point, it's worth splitting the concept of smart specialisation into its three key values (prioritization, relatedness and entrepreneurial discovery) to examine how each of them might impact the four main policies described above: cluster development, entrepreneurship, space provision and place branding and marketing. Such kind of summary will provide better understanding on how smart specialisation may work as a driver to revamp and boost the urban agenda on economic development.

	PRIORITIZATION	RELATED VARIETY	ENTREPRENEURIAL DISCOVERY
CUSTER DEVELOPMENT	Clearer legibility of urban economies	Maximizing the capacity of clusters for matchmaking across sectors and technologies	Deepening into the quadruple helix model to enhance existing cluster initiatives
ENTREPRENEURIAL ECOSYSTEM	Making feasible to organize business intelligence serving the local community	Strengthening the ecosystem approach	Sourcing new concepts on entrepreneurship, e.g., mission-based approach, social innovation, etc.
SPACE PROVISION	Activity focus to support an evolving portfolio of productive and innovation spaces	Co-location e.g. IT/creative industries	Better response to space requirements from specific industries
BRANDING AND MARKETING THE CITY AS BUSINESS ENVIRONMENT	More accurate segmentation of city's target groups	Uniqueness by combining different productive/knowledge assets	Business-driven Invest-IN strategies

S3 values and the urban agenda on business-led economic development

■ PRIORITIZATION

It is the most acknowledgeable value related to smart specialisation. Actually, it's simply a matter of good governance. A recall on the need for choice making when designing and delivering public policies, and the lack of impact of "one-size-fits-all" type of policies. We mean choice on a (short) range of innovation-oriented priorities to get focused.

- **Clearer legibility of urban economies.**

If the purpose of smart specialisation is drawing specific roadmaps to growth, based on distinctive industrial/knowledge capabilities and potentials, then it should contribute to build up stronger and more competitive (productive) narratives for cities and regions. Otherwise, those roadmaps won't be working well.

Agreeing on a specialisation pattern is much helpful to get and disseminate a more updated and accurate portrait of a local economy. And this specially matters in those cases where a major iconic industry overshadows other equally strong clusters or some emerging productive dynamics. For instance, Bordeaux reputation is closely linked to winemaking industry. However, not everybody is aware of its world-class positioning in the aerospace industry or in lasers & photonics. Likewise, the image of Frankfurt is that of a financial hub, but not many are aware the city is the global reference for critical digital infrastructures.

- **Activity focus for an evolving portfolio of productive and innovation spaces.**

The idea of specialisation pattern may provide greater direction and activity focus to a portfolio of productive and innovation spaces whose spectrum is now much wider than business parks, office space and science and technology parks – e.g. incubators and business centres, co-working spaces, accelerators, research labs, urban innovation districts, creative hotspots, campus re-developments, etc.

- **More accurate segmentation of city's target groups.**

As said above, smart specialisation is rather instrumental to create differentiation and build up a more appealing identity for the city as urban economy. On the more tactical ground, the set of priority technological and knowledge domains can work as a compass to navigate across the FDI (foreign direct investment) global market and getting a much more precise segmentation of target groups. There is therefore a fertile ground of cooperation between S3 and city branding & marketing strategies.

■ RELATED VARIETY

Prioritization and priority areas are not an end themselves but the backbone of a more complete picture. Promoting the relevant bridges among the main knowledge and production assets in a regional or urban economy is about fully exploiting their potential for expansion and growth.

Related variety can be understood as a kind of **conscious geometry of connections** between different sectors, value-chains and knowledge fields with the aim to source new innovations and business opportunities.

- **Maximizing the capacity of clusters for matchmaking across sectors and technologies.**

Relatedness is inherent in the cluster approach³⁰. So, in a S3-driven context, cluster policymakers and supporters should foster such predisposition for matchmaking as much as possible. In the past few years, Bordeaux has been allocating about 1.5 million Euros annually to cluster development plus 4 staff from the economic development unit dedicated to liaisons between cluster organisations and their stakeholders. This way has led to a more autonomous and consolidated role of cluster organisations, while Bordeaux Métropole staff is now focusing more and more on **cluster-cluster cooperation** and **cross-sector innovation** in a number of challenge-based domains like smart mobility, digital transformation, big data and IT for health.

Relatedness between sectors and clusters are not limited to technology, innovation and industrial competences. It can be extended to training and education and labour market, where often local governments have a wider role³¹.

A useful approach in this context is to organize **knowledge transfer from declining local industries to new emerging ones**. For instance, Ostrava's background on coal-steel-machinery can be re-used to some degree in order to support new activities that are emerging in the Czech city in its transition to a knowledge economy. In Plasencia (ES), some of the skills of the construction industry (which brought down in the years following the bursting of the real estate bubble in 2008) might be re-used, duly adapted, to support today's growing sectors like forestry and environmental management.

- **Strengthening the ecosystem approach.**

That is, deepening into the exchanges among the components of the local entrepreneurial ecosystem. If well done, RIS3 assemblages, understood as a mapping for potential cross-sector innovation, with a number of priority knowledge areas at the core, may work as a compass to that aim.

What it comes to startup promotion, having an approach on relatedness can make a difference. Apparently, FiZ Frankfurt Biotechnology Innovation Center is an incubator in the field of biotechnology, but actually it is a disruptive cross-sector innovation and startup programme aims to revisit the life sciences in a digital world.

³⁰ "Clusters cannot be understood as fitting into the narrow sectoral view that most industrial policies have, but should be considered as regional "ecosystems of related industries and competences featuring a broad array of inter-industry interdependencies" (European Commission, 2016).

³¹ See Karásek, Z. et al (2011). Transferability of skills across economic sectors. Report elaborated by RPIC-ViP for the European Commission. Publications Office of the European Union.

- **Co-location.**

When shaping the new urban industrial space, the S3 concept of relatedness can be translated in terms of co-location. We mean to experiment with bringing into the same location different industries with some (real or potential) affinity between them, in order to facilitate synergies and cross-innovation. Instead of spontaneously, co-location can be consciously promoted according to a plan or specific specialisation pattern.

- **Uniqueness by combining different productive/knowledge assets.**

Differentiation and uniqueness are key aspects for an urban economy to get more robust positioning nationally and internationally. And real uniqueness usually emerges by connecting city assets as far as possible (specialisations or priority domains included) not just finding them out. It is the resulting crossover what often produces distinctiveness. In other words, the more we can bridge between our city's key assets, our positioning will become stronger and unique, which fits quite well with the S3 idea of related variety

This assumption should inspire the storytelling on the city as innovation ecosystem. For instance, time ago the Rotterdam city marketing team made an effort in promoting stories and stunning images by bringing together its condition as world-class seaport and the fact of being home to the most innovative architecture studios in The Netherlands (OMA/Rem Koolhaas, MVRDV...).

■ ENTREPRENEURIAL DISCOVERY

Entrepreneurial discovery process (EDP) is the co-production method for designing and monitoring smart specialization strategies. It's a challenge-based and market-oriented open way to discover and prioritize opportunity areas (smart choices) by bringing together actors from the triple/quadruple helix, in particular leading firms, startups, local innovators and researchers and HEIs. High quality facilitation and keeping the process current over time is crucial to make the EDP works.

- **Deepening into the quadruple helix model to enhance existing cluster initiatives.**

As supporters of cluster initiatives, some local and metropolitan authorities have the capability to encourage cluster platforms to deepen into challenge-based innovation by organizing EDP type of discussions more systematically.

For instance, the Basque IT cluster **GAIA**, which is currently joined by 300 companies approximately, is absolutely a key actor for the digital transformation agenda of the Basque Country. In this sense, they are working on three main directions: i) turning the Industry 4.0 model into a well extended reality by means of 4.0 type of technologies and industrial processes; ii) extending the concept of industry 4.0 to services through 4.0 type of solutions; iii) scaling the smart city concept up to the regional level - intelligent territories.

The way GAIA is doing that is basically by promoting intra and inter-cluster alliances, as well as arranging specific living labs and large-scale demonstrators. They are also a key partner for the entrepreneurial discovery process that Bilbao Ekintza has launched specifically for the digital economy, as a result of the InFocus experience.

- **Sourcing new concepts on entrepreneurship.**

For instance, the EDP can be pretty helpful to operationalize the problem-solving approach as a catalyst for the startup local scene. An interesting concept to have in mind is URBAN-X. It is a start-up programme closely related to current urban challenges, promoted by HAX, a hardware accelerator, and MINI, the BMW card brand with a strong urban character. Its purpose is to “invest in and accelerate startups who are focused on intelligent cities, urban hyper-growth and society-scale challenges”.

The **challenge-based approach** and now the more short term-oriented **mission-based approach**³² fit well to the transforming aim that is inherent to the smart specialisation paradigm.

- **Better response to space requirements from specific industries.**

The entrepreneurial discovery logic may contribute to listen (and respond) to the voice of start-ups, free agents, SMEs, leading firms, cluster platforms and other industry-driven organizations about their specific needs regarding workspaces, e.g. design specifications, location patterns, co-location affinities, price elasticity, tenure regimes, etc.

Furthermore, this approach (indeed a new public-private dialogue with regard to space provision) may increase the interest of the private sector as industrial/innovation space developer as well as enhancing conventional landlord management.

- **Business-driven Invest-IN strategies.**

Urban diplomacy and innovative place branding can be much helpful supporting business and research internationalization, and vice-versa, when marketing the city as business location, the international deployment of local firms and clusters may work as a great supporting channel. In this regard, capturing the attention of local firms and professionals to involve them in marketing the city strategically or just in the form of endorsements, participation in PR events, brand ambassadors... is not always easy, and making EDP work in this ambit can be fruitful.

Anyhow, in marketing the city as business environment, reaching out specific target groups and opening a dialogue with them is also a matter of developing specific business/market intelligence, which absolutely needs from the concurrence of firms and local innovators at some point, and it has to do with the EDP method.

³² See Mazzucato, M (2018) Mission-Oriented Research & Innovation in the European Union. A problem-solving approach to fuel innovation-led growth. European Commission. Directorate-General for Research and Innovation. It seems the mission-oriented approach will gain influence in the next FP9 that will substitute Horizon 2020 for the next programming period.

03

Turning cities into tier-one RIS3 developers: how 10 cities are addressing the challenge



Bilbao URBACT Local Group at work

Overview

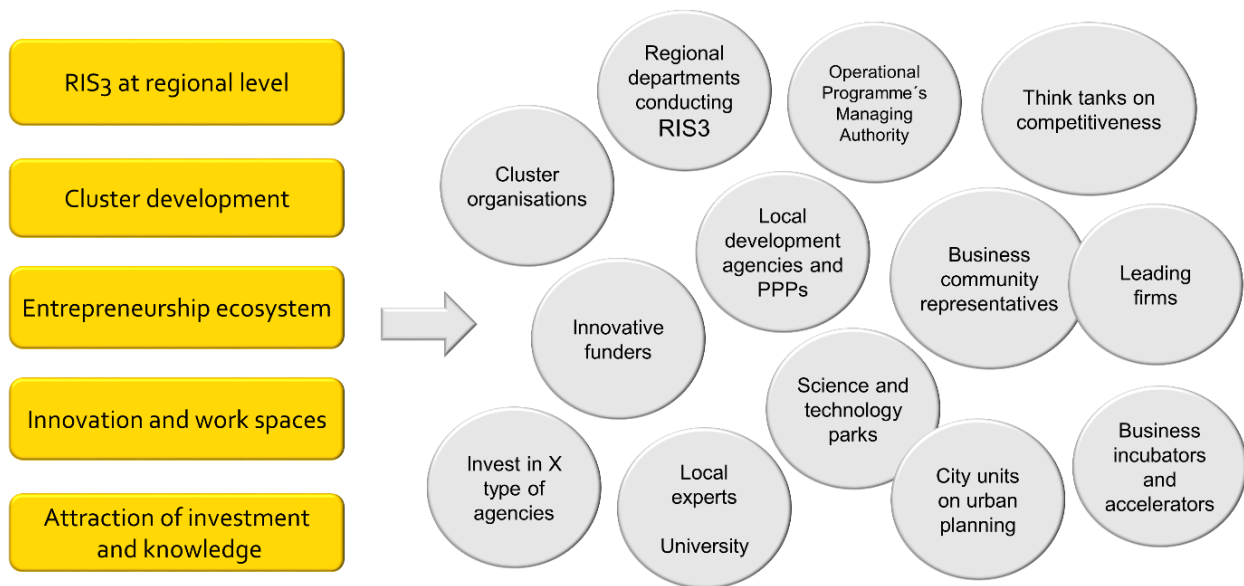
InFocus's main goal has been boosting the urban/metropolitan agenda on economic development, by testing how the smart specialisation approach applies to a number of today's essential local policies such as cluster development, entrepreneurship, space provision and attractiveness. All this, while taking a first step to bridge with the RIS3 strategies in place at regional level.

The ten participating cities - all with very different productive and policy backgrounds and coming from different institutional frameworks (see tables below) - have tried to give a response to this challenge throughout an **Integrated Action Plan**, following the URBACT standard with regard to action planning.

Hence, let's decode here those different responses. That is, not describing in detail the sets of actions but focusing on the motivation and logic behind them, which can be more useful to other cities and third parties wanting to follow the way that has been paved by the InFocus experience.

In this respect, a number of common features can be highlighted:

- The **URBACT Local Group** (ULG) method has given to all participating cities the opportunity to gather a number of key stakeholders to jointly re-think the economic agenda strategically. And most cities will keep this way of collaborative policymaking beyond InFocus. Furthermore, the ULG has been useful to engage RIS3 regional authorities in a more action-oriented dialogue with the city for the first time
- All cities have tackled a **sector prioritization** exercise, in one way or another, and all of them have taken the priority areas already agreed at regional RIS3 as a reference to confront with.
- Some cities have chosen revisiting the whole mix or a number of **horizontal policies** related to business-led economic development (e.g. Bilbao, Grenoble, Bielsko-Biala, etc), while others have put the spotlight on a single one (e.g. Ostrava on talent attraction, Porto on space provision).
- Most cities have reaffirmed **innovation** as a key driver for their strategies on local economic development, some for the first time like the medium-sized town of Plasencia.
- Smart specialisation has worked well to provide guidance to real **transformation agendas**, which means work agendas aimed at breaking path dependencies and exploring new growth potentials in order to accelerate the transition to knowledge-based urban economies. That's clearly the ambition behind the Local Plans from Bilbao, Bielsko-Biala, Bordeaux and Grenoble.



Standard composition of URBACT Local Groups within the InFocus network

- A majority of the involved cities are conducting major urban regeneration projects – e.g. Bordeaux-Euratlantique, Bilbao-Zorrotzaurre, Porto-Campanhá, Grenoble-Presqu coast, Bucharest-Hala Laminor. Those projects are a precious opportunity to test innovation-led urban development schemes over the ground, where smart specialisation can no doubt provide direction and approach. Those **great testbeds** are reason enough to address City/Metropolitan Authorities as tier-one RIS3 actors, along with universities, science and technology parks and cluster initiatives.
- All cities have tried to address this action planning as an opportunity to enhance **multi-level governance**, in coherence with the InFocus rationale. Nonetheless, in this regard the outcomes have not always been meaningful – despite the specificity of the collaboration and alignment: RIS3 and SMEs policies. There have been significant progress in the cases from Spain, Portugal, Czech Republic and Poland (where a more fluid and in-depth interaction has been set up with RIS3 leading authorities), and less positive in France, Italy, Germany and Romania. A variety of reasons can explain this, yet a still dominant, hierarchical top-down approach of multi-level governance outstands as a primary barrier.

Smart specialisation has worked well to provide guidance to real transformation agendas, which means work agendas aimed at breaking path dependencies and exploring new growth potentials in order to accelerate the transition to knowledge-based urban economies

TYPES OF REGIONAL KNOWLEDGE ECONOMIES							
INFOCUS PARTNER CITIES	Metropolitan knowledge intensive services regions	Knowledge absorbing regions	Public knowledge centres	Skilled industrial Eastern EU regions	High-tech regions	Skilled technology regions	Traditional Southern EU regions
Bielsko-Biala							
Bilbao							
Bordeaux							
Bucharest							
Frankfurt							
Grenoble							
Ostrava							
Plasencia							
Porto							
Torino							

InFocus partner cities within the 7 types of Regional knowledge economies (Wintjes and Hollanders, 2010)

INFOCUS PARTNER CITIES	Region	Innovation leaders	Strong innovators	Moderate innovators	Modest innovators
Bielsko-Biala	Silesia				
Bilbao	Basque Country				
Bordeaux	South-West				
Bucharest-3	Ilfov				
Frankfurt	Darmstadt				
Grenoble	Centre-East				
Ostrava	Moravian-Silesia				
Plasencia	Extremadura				
Porto	Norte				
Torino	Piemonte				

Regional Innovation Scoreboard 2017, European Commission



"A panel group was created with representatives of local government, business, education and research. That's our quadruple helix. The group targeted three economic specialisations: advanced manufacturing, modern material technologies and specialised IT products and services. Then, the group defined a number of driven forces, which should lead us to an outstanding position in those target areas, mostly related to modern technical education and training, cross-innovation and attractiveness of the city and its surrounding. We have given this Action Plan a name "Bielsko-Biala: Economy at High Level"

Stanisław Ginda, President of Bielsko-Biala Development Agency

Economy at high level.

Bielsko-Biala roadmap to enter the knowledge economy

A growing technology-intensive FDI inflow

Bielsko-Biała was established in 1951 as a result of merging two neighbouring cities: Bielsko (with its origins back in the Middle Ages) and Biała. Overall population of the city is 180,000, while the population of the Bielsko-Biała sub-region was over 665,000. It belongs to Silesian region (Silesian Voivodeship), with circa 4.6 million and Katowice as the administrative centre.

Formerly known as "the city of 100 industries" or "Manchester of Silesia", Bielsko-Biała has been historically an important economic centre. With the turn of the century and the collapse of the textile industry, the city underwent a successful **restructuring process**, with the automotive sector remaining as the most significant piece of the local industrial fabric, along with aviation and electronic equipment. Moreover, the city stands out of its regional context by a growing visitor economy mostly related to winter sports.

As in the whole Poland and other Central-Eastern European countries like Czech Republic, Slovakia and Hungary, inward investment played a key role at the time of their transition to market economies. At this time, that foreign direct investment inflow (FDI) to Bielsko-Biala area is becoming increasingly technology and knowledge intensive, at a point that it can also play an instrumental role, this time in the **transition to a knowledge-based economy**.

A sample of this is the R&D centre dedicated to autonomous driving that the automotive industry global player ZF TRW inaugurated in Bielsko-Biala by the end of 2015 - they have now three R&D centres in the world. According to the staff involved in the site selection process, being close to car manufacturing was the main location factor for them, together with the local/regional supply of engineers.

Education + Innovation as main pillars

However, they are aware of the potential **bottlenecks** that may threaten this dynamic, notably a mismatch between a growing demand of well-educated and skilled workforce and the local labour market. High-value FDI is requesting larger supply of engineers and other well skilled people, which poses a challenge for the higher education institutions in the region (in particular Lower Silesia). In the meantime, they are attracting foreign talent, from Romania for instance, to work on IT-related activities, whose demand is skyrocketing due to Industry 4.0 paradigm.

In addition to this, a bigger challenge is to embed that high-value FDI into the regional economy as much as possible to make knowledge economy transition work. That transition might also be

addressed as moving from being a manufacturing platform mainly to a more sophisticated business ecosystem.

Consequently, the **re-invigoration exercise** of the local economic agenda made by Bielsko-Biala in the frame of the InFocus project puts the spotlight on education and innovation as main pillars. Regarding the former, the main aim is to fine-tune technical higher education and vocational training curricula to the current needs from industry.

The University of Bielsko-Biala (6,500 students) and the number vocational schools in the city have a long standing tradition in technical studies (automatics & robotics, mechanics & machine building, computer science, environmental engineering, textile engineering...), which nonetheless should be revisited to better respond to advanced manufacturing models. For instance, promoting dual bachelor degrees and **dual training** – e.g. mechatronics + software and ubiquitous computing).

What it comes to innovation, the concept to work on would be **“extended innovation”**. That is, the abundant R&D type of innovation that is mostly placed in the multinational corporations (MNCs) and other big companies located in the area might be extended in some way to SMEs, startups and local Universities, who in turn are able to enhance MNC’s in-house innovation as well. It’s about cross-innovation and increasing Bielsko’s sophistication as innovation ecosystem. In this regard, the facilitating role of Bielsko-Biala Regional Development Agency will be key (not at all an easy task), along with clusters platforms, leading companies and the University.

In addition to these central pillars, two complementary strategies have been agreed. First on **space provision**. The collapse of the textile industry left a significant amount of abandoned former industry buildings, mostly central located, which might meet the growing demand for “live & work” spaces from start-ups and even foreign companies, and so contributing to build the post-industrial city. A breakthrough in this regard was the *Nowe Miasto* project (“New City project”) reusing the former BEFA Bielsko Valve Factory, in the heart of the city, as a mix of housing, retail, leisure and office space.

Second, increasing city **branding and marketing efforts**, from an integrated “study/work/live” standpoint. In particular, promoting Bielsko as a career destination to face brain drain and attract skilled workforce. The city, one of the “little Viennas” due to its built heritage, offers good life standards and amenities which deserve more buzz.

Taking advantage of the smart specialisation regional framework

When revisiting and updating their work agenda, Bielsko-Biala Development Agency realised that the Regional Innovation Strategy of the Śląskie Voivodeship 2013-2020, RIS3-Silesia, in particular its very precise choice of priority knowledge domains, could be rather helpful to provide them greater focus. In fact, the regional strategy mirrored most of Bielsko’s productive specialisations in machine industry, automotive industry, aviation, IT and medicine.

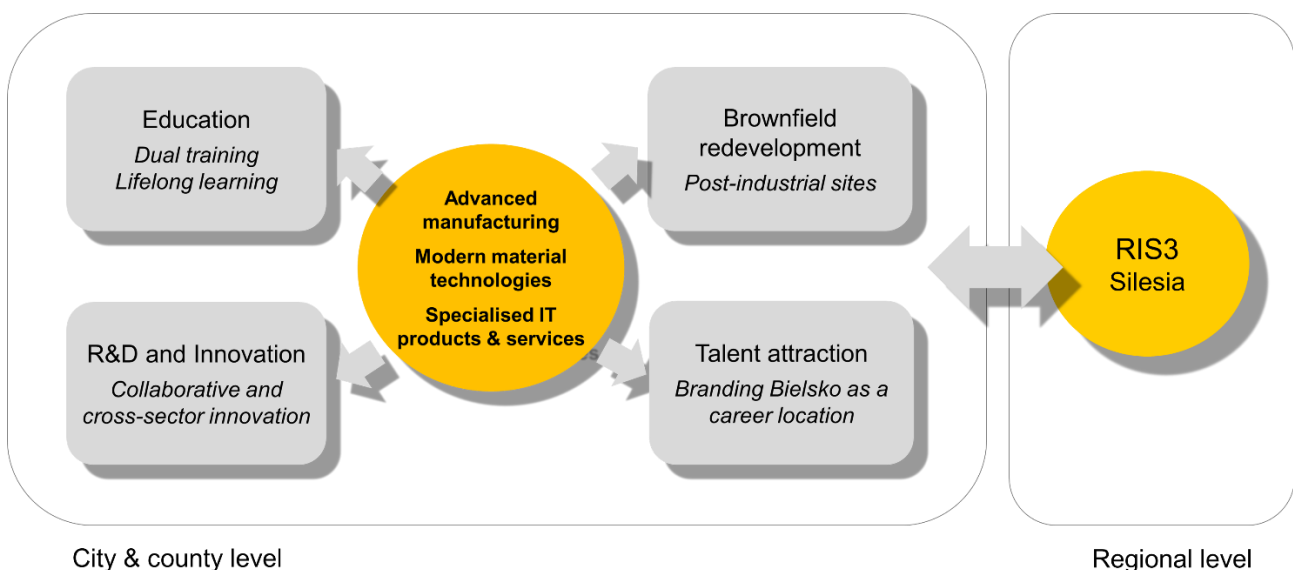
In focus

Against this background, the Bielsko URBACT Local Group agreed on selecting the following three **priority domains**:

- Advanced manufacturing (the automotive industry mainly).
- Modern material technologies (greatly linked to many different value chains, with almost 20 companies already innovating with graphene, polypropylene and metal and textile materials).
- Specialised IT products & services (cluster of companies that is growing very rapidly, also including creativity-based activities, which can be instrumental to the idea of expanding innovation beyond systematic R&D and high-technology-driven innovation).

Another advantage came from the willingness of the RIS3 leading authority in Katowice (Marshal's Office of the Silesian Voivodeship) to cooperate actively with the city level to embed the strategy territorially as much as possible. It's worth noting that other regions in Poland, a country with a robust urban system, are paying a special attention to embed S3 into the city/local level. For instance, that's the case of Wielkopolska (capital Poznan), delivering the "pro-innovative local government" strategic programme, as part of its RIS3 implementation framework.

To sum up, Bielsko-Biala's Integrated Action Plan is actually a **transformation agenda**, as it paves the way to a real knowledge-based economy. Significantly, it has been entitled "Bielsko-Biala: Economy at High Level". It's focused and responds to very specific local needs. To our view, it's a good example on the type of modern industrial planning that can be done from the local level nowadays.





“ Leadership should be now understood as the capacity of taking the initiative to manage, convene, promote, encourage and generate consensus ”

Nora Sarasola, Director at Bilbao Ekintza

Addressing Bilbao´s next economy through smart specialisation

Facing Bilbao´s second transformation

With a population of 350,000 inhabitants and about one million at the functional urban area, Bilbao is an unquestionable global benchmark in urban regeneration. The city reacted to decline that reached bottom at the eighties throughout an impressive integrated development strategy covering economic, urban and environmental dimensions.

Despite this success (GDP per capita in the Basque Country is now 21% above the average of the EU28) Bilbao still sees herself in transition, facing what they call a "second transformation" towards a New Economy – a really digital-based and creativity-based and knowledge-based economy. To walk this path, the Local Development Agency Bilbao Ekintza agreed on revamping its strategy, and in this regard they firmly believes the smart specialisation approach can be much helpful.

Moreover, the Basque Country brings a great reputation as industrial policymaker (being one of the first regions in the world in applying massively the cluster approach) and Basque RIS3 has got many international acknowledgments. Hence, it is not by chance that Bilbao pioneered in closing the **city gap** with regard to smart specialisation strategies, promoting the InFocus network.

To meet the challenge, Bilbao Ekintza first organized a task force, following the URBACT Local Group model, to engage in the discussion a number of necessary contributors, namely: multi-level governance (Basque Country RIS3 management team and Diputación Foral de Bizkaia as a body working at province level with a great funding capacity), research centres and think-tanks (Tecnalia-Technology Corporation and Orkestra-Basque Institute of Competitiveness), private sector and cluster organisations (Chamber of Commerce, GAIA IT cluster, EIKEN audiovisual and AVIC engineering and consultancy cluster) and public and private Universities (UPV/EHU, University of Deusto and Mondragon University).

Making smart specialisation work at city level

This co-creation work has led to an enhanced economic agenda for the city, where three main elements can be highlighted:

- Focus on three domains: advanced tertiary, creative economy and digital economy. Indeed, this choice comes from Bilbao´s own prioritization exercise of 2014, when 6 clusters were identified in a dynamic way according to their level of consolidation: knowledge intensive business services (KIBS), tourism, urban solutions (technologies and services related to urban regeneration), arts & culture, cleantech and healthtech. Later on, within the InFocus framework, three out of those clusters were prioritized and re-organized as above mentioned.

On this issue, just to draw the attention on the correlation between advanced tertiary and urban growth and prosperity, in terms of high-quality investment and jobs, innovation performance and positioning into globalisation.

- Significant reinforcement of project-based approach through brand new EDP-driven platforms, with the aim to promote a pipeline of tractor initiatives related to the aforementioned three priority areas, in close cooperation with selected stakeholders. This matters a lot, as it also works in the short term, promoting a demonstration and catalytic effect.

However, what is distinctive is that those tractor projects are designed to bridge between the priority domains as far as possible - e.g. connecting KIBS to the digital economy to foster Industry 4.0. Thus, those projects seek to promote **related-variety**, which is a key S3 concept, as important as sector prioritization.

That's the case of [AS-FABRIK](#), "Bilbao Alliance for Smart Specialisation in Advanced Services towards the Digital Transformation of the industry" that has been awarded [Urban Innovative Action](#). AS-FABRIK's main purpose is to enhance the capacity of advanced business services (KIBS) to supply the growing demand on digital transformation from manufacturing (advanced manufacturing, which is at the core of Basque Country RIS3), through a number of experimental initiatives on new higher education programmes, prototyping and incubation of new business models and dedicated workspaces.

- Duly fine-tuned horizontal policy-mix to better serve the three focal areas. Bilbao Ekintza's portfolio of activities and services has been re-arranged into the following major lines of work, with a spotlight on the three priorities, though without neglecting other sectors and clusters:

Competitiveness and sector development, giving now more emphasis to knowledge transfer, cross-innovation and synergies.

Business intelligence. It's a new working area aimed to organize a sort of EDP-sourced business intelligence units in every priority domain. It's about compiling and sharing information and knowledge on market trends, emerging technologies, related societal challenges... that afterwards can be transformed in opportunities and innovation sources.

Entrepreneurship, throughout a number of strategic initiatives like BIG or Auzo Factory. The latter is a decentralized network of centres working at the crossroads between entrepreneurs, companies and citizenship.

Space provision, like **Zorrotzaurre** island project, a huge brownfield redevelopment next door to central Bilbao, which is envisioned as a multi-functional urban innovation district. To a large extent, it should work as a testbed for projects and initiatives coming out from the S3 roadmap.

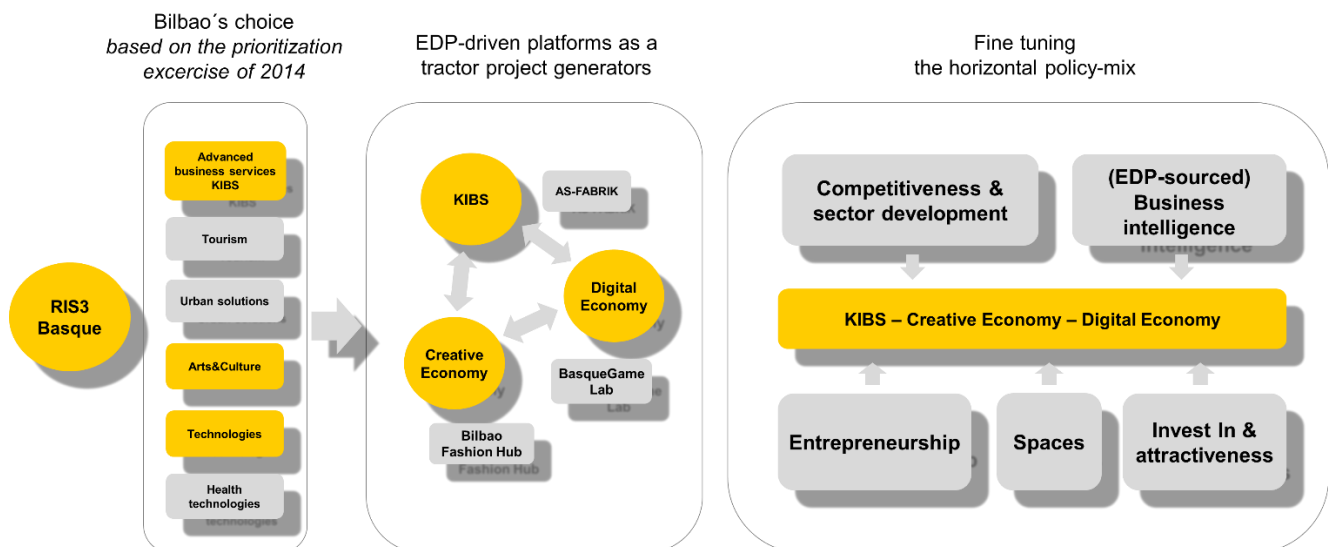
Attractiveness, organizing a set of activities with regard to Invest In Bilbao and talent attraction and retention, with a special focus on the priority domains.

Bringing together the right set of people by specific domains and mobilizing them. Bilbao Ekintza's role as facilitator

As a result, Bilbao's new economic agenda is now pretty much focused and better oriented to innovation and competitiveness. It is now closely aligned to industrial policy at national level, in particular with regard to Basque Country RIS3. In short, it's an agenda better shaped to help the transition to a New Economy.

However, the most significant change is that of Bilbao Ekintza addresses now its mission as a matter of bringing together the right set of people (actors) by specific domains and mobilizing them. Such a facilitator role, within a policy framework more centred on innovation and competitiveness, needs from specific skills. In this regard, a **capacity building programme** called "Espacio de Facilitadores" (*facilitator space*) has been designed for Bilbao Ekintza staff, covering issues like facilitation techniques, **entrepreneurial discovery process** (EDP) and smart specialisation.

It is precisely that role of facilitator, and overall the relational approach of the new work agenda, what makes Bilbao Ekintza a key developer in the implementation process of the Basque RIS3. This giant step taken by the city of Bilbao has been enthusiastically welcomed by the Basque Government, and it's worth mentioning this since not all InFocus partner cities have found such a willingness to discuss on a shared work agenda with regard to smart specialisation.





"A focus on attracting the jobs of tomorrow and helping businesses flourish today is a key component of Bordeaux Métropole's overall responsibility in providing a turnkey living environment for both companies and individuals. Through an ambitious territorial strategy to boost the region's attractiveness, the metropolitan authority is activating all the levers of economic innovation"

Alain Juppé, President of Bordeaux Metropole and Mayor of Bordeaux

Making Bordeaux economic agenda more innovation oriented

An impressive urban transformation that still goes forward

Bordeaux (760,000 inhabitants within the 28 towns of Bordeaux Métropole and 1.2 million in the greater urban agglomeration) has undergone a spectacular urban renaissance, which nonetheless is little known outside France in comparison to other cases. It was 20 years ago when the then called “sleeping beauty” began her awakening, throughout an outstanding urban regeneration programme (historic downtown credited as the biggest UNESCO World Heritage Site in 2007, riverfront redevelopment...), new public transport system, flagship infrastructures and a robust cluster-based economic agenda.

Unlike Bilbao with the Guggenheim museum, here the process lacked a single catalyst, but it’s fair to say it has run in parallel to Mayor Alain Juppe’s governing period, which still goes on. Furthermore, the portfolio of major urban projects keeps on working, and three of them deserve a special attention because of their direct impact with regard to business development and innovation:

- **Bordeaux-Euratlantique**, an “Operation of National Interest” (OIN) conceived to maximize the effects of the new high-speed train connecting Paris in 2 hours. It is likely the largest urban regeneration project now in France, 740 Hectares of which 200 has. to develop. A great opportunity to reinvent the concept of central business district (CBD) and host the New Economy, digital and creative.
- **Bordeaux Aeroparc**, an “Operation of Metropolitan Interest” (OIM) that will develop 400 has. within a 2,500 has. area close to the airport. It’s aimed to underpin the growth of the aerospace-defence cluster.
- **Bordeaux Inno Campus**, an “Operation of Metropolitan Interest” (OIM) with a focus on health sciences and new technologies like laser and photonics. It foresees 210 has. for new developments within 1,350 Has around the University of Bordeaux and the University hospital.

New city ambitions need for a new policy order

In this growth context, two administrative reforms on territorial organization promoted by the French Republic have direct consequences for Bordeaux. On the one hand, the MAPTAM law of 2014 (Modernisation de l’Action Publique Territoriale et d’Affirmation des Métropoles) means the empowerment of Bordeaux Métropole, as well as all metropolitan authorities in France, in particular to drive local economic development. On the other hand, the redraw of France’s regional map in 2015 (NOTRe Nouvelle Organisation Territoriale de la République) which leads to Nouvelle-

Aquitaine, by merging Aquitaine, Poitou-Charentes and Limousin. Bordeaux is now the capital of a region as big as Austria.

It is therefore the right time to test a “new (policy) order” on economic development, better suited to Bordeaux’s new status and ambition in terms of performance and influence. One step in that direction has been the launch, for the first time, of a sound strategy on branding and marketing the city under the strapline “Magnetic Bordeaux”.

To what extent the idea of smart specialisation can be instrumental?

In this juncture, the InFocus transnational experience arrives “just in time” to support. In particular to examine how smart specialisation may apply, in this case within the planning framework of Bordeaux Métropole’s Economic Roadmap, in place since 2016. As a result, a number of approaches and work methods, which are commonly related to the idea of smart specialisation, will be given a wider role from now on, namely:

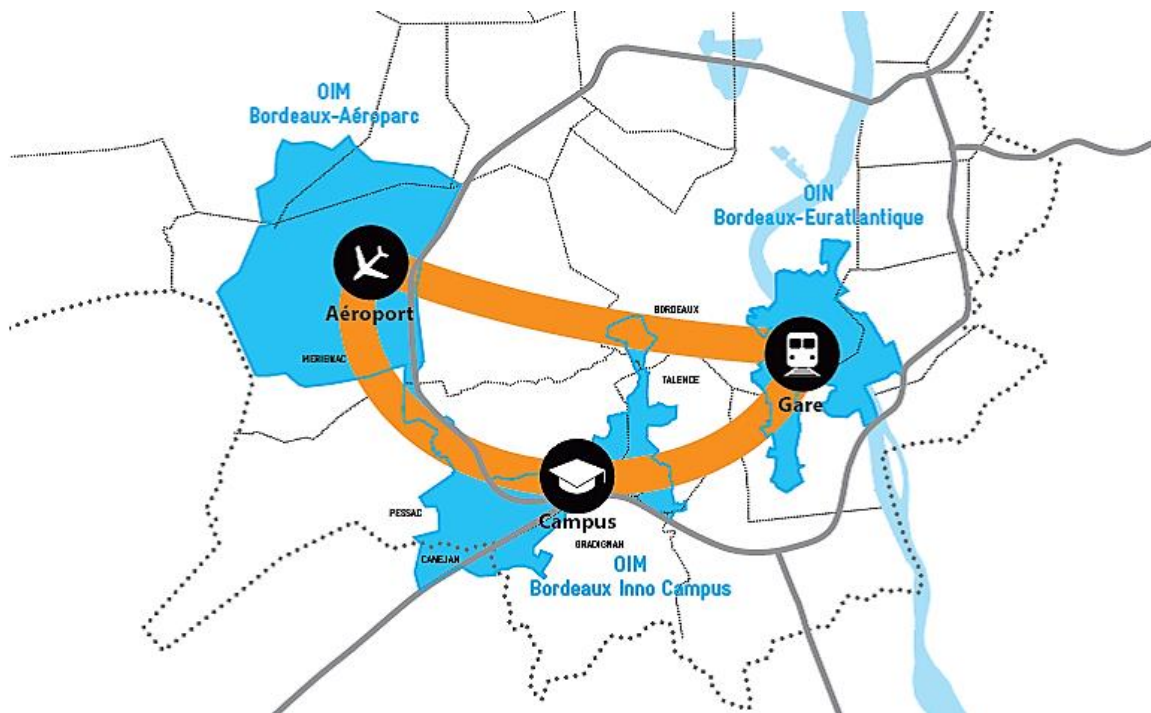
- **Prioritization/clearer legibility of the urban economy.** Bordeaux has addressed prioritization (probably the most acknowledgeable value associated to smart specialisation) as a simple matter of getting clearer “legibility” of Bordeaux’s urban economy; as a pre-condition to increase attractiveness.

This issue especially matters in those cases where a major iconic industry overshadows other equally strong clusters. That’s the case of Bordeaux’s winemaking industry, still highly competitive and important, while other key local sectors such as aeronautics-space-defence, photonics and lasers, chemistry, health sciences, financial and advanced services and creative-digital do not join the international visibility they deserve.

- **Activating synergies and cross-innovation.** The S3 idea of related-variety and subsequent concepts like cross-innovation, co-location, hybridisation... has been much appreciated by Bordeaux, at a point that its Action Plan as a result of the InFocus project has been entitled “a strategy on cross-innovation”. Relatedness will be used to strengthen the innovative character of the three flagship urban projects above mentioned (Bordeaux-Euratlantique, Bordeaux Aeroparc and Bordeaux Inno Campus) as well as to prospect connections and synergies among them.

Indeed, Bordeaux’s Action Plan is mostly a catalogue of pilots and demonstrators by bringing together capacities and approaches from the different sector-focused local innovation ecosystems in the metropolitan area. Thus, over the past years Bordeaux has got a significant background in cluster development, which is rooted into the renowned French policy of *pôles de compétitivité*, as well as workspace provision to every cluster’s needs - e.g. Bioparc for health sciences, l’Ecoparc for cleantech, Cité de la Photonique, l’Aéroparc. From now on, much more attention will be paid to cultivate linkages among those clusters and among those cluster-oriented business & innovation spaces.

In focus



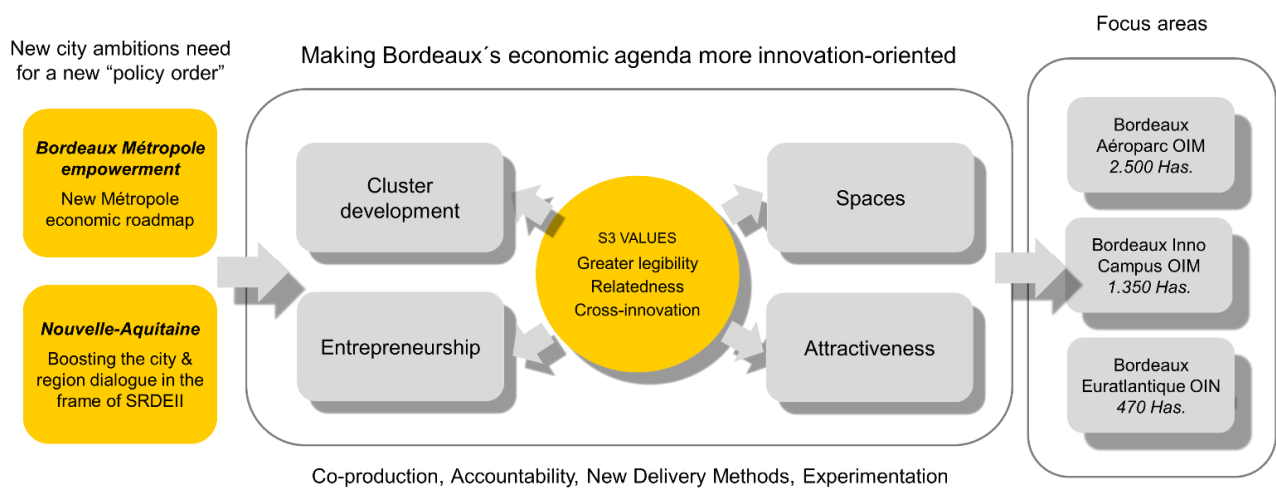
- **Deepening into the collaborative leadership model.** The URBACT Local Group method gave Bordeaux Métropole the opportunity to gather a number of key stakeholders to jointly re-think the economic agenda strategically. That task force included ADI Nouvelle-Aquitaine (regional agency for innovation and development) and Nouvelle-Aquitaine Regional Council, University of Bordeaux, the Chamber of Commerce Bordeaux-Gironde, Bordeaux Technowest (metropolitan development agency), and the clusters Aerospace Valley (over 800 members) and Alpha Route des Lasers & des Hyperfréquences.

Bordeaux's Action Plan is also a call into action for more efficient governance, in terms of avoiding fragmentation and overlapping as much as possible, accountability, innovative public procurement (through the French figure of "innovation partnership") and new delivery methods (service charter, contractualisation...). The aim is getting Bordeaux closer to a sort of "entrepreneurial (local) State", as a condition to drive innovation-led local economic agendas.

- **Re-thinking the relationship between the metropolis and its region.** It is not another vague claim for better multi-level governance, an issue that is often addressed from a hierarchical approach or as a matter of devolution. It's simply about alignment and sharing a working agenda. And Bordeaux has realised the potential of smart specialisation to drive and give direction to such a new dialogue with the region, at least with regard to innovation-led economic development. In this case, the framework is the Nouvelle-Aquitaine Regional Scheme for Economic Development, Innovation and Internationalisation (SRDEII), which assumed the legacy of S3-Aquitaine.

Summarizing, metropolisation and new regionalisation in France have led to a unique momentum for Bordeaux to re-invigorate its economic agenda. Against its valuable background in this field, the result is an agenda more straightforwardly oriented to innovation and attractiveness and exposed to **experimentation**, where a number of methods and approaches linked to smart specialisation will be able to play a broader role. In Mayor Juppé’s words, the aim is now “activating all levers of economic innovation”.

Anyway, to our view, the main lesson from Bordeaux lies on its motivation rather than the specific outcomes. It’s about the willingness (of an advanced performer) to improve, and the firm determination to do it.





"It is my strong wish to do more for the businesses in the 3rd District of Bucharest and this will be one of my main goals in the years to come. In order to ensure a close connection with the private sector and other key stakeholders in the future, we've started taking a few steps"

Robert Negoită, Mayor of Bucharest-3rd District

S3 values to boost Bucharest 3rd District economic agenda

An institutional framework seriously constrained by lack of multi-level governance

The third District of Bucharest (hereinafter Bucharest-3) is one of the six districts of the Romanian capital, with a population of almost half a million – two million the whole. What it comes to local development, the 3rd District Council has stood so far in energy efficiency, entrepreneurship support and brownfield redevelopment.

Bucharest-3 has been largely conditioned by the institutional framework when building up a response to **the InFocus challenge** – i.e boosting the urban agendas on economic development by means of smart specialisation, while at the same time bridging with S3/RIS3 strategies at regional/country level.

On the one hand, the governance model in Bucharest can be a barrier to tackle issues related to business development and innovation properly. Though there are a General Mayor and a General City Hall of Bucharest, a significant power in terms of policymaking lies on the districts, which have the status of Municipality, with its own elected Mayor, City Council and governing structure each.

On the other hand, **smart specialisation in Romania** has not followed the path originally traced by the European Commission for bigger member states. The main strategy in place is the National Strategy for Research, Development and Innovation 2014-2020 - managed by the Ministry for Education and Scientific Research - which lacks of a regional or spatial approach. Spontaneously, some Regional Development Agencies or similar bodies in the country have promoted regional roadmaps according to the RIS3 method, but their legitimation as real policies as well as their capacity to be implemented were fairly weak, since the so-called "Development Regions" have no administrative capacity so far.

To close that regional gap, some solutions have been agreed between Brussels and the Romanian national authorities. But in any way, the Bucharest-Ilfov Development Region (*de facto* Bucharest metropolitan agglomeration) was not among those who took the lead in this regard. In short, for Bucharest-3 there is no a smart specialisation strategy at regional level to bridge with.

Revamping the economic agenda of Bucharest 3rd District

In this context, the approach was simply **revamping Bucharest-3's economic agenda**, zooming over the business development issues of the 3rd District's "Sustainable Development Strategy 2014-2020". And doing that through a number of **values that are commonly associated to smart specialisation**, namely: choice of priorities, setting the right policy-mix accordingly and evolving to a governance style more open to stakeholder involvement and out-of-

In focus

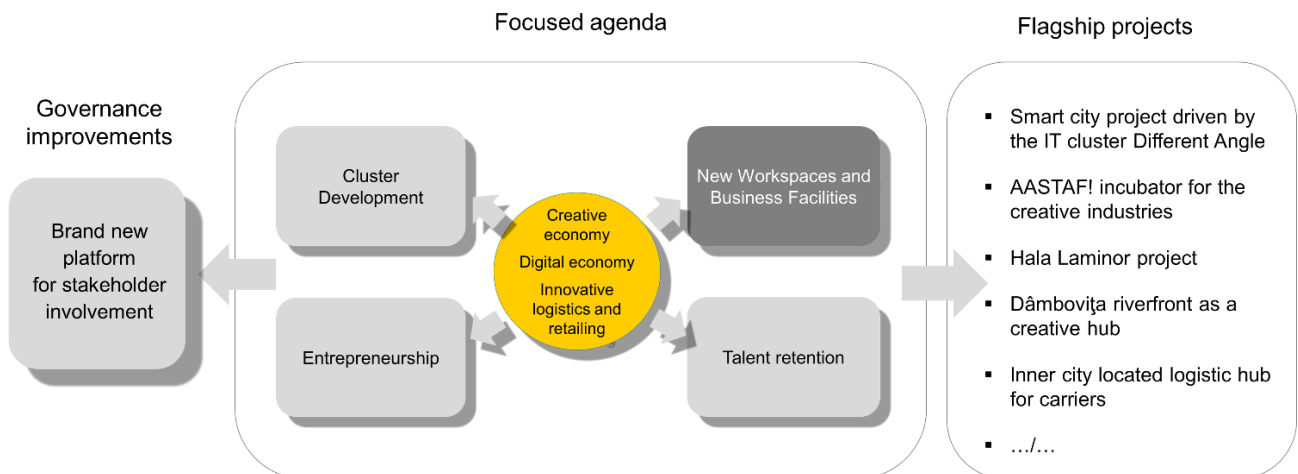
the-box initiatives. These values crystallized into three main achievements from the resulting Action Plan:

- Creative Economy, Digital Economy (and digital agenda) and Innovative Logistics and Retailing were agreed as **priority domains** to focus on and give better clarity and direction to the agenda. This choice makes sense for such a central urban space like Bucharest-3.
- An assemblage of four **main policies** working as a “4 wheel drive” economic agenda:
 - Cluster development: strengthening the partnership with the Bucharest IT cluster Different Angle and agreeing a path on how the Municipality can support cluster initiatives strategically and tactically.
 - Entrepreneurship: widening the service charter to start ups.
 - Space provision: with a number of specific projects, where *Hala Laminor* (68.000 m2 brownfield site) deserves special attention as a unique opportunity to develop a concept of urban space devoted to work and innovation.
 - Attractiveness. Branding and marketing Bucharest as a business environment more efficiently in order to attract and retain individual talent (and so facing brain drain), firms and investment.
- The experience with the URBACT Local Group has led to a **collaborative model** that will work on a permanent basis from now on, where it’s worth highlighting some valuable stakeholders like Bucharest University of Economic Studies, Bucharest-Ilfov Regional Development Agency, the abovementioned Different Angle cluster and AASTaFF, a co-working space developer.



To put in a nutshell, Bucharest-3 economic agenda is now more focused, it's project-based, it is better supported by a number of key stakeholders, as necessary contributors, and it is more permeable to ideas and initiatives from the private sector, whose contribution will be extended to implementation, monitoring and feedbacking.

All in all, the big step, still to take, will come from a sounder territorial approach in Romania and **making multi-level governance work**. In this case, it means building relevant and stable work relations on innovation and business-led economic development with both the General City Hall of Bucharest and the Bucharest-Ilfov Region, what will certainly be much helpful to unlock the untapped potential of the Romanian capital.





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City of Frankfurt

Giving Frankfurt economic development agenda a more transforming purpose

Frankfurt is a world-class business environment that has been ranked as an “innovation leader” at the 2017 edition of the Regional Innovation Scoreboard. However, a number of concrete challenges have been raised, where smart specialisation can be useful and instrumental. Actually, Frankfurt Economic Development GmbH (FED), the City-owned agency working for the metropolitan area (Frankfurt am Main, 2.2 million) are addressing those challenges as a way to re-think its own work agenda, giving it a more transforming aim.

Re-thinking their own background on cluster development to avoid path dependency

FED has a long tradition working with the cluster approach. However, this work might need to be reviewed and adjusted. Maybe, by re-assembling existing cluster dynamics around specific market/societal challenges, which might source new business opportunities and activate new growth potentials. With no doubt, the idea of smart specialisation can be powerful in this regard.

In this context, Frankfurt’s “House of” model deserves special attention. It’s a kind of cluster-oriented platform quite focused on matching industry and research agendas. They are backed by the territorial administrations (usually the State of Hesse and Frankfurt am Main), yet the key role is played by Universities and academic institutions. It’s a great asset to widespread the entrepreneurial discovery method in the area. For instance, House of Logistics and Mobility is a combination of advanced research centre, business centre and showroom for innovative products and solutions, and House of Finance is a mix of interdisciplinary research and education activities at Goethe University Frankfurt, with the aim to be an open cooperation forum for academia, politics and practitioners from industry and regulation.

As a matter of fact, there are a number of strong clusters in Frankfurt in industries like pharma & biotech, finance, logistics and mobility, IT and creative economy. However, no conventional cluster organizations and initiatives can be easily recognized behind them. Instead, a number of cluster-focused collaborative platforms, of different kinds and with different purposes, like the “House of”, are rolling out an agenda. Indeed, cluster management in Frankfurt is a private sector driven affair, with more or less backing from the government and the academia, and where research play a primary role, not a subsidiary one. This more open and somehow informal setting can be a value at this time, as it might be more easily redirected to a S3-driven framework, where the entrepreneurial discovery method might be fully exploited.

In addition to this, other policy areas have been considered within the review exercise and subsequent action plan promoted by the InFocus experience:

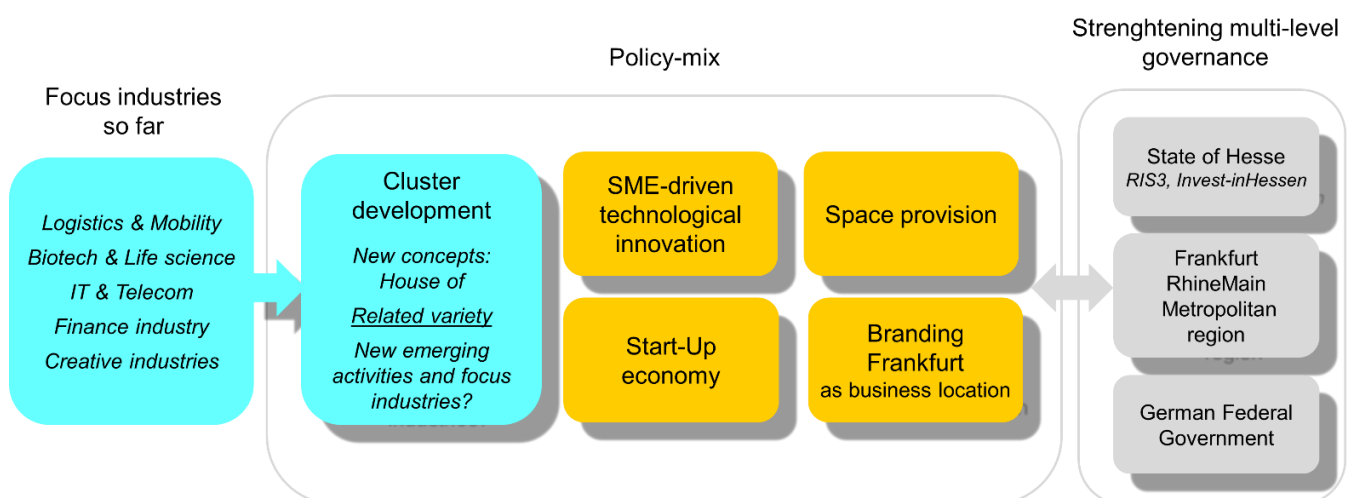
In focus

- **Start-Up economy.** Increasing Frankfurt’s attractiveness as a local ecosystem for startup incubation and growth, in comparison to other successful and more acknowledged ecosystems like Berlin.
- **Branding.** How can Frankfurt change the single-sided image of a financial hub and popularize the diversity of its economy? This question remains current.
- **Space provision.** Corporate real estate advisory and support is a distinctive service of FED, which has recently been reinforced. Next step is getting closer coordination with the urban planning city department on strategic issues, in order to face the high pressure from Frankfurt’s real estate market – i.e. housing and conventional office markets which offer higher returns than innovation spaces and workplaces for startups. The aim is “seeking spatial development solutions for industry”.

Addressing multi-level governance

Finally, there is much to do in Frankfurt with regard to multi-level governance. The State of Hesse delivered a S3 type of innovation strategy, but no effective step has been taken so far to embed it across the Länder. Consequently, smart specialisation as a policy concept is quite unknown between a high number of relevant actors in business development, innovation and research.

Another challenge is the consolidation of the metropolitan region, Frankfurt Rhein-Main, as a single framework for strategies on business development and innovation. It’s a vast functional urban area of 5.8 million inhabitants that stretches over three federal states and includes other main urban centres like Wiesbaden and Darmstadt. Some decisions have been taken recently. Thus, Frankfurt Economic Development GmbH (with a focus on business development in Frankfurt metropolitan area –Frankfurt am Main) and FrankfurtRheinMain GmbH (focused on inward investment for the whole metro region) share now the same general manager. But there is still a work to do on alignment and cohesion.





"InFocus has changed the usual way to address economic development, notably with regard to pay special attention to those sectors with high capability to play a structuring role. For instance, here in Grenoble we are now experimenting a lot the connection between art and science as a source for new areas of work and innovation"

Antoine Conjard, Director Théâtre de l'Hexagone

Innovation at the maximum

Expanding Grenoble 's most distinctive feature

A world-class research-driven innovation ecosystem

Grenoble-Alpes Métropole is a territorial authority gathering 49 municipalities and 450,000 inhabitants – circa 700,000 in the functional urban area. It hosts a renowned research-driven ecosystem, with impressive figures in terms of R&D and concentration of research centres, laboratories and high-tech companies, including the iconic European synchrotron - the world's most intense X-ray source. Grenoble is considered by people as the French Silicon Valley.

The city played a pioneering role at the time France launched its Pôles de Compétitivité policy, and today outstands in **6 specialisations**, which are organized through cluster initiatives: Digital-Micro & Nanotechnologies (gathered around Minalogic cluster platform), Energy (Tenerrdis cluster), BioHealth (mostly around LyonBiopôle), Chemistry and Cleantech (Axelera), Mechatronics (ViaMéca) and Sports and Mountain. Many of them have close connections to GIANT campus, with is Grenoble 's innovation district *par excellence*, in the central area of Presqu'île.

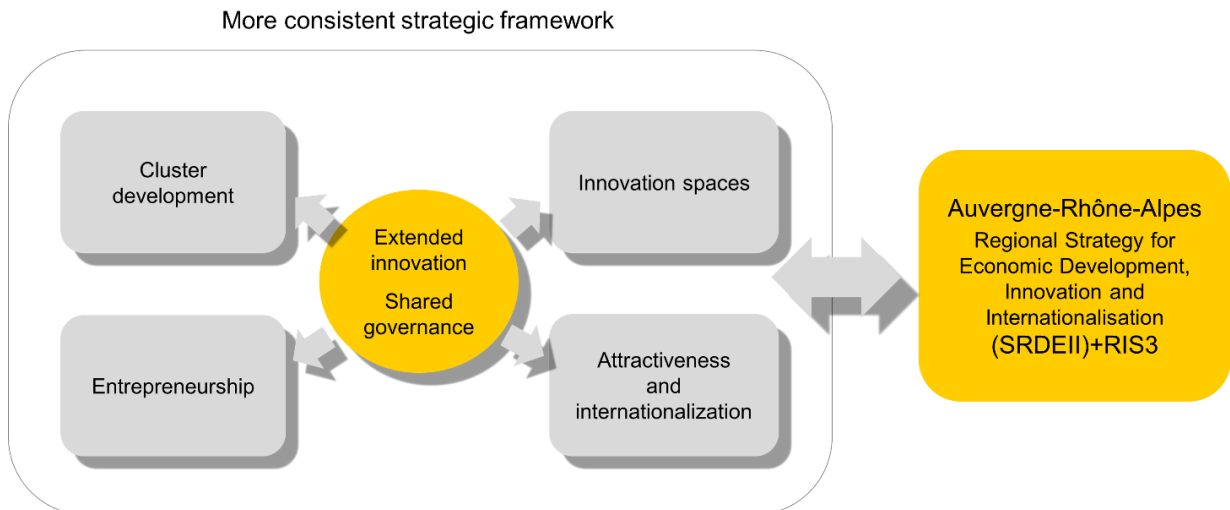
Similar to Bordeaux, the combined effect of two major administrative reforms concerning territorial organization in France has created a **new context for Grenoble** to upgrade its strategy on economic development. First, the empowerment of metropolitan authorities due to the MAPTAM law of 2014 (Modernisation de l'Action Publique Territoriale et d'Affirmation des Métropoles) is encouraging Grenoble-Alpes Métropole to strengthen its directional role as policymaker, in particular regarding the economic agenda.

Second, as a result of the new regionalization in France (NOTRe law of 2015), Auvergne and Rhone-Alpes have merged, and within this new regional context (which includes main cities like Saint-Étienne and Clermont-Ferrand, besides Grand Lyon as capital) Grenoble should keep clear and accurate its positioning and ambition as a metropolitan economy. The right policy framework for improving such **city-to-region articulation** would be the Regional Strategy for Economic Development, Innovation and Internationalisation (SRDEII) that assumes Rhône-Alpes Regional Innovation Strategy for Smart Specialization (SRI-IS), at least in terms of priority areas. It 's worth noting that strategy was adopted by Auvergne Rhône-Alpes in December 2016 with a significant gap in what concern the poor engagement of cities.

"Extended innovation" as a driver for future development

Coming from Grenoble, it wouldn 't be a novelty placing innovation at the core of the metropolitan agenda. What it is a novelty is the aim for a truly integrated approach, by using smart specialization as a cohesive force encompassing clusters, entrepreneurship, spaces and internationalization. In other words, what the Action Plan (promoted by the InFocus experience) has intended to achieve

is a **more consistent strategic framework** to the numerous initiatives and relevant stakeholders in the metropolitan area with a focus on innovation and business development.



Further to this main goal, the Action Plan stresses two new approaches that deserve special attention:

- **Expanding research-driven innovation to other forms of innovation.** That integrated approach is widening the scope of the very innovation policy, which maybe has been too focused on systematic R&D so far. From now on it will be more open to other forms of innovation. This is key.

The local ecosystem will get stronger when combining research-driven and high-tech innovation with creativity-based as well as social-driven and territorial innovation. Concerning the former, Grenoble is powerful, but there is wide room for improvement with regard to other types of innovation. That´s the concept of "extended innovation", which is coherent with one of the central ideas of RIS3-Rhone-Alpes, that of extending research-driven innovation to social innovation.

- Consequently, the S3 concept of **relatedness will be central for Grenoble from now on**, as it is rather instrumental to extend research-driven innovation to other non-technological forms of innovation and vice-versa. As matter of fact, some Grenoble stakeholders have already initiated a remarkable work in this way, for instance bringing together Art and Science – e.g. EXPERIMENTA the Arts Sciences Biennale. Certainly, **working in-between**, gathering knowledge and insights from different fields is an **experimentation** indeed.

In focus

Grenoble metropolitan authorities are aware of the **creative economy** potential in this regard (creative industries, creativity-based business models and more creative jobs at the sectors from the wider economy) i.e. fostering creative spillovers, more emphasis to business incubation different to campus/laboratories spin-offs, etc.

Empowering Grenoble-Alpes Métropole as a facilitator for cross-innovation

Innovation at the maximum. This could be a headline for Grenoble's Local Action that has resulted from the InFocus experience. In his preface, Claus Habfast, Vice-President at Grenoble-Alpes Métropole, set the ambition: "we have an innovative territory at the crossroads of industries and universities, with a strong culture and international DNA. The Metropolis is keen to combine technological innovation and societal innovation to develop all forms of innovation".

To approach that way, the Metropolis will have to assume a broader role as facilitator to make the most of the wide range of relevant stakeholders operating in the area, but also to engage citizenship in some way. For that task, smart specialisation and subsequent entrepreneurial discovery method will certainly be useful tools to provide clearer direction and method.



"From the very beginning, we introduced InFocus project's ambition to political and technical representatives from our region. Since then, we have worked along with FUNDECYT, the office in charge of RIS3-Extremadura, with the aim to align our priority areas in forestry and environment management, retail and tourism, wellbeing and sustainable construction to the framework strategy of the Extremadura Region"

Fernando Pizarro, Mayor of Plasencia

Plasencia

A smart specialisation approach for medium-sized towns

Plasencia is a medium-sized town located in the region of Extremadura, in Western Spain, with a population of 40.000. It actually works as a central place for many urban functions for a hinterland of 200.000 inhabitants. Its heritage-led urban development model could not avoid the great impact of the economic downturn following the bursting of the real estate bubble in 2008 resulting in unemployment rates skyrocketing. Today, unemployment remains very high (24% in 2017 compared to 16,5% on national average), since the local economy has not been “reshuffled” properly, as a new mix of traditional sectors duly revisited along with new emerging activities to work upon.

Innovation as a driver for job creation

Re-thinking Plasencia’s economic agenda under the lens of smart specialisation has brought the following outcomes:

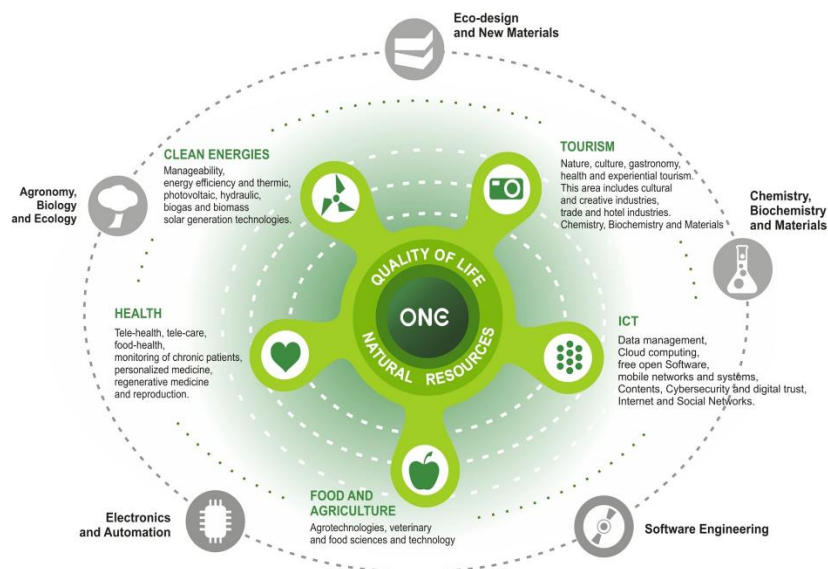
- For the first time, **innovation has been placed at the core** of the local economic development agenda, along with job creation. Rather, innovation has been approached as a driver to try to break with structural high unemployment and promote more durable jobs. Before that, local economic development was too focused on helpdesk to entrepreneurs and self-employees and training on basic skills on how to run a business or find a job.
- A number of crosscutting issues like digital transformation and circular economy have been assembled into the same agenda, providing greater cohesion and more **transforming purpose** to the whole.
- Investors and all economic agents have now a clearer picture of the city’s economic profile and growth opportunities, since an updated and **future-oriented productive model** has been acknowledged around retail and tourism, forestry and nature management, wellbeing (notably silver economy) and sustainable construction. This was a pre-condition to brand and market Plasencia as a business environment.
- Plasencia had already got a background in public consultation and participatory approach. Nonetheless, the InFocus experience and in particular the entrepreneurial discovery method (as well as the emphasis on stakeholder involvement which characterized the URBACT framework) has allowed to **deepen into the collaborative model**, making it more decision making-oriented and workable for monitoring and feedbacking.

- Smart specialisation has provided Plasencia a linkage to the regional project that **RIS3-Extremadura** is. Consequently, they are no longer in charge of their own local economic agenda only, as they also are necessary contributors to an innovation-led growth strategy at regional level. Hence, their status as economic development policymakers has been raised now, which is challenging.

The challenge of RIS3's territorial embedment

At this point, it should be noted that **territorial embedment** has been a main concern of FUNDECYT-PCTEX (the foundation entrusted by the regional government to lead and monitor RIS3-Extremadura) since the implementation stage of RIS3 began. This concern for giving RIS3 a sounder spatial approach makes sense in a region with no big urban centres and a high proportion of sparsely populated areas.

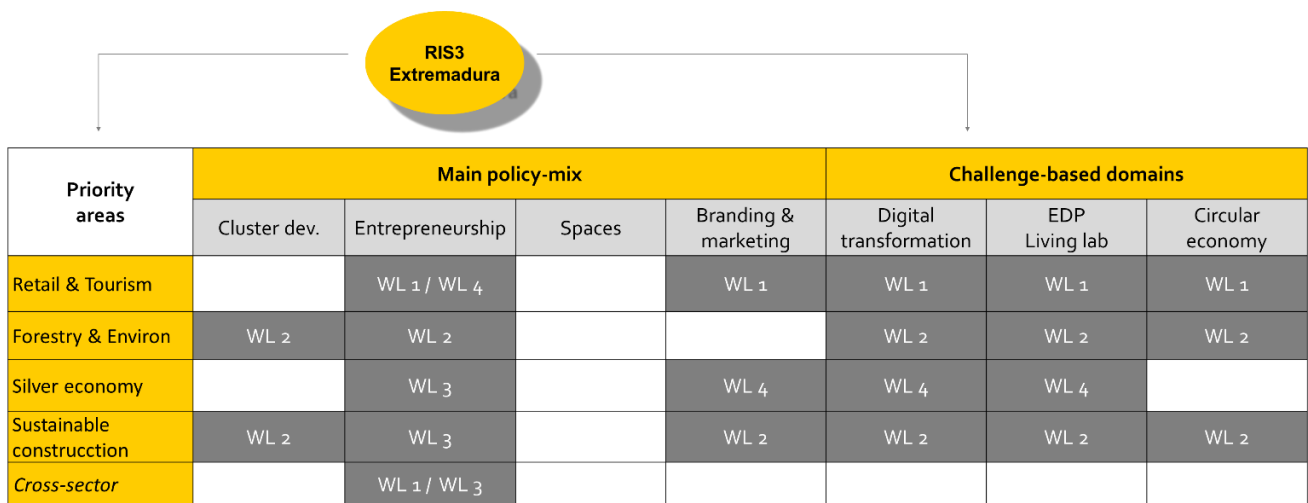
In fact, FUNDECYT-PCTEX followed up the InFocus experience with great expectation and they were an active member of Plasencia's URBACT Local Group. Even more, they are calling local authorities and other place-based economic development structures, like the LEADER Local Action Groups, to take a step forward and get deeper involvement in the regional innovation system. Actually, RIS3-Extremadura is a wide-scope strategy envisioning smart specialisation as an overarching approach for territorial development, beyond research and innovation. Interestingly, RIS3-Extremadura is named "One: Organising a New Extremadura".



RIS3-Extremadura "One: Organising a New Extremadura"
Representation of vertical priorities as a galaxy

In focus

The experience of Plasencia within the InFocus framework shows how smart specialisation can make an impact on local economic development agendas, no matter the city rank-size. Anyway, most likely many small and medium-sized towns won't play a prominent role in RIS3 implementation, as tier-one RIS3 actors, but their alignment matters in order to spatially embed the regional strategies for smart specialisation into the territory as much as possible.



WL: Working Line



"We intend to link our competences in urban planning with our work in fueling a startup economy, cluster development and investment and talent attraction, while simultaneously thinking about them from a RIS3 standpoint. This should contribute to providing RIS3 strategies a more tangible territorial and urban dimension"

Pedro Baganha and Ricardo Valente, Porto Councillors for urban planning and Economy, Tourism and Commerce respectively

How Porto is addressing new urban spaces for innovation and how it is contributing to RIS3-Norte Region

A growing demand of central spaces to “live & work”

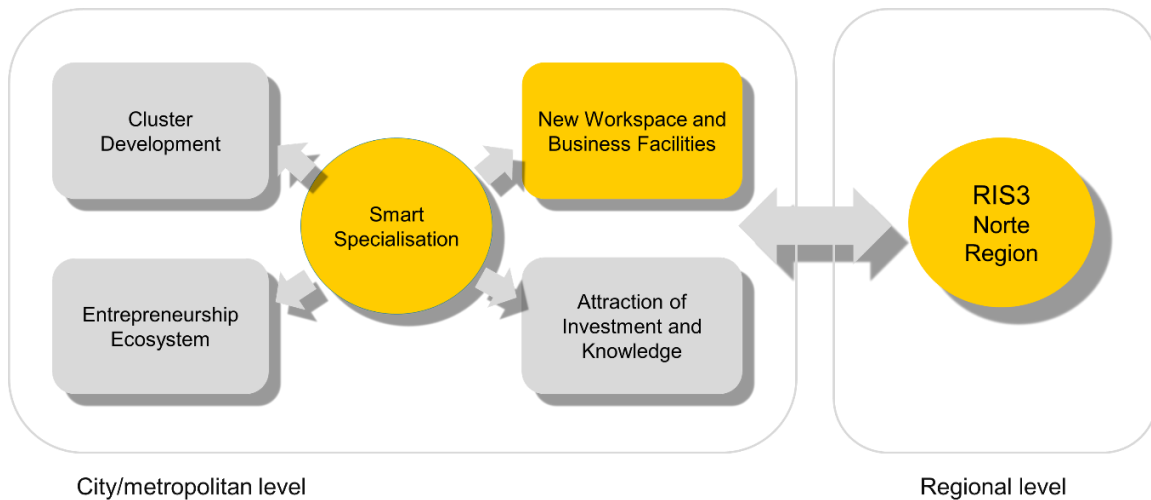
Porto is the second largest city in Portugal, with a population of 1.2 million in the metropolitan area. Today, it is acknowledged as an outward looking and dynamic city, whose economic profile is evolving a lot. In coherence with RIS3-Norte Region, the local authorities are now promoting a specialisation pattern which includes software and advanced engineering, health and life sciences, creative industries, mobility and nearshore services.

Over the past few years, Porto City Council has been very active in two areas. Firstly, boosting a start-up economy, jointly with other stakeholders in this field like UPTEC (University of Porto’s science and tech park) and the high number of incubation and co-working spaces in the city, delivering a sound ecosystem approach through the ScaleUp Porto programme. Porto has been considered Best Start-up Friendly City of Europe by World Excellence Award 2018. Secondly, the City took a giant step in branding and marketing itself as a business location by setting up the InvestPorto team in 2014 and engaging some business associations like Porto Tech Hub in it.

Against this background, Porto chose to concentrate its efforts within the InFocus framework on shaping new, **inner-city located knowledge and working spaces**, also as a way to face population decline and dereliction that still exists in some parts of the city. Indeed, Invest Porto has found somewhat difficulties in responding to a growing demand of central spaces to “live & work” by both local start-ups and foreign companies. In this regard, the City Council will focus on two target areas:

- **Campanhã/Bomfim.** It’s a vast area at the city’s East End affected by dereliction, economic weakness and social vulnerability, which is subject of an ambitious integrated revitalization scheme (“Urban Renewal Area” URA), based in building rehabilitation, landscape and green areas requalification, multimodal transport hub and new mobility schemes, housing and placebranding. Campanhã’s former warehouses and factories by the riverside represent a unique opportunity to test the new urban industrial space or just to explore new concepts on workplaces, not necessarily connected to the creative economy only. The re-use of a former slaughterhouse as a mix of cultural facility and business centre, the *Matadouro* project, is expected to work as an engine driver for the long-term regeneration process.
- **Porto Innovation District**, as a re-development of the existing University campus of Asprela. Out of the three campuses of the University of Porto, Asprela hosts a significant concentration of research institutes, hospitals (serving the countrywide health cluster which is headquartered in Porto) and the technology and incubation facility UPTEC, all in one single Km2. Under the brand Porto Innovation District, the strategy is to build up an ecosystem approach within a more openly multi-functional study & research & work & live

scheme that also includes residential developments, cultural and civic facilities and mobility improvements.



Making smart specialisation work

To both projects, Porto will capitalize its remarkable experience in urban renewal, notably in the historic downtown and the *Ribeira* district. Yet this time in a context more focused on innovation and workplace provision. This approach might represent a genuine contribution from the city level to RIS3 type of strategies, since guidelines and literature on RIS3 usually put the spotlight just on the figure of Science & Technology Park mainly. Thus, it would be fine to consider a broader portfolio of innovation spaces, like brownfield redevelopments or urban innovation districts in this case, and examine how they can work as part of an agenda driven (or just inspired) by the smart specialisation concept.

For instance, **the S3 concept of relatedness or related-variety may lead to the idea of co-location**. That is, experimenting with bringing into the same location (or nearby) different industries with some (real or potential) affinity between them, in order to facilitate synergies and cross-innovation – e.g. co-locating ICT, KIBS and the creative industries.

Another Porto's idea is using an **"entrepreneurial discovery" way of doing** in order to hear (and respond to) the voice of start-ups, freelancers, SMEs, corporate real estate managers, cluster organizations... about their particular needs regarding workspaces, e.g. design specifications, location patterns, co-location affinities and synergies with different industries and types of companies, pricing, tenure regimes, etc. The aim is surpassing a somewhat conventional "landlord-like" approach when promoting and managing new knowledge and work spaces in the city of Porto.

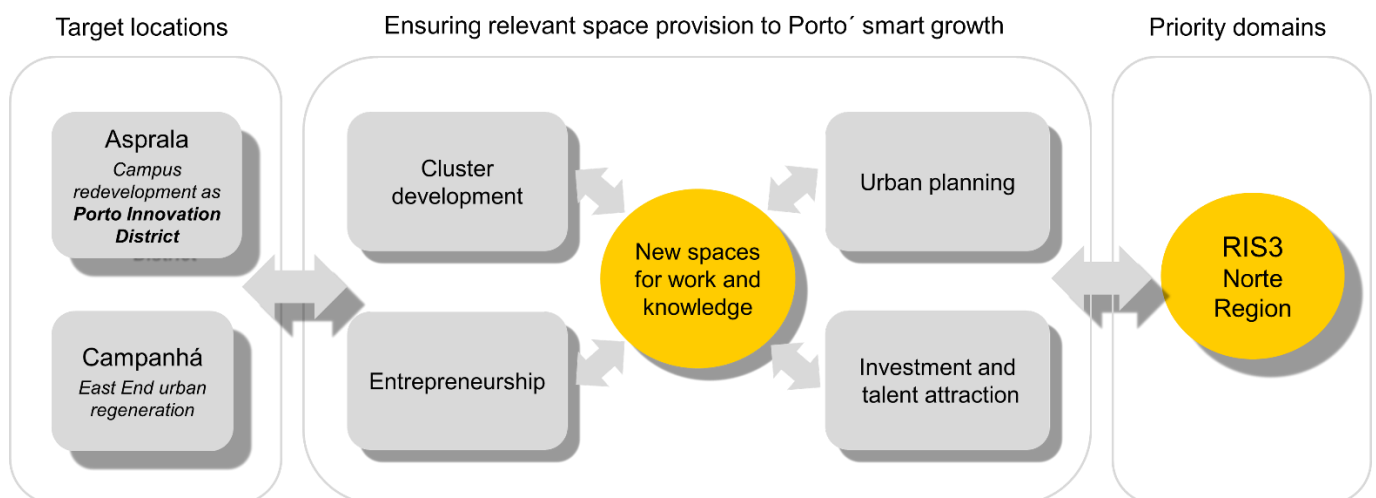
In focus

Anticipatory planning and governance

Two types of innovations regarding Porto's way for policymaking have come up from this action planning exercise in the frame of URBACT-InFocus. The first one has resulted in a great mobilization of selected stakeholders connected to research, innovation, entrepreneurship and business growth, including many business-driven platforms as well as national bodies like Agência Nacional de Inovação and CCDRN, the Regional Authority in charge of implementing RIS3-Norte Region.

Second innovation is that this initiative is breaking silos. In this case between the urban planning department and the city units in charge of economic development and innovation. Indeed, Porto City Council is putting **urban planning in a sort of experimental mode to help in the transition to a real knowledge-based urban economy**. Strategically that is integrated urban development, which leads to many beneficial impacts on the tactical ground. For instance, this will certainly be an opportunity to tackle some regulatory issues that are constraining a smooth implantation of firms from the new economy in the urban fabric. We mean to those too rigid land-use categories in urban planning which do not work so well in the current industry-service continuum, or the difficulties to allow specific multi-functional settings into the same area development.

In Porto they call this attempt for bridging between urban planning and the economic agenda "anticipatory planning and governance" - "new business locations are emerging spontaneously in the city, driven by location decisions by companies, and there is not yet in place a system to monitor these dynamics and anticipate needs; knowing better about those location patterns and trends could help to facilitate them from a more pro-active approach" (Porto Integrated Action Plan within the InFocus project).





"We need a focused cooperation in the main domains of our economy where the gap between the demand and supply of skilled and qualified labour force is bigger – advanced manufacturing, automotive industry, IT, energy. The smart specialisation approach, applied through the brand new Moravian-Silesian Innovation Centre (MSIC) and our own local innovation ecosystem, will be much helpful to face the talent challenge"

Tomáš Macura, Mayor of the City of Ostrava

Start your career, here in Ostrava!!!

Talent attraction turns Ostrava into a RIS3 key actor

Why talent attraction is so important for Ostrava?

Ostrava is the administrative capital of Moravian-Silesian Region and the third Czech city in terms of population - 300,000 inhabitants in the Statutory City of Ostrava and 1 million in the urban agglomeration. The city-region is undergoing a significant inflow of **high-value foreign direct investment** (FDI), notably since 2006, which is driving the evolution from a heavy industry economic base (coal mining extended to metallurgy, chemical industry, heavy engineering and power generation industries) to more advanced manufacturing, with new pillars like the automotive industry.

This transition to a knowledge-based economy is quickly absorbing skilled and well educated workforce and has brought the unemployment rate down from 12.5% in 2012 to 6.5% in 2017. Consequently, City and Regional Authorities fear a shortage of this critical location factor becomes a bottleneck to the current growth dynamic. The following reasons explain in more detail why talent attraction is now a hot topic in the Ostrava agenda:

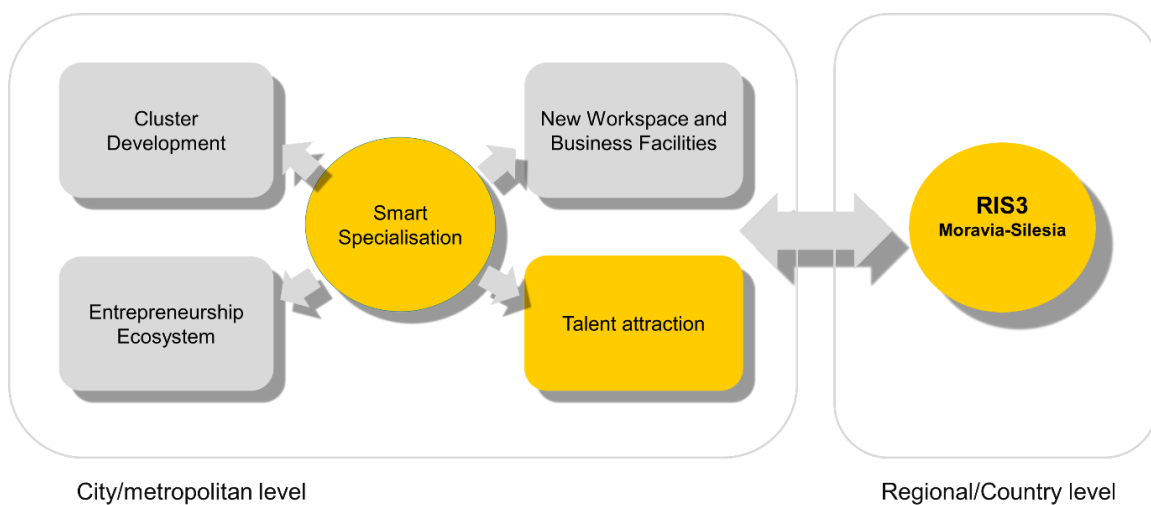
- The four Universities in the region host around 36,000 students and produce at least 10,000 new graduates every year. However, many of these young graduates leave the city to Prague, the Western countries or more sophisticated urban economies, e.g. where to find a job in the KIBS sector or linked to the creative economy.
- Furthermore, local knowledge production and skills are still too concentrated on the “coal-steel-machinery” value chain. There is therefore work to do in re-orienting this knowledge base to fields such as advanced materials, mechatronics and robotics, cleantech, ubiquitous computing, etc.
- Brain drain, which in turn feeds an ageing population, is also fuelled by a poor city image, still linked to old industrialism and its environmental outcomes, yet the Council is deploying city branding initiatives to counteract this perception and rise sense of place.
- The heavy industry culture has somewhat led to a secular low rate of entrepreneurship in Ostrava. So, targeting the young entrepreneurial talent means paving the way for the development of a local start-up economy, which is pretty scarce so far.

Ostrava as RIS3 key developer

Consequently, like Porto with regard to space provision, Ostrava focused its work within the InFocus experience on talent attraction. That is, a single policy instead of covering the whole policy-mix on economic development. Furthermore, the current policy framework in the city created the “perfect storm” to launch a strategy on this field. Firstly, because the **City of Ostrava Strategic Development Plan 2017–2023** points out talent attraction and retention as one the

main goals. Moreover, Ostrava's recent background on place branding (the Ostrava!!! strategy) set solid ground to address sector-focused city marketing practices, like the one targeting national and international talent.

Secondly, the own **Smart Specialisation Strategy for Moravian-Silesian Region (RIS3-MSR)**, which was agreed in 2014 as a re-elaboration of the 2010 regional innovation strategy according to the RIS3 model. Interestingly, besides the set of knowledge and technology vertical priorities, talent attraction is explicitly a key part of the RIS3-MSR's horizontal priority devoted to "Human Resources". Therefore, **in taking the lead on the talent attraction issue, the City of Ostrava is adopting a main role as RIS3 developer.**



According to the Guide on RIS3 implementation (Gianelle et al 2016), five ways can be considered to take RIS3 roadmaps forward: **launching strategic initiatives**, re-orienting existing programmes, changing strategic agendas from existing operators, aligning infrastructure and setting up S3 fora. With no doubt, Ostrava's Integrated Action Plan on talent attraction belongs to the first category.

In this framework, Ostrava's Integrated Territorial Investment has played a kind of facilitating role. ITI is the new financial instrument created by article 7 of the regulation on ERDF, which has been applied to the seven largest urban functional areas in the case of the Czech Republic. **ITI-Ostrava** was organized in three Strategic Goals (Employment, Entrepreneurship and Environment) and a number of specific objectives, of which one is specifically dedicated to bridge with regional RIS3.

Taking advantage of smart specialisation

The Ostrava strategy on talent attraction has been arranged as a URBACT Integrated Action Plan and it encompasses a number of initiatives following a "customer journey" logic: narrative building

In focus

of Ostrava as a work & live destination, awareness rising and marketing, welcoming and soft landing, socialization, and lastly keep-in-touch initiatives like ambassador and alumni networks.

Prior to this, a primary segmentation exercise has been done resulting in four main target groups for the city:

- **Qualified labour force**, with a focus on younger graduates, in particular from EU countries more affected by unemployment, to start their careers in the area, notably jobs related to mechatronics and Industry 4.0.
- **Innovative researchers**, in order to activate the full potential of a number of technological and R&D new facilities.
- **Excellent students**, cutting down the lack of excellent PhD students.
- **Creative class**, also a driver to consolidate the creative hotspot of Vítkovice, a huge brownfield redevelopment, and promote a livelier city centre.

Then, RIS3-MSR's knowledge and technological priority domains have been used as a secondary segmentation criterion, providing the necessary sectoral focus. Thus, the city team working on talent attraction gets a **very precise target segmentation**. Such a cross segmentation, matching the four main target groups with RIS3 vertical priorities, will allow delivering tailor-made messages and communications to every specific audience.

The S3 added value is not only on segmentation, it has to do with the **city narrative** as well. So, at focusing on the set of RIS3-MSR priorities, Ostrava's unique selling proposition (USP) will get more distinctive compared to other fuzzier, undifferentiated talent attraction strategies. In the same way, the S3 concept of **relatedness** should guide the facilitation of specific interpersonal relations between researchers/students/specialized workers/business executives from different technology and productive domains.

Crossed-segmentation:
matching main target groups with RIS3 priority areas

UNIQUE POLICY MOMENTUM
City Strategy 2017-2023
Branding strategy Ostrava !!!
ITI-Ostrava Integrated Territorial Investment
Art.7 ERDF

RIS3-Moravia Silesia



RIS3 vertical priorities	Qualified labour force	Innovative Researchers	Excellent Students	Creative Class
Materials Engineering				
Specialized Machinery				
Mechatronics				
Regenerative Medicine				
Processing of Mineral Resourcing				
Smart Grids and Smart Cities				
Integrated Security Systems				
Supercomputing Methods				
<i>Creative economy</i>				



"The Action Plan we have produced in the context of the InFocus project represents a concrete example of how to establish a fruitful relationship between RIS3-Piemonte and the development strategy of the Metropolitan city of Turin. On the one hand, the Plan identifies concrete initiatives that can contribute to the implementation process of the RIS3 at local level. On the other hand, I hope it will be able to influence and improve the Regional strategy, thanks to ideas and proposals from local stakeholders"

Dimitri de Vita, Councillor for mountain development, strategic planning, economic development, productive activities and transports at Metropolitan City of Turin

An economic agenda for the Metropolitan City of Turin that bridges with RIS3-Piemonte

A transition to a knowledge urban economy that needs to be fuelled and oriented

On the institutional side, the Metropolitan City of Torino (Cittá Metropolitana di Torino or Torino Metropoli) is the former province administration that has been transformed into metropolitan authority by national law in 2014, serving a population of 2.3 million, 890,000 in the City of Turin. So, it is a brand new administration that needs to be legitimized also by means of a relevant work agenda. That´s the purpose of the Metropolitan Strategic Plan, which is a compulsory tool for the ten new Italian Metropolitan Cities.

On the economic side, Torino´s economic profile has undergone a significant transformation in the past decades. From being the paradigmatic one-company town, the city is now much more than automotive, car design and mechatronics and includes aerospace, IT, chemistry and cleantech, food, creative-digital industries and a growing visitor economy. So, despite the effects of the last economic downturn, the city is on the way to a New Economy, more diversified and knowledge-based. It´s a transition that, as far as possible, needs to be duly fuelled and managed, in particular to face a number of hindering circumstances:

- High fragmented business and innovation local ecosystem, with a low degree of overall coordination.
- Poor results when promoting an entrepreneurial mindset in students and young people.
- Barriers for local startups to scale up.
- Low level of openness to the outside, in terms of both inward investment attraction and internationalisation of the local operators.

These challenges concerning innovation, entrepreneurship and internationalization, plus the need for better governance and direction, represent concrete paths for Metropolitan City of Turin to build up a meaningful work agenda and so operationalize the Metropolitan Strategic Plan ("Torino Metropoli 2025") with regard to innovation and economic growth aspects. That has been the purpose of the Local Action Plan produced in the frame of the InFocus experience, which lies on three main pillars:

- **Innovation ecosystem.** Torino must keep the pressure over this issue. Just a fact, Piemonte region has gone from the "strong innovator" category down to "moderate innovator" at the Regional Innovation Scoreboard 2017.
- **Entrepreneurship ecosystem.** The Metropolitan City is founder and main partner of the two main incubators (I3P-Innovative Enterprise Incubator of the Polytechnic of Turin and 2i3T-Innovative Incubator and Technology Transfer Center of University of Turin) and it runs the MIP Program, a business creation service, since 1994. Now it´s time to introduce

new concepts, like innovative funding or scaling up for instance, or expand others to the whole metropolitan area, like social entrepreneurship which has become a distinctive feature in the central city thanks to the leading role of the Municipality of Torino.

- **Business growth and territorial development.** It refers to a number of initiatives aimed at qualifying the Metropolitan City of Turin as a high level “work & live” environment and making it more attractive for business and talent.

The challenge of embedding RIS3 Piemonte locally

Such idea of ecosystem emphasizes the need for more stakeholder coordination and alignment, which is absolutely key when introducing the metropolitan area (which in the case of Torino Metropoli is even bigger than the functional urban area) as a work scale for the first time.

Furthermore, that work scale provides critical mass enough to turn Torino Metropoli into a tier-one developer for the effective implementation of RIS3-Piemonte. And that has been InFocus main added value to this action planning process carried out by Torino Metropoli. In some way, it’s about setting the new metropolitan economic agenda in a sort of “S3 mode”, which in this case has meant the following:

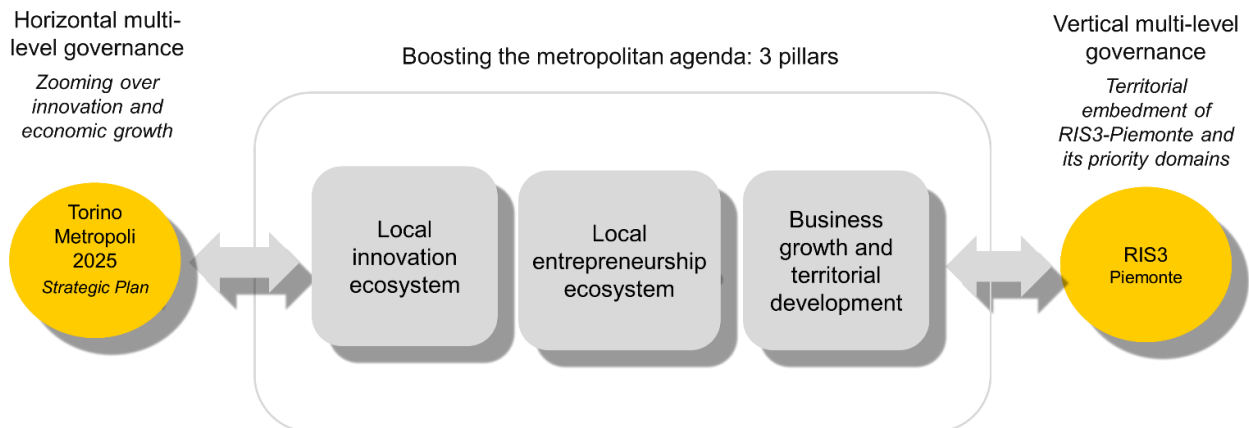
- **Prioritization.** In the sense of providing better direction. Working with the local innovation ecosystem and the entrepreneurship ecosystem in a way that both can best contribute to the challenge-based domains identified at RIS3 regional level, notably health and wellness. In other words, this is about agreeing on a specialisation pattern just to provide stronger identity and distinctiveness to the Turinese ecosystem, in coherence with RIS3-Piemonte.
- **Relatedness.** Encouraging research and technology facilities of the area to adopt a more cross-sector approach when targeting potential users, as well as exploiting synergies between different clusters and sectors. This way will help the metropolitan innovation ecosystem to give better responses to the specific challenges of RIS3-Piemonte’.



In focus

- **Entrepreneurial discovery.** Torino Metropoli's Action Plan will promote "design thinking" as a method for open innovation and making "entrepreneurial discovery" work.

Definitely, such an attempt by Città Metropolitana di Torino to bridge with RIS3-Piemonte should be enthusiastically welcome by the Regional Authorities (in particular the Directorate on Competitiveness of the Regional System) as a great opportunity to embed RIS3 locally, and hopefully, it should lead to an explicit work agreement between both levels of administration.



References

Aranguren, M^a. J., Magro, E., Navarro, M. and Wilson, J (2016) Governance of the RIS3 entrepreneurial discovery process: looking under the bonnet of RIS3. Presentation at the SmartSpec final conference, Cardiff.

Bruce Katz and Julie Wagner (2014) *The Rise of Innovation Districts: A New Geography of Innovation in America*. Brookings Institution, Washington.

DG for Internal Policies (2014) *Key Enabling Technologies (KETs): booster for European leadership in the manufacturing sector*. Document requested by the European Parliament's Committee on Industry, Research and Energy.

European Commission (2010) *Europe 2020: a strategy for smart, sustainable and inclusive growth*, Brussels, 3.3.2010. COM(2010) 2020 final

European Commission (2013). *The role of clusters in smart specialisation strategies*. Directorate General for Research and Innovation.

European Commission (2014) *National/Regional Innovation Strategies for Smart Specialisation (RIS3)*. Cohesion Policy 2014-2020 Factsheet

European Commission (2016). *Smart Guide to Cluster Policy*. Guidebook Series How to support SME Policy from Structural Funds. Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs.

European Parliament (2016). *Report on Cohesion Policy and Research and Innovation Strategies for Smart Specialisation (RIS3)*, 27 April 2016.

Foray, D. David, P.A. and Hal, B. (2009) *Smart Specialisation: the Concept*. Knowledge Economists Policy Brief n° 9.

Foray, D. et al (2012) *Guide to Research and Innovation Strategies for Smart Specialisation (RIS3)*. S3 Platform, JRC-IPTS, European Commission.

Gianelle, C., D. Kyriakou, C. Cohen and M. Przeor (eds) (2016) *Implementing Smart Specialisation: A Handbook*, Brussels. European Commission, EUR 28053 EN, doi:10.2791/53569.

Fukuyama, F (2014). *Political Order and Political Decay*. Farrar, Straus and Giroux, New York.

Karásek, Z. et al (2011). *Transferability of skills across economic sectors*. Report elaborated by RPIC-ViP for the European Commission. Publications Office of the European Union.

Marinelli E., Perianez-Forte I. (2017) *Smart Specialisation at work: The entrepreneurial discovery as a continuous process*, Publications Office of the European Union, Luxembourg, 2017.

In focus

Mazzucato, M (2018) Mission-Oriented Research & Innovation in the European Union. A problem-solving approach to fuel innovation-led growth. European Commission. Directorate-General for Research and Innovation.

McCann, P. and Ortega-Argilés, R. (2011) Smart Specialisation, Regional Growth and Applications to EU Cohesion Policy. Economic Geography Working Paper, Faculty of Spatial Sciences, University of Groningen.

McDearman, B et al (2013) The Ten Traits of Globally Fluent Metro Areas. Brookings Institution, Washington.

Pertoldi, M, Muriel, M.A and López, J. M^a (2016). Smart LEADER: Challenging Smart Specialisation in the scope of Rural Development. Draft paper presented at First SMARTER Conference on Smart Specialisation and Territorial Development, Sevilla, 2016.

Storper, M (1997) The Regional World. Territorial development in a Global Economy. The Guilford Press. NY, London.

Storper, M. et al (2015) The Rise and Fall of Urban Economies. Lessons from San Francisco and Los Angeles. Stanford University Press.

Wintjes, R. Hollanders, H. (2010) The Regional Impact of Technological Change in 2020. ETEPS-NET, Framework Service Contract 150083-2005-02-BE for Directorate-General Regional Policy.



From left to right: Bilbao Mayor Juan María Aburto, Bordeaux Mayor Alain Juppé and Plasencia Mayor Fernando Pizarro at the InFocus final conference, April 2018

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In focus

SMART SPECIALISATION AT CITY LEVEL



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