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INTERNATIONAL BENCHMARKING

of regional innovation councils

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This publication has been drafted as part of a knowledge development collaboration with researchers at Lund University. Emily Wise (consultant and associated researcher at Lund University) has authored the study, and bears responsibility for the views presented herein.

During 2018, Region Skåne is undertaking the first phases of developing its innovation strategy and governance system for post-2020. One aspect of this work is exploring approaches to improve the region's systemic leadership. In Kontigo's analysis of the functions in Skåne's innovation system and mid-term evaluation of Skåne's international innovation strategy (November 2016), they highlight the need to improve coordination among actors and **the continued development of governance frameworks to enable joint action and investments within the region's three priority areas.**

Extracts from Kontigo report

"Regarding new features or capabilities in the innovation system, Kontigo believes that coordination of stakeholders and their efforts will be an increasingly important aspect of promoting innovation, which we believe requires a developed ability to integrate different skills and perspectives in development efforts. This is particularly evident in addressing societal challenges and the three innovation areas."

"A number of efforts have been made that have contributed to the development of systemic leadership and achieving a more coherent management structure for innovation work. Important elements of this are the development of FIRS and the Sounding Board, as well as the network of cluster CEO's in the region. At the same time, we can see that the requirements for systemic leadership are increasing, which means that the forms of systemic leadership must be developed and deepened to respond to these changes. An additional aspect of developed systemic leadership is that more players show leadership and invest in innovation. (The municipalities have become more important players in the innovation system and can be highlighted in this regard.) At the same time, this contributes to increasing the complexity of the innovation system, which places further demands on coordination and collaborative action. This is a clear challenge for the innovation system in Skåne in the future."

Source: Kontigo 2016, Analys av nuläge och funktioner i Skånes innovationssystem och utvärdering av Skånes internationella innovationsstrategi, p. 5-6

As a source of inspiration to this development work, it was decided to conduct an international benchmarking of other regional innovation councils (or comparable approaches to systemic leadership). Following a "first peek" at other regions' approaches (see presentation from FIRS meeting September 2017), it was decided to undertake a deeper exploration of innovation governance structures and approaches to operational mobilisation in three regions: Basque Country, Brainport Eindhoven (a sub-region of Brabant, South Netherlands), and Southern Denmark. Information was gathered through a review of regional strategies and other documents, as well as interviews with representatives working within each regional system (see Attachment I for the list of interviews and interview guide).

This document provides a summary overview of the approaches to innovation governance in these three regions and Skåne, using six 'defining characteristics' established in previous analyses of national innovation councils¹. Following this, the document provides a comparative analysis of the defining characteristics and practices in the four benchmarked regions. Based on this inspiration from other regions, a number of possible development areas for systemic leadership in Region Skåne are presented – in a separate document.

¹ See, for example, Schwaag Serger, S., Wise, E. and Arnold, E. (2015). "National Research and Innovation Councils as an instrument of innovation governance: characteristics and challenges". Vinnova analysis VA2015:07 and OECD (2009). Chile's National Innovation Council for Competitiveness – Interim Assessment and Outlook.

Overview of innovation governance approaches

Innovation governance requires a collaborative approach – leveraging the competencies and resources of various actor groups and facilitating systemic action. With the rise of the concept of RIS3 (research and innovation strategies for smart specialization), regions across Europe are starting to adopt a common language for speaking about innovation strategies and innovation (policy) governance.

Approaches to collaborative (or systemic) leadership vary across regions – driven by history and context,

as well as different laws and innovation systems.

For each region included in the international benchmarking, a summary of defining characteristics² of the governance structure, as well as approaches for pooling resources, engaging stakeholders (particularly SMEs) in operational implementation, coordinating implementation with other (support) actors in the innovation system, monitoring progress, and communicating with the broader public are presented in the following sections.



On Governance of Smart Specialisation Strategies

In order to secure that all stakeholders own and share the strategy, governance schemes should allow for 'collaborative leadership', meaning that hierarchies in decision-making should be flexible enough in order to let each actor to have a role and eventually take the lead in specific phases of RIS3 design, according to actors' characteristics, background, and capacities.

When actors are many and different, it might be very difficult for them to find their own way to collaborate and manage potential conflicts. In order to tackle this potential problem, RIS3 governance bodies should include 'boundary spanners', that is to say, people or organisations with interdisciplinary knowledge or proven experience in interaction with different actors, and who can hence help moderate the process.

Source: S3 Platform (<http://s3platform.jrc.ec.europa.eu/s3-governance>)

² Mandate/task, Priority/focus areas and goals, Anchoring within the broader innovation system, Composition of the governing body, Resources and Output.



Basque Country

The Basque Country (Euskadi)³ has been working with industrial and innovation policy for the last 30 years. The Basque Science, Technology and Innovation Plan 2020⁴ builds on very stable & consistent approach to industrial development & innovation policy – developing from a focus on industrial restructuring (in the 80s), efficiency (in the 90s) and innovation (in the 00s).⁵ The strategic vision has focused on achieving short-term needs for maintaining and increasing industrial competitiveness, while opening areas of industrial diversification that are built from existing capabilities.

A key novelty has been a more systematic approach to entrepreneurial discovery (see description of Steering Groups below) alongside changes in governance and institutions (including various mechanisms to strengthen inter-institutional governance across different levels of government administration). The institutional plurality embedded in a private public collaboration scheme has been recognized as one of the unique strengths in the Basque Country. The structure for governing the innovation strategy is the Basque RIS3 governance ‘house’ (see Figure 1 below).

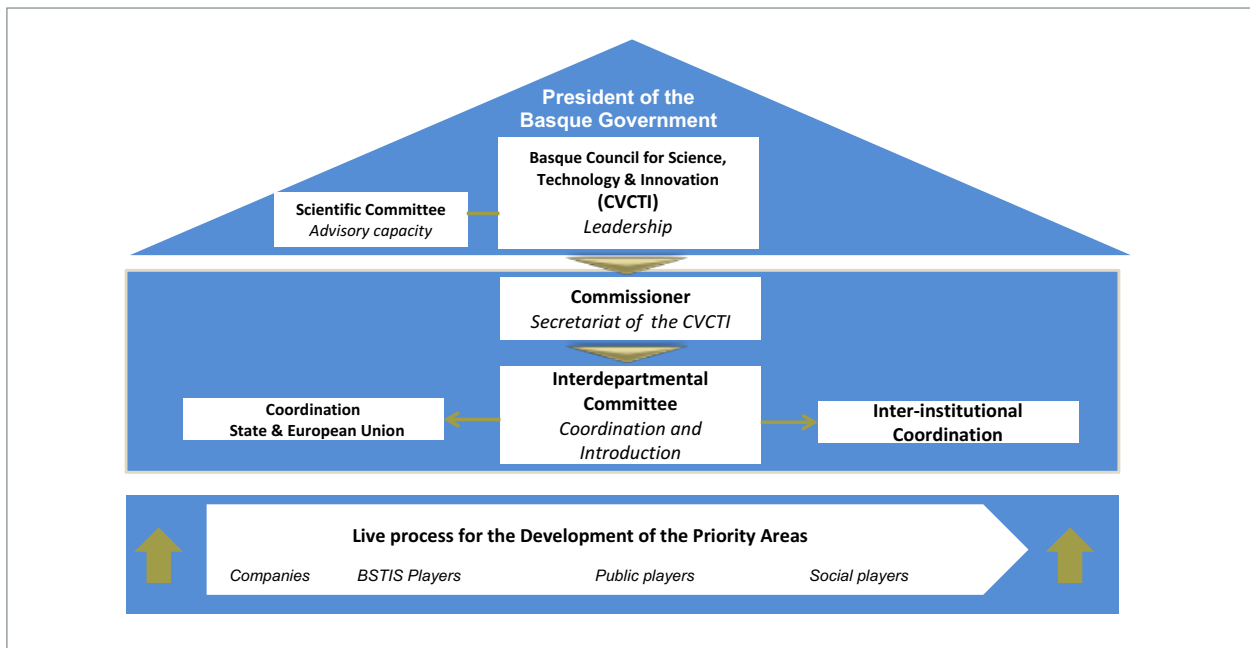


Figure 1: Basque RIS3 Governance ‘House’.

The governance house is made up of different groups on three levels – each with different mandates.

The highest level is the strategic and political leadership, made up of the President of the Basque Government, the Basque Council for Science, Technology and Innovation (BSTIC), and the

Scientific Committee. The **Basque Council for Science, Technology and Innovation (BSTIC)** was initially constituted in 2007 as the maximum organ for the strategic orientation of STI policy in the Basque Country. It was set up in response to the need to establish a systemic leadership that integrated initiatives from different levels of government.

³ Euskadi has a population of around 2,2 million, and a GDP per capita of around 32.000 EUR (see <http://www.s3vanguardinitiative.eu/partners/euskadi>).

⁴ See Basque Country's innovation strategy "PCTI Euskadi 2020 – a smart specialization strategy" at: <https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/policy-document/science-technology-and-innovation-plan-pcti-euskadi-2020>; https://www.irekia.euskadi.eus/en/news/23684-gobierno-presenta-plan-ciencia-tecnologia-innovacion-euskadi-2020-con-una-inversion-publico-privada-100-millones?criterio_id=1005307&track=1

⁵ See James Wilson's presentation at Sweden's national smart specialisation conference in Luleå, 31 January 2018.

Their mandate is to establish overall direction and priorities, for example through the formal approval of the strategy and action plan. The Council also has an advisory role to the Government, and facilitates strategic coordination and alignment of innovation policies between the government and the Basque Country's three provinces (each with provincial councils). In practice the Council is a highly formal organ that meets twice a year to discuss and approve key elements of the strategic direction of the STI system.

The **Scientific Committee** – renamed the **Basque Science, Technology and Innovation Advisory Group (BSTIAG)** in 2014 – as established to “open the vision” of the government and be more future-oriented. Instead of advising the BSTIC (as envisaged initially), the mandate of the BSTIAG is to advise the President, the Ministers and the Commissioner. They meet on a monthly basis with the Council of Ministers, and also on their own (with the Commissioner) every five-six months in the form of a working group. They are also made aware of everything that is happening in the BSTIC through the Commissioner, and are consulted directly on relevant documents and decisions. In their (more informal) meetings, the BSTIAG discusses in more detail the content of the steering groups and projects, and gives recommendations to the Council (and to the Government).

The middle level – comprised of the **Commissioner** and the Interdepartmental Committee – is a coordinating level which is also responsible for implementing the RIS3 strategy. The Commissioner works for the general secretary of the government and acts as the link between the Council and the Interdepartmental Committee. The **Interdepartmental Committee**⁶ gathers practically all departments of the government (in meetings twice a year) and is mandated with the coordination and implementation of the regional strategy – tailoring policies (and funding programmes) to needs of the operational level (represented by steering groups for the priority areas – see below).

The final level of the governance house is the operational level – comprised of Steering Groups for the (3) priority areas and (4) opportunity niches of the

RIS3. Steering groups were created to coordinate and drive forward the deployment of the RIS3 strategy. It is where entrepreneurial discovery in and across the priority areas should happen to refine priorities and shape the evolution of the overall strategy. Steering Groups are **mandated** with the design of activities/projects and operational implementation. The initial phase of their work has been geared towards two inter-related aims:

- › To understand and explore what is behind each priority and opportunity niche, identifying a set of 6-8 key technology or business areas that underpin each, and identifying key projects and strategic initiatives that are already underway.
- › To visualize and socialize the activity underway in each of the priorities and opportunity niches, identifying the key people in research in each area, and trying to ‘spread the word’ and generate noise and dynamism around the prioritized areas.

Initially, Steering Groups were led by the Basque government, but leadership and composition of the groups have changed over time depending on the maturity and priorities of the priority area.⁷ The processes for mobilization and implementation (e.g. number and frequency of meetings) vary across priority areas as well. The leadership of the Steering Groups are responsible for reporting to the interdepartmental committee (who help guide on use or adjustment of operational programmes to fund projects – supporting the process of deployment).

The **‘division of labor’ between strategy and operational implementation** is clear. The Council (BSTIC) – with informal input/advice from the scientific committee (BSTIAG) – is responsible for formally establishing the overall strategic direction, and the Steering Groups for the (3+4) priority areas are responsible for the operational implementation. In between, the interdepartmental committee is responsible for coordinating among governmental actors, tailoring policies and funding to the operational work.

The Basque Country strategy highlights three **priority areas** (Biosciences-Health, Energy and Advanced Manufacturing/Basque Industry 4.0), as well as four opportunity niches that are strongly linked to the territory (Food, Creative and Cultural Industries,

⁶ Both the Scientific committee (BSTIAG) and the Interdepartmental committee are new features of innovation governance.

⁷ One example is the priority area of advanced manufacturing, where the Department of Industry led initially- inviting stakeholders to participate. Over time, the steering group changed to be led by industry (through the automotive cluster association – company CIE automotive is responsible).

Urban Habitat, Environmental Ecosystems). These areas take into account the business and science/ technological capabilities of the region together with market opportunities. In addition, the strategy highlights five transversal actions (Guarantee the development of human capital in science, technology and innovation; Ensure excellence in the science, technology and innovation system; Promote social, business and public innovation as the key to the process of transforming the Basque Country, Use public-private collaboration to promote a business

ecosystem with high value-added; and Open the science, technology and innovation system to promote the uptake and generation of new knowledge not existing within the Basque region).

Measurable **goals** have been set for six strategic lines relating to the overall challenges of the system (vs. the priority areas). Goals include concentrating (80%) resources to priority areas, and increasing the market-oriented (company-financed) research (see Figure 2 below).

Operational Objectives	Indicator	Degree of progress	Operational Objectives	Indicator	Degree of progress
1. Concentrate resources and investments in R&D&I in the areas of specialization	1.1.A % of multi-localized RTO and CICs research aligned with RIS3 strategic priorities		4. Reinforcing international funding for R&D&I	4.1 % Foreign financing of R&D&I	
	2. Enhancing fundamental research and experimental development	2.1 Mix of R&D activity (% Fund. Research / % Industrial Research / % Experimental Development)		Boosting Basque participation in H2020	4.2 % of Basque financing over total funds of the framework program
3. To orient to results the System of Science, Technology and Innovation	3.1 Indexed scientific publications		Attracting international private investment in R&D&I	4.3 International annual private funding	
	3.2 % of publications indexed in first quartile		5. Increase number of innovative companies	5.1 Innovative companies with more than 10 employees over total	
	3.3.A European Patent Applications		6. Improve the qualification of research staff	6.1 Percentage of researchers with doctorates over total research staff	
	3.4 % of sales of new products over total turnover		6.2.A Research staff of companies	6.2.A Research staff of companies	

Figure 2: Evaluation of goals of Basque RIS3 (2017 monitoring report)

Goals are set in relation to the overall regional strategy, with no direct link between the macro objectives and the micro level activities (in the Steering Groups). These goals are part of a comprehensive evaluation system that includes the annual monitoring of the degree of compliance with the plan and its objectives. This evaluation system will be described later in this document.

The Council (BSTIC) – and, in turn, other levels of the governance system – is directly linked to the President of the region and **anchored** in formal political decision-making processes (meeting twice per year). At the same time that the governance structure fosters linked decision-making processes, all organisations (universities, clusters, etc.) involved are autonomous – with their own strategies and processes.

An overview of the composition of Council (BSTIC) and other governance bodies is presented in Figure 3 below. Council members were appointed when the Council was set up in 2007. In 2014, the **composition** of the Council was amended to include a wider range of agents from the quadruple helix, explicitly to support the RIS3. In addition to the Basque Government, Heads of provincial councils, Rectors of universities, Presidents of technology centres and Representatives from innovation support actors, Representatives from (4) leading firms were included in the Council. Council members are chosen based on their organizational position, and all are permanent members except for the four companies. The President of the Basque government makes these appointments (driven by the S3 priorities, etc.).

NAME	FUNCTION	COMPOSITION
Basque Council for Science, Technology & Innovation (CVCTI)	<ul style="list-style-type: none"> • Catalyst and coordinating instrument for the Basque Science, Technology and Innovation System • Strategic guidance • Advice and promotion of political science, technology, research and innovation in the Basque Country • Supervising the STIP implementation process 	<ul style="list-style-type: none"> • Basque Government • 3 Province Councils (DFB, DFG, DFA) • 3 Universities (UPV/EHU, Deusto, MU) • 2 Technological Corporations (Tecnalia, IK4) • Ikerbasque - Basque Foundation for Science • Innobasque – Basque Innovation Agency • Jakiunde - Basque Academy of Sciences, Arts and Letters • 4 Enterprises (representatives of BERD)
Scientific Committee	<ul style="list-style-type: none"> • Advisor body to the CVCTI • Advisory role in the development and implementation of the STIP • Reporting on important international initiatives in STI 	10 professionals of recognized standing in the field of science, technology, research and innovation
Commissioner for Science, Technology and Innovation	<ul style="list-style-type: none"> • Secretary of the CVCTI • Coordinating the overall RIS3 'live process' • Carrying out monitoring and evaluation reports related to the Plan 	Secretary General of the Presidency
Interdepartmental Committee	<ul style="list-style-type: none"> • Interdepartmental coordination • Managing the RIS3 'live process' • Evaluating the Plan instruments • Identify corrective actions • Coordinate governance with the RVCTI agents 	Main departments of the Basque Government with significant activities in research and innovation: <ul style="list-style-type: none"> • Public Administration and Justice • Economic development and Competitiveness • Treasury and Finance • Education • Health • Others
Interinstitutional Committee	<ul style="list-style-type: none"> • Coordination between the Basque institutions of R&I support programs and activities • Looking for operational synergies to optimise resource allocation and utilisation 	Extension of the Interdepartmental Committee to representatives of: <ul style="list-style-type: none"> • Three Province Councils • Eudel – Association of Basque municipalities

Figure 3: Functions and Composition of Basque Innovation Governance Structures.

In contrast, the 10 members of the Scientific Advisory Committee (BSTIAG) are chosen in their personal capacity (as experts), for a period of four years.⁸ Members were identified by the departments of

industry, education and the presidency, who explicitly sought to avoid the 'usual suspects' and incorporate fresh perspectives by drawing on new faces that were related to the main needs and capacities of the system.

⁸ The initial BSTIAG was set up in 2014. A process to select new members is currently underway.

Members thus come from a wide range of backgrounds and disciplines, and are from both home and abroad, taking advantage of the Basque diaspora. According to members of the Council of Ministers and members of the BSTIAG alike, this novel dynamic is proving to be very agile and effective in enabling an injection of external advice into day-to-day decisions.

On the operational level, Steering Groups are comprised of representatives from the administration, companies, clusters and scientific and technological players.⁹ Steering Groups have the responsibility of identifying priority areas and technologies where most of research and innovation resources will be invested.

The **mode of operation** for the governance bodies varies. The Council meets twice a year. All agenda points are prepared by the Commissioner and the Interdepartmental Committee, who follow and report on the work of the Steering Groups. The Interdepartmental Committee also meets twice a year, in longer (more in-depth) meetings. The Scientific Advisory Committee meets monthly in more informal meetings. The Steering Groups decide themselves on the structure of their meetings.

The **main resources** for the Council (BSTIC) are in the form of people: the Commissioner (part-time), secretary of the council, and various government personnel. In addition, a group of 3-4 people at the Basque innovation agency (Innobasque) has responsibility for activities related to RIS3 and council-assigned activities (e.g. monitoring and evaluation reports, etc.). This is funded by the Basque Innovation Fund. In Steering Groups, all time/participation is embedded in their “regular” organizational roles.

The Innovation Fund (under Council) is an attempt at “**pooled funding**” – funded from the Government and the three provincial councils. However, from 2012, the provinces withdrew their participation in the innovation fund; now, the Government (alone) funds the Innovation Fund (40 MEUR per year). The Innovation Fund is oriented, under the mandate of the Council, to finance strategic initiatives and projects for the Basque Country in the field of science, technology and innovation. These projects are often experimental

and oriented towards learning about innovation policies and instruments. The funds may be directed to specific departments – but for specific priorities decided by the Council and based on the results of the RIS3 evaluation (e.g. to reinforce the role of the Steering Groups, drive collaborative research projects led by industry, support the development of new STEM vocations, etc.). The fund is a more flexible funding tool.

Otherwise, Steering Groups work actively to pool resources. Through their operating processes and regular meetings with the Interdepartmental Committee (who, in turn, meets with the Council), the Steering Groups can suggest and affect adjustments to funding priorities and tailor programmes depending on their needs. As in other geographies, funding of the operating players (e.g. universities, research institutions, clusters, etc.) comes from Government and EU sources. The objective of the Steering Groups is not to establish strategies or guide funding, but rather to work towards adjusting priorities and project activities – and help define and identify new initiatives – that contribute to reaching the overall RIS3 goal (of converting research into value in companies). In each of the RIS3 areas, the 50 most significant projects or activities are selected based on the following five criteria: Scientific-technological excellence; Economic importance; Openness and internationalisation/ European projects; Vertical and transversal integration¹⁰; and Social and business impact.

Steering Groups also have the role of **involving a broader range of actors and actor groups**. Through the dynamic evolution of these groups (and the working groups and projects initiated within each), the Steering Groups provide a ‘living process’ to scale-up and widen innovation cooperation involving actors from business, research, government and civil society. Through the extensive ‘living entrepreneurial discovery processes’ that exist in the Steering Groups and the connections with the policy/funding level (through the Interdepartmental Committee), the Council (BSTIC) is well connected with other advisory bodies and innovation support structures. The governance system helps to foster interlinkages and **coordination between all actors in the regional innovation system**. Spanish regions are quite autonomous; thus, connections with national level governance/funding structures are less prevalent.

⁹ Composition of Steering groups can be found on: http://www.euskadi.eus/contenidos/informacion/pcti_euskadi_2020/es_def/adjuntos/composicion_grupos_pilotaje_es.pdf

¹⁰ Vertical integration: between different research and innovation organisations (Businesses –RTOs-Universities-Administration). Transversal integration: between different RIS3 areas.

The Council (BSTIC) itself has no **outputs** (e.g. reports or evaluations, decisions or policy guidelines); however, the Council gives responsibility for a number of regular analyses and evaluations to other actors in the system.¹¹ A comprehensive system for **monitoring and evaluation** is one of the core outputs. The monitoring and evaluation system has included:

- › annual monitoring and follow up of the strategy (the report “PCTI Euskadi 2020”) – approved by the Council (see Figure 4 below for 2016 results);
- › biennial evaluation of public support programmes (how well the instruments work)

- › biennial evaluation of the performance of various organization (the STI “agents” in the region) – collaborative research centers, clusters, etc.; and a
- › biennial comparative evaluation of the Basque System of Science, Technology and Innovation (international benchmarking).¹²

In addition, a local and international researchers have produced a report “Implementing RIS3: the case of the Basque Country”.¹³

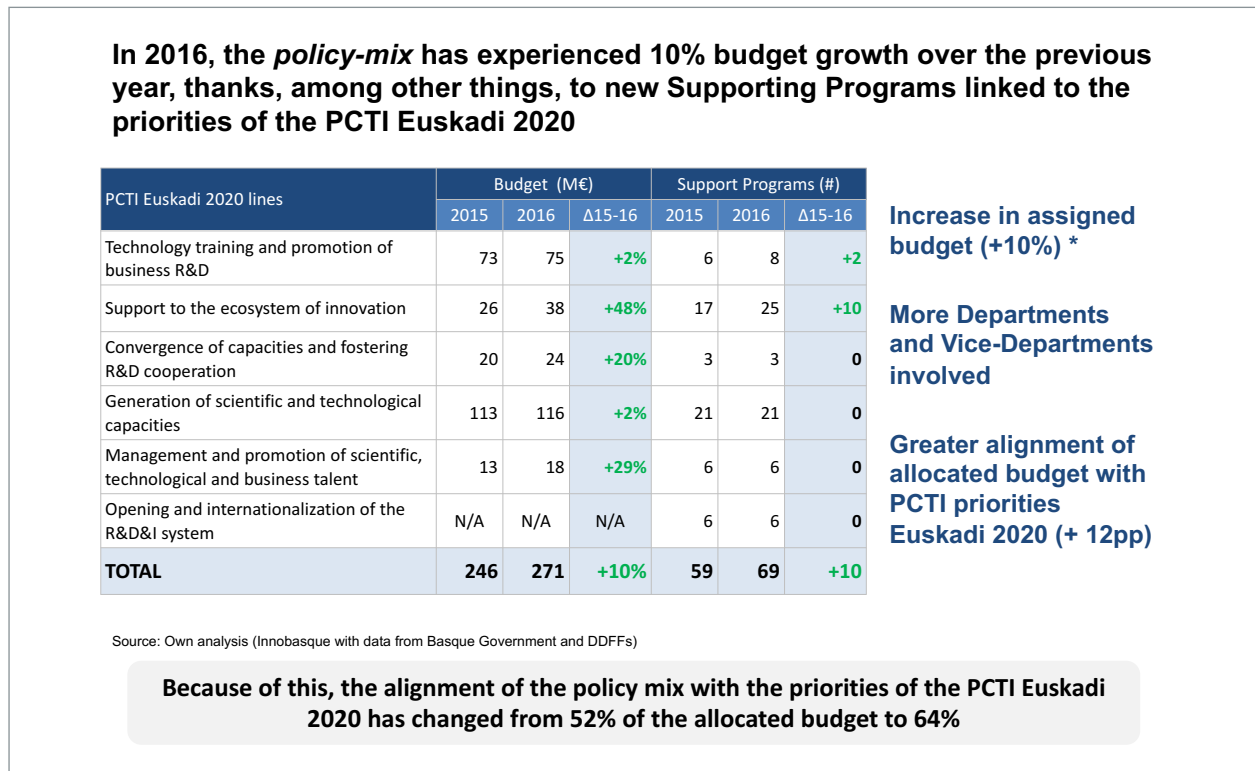


Figure 4: Example results from 2017 Monitoring Report

Currently, the Steering Groups are mainly responsible for **communication**/interaction with the broader public – using conferences, workshops and other approaches to engage new actors. However, the Council decided (in its meeting June 2017) to increase communication and awareness-raising efforts to Basque society. This will be done, for example, by using funds from the Innovation Fund to increase communication efforts with general society (through media) on the 10 most relevant innovation projects.

The Council will also, through InnoBasque, organize a number of events to target small companies – to connect them to the Steering Groups. Innobasque will establish a collaboration network with local development agencies (managed by municipalities, vocational training centers, etc.) – communicating what is happening in the Steering Groups so that SMEs can know the different instruments and programmes and get engaged.

¹¹ The innovation agency (Innobasque) has responsibility for regular monitoring and evaluation (including international benchmarking). Orkestra has responsibility for following the process – providing advisory support and action research (in the form of policy briefs, events and publications). And external experts/researchers (e.g. Kevin Morgan) are engaged in other ad hoc analyses.

¹² The “Innobasque Innovation Report 2016” can be downloaded at: http://www.innobasque.eus/microsite/politicas_de_innovacion/publicaciones/publicacion-358/ And external experts/researchers (e.g. Kevin Morgan) are engaged in other ad hoc analyses.

¹³ See: <http://www.orkestra.deusto.es/en/research/publications/cuadernos-orkestra/989-implementing-ris3-case-basque-country>



Brainport Eindhoven Region

The Region of South Netherlands¹⁴ is made up of three provinces: Limburg, Brabant and Zeeland, and Brainport Eindhoven Region¹⁵ is one of four sub-regions within Brabant. Although there is one innovation strategy for the region¹⁶, there are a number of ‘strategic pillars’ and governance structures for the region (including Brainport/Brainport Network for Southeast Netherlands and the Strategic Board Delta Region for Southwest Netherlands). This case focuses on the governance of the Brainport 2020 strategy (and the more recent Brainport Next Generation strategy¹⁷).

The structure for governing the innovation strategy is **Brainport Foundation** (established in 2005). Brainport Foundation is a close-knit partnership of companies, knowledge institutions and authorities in Brainport (currently represented by a group of 15 board members). The **mandate** of Brainport Foundation is to determine the strategy for the economic development of the region (currently Brainport Next Generation) and direct the development organisation Brainport Development. Brainport Foundation owns the strategy (giving backing and legitimacy), and provides leadership of its implementation.

Brainport Development is the economic development agency for Eindhoven/Southeast-Brabant region, with approximately 50 employees. The main tasks of Brainport Development are to work with stakeholders to interpret needs and connect actors (leveraging cluster initiatives), stimulate and realise innovation/business development programmes/projects, monitor economic development and lobby for the further development of the sub-region in the province of Brabant, nationally, and in Europe (see Figure 5 below).

The regional economic strategy/RIS3, the strategic governing body (Brainport Foundation), and the operational implementing body (Brainport Development) are all integrated in a seamless structure. The **‘division of labor’ between strategy and operational implementation** is clear. The Foundation acts as the strategic advisory board (and full owner) of Brainport Development. The Foundation is responsible for strategic elements, and Brainport Development is responsible for operational implementation. (Although Brainport Development helps prepare the regional economic strategy for the Foundation to decide upon, and Foundation members are expected to take part in implementation.)

¹⁴ South Netherlands has a population of around 3,6 million, and a GDP per capita of around 35.000 EUR (see <http://www.s3vanguardinitiative.eu/partners/south-netherlands>).

¹⁵ Brainport Eindhoven Region comprises Southeast Brabant and is a cooperation between the 21 regional municipalities and the companies and knowledge institutions active in this region.

¹⁶ See <http://s3platform.jrc.ec.europa.eu/documents/20182/91499/Ris+Southern+NL.pdf/eb5a7447-17f1-417a-8538-9b93cbba9fd4>

¹⁷ <https://www.brainport.nl/en/about-brainport/brainport-next-generation-strategy>

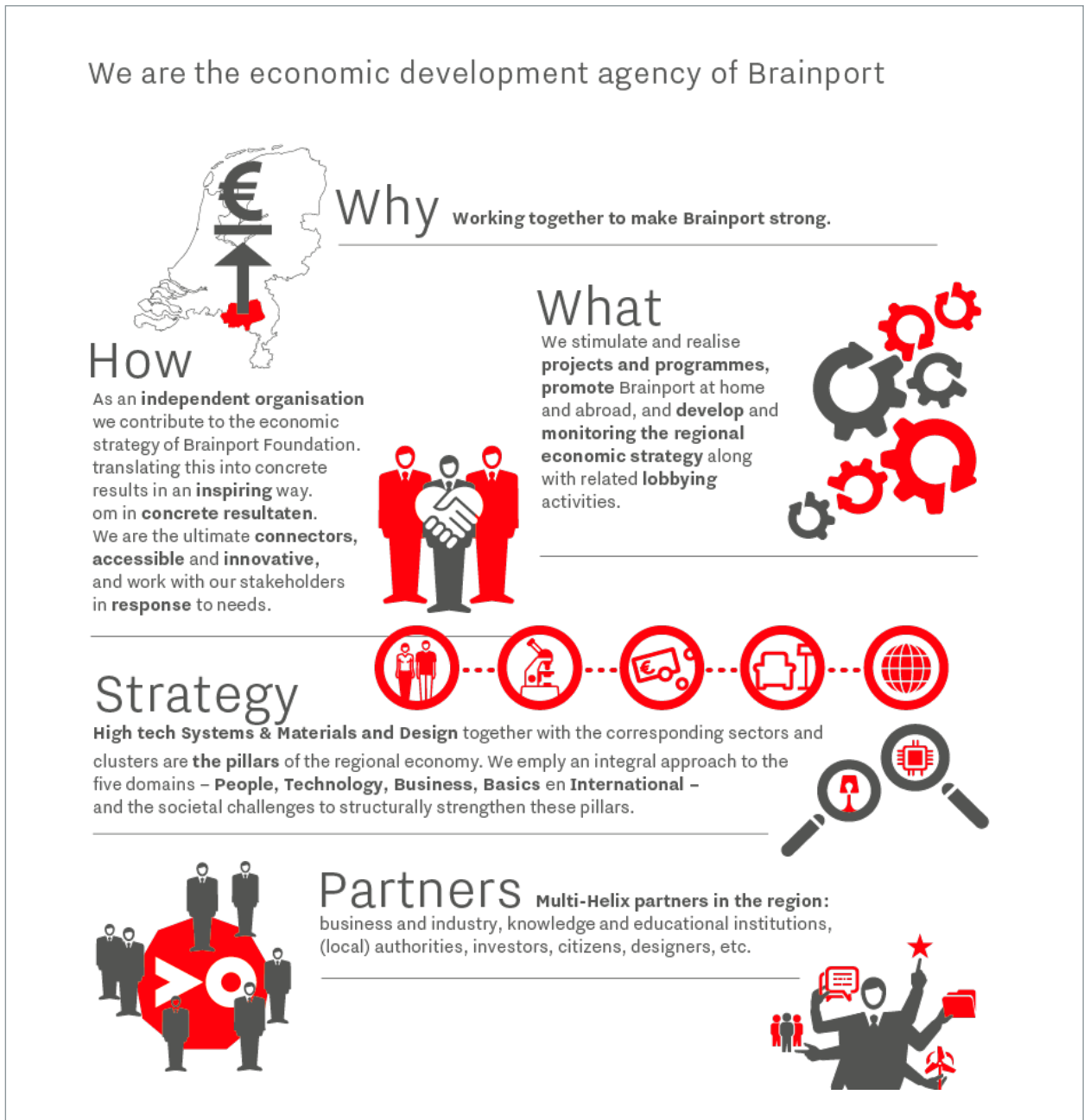


Figure 5: Overview of Brainport Development.

Solutions for major societal challenges relating to health, mobility, energy, food and safety are almost always characterized by a combination of technology, design and social innovation. Here lies the strength of Brainport Eindhoven. The region aims to **leverage its strength in a number of high-tech industries by combining capabilities across disciplines** (e.g. mechatronics, electronics, physics, computer sciences, mechanical engineering and electrical engineering) to produce complete solutions for societal challenges. Companies and knowledge institutes are encouraged to come up with creative, innovative solutions for these issues.

The previous strategy (Brainport 2020) set specific (measurable) **goals**. With this strategy, they realized that the dynamic nature of technological progress and societal developments made it difficult to set concrete goals. Globalization and digitization ensure that the world changes fast. A quick and thorough anticipation of new developments is a necessity. To stay ahead in the future, Brainport Eindhoven aims to be adaptive. This requires an approach that constantly renews... a course that challenges regional actors to respond effectively to the economic opportunities that arise – without blueprints or templates, but rather a dynamic approach (working together in smart coalitions).

Brainport Foundation is led by the Mayor of Eindhoven, and acts as THE strategic body governing economic development for the region. Although not formally **anchored** (i.e. by law), the Foundation's decisions serve as the 'guiding light' for the (21) municipal strategic governance structures. Brainport Foundation **meets every other month** (6 meetings per year). There are some standard items on the agenda, and others are introduced/prepared by the secretariat.

Brainport Foundation is led by a Board **comprised** of 15 members, selected based on their leadership and capacity to inspire action¹⁸. All board members must be either mayors or members of the board (of universities or industry organizations). Industry representatives are chosen in their individual capacity – in their role as leaders for others to be inspired by and follow.

There are five board members from each stakeholder 'pillar' (government, knowledge institutions and industry). The five government representatives are always mayors¹⁹ of the four municipalities with an innovation campus in their territory²⁰, and a fifth representative from one of the other 17 municipalities in the region. The five representatives from knowledge institutions²¹ are always presidents of the board (vs. rectors) in order to ensure broader regional/societal perspectives (vs. a focus on 'own organizational needs'). The five industry representatives are from industry associations, large companies and SMEs, chosen in their individual capacity²².

Brainport Foundation is supported by a secretariat – with 1 FTE. The Foundation has no budget or human **resources** of its own²³. All resources for implementation of the innovation strategy (including the secretariat of Brainport Foundation) is centralized within Brainport Development. The Foundation is 50% shareholder of Brainport Development; the other 50% of Brainport Development is in the hands of the 21 municipal governments (municipalities of Eindhoven, Helmond, Veldhoven, Best and other municipalities in the region).

The annual budget for Brainport Development depends on the necessary resources (depending on forecasted activities) for the following year to execute the strategy properly. Based on the plans of Brainport Development, shareholders contribute to the budget for Brainport Development. Their contribution is set for a four-year time period. In 2017, Brainport Development had base financing (from its shareholders) of €4,3 million, which was combined with external financing from companies, knowledge institutions, governments, and project grants (regional, national, EU). Together, the annual budget for Brainport Development (in 2017) was €8,3 million.

The ownership structure and financing of Brainport Development facilitates a **pooling of resources** (a common pot) to implement the innovation strategy. In addition to making financial contributions to the budget of Brainport Development, the Foundation contributes to common resource pools by seconding staff to Brainport Development²⁴. Board members are also expected to take the lead in executing parts of the regional strategy (areas that concern their organisations).

Brainport Development is responsible for **ensuring the involvement of other actors (particularly SMEs) in the operational implementation** of the innovation strategy (i.e. aside from Foundation members' organisations). They do this by identifying opportunities and developing project ideas that relate to the strategy, and by soliciting suggestions/needs from groups of companies. Brainport Development only starts projects if a group of local companies (at least five) finds the topic relevant enough to commit their time (in project meetings/activities) and, preferably, their funds.

Brainport Development works proactively with project development and stakeholder engagement.

Coordination among innovation support actors in the region and with national-level actors is made simple by the fact that "people know each other,

¹⁸ Previously, members were selected based on their representational capacity (i.e. representing broader groups of stakeholders). Now, leadership capacity is premised.

¹⁹ As mayors are viewed as the least political position within government.

²⁰ Eindhoven (chair), Helmond, Veldhoven and Best.

²¹ Current knowledge institution representatives are from Eindhoven University of Technology, Summa (vocational) College, Fontys University of Applied Sciences, Tilburg University and TNO (an independent research organization).

²² Current industry representatives are from Philips, NTS-Group, ASML Holding, Huijbregts Group and VanBerlo Group.

²³ The fact that the Foundation has no (financial) resources also ensures that the members of the Foundation don't run financial risks.

²⁴ To cover their part of the budget, Foundation members can contribute with an amount of money and/or second human capital to Brainport Development.

respect each other's roles and activities, and can easily meet up to work together". Board members of Brainport Foundation and other stakeholders take the initiative to coordinate activities, and to use their national-level functions to position regional interests. An example of coordination among innovation support actors is Jan Mengelers, President of the Board of Eindhoven University of Technology, who hosts, on his own initiative, a regular meeting with all campuses in the region (including the Science Park, High Tech Campus Eindhoven, Design Campus Strijp-S and Automotive Campus in Helmond).

Brainport Foundation has no **outputs** (e.g. regular reports or evaluations, decisions or policy guidelines) of its own. However, Brainport Development delivers annual reports of their activities and outputs (including qualitative descriptions of project progress, and quantitative KPIs). An example from the annual report from 2016 is presented in Figure 6 below.

This annual report is the primary method for **monitoring progress**. Progress and success are measured on two levels: general macro-economic performance of the region (through the Brainport Monitor), and performance of Brainport Development (through project-level assessments).

There are also a number of outputs that Brainport Development monitors each year, including: the number and kind of events that have been organized to increase interaction and cooperation within the ecosystem; the number of (start-up) companies that have been supported; the number of companies that have received financing; the number of international companies that have been attracted to the region, etc.

Brainport Development has responsibility for **communicating/interacting with the broader public**. The primary channel for communication is Brainport's webpage (in Dutch and English). There is also a newsletter (Brainport Update) that is now under reconstruction. They are considering developing separate newsletters for different target groups (e.g. one more focused on specific events for entrepreneurs and another more focused on development activities/strategic approaches for policy makers). In addition, there are many occasions where Brainport Development is asked to explain about the triple helix cooperation model, the region itself and Brainport Development's activities. Increasingly, Brainport Foundation's board members are taking on this role as well – serving as ambassadors for the region (particularly on national and European level).

Brainport Development is a typical networking organization. We are very familiar with initiatives in the region that concern economic development. When executing projects, we know which partners need to be involved and have the capability to make them contributing partners. This has to do with both the cooperative attitude of regional organizations (cultural aspect) and the relatively small scale of the region that ensures that everybody knows each other. ”

Jasmijn van der Horst-Rompa, Brainport Development

 **Opvallende resultaten 2016**
Business



Figure 6: Example from Brainport Development Annual Report.



Region of Southern Denmark

Since 2007, Denmark is comprised of five regions, with a legal mandate to set-up regional growth fora (växtforum)²⁵. The regional growth fora have the responsibility of developing (and implementing) the regional strategy for business development. On national level, the Danish Growth Council ensures cohesion between the regional efforts and the government business development policy. The chairman of each Regional Growth Forum has a seat on the Danish Growth Council. The national growth council (växtråd) has the responsibility for allocating 10% of European Regional Development Funds (ERDF), as well as approving the regional business development strategies.

Since 2009, the Region of South Denmark²⁶ has had a focused and long-term economic development strategy based on a triple helix model with strong collaboration between local authorities, industry and knowledge institutions. The main structure for governing the innovation and sustainable growth agenda is the **South Denmark Growth Forum (SDGF)**. The (primarily strategic) **mandate** of the growth forum is established by law (and is the same for all five regions). The SDGF is responsible for setting up the regional strategy for business development, monitoring growth conditions, and recommending co-financing and advice on how the budget²⁷ should be used. The Growth Forum is also responsible for evaluating business development projects in the region (and has the right to decline project proposals). The main strength of the Growth Forum is the construction of the partnership – involving all the relevant players (businesses, knowledge and educational institutions, unions and employers' organisations, local authorities, and the Regional Council) in guiding the direction and content of the regional development activities.

The Growth Forum has set up a long-term business strategy running from 2012-2020. Every other year, a two-year action plan is developed – outlining the overall goals, priority areas, and main tools (i.e. approaches to operationalise the strategy). These involve e.g. stimulating demand for new products and services, improving access to R&D and risk finance, supporting company creation, and strengthening research, development and education environments – including clusters – within the focus areas. To further accelerate growth, South Denmark has initiated an effort to attract international elite entrepreneurs to the region, for example through structured incubator and accelerator programs, access to test and piloting infrastructure and close contact with investors.

The strategy **focuses on the following four areas:**

Health and social innovation, Sustainable energy, the Experience economy, and Robotics (recently added). In addition, the strategy highlights a number of horizontal areas for action (see Figure 7 below). The strategy and action plan are updated every two years.

The economic development strategy presents two overall strategic goals²⁸, as well as measurable goals (related to growth in productivity and exports/export share or employment) for each priority area. All project applications (within priority areas) must estimate how their activities will contribute to the goals that are set.

The South Denmark Growth Forum (SDGF) is a legally-**anchored** body appointed by the Regional Council (the political leadership) every 4th year. The SDGF is led by one of the six mayors (currently, the mayor of Odense is the chairman). Given its legal framework and strong involvement of local authorities

²⁵ The law also provides direction on the composition of the growth fora.

²⁶ South Denmark has a population of around 1,2 million, and a GDP per capita of around 38.600 EUR (see <http://www.s3vanguardinitiative.eu/partners/south-denmark>).

²⁷ The budget is comprised of 13 MEUR from regional business development fund and 11 MEUR of structural funds (ERDF and ESF) for a total budget of approximately 200 MDKK.

²⁸ To reach a level of productivity that is 10% above the OECD average, and an occupational frequency on a par with the OECD Top 5 by 2020.

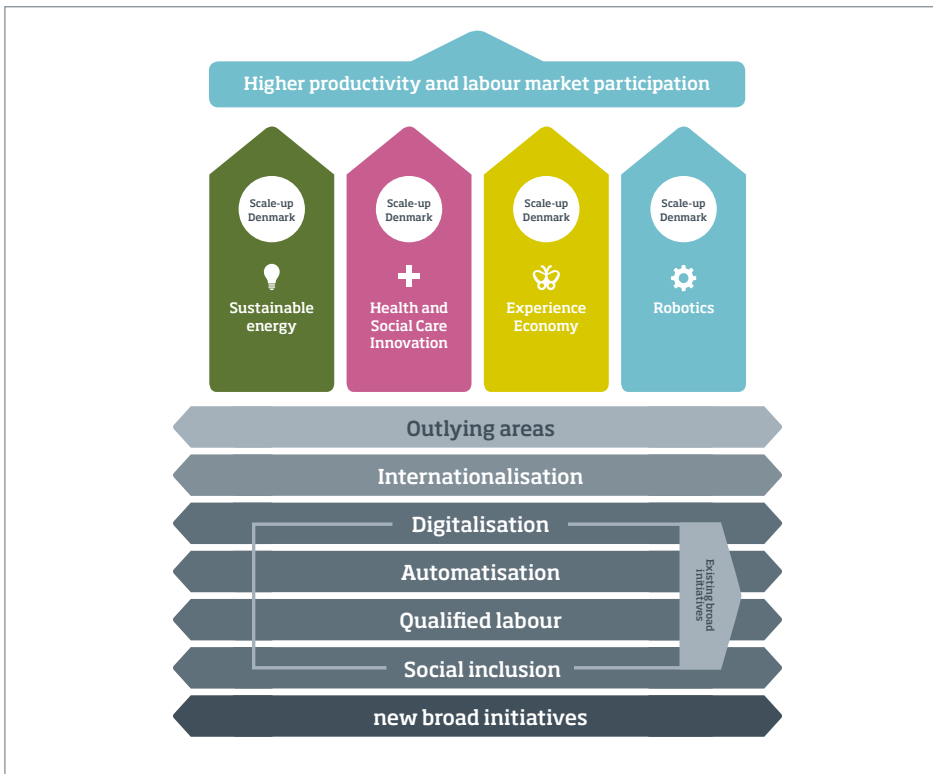


Figure 7: RIS3 focus areas for South Denmark.

(and others) in the partnership, the decisions and strategic guidance of the Growth Council are well-anchored in regional decision-making structures.

The Growth Forum is **comprised** of 21 members, recommended by business organisations, educational institutions and municipalities. Members are appointed in their organizational capacity – representing broader groups of actors. Members include: mayors and city council members of the five municipalities²⁹ (6), members of the Regional Council (3), Rectors of universities and vocational training institutions (3), representatives from industry/industry associations (6), and representatives from unions and employers’ organisations (3).

Currently, there are ongoing discussions on possible revisions to the business support structure in Denmark – whether the current governance structure (with five regional growth fora) should stay the same or be consolidated, and whether the budget for business development should continue to be allocated through regional structures or go through the municipalities. There is a lot of support for (and positive experience with) the partnership structures in the regional growth fora.

The South Denmark Growth Forum (SDGF) is supported by a secretariat function within the regional government. In addition to the core secretariat (of 3 FTEs), other **resources** from the regional government department working with economic development are engaged in preparing strategy documents, handling project applications, monitoring/evaluation activities, etc. “Working level” representatives of the SDGF members are involved in preparation of the meetings (4 times per year).

The broader secretariat group within regional government (30-40 FTEs) is responsible for the **operation/process facilitation** of the SDGF. Approximately two months in advance of each (quarterly) meeting of the Growth Forum, the broader secretariat meets to begin preparing material for each meeting. This preparatory process includes extra dialogue with individual members or project ‘operators’ (e.g. clusters, universities, etc.).

As described above, the SDGF is responsible for deciding on how the **budget**³⁰ for regional economic development should be used – i.e. making decisions on project applications. In addition to this budget,

²⁹ Odense (2 – one mayor and one city council member), Billund, Varde, Nordfyns, Sønderborg.

³⁰ The budget is comprised of 13 MEUR from regional business development fund and 11 MEUR of structural funds (ERDF and ESF) for a total budget of approximately 200 MDKK.

the SDGF discusses the initiation of “joint initiatives” or “partnership projects” of the Growth Forum partnership (i.e. the members of the Growth Forum). Examples of “joint initiatives” include: the initiation³¹ of the Centre for Industrial Electronics (to produce more skilled workers), and the initiation of lærpladser (internships) across various organisations. These “partnership projects” are collaborative efforts that are typically initiated bottom-up through dialogue processes, and exemplify **pooled efforts**. Another approach to develop collaborative projects is more top-down – where the region identifies particular challenges around which “operators”³² send in suggestions. However, there is no real tradition for “resource pooling”.

The South Denmark Growth Forum tries to **involve a broader range of actors/actor groups** in the operational implementation activities through issuing ‘challenges’ (as described above), reacting to/ providing advice on project suggestions (coming bottom-up), as well as organizing workshops (and other events) and inviting operational actors into the strategy development process. For the most part, individual companies (particularly SMEs) are involved indirectly (through cluster initiatives and other ‘operators’ in the region). However, in project applications regional ‘operators’ are required to explain how companies are involved.

In South Denmark, there are clear mechanisms for **coordination among other strategic/policy actors, and innovation support actors responsible for operational implementation**. The South Denmark Growth Forum is THE strategic governance structure responsible for economic development in the region. With a budget and a clear mandate for initiating and supporting collaborative projects, the Growth Forum has functional links with innovation support structures (e.g. S&T parks, clusters, etc.) and involves them in strategy and action plan development. The Growth Forum also has a clear (legally-established) link to the national level (through the Danish Growth Council). Each regional growth forum has a growth contract with the national government. This creates a

framework for presenting ‘partnership initiatives’ that arise to present initiatives (like centre for industrial electronics) where the region needs national support.

The SDGF has a number of regular outputs. The core **output** is the regional business development strategy (produced every fourth year).³³ This is an input to the general economic development strategy for the region. In addition to the business development strategy, the SDGF produces an action plan every other year, and materials for each quarterly meeting of the Growth Forum. Another core output relates to monitoring progress. Progress on implementation of the business development strategy is monitored through two regular analyses/reports: a project-level evaluation and a regional-level assessment. The project-level evaluation is part of a nationally-procured evaluation of ERDF-financed projects – conducted by KOBE. In addition to the mid-term and final evaluation conducted by KOBE, the Danish Business Authority and Danish Statistics conduct an impact assessment – analyzing key indicators for all companies who have participated in structural funds projects (3 years after participation in project) relative to a control group.³⁴ The regional-level assessment (an annual “State of the region” report³⁵) is a product of the broader secretariat of the SDGF. These reports monitor progress towards the goals established in the business development strategies.

The main channel for **communication/interaction with the broader public** is through its website (see Figure 8 below). The South Denmark Growth Forum has a comprehensive website including information on the composition of the Growth Forum, materials from all quarterly meetings, and other publications.

The secretariat for the SGGF tries to communicate in a structured and transparent way after all Growth Forum meetings, and at conclusions of projects. In addition, members of Growth Forum speak with the press about particular initiatives. The SDGF plans to work more in the future with leveraging Growth Forum members as ambassadors to the broader public.

³¹ Driven by actors in the Region, the University of Southern Denmark, Sønderborg municipality and several companies.

³² Operators include cluster organisations, regional business development centres (væksthus), and municipal business support actors.

³³ The current business development strategy (for 2016-2019) is available here: <http://detgodeliv.regionsyddanmark.dk/vaekst-og-udviklingsstrategi/>. South Denmark is currently in the process of developing its next regional business development strategy for 2019-2023.

³⁴ The most recent impact analysis of structural funds projects in South Denmark is available here: https://s3.eu-central-1.amazonaws.com/mg-web-site-detgodeliv.regionsyddanmark.dk/2017/03/Effekt%C3%A5ling-2016_syddanmark_final.pdf

³⁵ The State of the region 2017 report is available here: <https://s3.eu-central-1.amazonaws.com/mg-web-site-detgodeliv.regionsyddanmark.dk/2017/03/State-of-the-region-2017.pdf>

The screenshot shows the website for the South Denmark Growth Forum. At the top, there is a navigation bar with links for 'LÆS OP | OM SITET | SITEMAP |' and a search box containing 'Indsæt søgeord' and a 'SØG' button. Below this is a large orange banner with the logo 'syddansk vækstforum' and several circular images showing people and industrial scenes. To the right of the banner are logos for 'DEN EUROPÆISKE UNION Den Europæiske Union' and 'DEN EUROPÆISKE UNION Den Europæiske Union og Regionalfonden', along with the text 'Vi investerer i dit fremtid'.

Below the banner is a navigation menu with buttons for 'VÆLG EMNE:', 'DAGSORDNER', 'KONTAKT', 'OM VÆKSTFORUM' (highlighted), 'NYHEDSBREV', and 'FOR ANSØGERE'. The main content area is titled 'Om Vækstforum' and contains the following text:

Forside » Om Vækstforum

Om Vækstforum

Syddansk Vækstforum er udpeget af regionsrådet efter indstillinger fra organisationer, uddannelsesinstitutioner og kommuner.

Antallet af pladser i Vækstforum er i erhvervsudviklingsloven fastlagt til 21.

Syddansk Vækstforum har desuden én observatør.

Siden er sidst opdateret 5-4-2018
[Regional Udvikling - Vækstforum](#)

The sidebar on the left lists various links under the heading 'OM VÆKSTFORUM': Dagsordner, Kontakt, Om Vækstforum, Medlemmer 2018-21, Mødekalendarer, Publikationer, Støttede projekter i 2007-18, Strategi, Handlings- og Investeringsplan og Samarbejdsaftaler, Logos for Syddansk Vækstforum og EU's Social- og Regionalfond, Nyhedsbrev, and For ansøgere.

On the right side, there are two buttons: 'Start her som ny ansøger' with a sub-link 'Hotline', and 'Fakta om EU's strukturfond'. Below the second button is a text block: 'EU's Regionalfond, Socialfond og danske partnere investerer hvert år 1 mia. kr. i aktiviteter, der skaber vækst og beskæftigelse i hele landet. Partnerskabs investeringer sker med afsæt i regionernes styrkepositioner og i innovation, grøn omstilling, uddannelse og iværksætteri.' Below this is another button: 'Bliv klogere på, hvordan vi gør en forskel for Danmark'.

The footer contains the following contact information: 'Region Syddanmark | Damhaven 12 | 7100 Vejle | Email: kontakt@regionsyddanmark.dk | Tlf: 76 63 10 00 | Fax: 76 63 20 00'.

Figure 8: Website of South Denmark Growth Forum.

The current administrative system in Sweden consists of two main regional bodies in each county: the County Administrative Board, which represents the Government at the regional level and acts as a regional coordinating body for the State, and the County Council (or Region), which is a directly elected regional body responsible for health care and public transport. The County Council (Regionfullmäktige) in Region Skåne is one of ten (out of Sweden's 21 counties) that has the additional responsibility of regional development.³⁶

Since 1999, Region Skåne³⁷ has a permanent commission from the national government to coordinate regional development issues and lead the work with creating a Regional Development Strategy, RUS. Within the mandate for regional development,

Region Skåne has the responsibility to coordinate the regional innovation strategy. The current (smart specialisation) strategy *An International Innovation Strategy for Skåne (2012-2020)*³⁸ identifies six strategies to improve innovation capacity³⁹ and three areas of relative strength: Personal Health, Smart and Sustainable Cities and Smart Materials. The existence of strong clusters within life-science, clean-tech, ICT, packaging, food and mobile communication is a starting point for advancing collaborative action within the three priority areas.

The Region is committed to working closely with the private sector, academia and other relevant actors to promote the skill-base and know-how needed and to create an innovative and truly international mind-set throughout the region. To strengthen innovation

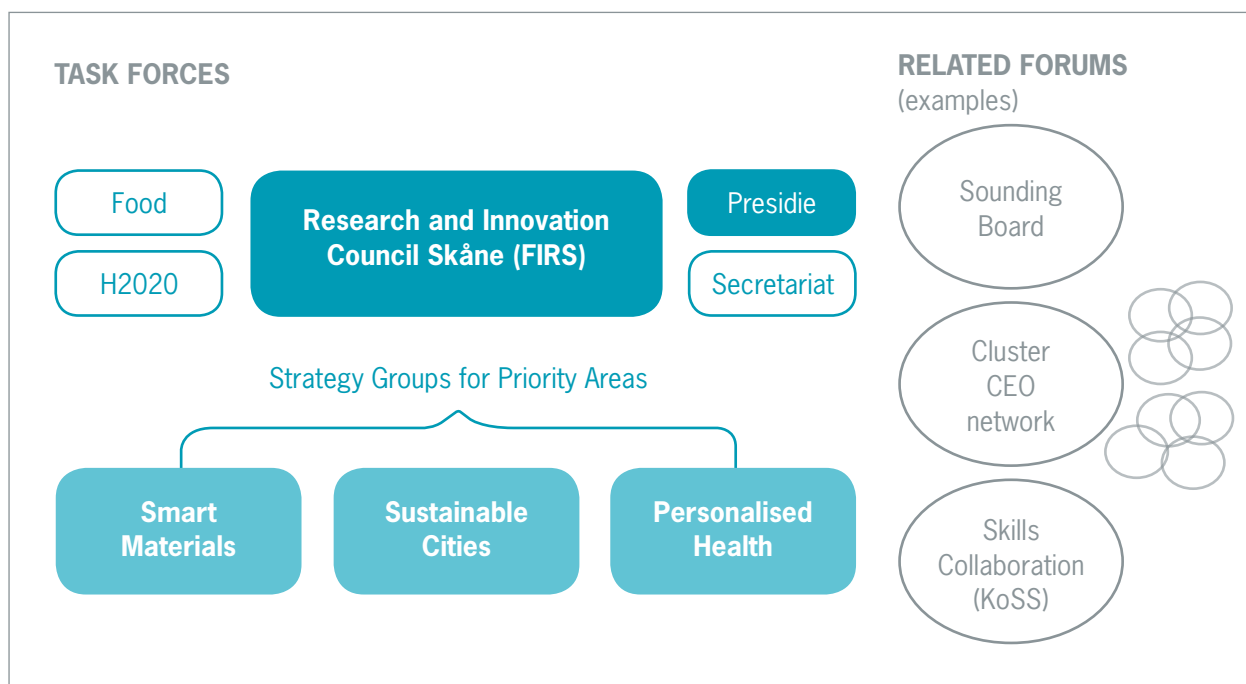


Figure 9: Systemic Leadership in Skåne

³⁶ In the rest of the country, regional development falls under the responsibility of either the County Administrative Boards (in four counties) or Regional Coordination Bodies, which are indirectly elected assemblies owned by municipalities and county councils (in seven counties).

³⁷ Skåne has a population of around 1,3 million, and a GDP per capita of around 26.300 EUR (see <http://svanguardinitiative.eu/partners/region-skane>).

³⁸ http://s3platform.jrc.ec.europa.eu/documents/20182/232763/SE_Sk%C3%A5ne_RIS3_201109_Final.pdf/672786c5-8ef7-4935-aa8b-7429a32a8aa2

³⁹ Develop systemic leadership; Broaden the sense of what innovation is – include more people; Streamline the support structure for innovation; Develop new innovation areas and creative environments; Develop international cooperation; and Strengthen innovation capacity in existing industry and public sector activities.

capacity and develop collaborative efforts for the research and innovation work in Skåne, an enhanced ‘systemic leadership’⁴⁰ is required. In Skåne, this is currently made up of the Skåne Research and Innovation Council (FIRS), the strategy groups for each of the three priority areas, and task forces – as well as a number of related forums and instruments with the objective of developing collaborative efforts in the region (see Figure 9).

The **Research and Innovation Council of Skåne (Forsknings och Innovationsrådet i Skåne) – or FIRS** – is a collaborative stakeholder body with the **mandate** to: Facilitate and coordinate resources towards collaborative research and innovation efforts; Handle important questions (including industrial restructuring and crises); Monitor trends and advance the region’s interests nationally and internationally; and Communicate/be ambassadors for innovation-related questions.

The regional strategy **focuses on three priority areas** that leverage competencies across various sectors/ clusters and disciplines to address societal challenges: smart materials, smart sustainable cities, and personalised health. In addition, the strategy highlights six sub-areas to improve innovation capacity. A general vision and direction for six sub-areas is established in the International Innovation Strategy for Skåne (2012-2020) and position papers for the three prioritized areas. However, there no concrete (measurable) **goals** have been set.

FIRS is **anchored** within the broader political and innovation system via its members (and their positions). FIRS is chaired by the Head of the Regional (County) Council. Decisions taken within FIRS serve as catalysts and guides for action – and are taken over by the strategy groups (one for each innovation area).

The Research and Innovation Council of Skåne is **comprised** of 22 members including: members of the regional council (4), members of the municipal council/municipal association (5), industry (9⁴¹), and rectors of universities/university colleges (4). Members

are appointed in their organizational capacity – representing important stakeholders and broader groups of actors in the region. In addition, FIRS has 15 adjunct members – including representatives from the national innovation agency (Vinnova) and the Swedish agency for economic and regional growth (Tillväxtverket).

FIRS is supported by a secretariat function within Region Skåne (department for innovation). In addition to the core secretariat (of approximately 1 FTE), other **resources** from the regional government and FIRS members’ organisations are engaged in the Working group and Presidie⁴² (preparing the agenda and discussion materials). FIRS has 3-4 meetings each year.

FIRS has no budget of its own; however, core organisations in FIRS commit 0,5-1 FTE to each of the three strategy groups. Aside from the human resources allocated to each of the priority areas, there is no formal process for **pooling resources** (funding or additional human resources). Rather, formal funding decisions are taken by each organization following ‘guidance’ provided within FIRS meetings.

The three strategy groups are the main mechanism to **coordinate action and connect strategy to operational implementation**. In addition, working groups in other areas (food, Horizon 2020) are initiated on an ad hoc basis to coordinate implementation. Currently, there are no formal linkages between FIRS and other existing advisory bodies and innovation support structures (responsible for implementation) in the region. Adjunct members from national agencies help support coordination with the national level (and national funding programmes).

In addition to the three strategy groups, there are a number of other mechanisms to bridge knowledge/ research and business actors, and **engage a broader range of stakeholders** in the region’s innovation efforts. These mechanisms include the region’s 10 cluster initiatives, university innovation offices, science and technology parks, and incubators.⁴³

⁴⁰ To raise the profile of the entire system, create a greater understanding of a systems perspective, and formulate objectives for the joint development work including a representative from the chamber of commerce and chairmen of the board (coming from companies) from regional cluster initiatives

⁴² The working group is made up of representatives from regional and Malmö city government, and vice rectors from Lund and Malmö Universities. The presidie is made up of the Head of the County Council, a representative from the municipal council, and rectors from Lund and Malmö Universities.

⁴³ A categorization and elaborated description of the functions and financing of the various actors in Region Skåne’s innovation support system is available (in Swedish) here: https://utveckling.skane.se/siteassets/publikationer_dokument/funktionsanalys_slutlig_uppslag.pdf



Figure 10: Categories of Actors in Skåne's Innovation Support System.

FIRS has no regular **outputs**. Suggestions and ideas from FIRS (e.g. coordinated efforts for ESS/MAX IV, strategy for food sector, initiatives following Sony Mobile's restructuring) are taken further and

operationalized through the strategy groups or FIRS' member organisations. There is also no formal system for **monitoring progress** – neither for the overall strategy, nor for the three priority areas/strategy groups.

Comparative Analysis

Each of the regions presented above has a different approach to systemic leadership. In the text that follows, a comparison of the defining characteristics⁴⁴ and practices⁴⁵ is presented – highlighting similarities and differences, and aspects that may serve as a source of inspiration for further development of the approach to systemic leadership in Skåne.



⁴⁴ Mandate, goals, anchoring, composition, resources and output.

⁴⁵ For pooling resources, coordinating implementation, engaging stakeholders, monitoring progress and communicating with the broader public.

Defining Characteristics

An overview of the defining characteristics for each of the four region’s approaches to systemic leadership is presented in Table 1 on page 26.

All four regional councils have similar **mandates** – i.e. to guide or develop the strategy for innovation (and business development) in the region. The councils also have mandates to guide operational implementation – either through direct mechanisms like ownership structure (in Eindhoven) and legally-

mandated decisions over resource allocation/ budgets (in South Denmark), or more indirect mechanisms like stakeholder dialogue managed through Steering/Strategy Groups (in Basque Country and Skåne). Eindhoven and South Denmark appear to have a broader mandate (on regional economic development); whereas Skåne and the Basque Country have a narrower mandate focused on (industrial) and innovation policy (see Figure 11).



Figure 11: Comparison of Mandates.

Two of the regions in this study (Skåne and Einhoven) have not established concrete (measurable) **goals** for their smart specialization strategies. Rather, they use general strategic aims to guide their activities. In contrast, the Basque Country and South Denmark have both established measurable goals to guide their

efforts (see Figure 12). South Denmark's goals relate to productivity, employment and export, whereas the Basque Country's goals relate more directly to RIS3 (concentrating resources and investments to priority areas, etc.).



Figure 12: Comparison of Goal-setting and approach to Monitoring Progress.

Relative to Skåne (who relies on stakeholder dialogue as the main mechanism to anchor decisions with the broader innovation system), the three other examples appear to have more formally-**anchored** governance structures that are integrated with regional

decision-making structures (and implementing bodies). The anchoring (i.e. how decisions are connected to the broader system) comes in different forms in each of the three examples (see Figure 13).



Figure 13: Comparison of form of Anchoring.

Table 1: Overview of Defining Characteristics.

	Research and Innovation Council Skåne (FIRS)	Basque Country (BSTIC)	Brainport Foundation	South Denmark Growth Council
Mandate	<p>Collaborative stakeholder body responsible for:</p> <ul style="list-style-type: none"> • Facilitate and coordinate resources and activities; develop collaborative research and innovation efforts • Handle important questions (including industrial restructuring and crises) • Monitor trends and advance the region's interests nationally and internationally • Communicate/be ambassadors for innovation-related questions • Focused on smart materials, smart sustainable cities, and personalised health 	<p>Regional innovation (S3) governance body responsible for:</p> <ul style="list-style-type: none"> • Establish overall direction and priorities (formal approval of strategy and action plan) for industrial and innovation policy • Coordinate the strategic direction and decisions of the three provinces • Advise Government • Scientific Advisory Committee (BSTIAG) and Interdepartmental Committee have complementary mandates • Focused on Biosciences-Health, Energy and Advanced Manufacturing/Industry 4.0 (+4 opportunity niches) 	<p>Ownership body responsible for:</p> <ul style="list-style-type: none"> • Determine the strategy for economic development of the region • Guide the development organization Brainport Development • Brainport Development with complementary (operational) mandate • Focused on leveraging combining competencies in high-tech industries to address societal challenges in the areas of Health, Mobility, Energy, Food and Safety 	<p>Legally-established body with mandate for regional growth:</p> <ul style="list-style-type: none"> • Set up the regional strategy for business development • Monitor growth conditions • Recommend co-financing and guide use of budget for regional business development (totaling approximately 200 MDKK) • Focused on Health and social innovation, Sustainable energy, Experience economy, and Robotics
Goals (and metrics for monitoring)	<p>A general vision and direction for six sub-areas is established in the International Innovation Strategy for Skåne (2012-2020) and the position papers for the three prioritized areas; no concrete (measurable) goals.</p>	<p>Concrete (measurable) goals set for six strategic lines (e.g. concentrating resources and investments on priority areas, reinforcing international RDI funding)</p>	<p>A general direction and strategic aims for the strategy set (using scenarios); no concrete (measurable) goals (as had in previous strategy)</p>	<p>Concrete (measurable) goals set for the strategy (overall), as well as for each of the priority areas; goals relate to productivity/productivity growth, export/export share and employment</p>
Anchoring	<ul style="list-style-type: none"> • Chaired by the Head of the Regional Council • Decisions/discussions within FIRS are taken over by the strategy groups (one for each innovation area) 	<ul style="list-style-type: none"> • Chaired by the President of the Region • Decisions anchored in formal decision-making processes • Decisions linked to operationalization through interdepartmental committee and Steering Groups (for priority areas and opportunity niches) 	<ul style="list-style-type: none"> • Chaired by the Mayor of Eindhoven • Decisions not anchored in formal decision-making processes, but serve as the 'guiding light' for the (21) municipal strategic governance structures 	<ul style="list-style-type: none"> • Chaired by one of the six mayors (currently the Mayor of Odense) • Growth Forum is appointed by the Regional Council (following legal guide), and decisions and strategic guidance are well-anchored in regional (and local) decision-making structures

Table 1 continues on the next page.

Table 1 continued.

	Research and Innovation Council Skåne (FIRS)	Basque Country (BSTIC)	Brainport Foundation	South Denmark Growth Council
Composition	<ul style="list-style-type: none"> • Members of the Regional Council (4) • Members of the municipal council/ municipal association (5) • Industry (9) (representative from the chamber of commerce and chairmen of the board from regional cluster initiatives) • Rectors of universities/ university colleges (4) • Adjunct members (15) • Members represent important actors in the region 	<ul style="list-style-type: none"> • President of the Government, Council of Ministers and Commissioner (10?) • Heads of the three Provincial Councils (3) • Presidents of the two Technology Centres (2) • Rectors of the three Universities (3) • Representatives from four leading firms (4) • Representatives from the Basque Science Foundation, the Basque Innovation Agency and the Basque Academy of Science, Arts and Literature (3) • Members represent important actors in the region 	<ul style="list-style-type: none"> • Mayors of four municipalities with an innovation campus + another mayor from one of the other 17 municipalities (5) • President of the Board from knowledge institutions (5) • Industry/industry associations (5) • Members chosen in their individual capacity – in their role as leaders for others to be inspired by and follow 	<ul style="list-style-type: none"> • Mayors and city council members of the five municipalities (6) • Members of the Regional Council (3) • Rectors of universities and vocational training institutions (3) • Representatives from industry/ industry associations (6) • Representatives from unions and employers' associations (3) • Members are appointed in their organizational capacity – representing broader groups of actors
Resources	<ul style="list-style-type: none"> • Approximately 1 FTE secretariat function at Region Skåne • Working group and Presidie prepare agenda/discussion materials • FIRS meetings (3-4 per year) 	<ul style="list-style-type: none"> • 2+ FTE secretariat function at Basque Government • 3-4 FTE at Innobasque responsible for council-assigned activities • Secretariat (with support from Innobasque and representatives from Steering Groups) prepare agenda/discussion materials) • BSTIC meetings (2 per year) • BSTIAG meetings monthly; Interdepartmental Committee meets 2 times per year • Innovation Fund (40 MEUR) under responsibility of the BSTIC 	<ul style="list-style-type: none"> • 1 FTE secretariat function at Brainport Development • Secretariat prepares Foundation meetings (held 6 times per year) • All resources for implementation of the strategy centralized within Brainport Development (where Brainport Foundation is 50% shareholder) 	<ul style="list-style-type: none"> • 3 FTE secretariat function at Region South Denmark + others within regional government • Secretariat prepares Growth Council meetings (held 4 times per year) • Broader secretariat (30-40 FTE) engaged in preparing strategy documents, handling project applications, and working with process facilitation • Budget for business development is approximately 200 MDKK (ERDF and regional business devpt fund)
Output	<ul style="list-style-type: none"> • Suggestions and ideas from FIRS are taken further/operationalised • Joint articles in media 	<ul style="list-style-type: none"> • BSTIC has no outputs of its own, but gives responsibility for regular analyses and evaluations to other actors in the system (e.g. annual monitoring of the strategy) 	<ul style="list-style-type: none"> • Brainport Foundation has no outputs of its own, however Brainport Development delivers annual reports 	<ul style="list-style-type: none"> • SDGF has a number of regular outputs including a business development strategy (every 4 yrs), an action plan (every 2 yrs) and regular monitoring reports

Practices

In the Basque Country, the various governmental and non-governmental governance structures seem to complement each other and provide an approach to gather ‘alternative’ and future-oriented perspectives (through BSTIAG) and tailor programmes/funding to operational needs (through Steering Groups and the interdepartmental committee). In Eindhoven, the shareholder/ownership structure provides a clear mandate and transparent relationship between Brainport Foundation and Brainport Development. In South Denmark, the national legal framework gives a clear mandate (and resources) to the regional growth forum. The more direct linkage between councils and operators (through formal decisions, funding, etc.) helps ensure an effective connection between strategic policy level and operational implementation.

Each of the councils in this benchmarking has a similar overall size and **composition** – with representation from government, academia and industry. Yet there are some distinguishing features. Brainport Foundation (Eindhoven) is the smallest (with 15 members), and the only council which stresses the individual leadership capacity (vs. organizational capacity) of its members. The South Denmark Growth Forum is the only council that also engages unions and employers’ associations. FIRS in Skåne is the only council to engage clusters (through respective chairmen of the board) as representatives of industry. Finally, the three international benchmarks seem to have more emphasis on local government/municipal-level involvement. (In Eindhoven and South Denmark, the councils are led by municipal mayors.)

All four councils have similar **resources** in terms of the core secretariat; however, the Basque Country and South Denmark seem to have access to broader support within government. In addition, these two regions each have direct control over a budget (see information on pooled resources and Figure 14 below). All three of the international benchmarks have stronger/more direct connections to ‘operational level’ bodies (see anchoring and Figure 13 above) – providing them with indirect access to other (human and financial) resources. In the case of Eindhoven, all resources for implementation of the strategy are

centralized within Brainport Development (where Brainport Foundation is 50% shareholder).

The three international benchmarks each have regular **outputs**. Outputs are produced either directly (e.g. the business development strategy in South Denmark), indirectly – through ‘their’ operators (e.g. Brainport Monitor in Eindhoven), or are commissioned to a range of providers (e.g. analyses and monitoring reports in Basque Country). In all of these cases, the outputs are produced for guiding, following and communicating progress of the regional innovation/business development ecosystem and strategy (vs. serving as a narrow output of the council itself).

An overview of systemic leadership ‘practices’ (e.g. how resources are pooled, implementation is coordinated, stakeholders are engaged, etc.) in each of the four regions is presented in Table 2 on page 30.

The four regions have different approaches to **pooling resources** – i.e. directing human and financial resources to prioritized areas (see Figure 14). In two regions (Basque Country and South Denmark), there are **pooled financial resources** under the control of the regional council. The Growth Forum in South Denmark manages a budget of 200 MDKK (approximately 26,5 MEUR) for business development. The Council in the Basque Country guides the use of a 40 MEUR Innovation Fund. In the case of Eindhoven, the ownership structure of Brainport Development facilitates a pooling of resources to implement the strategy. In terms of **pooled human resources**, all four examples leverage coordinated action among operators (through Steering Groups in the Basque Country, Brainport Development in Eindhoven, etc.) to mobilize companies and other actors around prioritized projects or challenges. The tailoring or pooling of funding for coordinated action (for prioritized projects) is handled in different ways: centralized budgets and decision-making processes in Eindhoven and South Denmark; regular meetings of the interdepartmental committee – connected to needs of steering groups – in the Basque Country; and decentralized budgets and decision-making processes in Skåne.

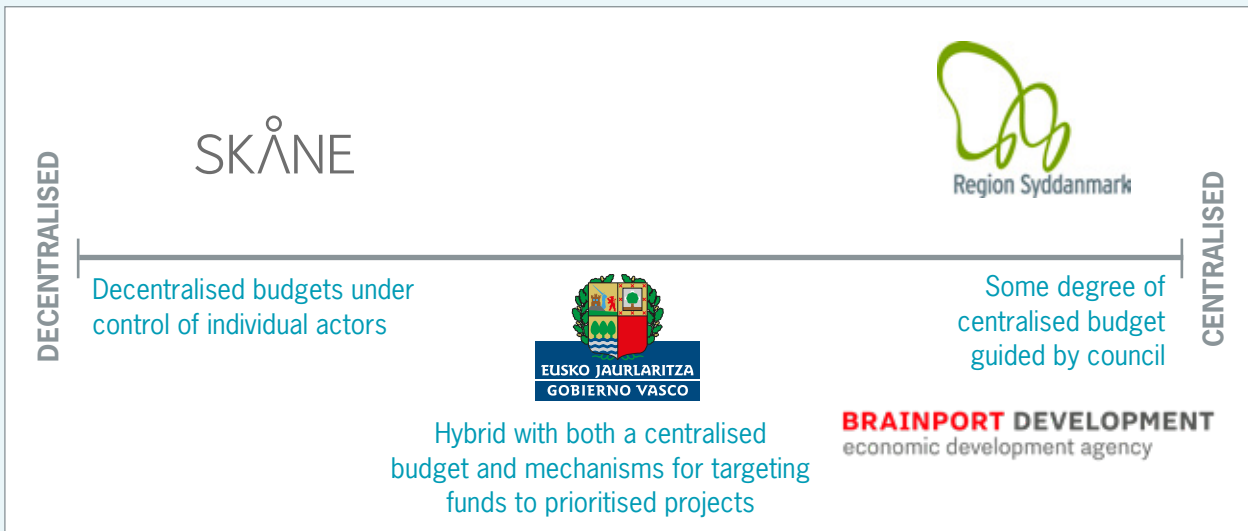


Figure 14: Comparison of approach to Resource Pooling

The different mandates and anchoring of regional councils' activities relative to the regional (innovation or economic development) strategy have a direct relation with the approach to **coordinating implementation** – i.e. how strategy is connected with operational actors and action (see Figure 15). As mentioned above, the more formal/integrated governance structures (through laws/formal funding decisions or ownership structures) provides a more

direct approach to coordinating implementation. But even less formal – more indirect approaches – to coordinating actors and tailoring funding towards prioritized innovation activities (as exists in the Basque Country) seem to work well.) fosters a more natural coordination between councils and operators and helps ensure an effective connection between strategic policy level and operational implementation.



Figure 15: Comparison of approach to Coordinating Implementation

All regions have recognized 'institutions' (formal agencies or other forms) for proactively **engaging stakeholders**: Steering Groups in the Basque Country, Brainport Development in Eindhoven, a recognized set of 'operators' (e.g. clusters, regional business development centres and municipal business support

actors) in South Denmark, and Strategy Groups in Skåne. The "living entrepreneurial discovery process" that is facilitated by the Steering Groups in the Basque Country is an inspiring 'best practice' example for working proactively with engaging new (and a broader range of) stakeholders in collaborative innovation efforts.

Table 2: Overview of Practices.

	Skåne	Basque Country	Brainport Eindhoven Region	South Denmark
Pooling Resources	<ul style="list-style-type: none"> • Core organisations in FIRS commit 0,5-1 FTE to each of the three strategy groups • No formal process for pooling financial resources • Formal funding decisions taken by each organisation following 'guidance' by FIRS 	<ul style="list-style-type: none"> • Innovation Fund (40 MEUR per year) under BSTIC's responsibility • Steering Groups work actively to pool (mainly human) resources in project activities – and guide the pooling of financial resources through the Interdepartmental Committee 	<ul style="list-style-type: none"> • Ownership structure of Brainport Development facilitates a pooling of resources to implement the strategy • In addition to financial contributions, Brainport Foundation members second staff to Brainport Development and are expected to take the lead on executing parts of the regional strategy 	<ul style="list-style-type: none"> • Budget for business development under responsibility of the Growth Forum • Collaborative efforts through joint initiatives (or partnership projects) initiated bottom-up or through mobilizing around challenges identified by the region
Coordinating Implementation	<ul style="list-style-type: none"> • Strategy Groups are the main mechanism to connect strategy to operational implementation • In addition, other working groups (food, H2020) are initiated on an ad hoc basis to coordinate implementation • Informal connections between FIRS and implementing/innovation support structures, advisory bodies • Coordination with national level through national agencies' participation in FIRS meetings 	<ul style="list-style-type: none"> • Governance system (with BSTIC, BSTIAG, Interdepartmental Committee and Steering Groups) connects policy/funding with operational level • Steering Groups main mechanism to connect innovation support structures and advisory bodies • Little connection with national level 	<ul style="list-style-type: none"> • Brainport Foundation and Brainport Development are the only innovation structures in the Eindhoven region • Brainport Foundation members use their national-level functions to position regional interests 	<ul style="list-style-type: none"> • Clear mechanisms for coordination within the region, and with national level
Engaging Stakeholders	<ul style="list-style-type: none"> • In addition to strategy groups, a number of other regional mechanisms to engage stakeholders (Sounding Board, 10 clusters, Skåne Innovation Week) • Core stakeholders also have own institutions and processes for engaging stakeholders in innovation activities 	<ul style="list-style-type: none"> • Steering Groups have the role of engaging actors ('living EDP') • Actors engaged in working groups and projects 	<ul style="list-style-type: none"> • Brainport Development responsible for ensuring the involvement of actors (particularly SMEs) in operational implementation • Actors engaged by identifying opportunities/developing projects, and by soliciting project suggestions from companies 	<ul style="list-style-type: none"> • SDGF engages actors through issuing 'challenges', reacting to/ providing advice on project suggestions (initiated bottom-up) and organizing workshops/ etc. to involve companies

Table 2 continues on the next page.

Table 2 continued.

	Skåne	Basque Country	Brainport Eindhoven Region	South Denmark
Monitoring Progress	<ul style="list-style-type: none"> No formal system for monitoring progress – neither for the overall strategy, nor for the three priority areas/ strategy groups 	<p>Comprehensive system for monitoring and evaluation, incl:</p> <ul style="list-style-type: none"> Annual monitoring of the strategy Biennial evaluation of public support programs and organizations/STI agents Biennial international benchmarking 	<ul style="list-style-type: none"> Progress measured based on macro-economic performance of the region (through Brainport Monitor) and performance of Brainport Development (through project-level assessments and monitoring of other indicators in annual report (see outputs) 	<p>Progress on implementation of business development strategy monitored through project-level evaluation (of ERDF projects), and regional-level assessment (annual 'state of the region' report)</p>
Communicating with the broader public	<ul style="list-style-type: none"> Website (in Swedish) and annual Skåne Innovation Week are primary channels for communicating with the broader public Ad hoc activities (joint articles from FIRS and events) are also used 	<ul style="list-style-type: none"> Steering Groups with main responsibility for communicating/ interacting with the broader public (through workshops, conferences, etc.) Council decision (June 2017) to increase communication and awareness-raising efforts (through media and SME-targeted events, funded from Innovation Fund) 	<ul style="list-style-type: none"> Brainport Development website is primary channel for communication with the broader public Also use a newsletters (Brainport Update), and presentations on the regional cooperation model (nationally and internationally) 	<p>South Denmark Growth Forum website is primary channel for communication with the broader public; website (in English and Danish) has comprehensive information and materials</p>

The three international benchmarked regions all have structured processes for **monitoring progress** (and quite extensive sets of reports – both internally and externally-produced). Whereas monitoring processes in Eindhoven and South Denmark are focused on broader regional macro-economic performance and project level assessments, the monitoring process in the Basque Country also includes annual monitoring of implementation of the smart specialization strategy (including indicators on e.g. alignment of budget with priority areas). The approach to monitoring progress also varies across the benchmarked regions. An interesting example is the Basque Country's use of action researchers (from Orkestra) to provide input on state-of-the-art and international experiences, continuous reflection on the challenges, and various outputs (e.g. policy briefs, events and publications) that help communicate and foster increased visibility of the Basque region's RIS3 approach and challenges.

The structured approaches to monitoring progress and other outputs that are produced in the three benchmarked regions are key aspects of **communicating with the broader public**. Websites (in English and local language) and stakeholder engagement institutions are the primary channels for communication. And regions use other channels (regular workshops or other events) for interacting with and engaging a broader range of stakeholders in the development of innovation in the region (see Figure 16). Communication with the broader public is increasingly on the agenda (across all four regions) – as a means to broaden and scale-up innovation activities (reaching out to SMEs and other actor groups). In the Basque Country, the council has decided to invest additional resources for communication and awareness-raising efforts.



Figure 16: Comparison of approaches for communicating and interacting with the broader public.

List of interviews and interview guide

List of interviews

Joep Brouwers, Vice Director and **Jasmijn van der Horst-Rompa**, Programme Director Clusters at Brainport Development (November 8, 2017)

Olav Sønderskov, Chief Development Consultant, Regional and Business Development, Region of Southern Denmark (December 6, 2017)

Carlos Peña, Advisor for Science, Technology and Innovation, Office of the Presidency, Basque Government (December 7, 2017)

Interview guide

1. Please describe the structure for governing the innovation strategy in your region? (Do you have an innovation council or equivalent? Do you have working groups or equivalent for priority areas of strategy?)
2. What is the **mandate/tasks** for this 'body'?
3. How active/operational is the mandate and formulation of roles/tasks?
4. Which strategic **focus areas** (i.e. priority areas of strategy)?
5. How do you work with **goal-setting** for priority areas of innovation strategy? (Do goals relate to Agenda 2030/sustainability goals?)
6. What is the **anchoring** of this body? (Who leads? How coupled or not to 'regular' regional decision-making structures?)
7. What is the **composition** of the group? (Who are members? Are they selected in their own capacity, or as representatives of broader group of actors?)
8. **What budget or other resources?** (e.g. how many FTEs in the secretariat?)
9. Does the council (or equivalent) work with **pooling resources** (financial or human) from council members' organisations? How do you mobilise/pool resources?
10. How do you **involve other actors/actor groups** – aside from council members' organisations – in the operational implementation? (particularly how involve SMEs?)
11. What is the **'mode of operation'**? (e.g. how many meetings, how select topics on agenda, general process of preparation, etc.)
12. How do you **structure the work** ('division of labor') between **strategic** elements (the council or equivalent) **and operational implementation** (working groups or equivalent)?
 - a. How does the council (or equivalent) relate to other strategic/advisory structures in the region?
 - b. ...to other innovation support structures (e.g. S&T parks, clusters)?
 - c. ...to the national level?
13. What **outputs?** (e.g. regular reports or evaluations, decisions or policy guidelines)
14. How do you **monitor/measure success?** Do you have indicators or KSFs related to success of systemic leadership/system innovation?
15. What approaches for **communication/interaction** with the broader public? (both communication of strategic approach, and concrete communication of process/progress over time)