

General part

1. Introduction

This feedback paper provides a background and a set of recommendations that supports the on going discussion about effective implementation of the smart specialisation in the Gävleborg region. It has been created as an output of the Interreg-project EmplInno.

Region Gävleborg have ten municipalities with a total population of 276,000 people. The central regional town is Gävle with 100,000 people in the whole municipality including rural areas. Gävle is situated one hour north of Swedens largest international airport – Arlanda and 1,5 hours north of Swedens capital Stockholm. Most people live in towns and municipality centres on the 20,000 km² in the Gävleborg region that is the most forestry dense part of Sweden where over 80 % is covered with forest (Skogsstyrelsen). There is a tendency towards urbanisation in the region that makes the service structure in the rural areas vulnerable. Low tax growth in the region is a problem since, for example, the cost for public health care services grows faster (5 %) than the regional tax base (2,2 %) (Gefle Dagblad 02/02/19).

Gävleborg is also a part of the NUTS-area North Mid Sweden for EU structural funds together with the regions of Dalarna and Värmland. The three regions have been working together on a regular basis about regional development for over a decade with common projects for interregional development of clusters and smart specialisation. In total 840,000 people lives in North Mid Sweden.

Gävleborg have 715 exporting companies with a total turnover of 3 billion Euro. The business structure is dominated by industries in steel, paper pulp, timber and wood. Some ICT-companies in the region is growing and have established themselves on the international market.

Gävleborg had a significant lower growth (22 %) than the average national level region (40 %) in the period 2004-2014 (Kontigo 2016 p 6). Strategic investments to enhance and diversify the business structure and increase the regional attraction are therefore crucial for future growth (Kontigo 2016 p 8). The largest investments to diversify the business structure over the years have been in three ICT-related cluster organisations, tourism and a supporting system for start-ups and small companies in general to grow.

Gävleborg have an extended innovation system where the larger part was established over a decade ago, before smart specialisation became a mainstream innovation strategy approach in EU.

Some of the major achievements are:

- **Bottom-up establishment of an innovation system** (EC 2016 p 11): clusters, incubators, technical parks, university, R&D centres, development projects, business associations/centres and municipality business centres (Kontigo 2016 p 19).

- **Cluster organisations have been a central part of the regional development for over 15 years** and are corner stones in the innovation system. Three out of four cluster organisations have national funding (Vinnova/Vinnväxt/RISE).
- **Smart specialisation oriented innovation strategy in Gävleborg presented 2012, before a more formal RIS3-strategy was developed 2017.** The RIS3 development was supported by an interregional project in North Mid Sweden (Smart Regions) financed by EU regional funds. University of Gävle was an active co-partner in the process together with the intermediate actors in the innovation system.
- **Close interregional collaboration with two neighbouring regions in North Mid Sweden (Dalarna and Värmland) for over ten years.** The present ERUF-project "Smart Regions" is a common project for the three regions.
- **In 2017 the three regions in North Mid Sweden was appointed as one of five regions to participate in a pilot project about "Industrial transition" by the European Commission.**

Together with the "Industrial transition"-project, there are several present initiatives at Region Gävleborg that have the purpose to enhance the implementation of RIS3.

- **ERUF project "The Innovation Step"** have a 2,5 million Euro budget to work with the implementation av RIS3 through the five smart arenas (Gävleborgs smart specialisation areas) and integration of the innovation system 2017-2020.
- **ERUF project "Smarta regioner"** in North Mid Sweden have, among other things, designed a monitoring system for smart specialisation in each region. There is also an opportunity for bench marking between the regions in the monitoring system for smart specialisation.
- **Interreg project EmplInno** is working to enhance the processes of implementing the smart specialisation for example in the projects mentioned above by supporting knowledge about smart specialisation. The intention is also to share the experiences and knowledges´ about smart specialisation in all regions in North Mid Sweden.
- **The ERS projects (Electric Road Systems)** are actually using the smart specialisation implementation methods to describe their innovation process. At the same time is the innovation process in the ERS-project a pedagogic example to describe smart specialisation. This mutually beneficial way of describing innovation and smart specialisation has received national (Reglab) and international attention (Interreg Peer Review). This is a result from the collaboration between EmplInno and the ERS-project in Region Gävleborg.

The smart specialisation areas in Gävleborg are:

- Material technology and sustainable production.
- Smart sustainable cities and communities.
- Sustainable and inclusive working life.
- Bio economy
- Digital services and processes.

A revision of the strategy has been announced, **RIS3 2.0 in Gävleborg 2020**. The main parts are:

- An update of the RIS3 in Gävleborg from 2017.
- Further development of smart arenas for S3 in Region Gävleborg.
- A deeper focus on the regions abilities and possibilities for excellence and cutting edge innovation.
- Development of a research- and educational strategy at the regional University.
- Further development of the knowledge ecosystems at the University of Gävle.

The thematic renewal is in the process of evolution (incremental renewal) that does not exclude revolution (radical renewal) if new opportunities present themselves. There is an ongoing discussion for the future RIS3 in EU that even more emphasis is going to be put on interregional cooperation. In this Gävleborg have the advantage of more than a decade of experience in cooperating with the other two regions in North Mid Sweden, Dalarna and Värmland. The importance of developing interregional relationships are also shared among several intermediate actors in the innovation system in Gävleborg (Kontigo 2016 s 33).

There are also several problems in the implementation of smart specialisation. The two most critical questions are:

- The importance of enhancing the regional leadership for smart specialisation on all levels.
- Getting the whole innovation system to work together as one entity towards the target groups. Many intermediate actors are scattered over the region and are lacking knowledge about each other.

2. Problems defined and recommendations of solutions

A SWOT-analysis by the author provides a background for the description of current problems below:

Strengths: Strong traditional industry with world class manufacturing e.g. in steel, paper, packaging, timber, wood technology.

A well developed and diversified innovation system (Kontigo 2016 p 33).

Weaknesses: Low formal education level leads to problems with lack of skilled labour and transition to the knowledge economy.

Introvert mentality dominates in SME and in the public sector where the interest to take an active part in a globalised society and economy is low with few exceptions.

A vulnerable business structure with low level of diversity and few medium-sized enterprises.

Opportunities: Efficient use of the whole innovation system of intermediaries to enhance entrepreneurship and innovation processes in collaboration with several ICT-clusters (GIS, fiberoptics, industrial IT-processes) where digitalisation can enhance the innovation level.

Proximity and high accesibility to the Stockholm area with high growth, high innovation intensity and concentration of knowledge resources.

Threats: Lack of regional leadership for smart specialisation might lead to inefficient use of public resources. Discontinuation of industries in the region.

The main objectives of RIS3 in Gävleborg are:

- **Mobilisation of a common collaborative regional leadership** and taking the next step in developing a regional strategic framework for a more focused development of research and innovation in the region.
- **Developing a conceptual framework** to enhance the integration of the innovation system.
- **Increasing the regional attraction** for investment and competence. Facilitating interregional, national and international exchange and cooperation.
- **Transforming the region** from an innovation follower to an innovation leader.

Why these priorities?

- A large but scattered innovation system throughout the region.
- Lack of a cohesive regional collaborative leadership.
- A need for a more focused RIS3 strategy.
- Serious efforts are needed for the region to enter the innovative knowledge economy for sustainable growth.
- The SME in the region needs to take the step from being an innovation follower to an innovation leader.
- The need to profile an anonymous Swedish region with its attractive qualities.

2.1. Description of current problems requiring innovative approaches in the region.

With inspiration from professor Markku Sotarautas lecture at the EmplInno-meeting in Seinäjoki (10/10/18 University of Tampere) much of the opportunities and problems with smart specialisation seem to be strongly related to leadership issues. The European Commission handbook for smart specialisation claims that:

”Political leadership is the most critical ingredient in the S3 repertoire because it creates the capacity to mobilise every other ingredient”
(EC 2016 *Implementing S3 – a handbook* p 40).

However the regional director (Johan Färnstrand 12/11/18) for Region Gävleborg made clear that there is a strong political interest to take regional development to the next level in the new political election period 2019-2022. The intention has been strongly enhanced with a new organisation with a more cohesive structure for regional development from 01/01/19. It is therefore now an opportunity to formulate questions about critical issues and propose creative solutions.

2015 was Region Gävleborg reorganised from a regional community for the ten municipalities of Gävleborg with 120 employees to a regional municipality with 6.500 employees. In the new organisation healthcare is the largest part among several other functions on a regional level for example regional infrastructure, cultural institutional support, support for innovation and enterprises etc.

The new regional organisation represented a fusion of regional responsibilities from three former regional institutions. With that followed the opportunity to work with regional development in a more focused and efficient way with for example greater clarity about responsibilities and roles. At the same time it increased the demands and requirements on the organisation responsible for the regional development (PWC 2016 p 9). It is also an opportunity for regional politicians to specialise on different areas for example about regional development and the different areas there. It is now possible for at least one politician to gain deeper knowledge about smart specialisation.

A few of the politicians from the regional community of Region Gävleborg before 2015 followed into the new regional municipality. But most of the politicians are relatively inexperienced about regional development and it takes time to build knowledge and experience from a regional perspective, which is something new to most people. Sweden has a strong national level and a strong municipality level, but a comparatively weak regional level. It is sometimes described like a time glass with a broad national level, thin regional level, and a broad municipality level.

The politicians however decided to divide the new structure and the resources for regional development throughout the whole organisation 2015 with the intension to involve the whole organisation in the regions development. One effect from that decision is that the issues about regional support for the business structure in Gävleborg and smart specialisation today has no natural assembly point in the organisation and are scattered on several places and also on different hierarchical levels. That makes the internal coordination for smart specialisation within the organisation of Region Gävleborg very challenging. An additional cultural complication is that regional development requires another way of thinking (creative reflection) and working (very tentatively) compared with for example healthcare where linear thinking and routine and highly structural ways of working with production dominates.

The new organisation from 01/01/19 solves some of the co-ordinating problems. However regional leadership in general and especially for smart specialisation are very important. A critical part for implementing smart specialisation is:

”Preserving EDP from political changes or political instability: The EDP requires trust across stakeholders, which is a lengthy and laborious process that should be protected from sudden

political stability. As for the public sector, the governance system should devise ways to ensure that the outcomes of stakeholders’ interaction are embedded in the policy process in a robust way, whereby political changes – rather than damaging the trust building process – are in a position to embrace them in their new agenda” (EC 2016 P 27).

A successful implementation of smart specialisation is dependent on a long-term institutionalisation in a holistic strategic manner (EC 2016 p 45-46). The internal structure for smart specialisation in Region Gävleborg is today fragile and vulnerable. It is very dependent on personal relations (PWC 2016 p 11). It is today more of a personal leadership that keeps the innovation system together rather than a functional organisation. It is important that the organisation for smart specialisation becomes grounded in a common understanding of the importance of a regional collaborative leadership that is shared on all levels and is rooted in a political leadership.

The European Commission handbook for smart specialisation claims that:

“A holistic approach to sectoral development that goes beyond narrow concerns with science and technology or infrastructure and seeks to understand their multiple and inter-connected needs” (EC 2016 *Implementing S3 – a handbook* p 46).

According to one survey intermediate actors and other stakeholders in Gävleborg perceives the innovation system as well developed and diversified. The innovation system as a whole offers coherent services to businesses in different phases of innovation processes (Kontigo 2016 p 33, 18).

On a regional level however the innovation system is not perceived as coherent system that is accessible to the whole region, which impedes coordination and cooperation. There are also some unclear roles about when an innovator in the region is to be transferred from one intermediate actor to another quality of expertise (Kontigo 2016 p 40, 42-43). There is also a division between local and regional intermediate actors within the innovation system (Kontigo 2016 p 34), which might impede co-operation. Common methods for a more efficient and professional ways of working with innovators are also requested from intermediate actors along with a more coherent vision about what is to be prioritized and what can make the region more unique (Kontigo 2016 p 33).

The smart specialisation strategy was presented in 2017 with its five priorities: material technology and sustainable production, smart sustainable cities and communities, sustainable and inclusive working life, bio economy and digital services and process. The same year the large ERUF-financed project “The Innovation Step” was launched with the aims to create five smart arenas for each of the five priorities. The general idea is that the project is supposed to focus the intermediate actors and other institutions towards the priorities and to create a more coherent innovation system on regional and local levels.

However the responsible strategist, the project leader and the new process leaders in the “Innovation Step”-project for each of the smart arenas have considerable leadership challenges to overcome in implementing the intentions of the project. That involves building relations with the whole existing regional innovation system and introducing new ways of thinking and working with innovation, for example how to organise for the entrepreneurial discovery process (EDP) (EC 2016).

One of the most demanding tasks is to enter the role for a collaborative leadership in “a new role for government”, going from government to create governance with a shared executive power in a quadruple helix context (EC 2016 p 23). Another is to generate and conceptualise entrepreneurial knowledge in each of the smart arenas (EC 2016 p 17). And – for the project as a whole – to create a coherent regional innovation system for smart specialisation.

2.2. Presentation of key findings acquired during the project realisation.

I began my work in August 2017 halfway into the EmplInno-project that started in May 2016. EmplInno made it possible for me to update and expand my previous knowledge about S3. One of the most important parts was the opportunity to trace back the conceptual development of smart specialisation to the roots in for example “Knowledge for growth” (Ptocnik 2009) and central EU strategies. That made me able to prepare the assignments in the project directly connected to the role of S3-expert or as a representative for the collective S3-expertise in Gävleborg. This presentation is about my findings so far, and can be elaborated further if needed.

Much of the study in this paper is based on already existing material, strategies, surveys, papers and ten years of regional development experiences as a senior regional developer leader and other people I have met in the Gävleborg innovation system. I have intimate knowledge about some intermediate actors for example cluster organisations that I have established contact in earlier projects dedicated to cluster development. Through a former interregional ERUF-project (SLIM 2007-2013) in North Mid Sweden, “the seven innovation gap model” was developed and used as multi-tool in different contexts (both a policy instrument and organisational tool in EmplInno). However I only have superficial knowledge about several other actors in the innovation system for example those working with financial issues connected to growth of SME. The opportunities to work in the EmplInno-project has also contributed to enhanced networking with intermediate actors in the innovation system and updated information about what is going on there, especially about the increasing focus on smart specialisation and its connection to cluster organisations.

My/our participation in the EmplInno-project has been very valuable in comparing our smart specialisation strategies and issues for implementation. A general summary is that Region Gävleborg have been working with smart specialisation oriented strategies for a long time which have made an impact especially on the innovation system which is diverse in our region. We have also developed knowledge about collaborative leadership in North Mid Sweden that has been in the frontline of regional development nationally and internationally. The new smart specialisation strategy for Gävleborg from 2017 have made the regional development more formally focused. But the whole regional development organisation needs to take a large step towards cohesion and make proper internal coordination possible to keep the advantages. It is otherwise obvious that other regions will take the lead since several partners in the EmplInno-project have smart specialisation strategies and organisational approaches that will mature and surpass Gävleborg, unless our organisational issues

are being solved. Myself and some other people in Region Gävleborg place some hope in the new organisation for regional development that will move smart specialisation strategy and implementation in the right direction.

In this paper I have attempted to enhance the importance of leadership issues in aiding to solve some of the most urgent issues for implementing the Gävleborg smart specialisation strategy. Several of my key findings and propositions have been suggested by others. However there is a value in highlighting and reinforcing the most important parts until the problems are fully solved. In approaching smart specialisation from a leadership point of view in a successful way will probably create a solution-multiplier effect for many other issues as well.

Two of the most important lessons – connected to each other – are:

- The implications of introducing a new role for government requires new forms of leadership and strategy development (S3). That puts another level of complexity to the already complex political and regional leadership for regional development at Region Gävleborg.
- The complexities that comes with the advanced levels of knowledge, competence, experience and motivation requires extraordinary leadership abilities. There are multiple challenges to handle smart specialisation as a continuous strategy development: to execute a collaborative leadership for creating a continuous entrepreneurial discovery process (EDP) with the business sector and the innovation system, which in itself is a “system- of-systems”. AND to lead and facilitate the perpetual conceptualisation and reconceptualisation of entrepreneurial knowledge in the smart arenas.

The handbook for “Implementing Smart Specialisation Strategies” is very clear that smart specialisation requires “a new role for government” in a transition from traditional government to governance: “the EDP demands that the public sector acts as a platform to enable targeted stakeholders’ interaction and policy coordination” (EC 2016 p 23). That puts even more increasing responsibilities on the regional leadership that often is new to policy-makers (EC 2016 p 23). One example is the new task of risk assessments and decisions needed in the long term collective investments for smart specialisation that breaks the traditional role in the public sector of being a “risk adverse stakeholder” (EC 2016 p 14).

There is also an ambition from the European Commission to put pressure on the regional organisations for a more proactive regional leadership:

“The smart specialization approach is expected to help inefficient regional administrations become accustomed to external connections and be confronted with practices and experiences coming from outside, challenging inertia and clientelism which prevail in locked-in-systems’ (Rodriguez-Pose et al 2014 p 10). Smart specialization is thus expected to be of use not only in constructing a shared vision and pooling scattered resources but also in fixing the problems of poorly functioning governance systems and lack of leadership” (Sotarauta 2018 p 193).

There are large innovation gaps that needs to be bridged if Region Gävleborg is to keep and improve its competitive and cooperative position with other regions (Kontigo 2016 p 32 and The Seven Innovation Gap Model). One gap that has been encountered in the project is to explain why we need another strategy (smart specialisation) along with all the others strategies that Region Gävleborg has (EC 2016 p 51). I have also encountered that there is an unclear notion of what a strategy is and what the purpose of strategies are. To create sustainable ways of working with smart specialisation decision makers need support to understand the consequences of their decisions and for the implementation of smart specialisation (EC 2016 p 27).

The effects of the re-organisation mentioned above have been monitored by the accountant consultant organisation PWC (2016) on an assignment by Region Gävleborg. According to PWC the direction for the regional development is unclear and sense making is lacking between strategies, programs and individual projects (PWC 2016 p 8). The accountants conclude that the “regional steering board should make clear and communicate what it means to lead regional development in Gävleborg” (PWC 2016 p 3, OW translation from Swedish) and they recommend a reconsideration about how the work for regional development should be structured (PWC 2016 p 7). The new organisation for regional development from 01/01/19 is an answer to that recommendation.

Until the importance of smart specialisation is properly communicated and rooted throughout the whole organisation Region Gävleborg working with regional development, there is a serious risk that smart specialisation is going to be marginalised. One reason is the ambitions and complexities in the new role for government in smart specialisation (EC 2016 p 23). Another is the pressure that the European Commission is putting on “challenging inertia” and the multi layers of complexity by promoting smart specialisation strategies that requires new ways of thinking and doing to be handled properly.

The accountants at Region Gävleborg puts an emphasis on a long term commitment on the regional development if Region Gävleborg is to be a leading actor and take a regional leadership that continuously creates a progress in the work with smart specialisation. Otherwise the other stakeholders might lose their heart and confidence in Region Gävleborg (PWC 2016 p 6). The S3 handbook puts a large emphasis on “preserving EDP from political changes or political instability” that risks of “damaging the trust building process” which requires institutional settings with sufficiently flexible structures (EC 2016 s 27, 30). The implications is reflected in a previous quotation as stated under 2.1:

“Political leadership is the most critical ingredient in the S3 repertoire because it creates the capacity to mobilise every other ingredient”
(EC 2016 *Implementing S3 – a handbook* p 40).

Region Gävleborg have not yet created a sustainable organisation for regional development with an active support for implementation of smart specialisation. Although the new organisation for regional development together with the political intentions to prioritise regional development issues, are promising for the future. A sustainable support for smart specialisation enhances the

opportunities to make wise public investments for a more attractive region and a richer regional future.

Some insights into the leadership challenges for implementation of smart specialisation strategies

There are many roles that need to be executed with skill if Gävleborg is to succeed with the intentions of Gävleborgs S3 (see for example “the seven innovation gap model”). One of the most challenging parts is the process leadership for the smart arenas in each of the five S3 priorities. “A key feature of S3 is its reliance on collaborative leadership” (EC 2016 s 117; Sotarauta 2018 p 197).

There are advanced levels of knowledge, competence that requires extraordinary abilities, experience and motivation to execute a collaborative leadership. Multi-level governance networking (EC 2016 p 44; Kontigo 2016 p 5) is a prerequisite to create a continuous entrepreneurial discovery process (EDP) with the business sector and the innovation system, which in itself is a “system- of-systems”. Smart specialisation also needs to be handled as a strategy that develops continuously and also affects other strategy processes. The regional strategies need to be integrated into each other.

One of the most crucial tasks is to lead the perpetual conceptualisation and reconceptualisation of entrepreneurial knowledge in each of the smart arenas. One of the most difficult parts is to get access to relevant entrepreneurial knowledge for the strategy process that is “embedded in a deep sociocultural understanding of leadership and related power and influence systems in a specific place” beyond the “administrative machinery” (Sotarauta 2018 p 199). To be a process leader for a smart arena in Gävleborg is surely one of the most complex roles in the whole field of regional development:

“The many contradictory institutional pressures and conflicts affect development efforts in many ways (Benneworth et al 2017), and understanding how these pressures influence also smart specialisation processes may turn out to be crucial... All in all, by definition, place leaders are actors who have the capacity to organize and reorganize social action with an ambition to change the social networks and institutions framing the factors in which smart specialisation is embedded (Sotarauta, Horlings & Liddle 2012)---

In sum, place leadership is the process of reconciling conflicting and competing interests aimed at generating collaborative advantage and an understanding of the challenges associated with transforming places as well as organizations and capabilities (Trickett & Lee 2010)... (Sotarauta 2018 p 198)”.

Two ways to facilitate the implementation that I advocate is a long term investment in regional learning for smart specialisation and a parallel approach for a long term sustainable organisation for implementation of smart specialisation:

“Reflection and learning: A final characteristic of good governance is the stability that makes learning possible over extended periods of time. Some of the most successful regions in Europe in this respect have been developing innovation policies since the

early 1990s and have gone through several rounds of policy design and implementation”
(EC 2016 p 55).

Smart specialisation is for most people an empty abstraction that is hard to relate to, although it is beginning to receive some attention in the region and also occasionally gets favourably feedback. Some key people in the innovation system welcome Gävleborgs S3 as a more understandable and focused way of contributing to the common development of the region. The way Gävleborgs strategy is written is perceived as accessible for most people interested in the topic. So there is hope – if a long-term approach for learning and implantation of the strategy AND integration of the innovation system is taken. In the end the basis for a regional leadership is continuous dialogue about what is prioritised and not on a strategic level with the key role for Region Gävleborg to manage the financial flows and networks on a national and EU-level (Kontigo 2016 p 44).

2.3 Recommended solutions for improving the RIS3

- *A long-term investment in regional learning for smart specialisation*
- *Long-term sustainable organisation for implementation of smart specialisation*

- **Short description of the solutions**
- *A long term investment in regional learning for smart specialisation:*
“Concepts are needed to organize our thinking and experience” (Harry Nyström, professor of Marketing and Organizations, Institute of Economics, Uppsala, Sweden).
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- In Region Gävleborgs leadership model (2016) the organisation is asserted as a complex, knowledge intensive and subject to change. In S3 and Europe 2020 knowledge is seen as a pre-requisite for innovation. A successful development of an organisation requires reflection and learning. Working efficiently with the implementation of smart specialisation and playing supporting parts requires new ways of thinking and doing and an extraordinary range of interdisciplinary skills. It also requires enlightened decision making that reflects on the consequences of their decisions to take a long-term sustainable supporting role for smart specialisation.

- *Learning regions* is a concept that has received some attention in regional development for over two decades. From that concept I have derived “regional learning for smart specialisation”. In this paper I have arguments for the new and advanced level of the multi-dimensional leadership needed to implement smart specialisation. It is not a quick fix where a couple of lectures or a short course will solve the problem with the lack of knowledge on different levels. Building a learning culture takes time and requires the participants to make personal investments of the professional time in continuous reflection, learning and relearning. It is also necessary for the organisation as a whole to collectively encourage and also to invest in the resources necessary for learning.
- The suggested S3-school in Region Gävleborg within the EmplInno-project can provide a good start, but to create sustainable results and effects for smart specialisation a long-term approach is needed. Together with the monitoring system for smart specialisation proposed by the interregional “Smarta regioner”-project in North Mid Sweden there is an opportunity to create a long-term program for “regional learning for smart specialisation”. A long-term approach can also provide a knowledge foundation for the update of S3 in Gävleborg 2.0 to enhance the implementation process. The learning regions concept can also enhance eventual ambitions for Region Gävleborg to become a learning organisation. A solid knowledge base and learning attitudes also enhances the trust building processes.
- *Long term sustainable organisation for implementation of smart specialisation*
- Several parts of the S3 handbook suggest that a long term approach for smart specialisation is needed for a successful implementation of the strategy. Long term innovation processes and practices requires a long term sustainable organisation for implementation that enhances the regional collaborative leadership for smart specialisation.
- “In sum, the EDP requires a long-term investment in building both mechanisms to prevent the cycle being broken by either political or financial instability, and aspects of the functioning of the public administration” (EC 2016 s 20).
- “Preserving EDP from political changes or political instability The EDP requires trust across stakeholders, which is a lengthy and laborious process that should be protected from sudden political instability.
- As for the public sector, the governance system should devise ways to ensure that the outcomes of stakeholders’ interaction are embedded in the policy process in a robust way, whereby political changes – rather than damaging the

trust building process – are in a position to embrace them in their new agenda” (EC 2016 s 27).

- ***To create a sustainable organisation for S3 a wide array of initiatives are needed:***
- *** At least one regional politician is required to follow the development and implementation of smart specialisation to gain deeper knowledge to enhance enlightened decisions.**
- *** Two assembly meetings every year for the whole innovation system:**
Through the EmplInno project Region Östergötland have answered with a suggestion to our problem in Region Gävleborg in coordinating and integrating our whole innovation system to work as one entity towards the business sector. Region Östergötland have arrangements where the whole innovation system meets twice every year. Together with the informal and formal meetings in between those two large assembly meetings with each and every one of the intermediate actors, Region Östergötland have the notion that the innovation system is properly coordinated and integrated. The assembly meetings are also something that is requested from many intermediate actors in Gävleborg to gain knowledge about each other and to enhance the proper flow of information between the intermediate actors (Kontigo 2016 p 31). This approach is being embraced and on its way to be implemented in the project “The Innovation Step” in Gävleborg.
- *** A long-term approach to the mission of “The Innovation Step”.** I perceive the project to be right in design but not in the time span for the purpose and all the goals in the project. It is important that realistic expectations are set beyond the project finance to 2021. A more proper long-term time frame could be that the smart arenas are properly established by 2027 along with an integrated innovation system. The resources needed to reach the goals should be thoroughly assessed with each step into the project applications e.g. 2020-2023, 2024-2027 etc.
- *** Integration of Gävleborgs strategy for smart specialisation in the mainstream of the new general regional development strategy (RUS) for Gävleborg.** Today the efforts to enhance the business sector and smart specialisation are marginalised in general regional development. However regional development is receiving more attention from the political level and is supported with an improvement of the organisation structure. Hopefully smart specialisation is going to receive proper attention in the new political period 2019-2022.
- *** Internal multi-level governance system for smart specialisation within the organisation for Region Gävleborg** (Swedish: intern flernivåsamverkan): In the new large organisation of Region Gävleborg with 6.500 employees and with the regional development work scattered on several places in the organisation, the internal

coordination problems needs to be handled. One way to facilitate the implementation but also to reinforce the trust building process is to introduce internal multi-level governance system where all internal hierarchical levels are present at the same time so there can be a real fusion between professional knowledge and enlightened decision making. That could be one cure against the lack of opportunities for communication between the political level and officers (PWC 2016 p 6) and also a way to enhance trust building in the organisation. Region Gävleborgs way of working and organising external reference groups in the electrical road systems-project is a good example that can be used.

- * **The concept of “sustainability” has important potential for further development:** By adding the dimension of implementation in the sustainability concepts the results and effects of regional development initiatives can be enhanced. The new conceptualisation should include a regular assessment of the organisational conditions for smart specialisation e.g. structure, process and organisation culture. Ultimately the concept can be beneficial for the whole sustainability concept.
- * **One useful model for sustainable organisation is the “Sustainability chain for regional projects”** that is also viable for assessing programs. To create sustainable results and effects the projects requires: Active ownership – Demanding financiers – Professional direction of the initiative in relation to strategic purposes and operational goals – Competent leadership and management – Dedicated participants – Involved target group(s) (Brulin & Svensson 2011 p 24).
- * **Long-term finance planning for the intermediate actors in the innovation system:** There is also a request from intermediate actors for a more long-term approach to the finance of the innovation system. Short-term projectification of long-term innovation processes is perceived as a threat for a sustainable professional innovation system. There is an immediate risk that it creates unwanted irregularities, unnecessary uncertainty and wasted work on administrative tasks where the work could have been invested in the innovation processes instead (Kontigo 2016 p 34). The short-term finance of intermediate actors also weakens the attraction for proper competences for very advanced tasks that requires long term learning and execution.
- **Regional implementation process**
 - *A long term investment in regional learning for smart specialisation*
 - A strategic discussion is needed about how regional learning can be organised. The initiative also requires additional resources after the EmplInno-project, although parts of it can take place as an ordinary task in different coordinated roles. The new monitoring system for smart specialisation is an example of an ordinary task that can be enhanced by regional learning.
 - *Long-term sustainable organisation for implementation of smart specialisation*

- Additional resources are required after “The Innovation Step”-project to transform the efforts into a sustainable organisation of the innovation system. Some of the ideas presented above also need a thorough discussion from a strategic perspective. The conceptualisation of sustainable organisation integrated in the sustainability concept needs some strategic anchoring on several levels.

- **Determination of policies and operational program which are addressed by the implementation of the recommended solution:**
 - *A long term investment in regional learning for smart specialisation*
 - Involved strategists and decision makers, coordinated with the monitoring system for smart specialisation.
 - *Long term sustainable organisation for implementation of smart specialisation*
 - Involved strategists, the project group for “The Innovation Step” and decision makers.

- **Costs and funding sources:** To be assessed and discussed. Short term finance of some limited initiatives exists already.

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