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**Negotiating Place-Based Regional
Development Policy:
Multi-Level Governance and Institutional Isomorphism in
RIS3 Implementation within the Eastern and Southern
Netherlands**

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ABSTRACT

This research has explored the role actors from various scales have in the production of Research, Innovation and Smart Specialisation Strategies (RIS3) in the Eastern and Southern Netherlands through its multi-level governance framework. This could be worrying, as the influence from higher-scale actors could weaken RIS3's ability to create place-based programmes. In order to gain an understanding of the ways in which place-based policymaking within RIS3 is impacted by the multi-level interactions between policymakers and stakeholders, this research has employed the concept of isomorphism. This concept allows for systematically assessing whether different institutions and policies move towards a singular shape, thus decreasing place-based policymaking in favour of one-size-fits-all policymaking.

Through interviews with consultants from all consultancy agencies involved in the policymaking process and programme managers from all regions, as well as analyses of the RIS programme documents. This research has uncovered the assumptions, negotiations, and deliberations which create the amount of space for local needs and strengths to be represented within the policymaking process in two relatively peripheral, yet innovative, regions.

This research has shown that, through ideas surrounding acceptable types of innovation, strict funding requirements, and attempts at aligning the programmes with EU-wide or national innovation chains, coercive and normative isomorphism are driving forces behind the general shape and direction of RIS3 programmes. Furthermore, a limited variety of local actors and temporal isomorphism, through a continuation of prior policy, are the main factors behind place-based policymaking, and outreach towards non-regime level industries is limited. As a result, not all areas of the regions can be incorporated in the programme. Furthermore, part of the funding goes to introduced industries, and support to existing specialisations is lacking at times. These issues partly seem to stem from incomplete communication and unclear power relations within the multi-level governance, as well as insecurities regarding funding.

Key words: RIS3; Multi-level governance; institutional isomorphism; place-based policymaking

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1. INTRODUCTION

1.1 Research aim & Relevance

This research explores the policymaking and policy-implementation processes within Research and Innovation Smart Specialisation Strategies (RIS3) at the NUTS-2 level. Specifically, it aims to uncover the assumptions and influences within the decision-making process, which shape the RIS3 programmes, through the perspective of RIS3's multi-level governance framework. Through this central goal, the research hopes to understand part of the dynamic between bottom-up and top-down planning practices, and the ways in which policymakers play a role in facilitating and negotiating the representation of local needs.

RIS3 is one of the EU's current major programmes for economic development and innovation capacity (European Commission, 2023; Wigger, 2023). Herein, RIS3's unique element mainly lies within the perceived ability to create regional development, by means of building from existing regional strengths (Foray et al., 2009). The programme is supposed to do so through an understanding of local needs, and placing them within a flexible EU-wide structure to allow for subsidisation and strength through numbers. This inclusive, multi-level and interactive horizontal governance is achieved through Entrepreneurial Discovery Process (EDP) which should allow for collaborations between all relevant local stakeholders -not only the strongest ones (European Commission, 2023). However, the programme aims to achieve this sustainable growth during a period of polycrisis with, amongst others, geopolitical turmoil, changing industrial dynamics, arising environmental issues, and furthering digitalisation of the working environment (Andrade & Paiva-Silva, 2026; Harding et al., 2021; Wigger, 2023). Ineffective investments in regional economies could gravely impact the long-lasting economic prowess and quality-of-life of regions throughout the EU.

Improperly building upon existing regional strengths could lead to a lack of sticky investments -which is especially likely in left-behind regions, as they have less capabilities available to them (D'Adda et al., 2022). Focusing too much on existing industries could lead to blind spots in the product space driving future innovations, specialisations and the broader future economy (Boschma, 2025). Hence,

the effectiveness of RIS3 to achieve sustainable regional development should be under constant scrutiny, especially the ways in which it balances local needs with EU-demands. Therefore, the aim of this research is to understand how the multi-scalar influences impact the acceptable trajectories for regional economies.

1.2 Problem indication & Scope

Given RIS's position as the EU's main regional innovation programme, RIS3 is a current key driver behind European regional (economic) development (Storonyanska et al., 2021). It places an emphasis on producing sustainable development -economic, social, and ecological-, while aiming to provide this long-term stability within all regions of the EU. RIS3 does so by utilising local strengths as the basis for individualised policies (Foray, 2014). As such, RIS3 needs to develop itself on the basis of institutional support to local actors and their understanding of innovation achievable within their capabilities (Benner, 2019). However, contrasting the accompanying need to utilise bottom-up planning principles, RIS3 exists within a top-down structure due to multi-level funding structures and the common identity of all RIS3 programmes.

The resulting dynamic could have significant consequences for the attainability of RIS's goals. Locally supported policies can create a suitable environment for all embedded industries to build and develop themselves from, whereas policies developed at higher scales could misalign with the existing industrial ecosystem and lessen the potential for sustainable growth (Benner, 2019; McCann et al., 2016). Yet, higher scale policies can be produced more thoroughly -due to a relative abundance of resources-, and can create growth by advancing EU-wide developments, which are less likely to arise in regional policies due to the lower amount of resources present within the institutions (Benner, 2022). As such, this research is not arguing for either option. Instead, this thesis merely assesses the policymaking and policy-implementation processes, to understand the drivers behind the direction real-life RIS3 has taken, and discuss the implications this might have. As such, this thesis places itself in line with RIS3's development towards RIS4. An updated programme with an increased focus on policy processes (International Urban and Regional Cooperation, 2023). Given this discrepancy between reality (RIS3 with RIS4 elements) and theoretical aims (RIS4), the programmes are further described

as RIS, unless a more specific denunciation is relevant. The discussion is done with less capability-rich regions in mind, as RIS is specifically developed to allow for growth in *all* regions and potentially bring interregional convergence.

This is achieved by mapping the policymaking process surrounding the design and implementation of the RIS programmes of the Eastern and Southern Netherlands (Figure 1). These regions remain largely lacking in dedicated research. Furthermore, the regions have interesting compositions and positions. The Eastern Netherlands largely functions as a relatively peripheral region with risk of decline, yet it manages to create continued growth in the agricultural and manufacturing industries through highly innovative SMEs (De Pater,

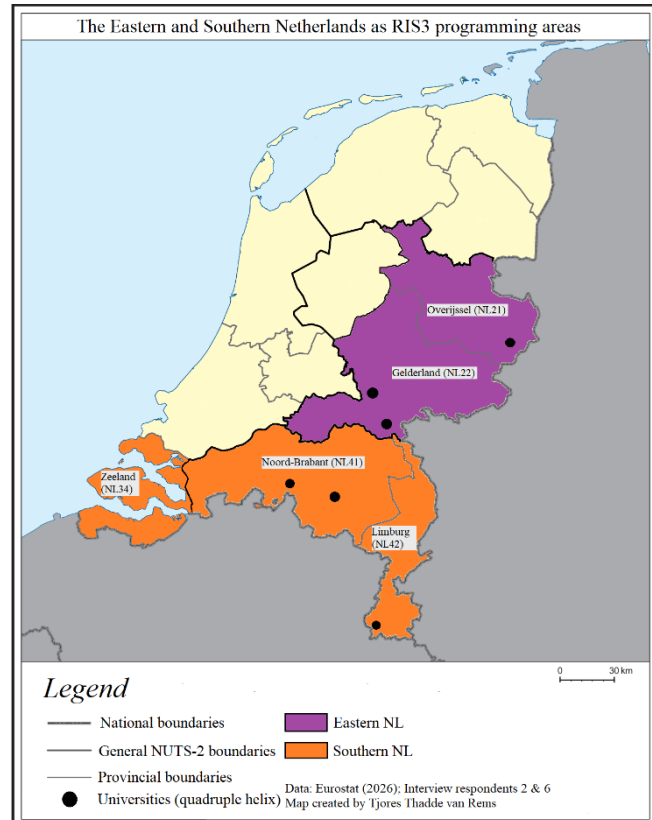


Figure 1: Map; general overview of the case study areas

2019). The Southern Netherlands, meanwhile, has a largely similar industrial history. However it largely did not manage to overcome industrial lock-ins and decline within two of its regions (with low-innovation government reliant activities as a result), while playing a key role in European Strategic Autonomy through various highly innovative and unique enterprises -such as ASML (De Pater, 2019; van den End & Huyn, 2022; van Meeteren & Smit, 2025). Both regions play a remarkable role. Neither region can commonly be considered a core-region relative to the national context, yet they have consistently become global innovators (De Pater, 2019; Pugh, 2025).

This research investigates the regions' RIS programmes through interviews and document analyses, this research engages with the formal and informal aspects of the policymaking process - guidelines, goals, or regional identities, for example-, as well as the way in which this process crystallises into real-life policies and implementations. To align with the research aim, these analyses

focus on the importance of actors from various levels of RIS's multi-level governance framework. The results have been presented through the lens of isomorphism. Isomorphism within this research denotes institutional convergence and could help understand the drivers behind RIS programmes' ability to coalesce in its shape or substance. Hence, within this research isomorphism is operationalised as a way to understand whether and how policies are pulled into an interregional mould. As such, the results uncover and organise the effects of various levels of the multi-level governance framework, while highlighting the possibility for RIS to produce place-based growth and EU-wide goals.

1.3 Introduction to the literature & theoretical contributions

RIS as a whole has been researched relatively often. In general, many researches primarily focus on the implementation and results of RIS (Rosas Rodríguez et al., 2023). Oftentimes, this has been done in order to highlight the effects of evolutionary economics or RIS in practice. For instance, changes in the labour market, amount of patents, types of innovations, or change agency, have been observed a number of times (Ferreira et al., 2026). Moreover, a critical stance is often present in this effect-side RIS-literature (Benner, 2020; Ferreira et al., 2026; Hassink & Gong, 2019; Rosas Rodríguez et al., 2023). There is often a consideration whether smart specialisation achieves growth in all regions, specialises or diversifies, allows for other types of innovations, or is actually 'smart'.

However, this common critical stance also applies to the (in)ability of RIS to overcome the shortcomings of the literature from which it pulls. Some relevant themes within these criticisms for this research arise in this. There is traditionally an overrepresentation of high-capability and successful regions in the underlying theoretical framework, which could misshape the ideas of growth in less successful regions (Benner, 2020; Hassink & Gong, 2019; Phelps et al., 2018). This overrepresentation of a select group of regions to shape the future of RIS is also present in the literature engaging with the effects of RIS itself -a large number of cases take place in Portugal, Poland, the Baltics or the Nordics (Lopes et al., 2019; Rosas Rodríguez et al., 2023). Furthermore, institutions -the backbone and identity of regional economies-, are often considered a black box and its internal functioning remains poorly understood (Benner, 2019, 2022). This could be a significant shortcoming, as RIS functions as an

institution and is shaped by a complex network of multi-level institutions, as well as local informal institutions.

Within the RIS literature there is a seemingly less sizable literature which looks into this multi-level governance perspective. However, this literature appears to focus almost entirely on the dynamics of the multi-level governance framework or the RIS policy-advancements on an EU-level (Lepore & Spigarelli, 2018). This is quite important, as it furthers an understanding of RIS's functioning, which according to the EU's most recent report on its governance framework remains 'fraught with several problems and challenges (Guzzo & Gianelle, 2021, p. 27)'. This largely is said to stem from uncertainties and unclarities within the communication between actors and their respective roles or expectations. Yet, importantly, this literature rarely seems to cross-over into the effects-side of RIS.

One recently theorised method of bridging this gap -thus understanding how the institutional black box in RIS-impacted economies are shaped by and shaping regional development-, is by analysing RIS's policy processes through isomorphism (Benner, 2022). This concept specifically focuses on understanding how institutions (or policies, in this case) get pulled closer together in shape and execution. This would allow for an understanding of both multi-level governance dynamics, and the ways in which it allows for the bottom-up approach inherently necessary to the originally conceptualised functioning of RIS. However, this concept is primarily used to understand entire institutions. Hence, it could be ill-equipped to understand the programming period-based functioning of RIS.

Therefore, this research aims to create a number of contributions. Firstly, it aims to expand the RIS literature in regions which remain largely without dedicated case study research; the Eastern and Southern Netherlands. This allows for an understanding of non-core successful regions, and an in-depth knowledge of these respective regions' isomorphic processes. Secondly, this research bridges the gap between the production-side and effects-side literatures of RIS, in order to further the understanding of the role and dynamics of institutions in regional economies. Thirdly, this research hopes to be an early contributor to the understanding of isomorphism within RIS policies, and with it help further the literature on the dynamic balancing between place-based and generalised policy-making in RIS. Lastly,

this research utilises the idea of temporal isomorphism to include isomorphism through the internal continuation of policies. This addresses a gap present when implementing isomorphism into a policy-context.

1.4 Research questions

Given the underlying purpose of this research -examining the impact policy isomorphism has on the effectiveness of RIS policy on regional economic development, and the degree to which policy has been produced through a place-based perspective-, this research aims to explore the impact of multi-level governance isomorphic pressures on NUTS-level 2 level policymaking and policy implementation. Furthermore, this thesis aims to consider the effects these processes may have on the sustainability of growth created through the support of RIS, on a regional and EU-level. To this end, the research attempts to answer the following questions:

MRQ: How do multi-level governance pressures shape policy isomorphism in RIS implementation in the Eastern and Southern Netherlands?

SRQ1: *Through which multi-level governance mechanisms and power relations does policy isomorphism emerge in RIS, and what forms does it take?*

SRQ2: *Which regional growth trajectories are articulated in RIS policy documents, and how are these influenced by patterns of policy isomorphism?*

SRQ3: *How much space is available to integrate local initiatives and interests into the implemented RIS policy, and how do policymakers decide how and with whom this space can be filled?*

The research questions allow for this research to achieve its main goal of understanding some of the ways policy isomorphism is shaped within RIS policy. This is achieved through the main research question, which shows the ways isomorphism is created. Furthermore, the research questions allow for this understanding of policy isomorphism to be used for to the research purpose of examining the effects of isomorphism on the sustainability of regional and EU-level economic development.

Sub research question 1 aims to mostly support the research goal, by showing the power relations present in RIS policymaking, and understand the ways in which power relations can create isomorphic movements. Sub research question 2 further aims for an understanding of the regional industrial trajectories projected onto the region through multi-level governance, by discussing the effects of isomorphic processes on place-based policymaking. Lastly, sub research question 3 aims to highlight the ability of RIS to achieve its original goals, by examining its ability to include a complete and flexible image of regional economies. Together these research questions help create a comprehensive understanding of the ways in which the implementation of RIS policy is shaped by multi-level pressures, while allowing for the effects of these pressures on the sustainability of regional economic sustainability to be discussed critically. Furthermore, they allow for adding policy isomorphism into both the RIS literature.

1.5 Reading Guide

This remainder of this paper is written according to the following structure. In chapter 3.1, the theoretical regional economic background upon which RIS is built is briefly discussed. Particular focus is given to the interactions between various processes and concepts, and the way RIS would ideally hope to interact with them. Then, in chapter 2.2 the practical reality, such as its effects on regional growth and governance processes, is discussed, followed by an introduction to the ways in which policy isomorphism is created in chapter 2.3. In chapter 3 the methodology of this research is described, as well as a short introduction to the case studies. In chapter 4.1 an in-depth analyses and overview of the RIS policy and the functioning of the case studies are given. Then, in chapter 4.2 results from the case studies are analysed by theming them through multi-level governance actors. In chapter 5 these influences will be critically discussed on the basis of chapter 2 with a focus on understanding and grouping isomorphic processes, and concluding remarks and criticisms on this research are given in Chapter 6.

2. THEORETICAL FRAMEWORK

This theoretical framework gives an understanding of the potential processes which drive the research questions. It provides an understanding of the concepts used to create RIS, as well as the effects of RIS policy, and the relations between these concepts. Furthermore, it clarifies the research contribution of this thesis.

The above is achieved in the following manner. First, an exploration of RIS is given, and its views regional development are briefly discussed. This section provides an understanding on the functioning and results of RIS, and helps answer sub research questions 2 & 3. Second, an insight into the effects of RIS programmes through Europe is given, to understand the real impact of RIS as well as find common shortcomings of RIS. This benefits the methodology and critical analysis of this research, while providing support for sub research question 3. Third, an insight into the multi-level governance processes shaping RIS is provided, which helps answer sub research question 1. Lastly, a conceptual explanation to the relationship between the forces driving the production of RIS programmes, and the effects that RIS programmes have is given in the shape of isomorphism. Furthermore, this will help answer sub research questions 1 & 2.

2.1 RIS's understanding of regional development

2.1.1 The RIS programme

This first section of the theoretical framework delves into the objectives of the EU's *Research, Innovation and Smart Specialisation Strategies* (RIS). Furthermore, a general overview of the functioning of the RIS is given.

Within this research, RIS is considered an operationalised EU policy-strategy of the theoretical smart specialisation or Smart Specialisation Strategies (S3) ideals (Barzotto et al., 2020). This set of ideals has been the leading EU regional development fund since 2010-2014, by slowly replacing prior programmes with a focus on introduced industries and infrastructural investments (Dall'Erba, 2003; McCann & Ortega-Argilés, 2021). Since 2014 producing an RIS has been first an ex-ante conditionality, then an enabling condition for regions to access European Structural and Investment Funds (ESIF), and

currently the project is nearing the end of its second programming period (2021-2027) (Capello & Kroll, 2018; Foray, 2026; Kyriakou, 2017). This has marked a complete shift to place-based regional development, due to RIS's adherence to the following three goals: localisation, prioritisation, and participation (European Commission, n.d.). Within the original conceptualisation of S3, this is to say that EU regional development funding should build upon local existing capabilities, concentrate on a select collection of industrial or technological areas, and be co-developed with local quadruple helix actors (public sector, public sector, research institutions, and civil society) (Foray, 2009, 2014).

At request of the EU, the Knowledge for Growth expert developed the idea of smart specialisation on the grounds of supporting local growth in a horizontal manner by leveraging theories from, amongst others, evolutionary economic geography, innovation studies, and multi-level governance studies (Foray et al., 2009). This resulted from the need to create locally conducive and far-reaching growth in *all* regions. Smart specialisation proposed to achieve this by spending resources on developing local capabilities; embedded technologies, (tacit) knowledge, connections, institutions, and more. As such, the resulting S3 and RIS demand for EU regional development programmes which are integrated with the local societies and embedded within local industrial strengths, and aims to create both socially and economically sustainable growth -through a logical evolution of local economies across the entire EU-zone.

Within this perception of regional development, the three main goals of RIS make sense. RIS believes that growth can come in all regions if bottom-up place-based policy principles are followed. Development arises from adhering to the existing economic base, and the ideal policy is created by those involved within this ecosystem. The prior one-size-fits-all policies no longer fit the bill, and top-down planning principles could undermine RIS's strengths.

A simplified overview of this evolutionary perspective on regional growth is given in section 3.1.2.

The S3 ideal has crystallised within the RIS framework. In this system, the main policy-actors are at the NUTS-2 level (or NUTS-1 on smaller countries) (Foray, 2014; Kyriakou et al., 2019; Moodie et al., 2023). These policymakers create comprehensive subsidisation, implementation and monitoring

programmes for every programming period of seven years, and the resulting projects are co-funded by the EU and regional governments (50% from both institutional levels). In order to adhere with the bottom-up planning principles, policymakers are supposed to be flexible in the details of these programmes, and only have to adhere to a general EU structure for funding purposes. These programmes are made in collaboration with local actors, and should prioritise their economic and social needs. Partially, this collaboration with local actors is assured through dialogue with local actors. Moreover, the RIS policymakers perform an Entrepreneurial Discovery Process, which is an analysis that highlights the local specialisations and strengths to focus on -yet creates an emphasis on regime-level industries (Hassink & Gong, 2019).

However, despite this flexibility, the EU has promoted a direction for the innovations to take. Namely, there is a preference towards entirely new innovations, and technological and procedural innovations, as well as a demand to include ecologically sustainable and digital technologies into account (Di Cataldo et al., 2022; Gianelle et al., 2018; Marrocu et al., 2023).

Aside from the three main RIS-goals, the current programming period has added an additional goal. Namely, RIS is supposed to strive for good governance. This largely entails a need for professional RIS policymakers and policy-implementers (programme managers) & monitoring committees, as well as formalised co-operation with local stakeholders in the policymaking process. Amongst others, this additional goal has started the gradual transition from the prior RIS3 programme to the RIS4 programme (International Urban and Regional Cooperation, 2023). Given this transitional period, this thesis calls the programme RIS, with exception for literature specifically on RIS3.

The simplified governance processes surrounding the production of RIS is discussed in section 3.2.2.

2.1.2 Regional development through RIS ideals

This section describes RIS's understanding of regional economic development, a simplified logic of place-based evolutionary economic sustainable growth, and the role RIS believes to play within this.

Prior EU regional development programmes believed that regional growth could be achieved through means of introducing, amongst others, technologies, infrastructure, governance systems, or industries into a region (Shearmur et al., 2016). While this approach can lead to positive effects, many regions were seemingly consistently unable to support these additions to their economic ecosystems (Boschma, 2014; Foray et al., 2009). Within smart specialisation this has been conceptualised to be a result of the regional fit of the policies. Regions which have capabilities aligning with the element introduced by the policy have a higher chance of finding the element 'sticky', as a number of inhabitants has (tacit) knowledge and familiarity (Boschma, 2025; Hidalgo et al., 2018). Through this principle of relatedness, it becomes understandable that one-size-fits-all policies do not have similar levels of impact in all regions (Ortega-Argilés, 2022; Tödtling & Trippel, 2005). Instead locally embedded regional development policies could be more effective -especially for those regions which do not align with international myths on innovation.

In order to achieve this, RIS has to understand the local economic structure. The idea being that growth will be more likely to arise when the policy fits with the regional capabilities. As such, RIS performs the Entrepreneurial Discovery Process (EDP), and discusses with stakeholders, to 'discover the research and innovation domains in which a region can hope to excel' (Foray et al., 2009, p. 2). Thus allowing for RIS to invest in the strengths of the less capability-rich regions, and potentially spur development (Kim et al., 2024).

By performing the EDP, policymakers hope to understand the regional innovation System, or the entirety of the interactions and networks between actors within and outside of a region, and their potential for leveraging existing industries and capabilities within these interactions (Asheim et al., 2016). As such, it becomes possible to develop a complete image of not just the ecosystem enterprises depended on for past development, but also the potential collaborations or additive knowledge and

technologies which could drive future development. Through this knowledge, policymakers can assess what the opportunity space is -possible future regional economic structures and specialisations-, as well as through which agentic processes to broaden the opportunity spaces with the least resistance (Grillitsch & Sotarauta, 2020; Matti et al., 2025). Hence, by understanding the regional innovation system policymakers can design a subsidies which help generate a regions' viable future trajectories (Asheim, 2019). In theory, this approach allows RIS to provide support for both consistently growing regions, and regions where regional development policies have a lower chance of thriving; RIS creates policy focused on related diversity in all regions.

However, the main goal is not merely economic growth, but economically and socially sustainable regional development. A primary way of achieving this within RIS is through specialising. A comparatively advantageous specialisation allows for regions to have a more stable and profitable international position, as the regions is positioned at a dominant position against competitors (Kemeny & Storper, 2015). However, as specialisations are likely to falter through complacency or industrial decline at some point, a focus on specialisations brings risks (Kemeny & Storper, 2015; Mastroeni & Rosiello, 2016). This is especially true as regions are likely to undergo a lock-in through over specialisation. As an industry grows stronger and more dominant, it garners a larger part of the regional identity -tightening opportunity space-, creates higher-paying jobs, and becomes more entrenched into social and political live. Accordingly, large amounts of (dwindling) resources are spent on supporting the dominant industry, and other industries cannot create a foothold; the region is in a self-reinforcing lock-in (Hassink, 2016; Hassink & Kiese, 2021; Newey & Coenen, 2022).

RIS could help regions avoid this. Instead of singularly deepening a specialisation or introducing new, unrelated, diversification, RIS can bring related diversification. Through the EDP RIS policymakers can identify a plethora of viable trajectories -by having a similar position in the product space (Heimeriks & Balland, 2016)-, and support a broad variety of them. As such, focusing on spill-over effects, collaborations and upgrading prior industries are central strategies to the RIS programmes (Boschma, 2025). While this could lead to social disruption due to creative destruction, related diversity is both viable and sustainable (Malerba & McKelvey, 2020; Rotaru, 2015). When one of many

industries withers, others keep their space and thrive (Chu et al., 2026). Furthermore, as all related diversifications are building upon the bases of existing industries -by directly diverting within the same industry, utilising business connections, or repurposing technologies, knowledges, or infrastructures already present in the region-, related diversifications bring similar benefits as specialisations.

RIS's impact largely depends on another aspect of the regional innovation system (Benner, 2019). Namely, institutions, which shape the underlying rules and foundations shaping the interactions and beliefs of the regions (Gong & Hassink, 2019). On the one hand are formal institutions, public actors and regulations create a predictable environment. On the other hand, there are informal institutions, which are the unspoken rules and values shaping everyday (economic) interactions. In turn, both of these institutions create the ability for RIS policies' aims to take effect, as they shape the willingness for collaboration or innovation, and the ease-of-use for RIS subsidisation to take hold (McCann et al., 2016; Papamichail, 2019). However, it is also important to realise that RIS itself is a negotiation between the two types of institutions (Benner, 2019). As a bottom-up policy with a focus on collaborative governance, it is a directly produced formal institution created by, and reshaping the region's informal institutions.

In short, RIS aims to understand and impact the system by which it was created. It does so by examining the regional innovation system, as well as the opportunity space. In turn, it aims to strengthen a variety of viable trajectories. This would allow for RIS to support both the region's specialisation and related diversification. Eventually, this could help regions avoid, or even exit, regional lock-ins, and bring both economically and socially sustainable long-term growth to all types of regions. These benefits only arise from the bottom-up place-based policy making RIS strive for. It is supposed to differentiate RIS from many prior regional development policies, which put a larger emphasis on introducing processes and technologies. However, as chapter 2.2.1 will show, the ability for RIS to build on existing strengths and not confine itself to wider innovation trends is oft criticised.

2.2 The practical reality of RIS3

2.2.1 Effects of the RIS3-programme

This section aims to showcase the effectiveness of the RIS-programme as a whole, by highlighting selected literature assessing various RIS's first programming period's (RIS3) effects on individual regions and macro-level analyses on RIS effects. This is followed by a short discussion on the ways RIS has handled the concepts from chapter 2.1. In contrast to all other parts of this research, this discussion will mostly centre its discussions on the actual effects of RIS3 and S3 on the 2014-2020 programming period, as this period has had the ability to create impacts and has accumulated a comprehensive literature. The current period of S3 2.0 has only started programming and funding in recent years, thus does not have complete evaluations of its economic impacts yet. However, this research remains aware that part of the results could be outdated, and actively considers the adjustments made to RIS3 within the remainder of this research.

Notwithstanding heavy criticisms on its policy processes, the ability of regional governments to consistently align itself with RIS3-aims, and the broadness of the possible eventual industries supported within regions, RIS3 has generally been lauded as a success by the EU. This conclusion is consistently made within EU-reports, EU-aligned research projects, and individual research (European Court of Auditors, 2020; Ferreira et al., 2026; JRC, 2021; Rigby et al., 2022). Hence, the S3 approach, has been researched extensively from a plethora of non-EU regions, and similar programmes have taken root in, among others, Australia, Morocco, and Norway (Andrade & Paiva-Silva, 2026; Boumahdi & Zaoujal, 2025; Kristensen & Pugh, 2023; Veldhuizen & Coenen, 2022).

On average, regions participating in the RIS3-programme have seen a significant increase in productivity, through a variety of process innovations and local collaborations present within many RIS3 policies (Kruse et al., 2023; Rocchetta et al., 2022; Vinko et al., 2023). As such, equity and quality of employment has likely risen as well. Similarly, a large loss of unexploited related diversity can be found within most regions (Marrocu et al., 2023). This shows a great amount of success in the ability of RIS3 to motivate regions to diversify, while finding a balance between the drawbacks of

unrelated and related diversity, as well as a good understanding of regional perceived opportunity spaces (Boschma, 2025; Kim et al., 2024).

In line with this result, RIS3 has likely greatly supported the ability for the EU's eastern regions to develop towards new service industries, while allowing for the EU's older member states to start re-industrializing by diversifying towards related 4.0 industries (Kudelko et al., 2022; Wigger, 2023). As such, following the logic from 2.1, many regions have temporarily avoided lock-ins, while finding sustainable economic growth. This is mostly achieved by introducing new technologies and networks through triple helix relations, the large degree of policy flexibility -thus bottom-up adaptability-, and fostering trust towards R&D expenditures in otherwise risk-divergent firms (Aksoy et al., 2022; JRC, 2021; Kogut-Jaworska & Ociepa-Kicinska, 2020). Accordingly, EU-wide patterns on heightened patenting, diversity, (Montresor & Quatraro, 2020)

Furthermore, has deeper impacts than direct economic growth. Such as the data resulting from the EDP serving improving wider governance processes, hence improving the quality of institutions and likely improving future trust in institutions (Masana & Fernández, 2019). Similarly, environmental sustainability has been improved by focusing on environmentally sustainably embedded industries, and supporting green technologies (Harding et al., 2021; Kruse, 2025). As such both the average GDP, employment and quality of life has been improved through the bottom-up diversification provided by RIS3 policy (JRC, 2021; Rigby et al., 2022; Vinko et al., 2023). Hence, RIS3 has been able to support RIS3s by performing EDPs, to understand the unexploited related diversity, expand perceived opportunity spaces, and search for those aspects to introduce to allow for diversification. As such, RIS3 has seemingly been able to find a balance between multi-level pressures and supported bottom-up processes.

However, this generally positive influence of RIS3 on economic, social and environmental sustainability is not common within the research community. The benefits are not shared within all regions, nor does RIS3 overcome many of the shortcomings within evolutionary economic geographic literature or its lacking understanding of institutions. Perhaps most worryingly, RIS3 policymaking and implementation oftentimes takes place with limited technical staff, which gets smaller at a similar

rate to the population and economic prowess of a region. Combined with a natural shortages of capabilities -thus viable opportunities-, peripheral and low-capability regions have experienced continued lagging growth. Where these regions have found increased diversification, GDP growth, and labour and class equity, the rate of this has been far lower than within central cities (Antonelli et al., 2023; Hassink & Kiese, 2021; Madeira et al., 2021; Marrocu et al., 2023; Wigger, 2023). This continued divergence stands in contrast to S3's original growth of allowing convergence after eras of regional economic development policy based upon unrelated diversification, which is less likely to stick in low-capability regions (Rigby et al., 2022).

A potential reason behind this is the continued focus on introducing technologies for upgrading (Antonelli et al., 2023). This allow for somewhat related diversification, leading to less focus on purely building from existing industries (Aksoy et al., 2022; Wigger, 2023). As such, a call is being made to improve on governance processes surrounding the amount of support RIS3 policymakers are able to provide, and the length to which they can do so (JRC, 2021). In turn, this would lead to strengthening the EDP -which was supposed to be at the centre of RIS3. Currently, the EDP shows inadequacies within the depth and broadness of networks and capabilities it identifies, due to a lack of funding and resources. In turn hurting their ability to perform empirical work and conceptual grounding of institutions within them (Esparza-Masana, 2022; Kristensen et al., 2023; Marrocu et al., 2023). Furthermore, due to the bottom-up aims, EDP has a conceptual vagueness, which leads to a lack of support for policymakers. This results in high policy experimentation, but also a lower chance of successful EDP-analysis (Esparza-Masana, 2022; JRC, 2021; Mütter, 2022).

Interregional networks have regularly been supported in RIS3, due to their role in the value chain and GPNs to which regional specialisations belong, and the ability to build upon similar RIS3 supported industrial developments in other regions (Asheim & Grillitsch, 2015; Ghinoi et al., 2021). However, these networks, and especially their ability to -in some cases- supplement local capabilities in open innovation processes, has not yet reached its full potential in RIS3 policy (Ghinoi et al., 2021; Grillitsch & Nilsen, 2025). This is largely as a result from the lacking EDP-analyses and theoretical understanding of institutions (Esparza-Masana, 2022; Marrocu et al., 2023). In turn, this leads to a

further divergence and worsening diversification abilities in low-capability regions (Asheim & Grillitsch, 2015).

In short, RIS3 has created tangible and significant developments towards not just growth, but also sustainable growth throughout the whole EU. Through a plethora of methods, mostly related to collaborations and technological introductions, RIS3 has provided GDP growth, higher social and environmental quality, and a surge in diversification. This progress has largely been made through bottom-up policies and improvements to the RIS3s of regions. However, the development process has been far slower in low-capability regions, and their growth has been less sustainable. This largely comes as a result of low levels of institutional support and understanding of the EDPs. As a result, these regions still have not broadened their perceived opportunity spaces to the desired level, and the creation of new capabilities has been hindered. As such, despite the immense success of bottom-up processes, these have not gone far enough in all areas of RIS3 policymaking and implementation, while the respective policymakers do not receive enough higher level institutional support as well.

2.2.2 (Multi-level) institutions in RIS

This section provides an understanding of multi-level governance (MLG - within this thesis, this concept describes the negotiation of influence and responsibilities between various levels of institutions (Hooghe & Marks, 2010)), by addressing the interplay between types MLG RIS could be within different context, and positioning this research's lens on RIS's power relations. Following this, the text gives a short overview of ways in which NUTS2-level RIS policymakers align themselves with influences from various levels according to part of the literature. In turn, this allows for this research's analyses to identify and understand power relationships, as well as generalise them. Within the confines of this thesis, the term governance, in multi-level *governance*, describes the way in which actors wish for the government to function. This befits the main research question, which looks for the ways in which different levels reshape policy.

An understanding of RIS's MLG is essential, as it RIS's support for regional economic development depends entirely upon the basis of multi-level processes. Sustainable and achievable growth is expected to arise from building policy support upon local strengths. This policy support is to be developed on the basis of EU-level guidelines and goals, while being placed within national networks, in order to create regional policy (Moodie et al., 2023). Considering the shortcomings within the regional economic development process of RIS, and the potential lock-ins that could arise from this, an imbalance of the MLG within RIS could overly highlight EU-level aims, or result in lacking guidance for small teams of policymakers (Wibisono et al., 2025). As such, an imbalance could upend the prowess of RIS (Wibisono, 2022). The MLG could be expected to include a highly robust conceptual framework, as the EU and EU studies are the original creators of MLG literature, as a way to understand the EU's flow of power towards supranational and intranational (NUTS-2 & NUTS-3) level governments (Bache & Flinders, 2004). As such, Marks defined MLG, within the context of EU (governance) studies as: 'a system of continuous negotiation among nested governments at several territorial tiers' (Marks, 1993, p.392).

However, despite this immense importance, and rich theoretical background RIS's MLG according to the EU's assessment of governance is 'fraught with several problems and challenges (Guzzo & Gianelle, 2021, p. 27)'. Still, even within this EU assessment on governance, merely half a page is spent on the topic, and literature on RIS MLG is noted to be limited. Moreover, in the programming period of RIS 2.0, there is a new set of pillars upon which emphasises the need for everchanging and reciprocal interactions between different actors in 11 pages (Larrea et al., 2019). The new guidelines are considered vague and ambiguous, while providing too much room for changeable interpretation (Moodie et al., 2023; Wibisono et al., 2025). As such, an understanding of RIS's connections to other levels and policies remain absent, and up for the interpretation of small technical teams (Cohen, 2019). Thus, these small teams are at the centre of the entire negotiation process of power and goals behind RIS. Resulting from this is a lack of support and streamlined policy, thus hardships for RIS policy to perform an empirical EDP (Esparza-Masana, 2022).

This issue stems from an attempt at intertwining MLG type-I and type-II practices (Hooghe & Marks, 2010). This is to say, RIS aims for both rigidly separated levels of policy processes, and the resulting constant ways of interacting between levels, as well as aiming for a liquid and changeable interaction structure depending on which needs are present, with overlapping authorities and responsibilities. RIS is supposed to be a rigid bottom-up process with certain areas under influence of EU-level goals, to be supported by national governments (Wibisono, 2024). Meanwhile, it is supposed to be a process of reciprocity and flexibility, where regional policymakers can recreate their policy on the basis of other regional development programs, and create its responsibilities on the basis of changing geopolitics and local needs (Santos et al., 2023).

Given this insecurity in MLG within RIS, the implemented policy is often considered to be influenced by all levels within EU MLG. These being the EU-level, national level, regional level and local level. The literature on these impacts are limited, and seldom discussed as the main topic of a research. The main area of discussion in the literature is the presence of vested interests from the local level, aiming for continued support from RIS. This could be due to an inability or unwillingness from policymakers to adjust to RIS, leading to a mismatch between EU-level goals and regional development policy (Kristensen & Pugh, 2023). Alternatively, this could be due to local regime-level politicians and firms pushing for a continuation of support, as a result of lock-in's self-re-enforcing process (Hassink & Kiese, 2021). In turn, these local pressures result in a continuation of prior policies, and lacking support for diversification (Hassink & Gong, 2019). Eventually, this could lead to a (deepened) lock-in.

Further literature mentions the EU-level as having a strong influence through its ability to create the framework and goals of RIS, as well as provide funding. In turn, this heightens the focus of RIS on introducing the technologies desired for by the EU, green or digital technology (Antonelli et al., 2023; Harding et al., 2021; Montresor & Quatraro, 2020). Furthermore, on the regional level other EU projects with clearer guidelines can reshape the aims of RIS, to create a more comprehensive effort (Santos et al., 2023). Remarkably, the influences of national development policy seems to not be described at large yet.

In short, MLG is central to creating a harmonious RIS process which is both streamlined from higher levels, comprehensive with other policies, and able to include bottom-up processes to gain a full understanding of the RISs and opportunity spaces. However, current MLG guidelines are ambiguous and largely unable to be defined at the regional level. As a result, RIS seems highly influenceable from all levels present within RIS's MLG-system. Hence, this research attempts to understand the ways in which these influences shape RIS policy and its implementation, to discuss its impacts on the sustainability of regional economic development.

2.3 Isomorphism

The ambiguous nature of RIS's MLG requires policy-makers to create extensive policy, while ensuring alignment with the potential interpretation of governance from various governmental levels. This chapter discusses and operationalises one concept, isomorphism, as a mode to understand the impact the complex RIS MLG has on the shape RIS programmes take, thus also the opportunity space they uncover.

RISs have been observed to be ill-fitting with local contexts through, amongst others, its reliance on EU-level goals (Di Cataldo et al., 2022; McCann & Ortega-Argilés, 2016); according to Benner (2022) they reproduce higher level values out of conservative assumptions on EU demands, while attempting to coalesce with myths regarding 'correct' innovations propagated by higher-level influences. As such, a herd behaviour is often seen within the design of innovation policies, and the specific type of innovations they aim to support (Geerdink et al., 2010; Irwin et al., 2021). Hence, Benner argues that RIS is especially susceptible to this reproduction and convergence of policies, due to the unpredictable nature of innovation, the consistent mode of production and professionalisation, the reliance on other EU projects, and the complexity of MLG (through (Chien, 2008)). Therefore, Benner argues that the concept of *isomorphism* could be deployed when researching the production of RIS, and the embeddedness of these 'bottom-up' policies on their local contexts.

Isomorphism is a concept which entails the natural convergence of various objects, as they take on increasingly more similar characteristics. Within social sciences, this concept is most commonly derived from institutional isomorphism (DiMaggio & Powell, 1983). Here, institutions are expected to evolve towards one another on the basis of the similar situations policy-makers find themselves in, as well as the professionalisation of policy-making. Wherethrough policy-makers aim to learn from successful cases, and prolong myths regarding their key factors to growth.

On this basis, three main forms of institutional isomorphism have been theorised: coercive, normative, and mimetic isomorphism. Deploying these three forms of isomorphism could allow for researchers and future policy-makers to understand why RIS, or innovation policies at large, converge, the benefits this brings, and the risks produced through high degrees of overlap or a low level of local embeddedness (Benner, 2022; Irwin et al., 2021). However, seemingly no research has been dedicated to isomorphism in RIS. This research hopes to change this, by showing preliminary findings on the ways in which the influence of MLG actors can allow for, or counteract, isomorphic forces within RIS policymaking, implementation and monitoring.

Coercive isomorphism takes place through coercion; legislative, verbal, monetary. Where actors from all levels, with significant sway over the RIS policy, directly force the programmes into a consistent mould across the entire EU. Formal institutions can demand certain moulds for strategic purposes. As can be seen by the EU's requirement for RIS to include digital and green innovations, or can be extended through funding requirements from EU, national, or regional governments (Di Cataldo et al., 2022; Novotný, 2026).

Normative isomorphism takes place through the perpetuation of norms, values, ideals, or myths. Local regime-level industrial stakeholders can advise policymakers on strengthening local industrial identities, or supporting their key technologies, while assumptions regarding EU-demands in other areas regularly lead to more careful, hesitant, and inflexible usage of EU subsidies (Sotarauta, 2018; Thomann & Zhelyazkova, 2018; Tripp et al., 2020).

Mimetic isomorphism takes place through a process of mimicking famous innovations, and successful other RIS or innovation policies, to overcome the uncertainties of the RIS development process (Benner, 2022). This could be through consultants enlisting a consistent playbook when producing policy advice, programme managers copying policies of fast-growing regions, or RISs being impacted by developments in surrounding regions.

Additionally, in line with findings by Kristensen & Pugh (2023), this research aims to discuss whether a mimetic view based on surrounding policies is sufficient within the context of isomorphism in RIS -or policy isomorphism. Instead, this research theorises that mimetic isomorphism with specifically policy-contexts can take on not only a longitudinal, but also a temporal way. Namely, policymakers may choose to base prior policies within the region, to prolong earlier success, deepen existing triple helix networks, and engage with the impacts of structural support and investments. This differs greatly from spatial mimetics, where policymakers aim to emulate other regions' success by transplanting key elements of policy into an unfamiliar geographical context. Instead, policymakers can also aim to emulate the success of their own region by transplanting key elements of a geographical context, as captured by prior policy, into an unfamiliar policy context, in order to overcome the uncertainties of innovation. Within the context of this research, this alternative type of mimetic isomorphism will be called temporal isomorphism.

In short, within this research isomorphism will be used as a lens to explain the broader and comparative effects of MLG influence on RIS policies. Despite the low number of researches including isomorphism, the concept is particularly well suited to analyse RIS, as it describes the negotiations between top-down and bottom-up policymaking, while providing a lens to understand the impacts of a top-down rationale. As such, notwithstanding isomorphic theories for broader innovation policies (Irwin et al., 2021), following Benner 2022 recent call on using isomorphism in RIS research, a small number of researches have started utilising isomorphism as a lens since 2026 (Lien, 2026; Pylak et al., 2026). This thesis utilizes all major forms of isomorphism -coercive, normative, and mimetic-, as well as the theorised term of temporal isomorphism.

2.4 Conceptual model

In order to show the relationships between the concepts within the theoretical framework, the following conceptual model has been included. The model gives a very simplified overview of the role MLG-frameworks play in the creation of regional development trajectories, where some relationships and concepts within the evolutionary economic framework are left out. This is done to highlight the parts of the process which will explicitly be researched within this thesis, and can be supported by data which is collected.

The model (Figure 2) first highlights the isomorphic power possible from various levels of actors, where the MLG-framework within RIS moderates and allows for these different forces to gain influence over the policymaking and policy-implementation process. In the end this combination and creates the direction of the isomorphism, as well as its specific type (coercive, normative, mimetic, and temporal). Together with the place-based policymaking -which largely enters the process from the EDP, and supposedly encapsulates the structure of the regional industrial ecosystem- the strength and direction of isomorphism shape the RIS programmes on a regional, NUTS-2, level. In turn, this shape decides which projects and innovations can be supported by RIS-based subsidies, and create the future sustainability and quality of the regional industrial ecosystem. This model is oversimplified. For example, the regional economy impacts local actors, who function as actors shaping the isomorphism, and RIS functions not just as an outsider, but also makes up the institutional foundations of the regional innovation system. However, this model stays within the boundaries of that which has been operationalised for data analysis. All aspects directly researched in this thesis have been placed in the rounded boxes.

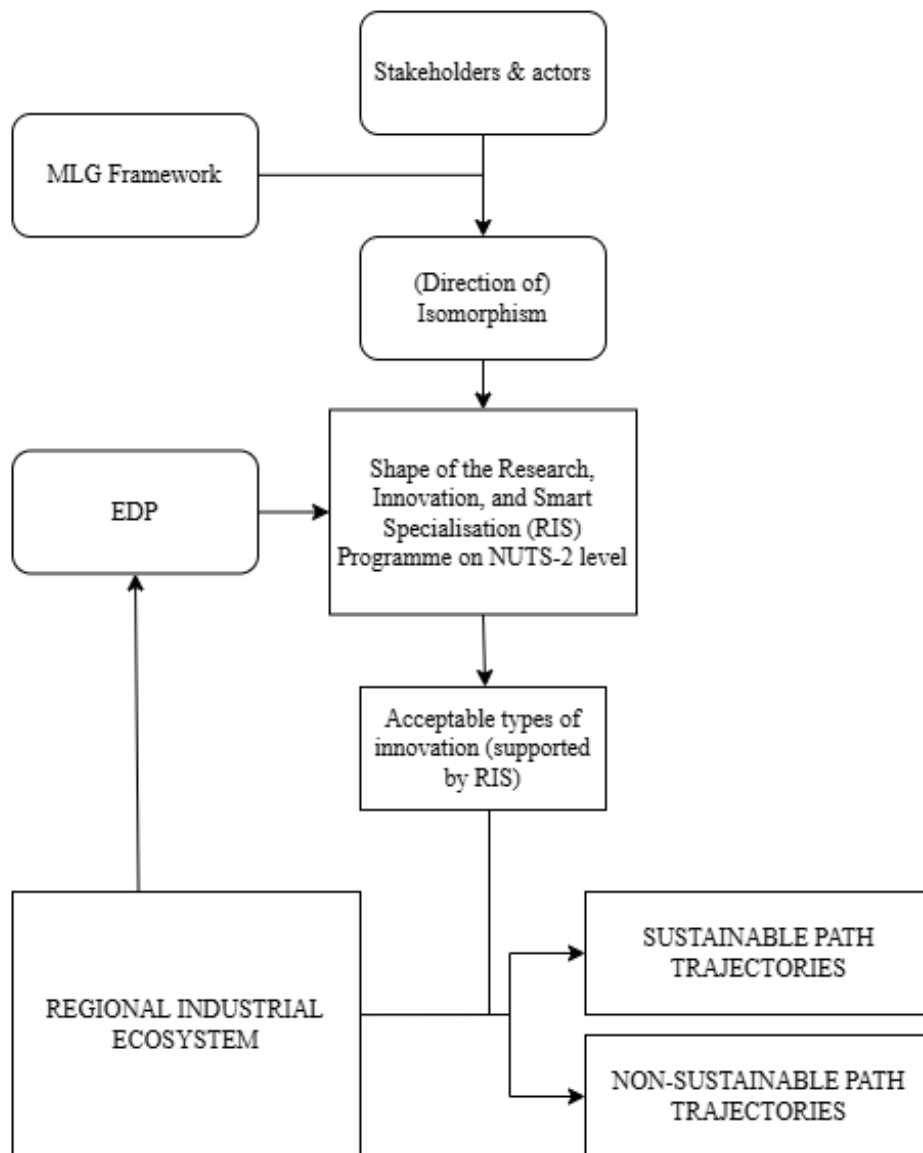


Figure 2: Conceptual model

3. METHODS

This research relies entirely on qualitative data acquired through primary data collection. This decision follows the research goal: to understand the decision-making process of policy-makers when interacting with stakeholders from various levels. As such, this research concerns itself with values, considerations, identities, and prioritisations. These research objects are unquantifiable, and arise solely from (socially derived) personal and sometimes private deliberations (Priya, 2021). Furthermore, these research objects often create moments of contention, and rely on lobbying processes and multi-level discussions (Schakel, 2016). Hence, this research aligns itself with other researches on isomorphism, as well as other institutional researches regarding RIS and innovation policies, by discussing data created through very subjective and personal decisions from policymakers (Benner, 2022; DiMaggio & Powell, 1983; Ferreira et al., 2026). Therefore, given the loss of richness of the collected data, this research concerns itself solely with qualitative data.

In accordance with similar literature, this data has been considered and analysed through a social constructivist framing and a neo-institutionalist approach. Wherein institutions are a product of their surroundings, and propagate or reshape their assumptions. The exact methods of this research builds on these assumptions, and this chapter describes them chronologically -data collection, data analysis, interpretation. Afterwards, positionality is briefly discussed.

3.1 *Data collection*

As this thesis needs to include personal choices and deliberations regarding a plethora of actors and their influences, this research has needed to not only consider RIS policy itself. Rather the methods highlight the policymakers and programme managers directly shaping everyday RIS. As such, the main data for this research is collected through interviews. Interviews allow for individuals to explain their choices and the reasoning behind them, as well as state normative ideas (Adams, 2015). Furthermore, interviews can highlight mimetic processes, by explicitly stating influences for mimicry (Pylak et al., 2026). Moreover, interview data allows for this research to inquire directly into the balancing of influences from various levels of actors, and the motivations behind these choices.

Therefore, interviews allow for this research to utilise many aspects of isomorphism, as a conceptual lens, while understanding part of the impact MLG has on isomorphism in RIS. Meanwhile, interviews tend to have the ability to produce more comprehensive and extensive data when uncovering the convictions behind isomorphic processes (Akgul et al., 2024; Sakib, 2023). However, as seemingly no open source interview data exists with the involved actors for such a purpose, this research has carried out primary data collection.

The interviews within this research are designed to showcase the interaction between policymakers or programme managers; the main relevant stakeholders present in the policymaking, implementation, and monitoring process. As such consultants from all consultancy offices involved in policymaking, programme managers from all provinces in the Eastern Netherlands, and one programme manager from the Southern Netherlands (as contact person for the broader programme) have been interviewed (Figure 3).

	<i>Consultants (policy-makers)</i>	<i>Programme managers</i>
<i>Eastern Netherlands (EFRO OOST)</i>	CR1	PmR1 & PmR2
<i>Southern Netherlands (Stimulus/OPZuid)</i>	CR2 & CR3	PmR3

Figure 3: Interview respondents and their general relation with RIS.

Furthermore, the interviews needed to allow for respondents to explain their entire RIS process, as well as the remarkable experiences, and struggles therein. This results from the aim to uncover those isomorphic processes which are largely unknown, and depend on individual circumstances -or shared, as isomorphism could suggest. As such, the interviews have been semi-structured in their design (Adams, 2015). Specifically, the interviews are flexible to allow for respondents own experiences to lead the conversation, but are structured to force the interviews to be comparable through different actors in RIS's MLG framework. Furthermore, in order to accommodate this open design, interview lengths were designed to be roughly one hour or longer (Galletta & Cross, 2013).

As this research has needed to create a timeline through the whole RIS process -allowing for more comprehensive comparisons between and within case studies-, all respondents were asked roughly the same main questions, with exception to the introduction. Small adjustments were made in other

questions to account for actors' different positions in the policymaking process. Follow-up questions were asked when respondents mention the presence of actors, without mentioning their influence or the effect the respondents believe this has on RIS. Therefore, respondents were largely free to tell their own experiences, with only interferences to concretise statements on relevant processes (Adams, 2015; Galletta & Cross, 2013). Therefore, this research includes data from six lengthy interviews (1-3 hours). This might allow for the research to achieve a more holistic understanding of multi-level policy isomorphism in RIS by highlighting relationships and deliberations on their own merit, reducing researcher normative interference (Galletta & Cross, 2013).

However, this approach does not directly question respondents' normative assumptions on innovation policy. As such, the interviews also asked respondents whether they believed that other actors, and they themselves had normative assumptions. The resulting interview guide is located in appendix A. The consent forms required to undertake the interviews -and have been signed by all interviewees-, can be found in appendix B. The consent form is lengthy and includes an explanation of the ethical process for interviewees.

Additionally, this research has performed a document analysis on the two RIS programmes to highlight discrepancies through normative assumptions, as well as control for other conclusions from the interviews.

3.2 *Data analysis*

This research has examined and interpreted the interviews and the policy documents through a small variety of inductive coding techniques, befitting a thematic analysis (Christou, 2022). Later, this analysis was placed in a theory-informed framework. This analytical strategy was selected because this research's topic demands not just an understanding of the outcomes of policymaking, but also to organise the values, deliberations, and governance processes through which those outcomes emerge. The research questions focus on the ways in which multi-level governance (MLG) influences shape or disincentivise policy isomorphism in RIS. As such, the analysis strategy requires an approach capable of mapping and understanding the policymaking process, while highlighting the (in)consistencies of

individual deliberations behind them. Hence, an inductive approach -allowing for creating a coding system on the basis of patterns emerging from the empirical material-, within a thematic approach -for organising results and for a later connection to the literature-, was necessary (Desjeux, 2021).

Although all material was ultimately integrated into one thematic structure, interviews and policy documents fulfilled different analytical purposes and therefore received slightly different first-cycle coding approaches. Interview material was used to reconstruct decision-making processes and actor relationships, while policy documents were used to identify formal priorities, assumptions, and intended policy directions. Hence, the research requires two different coding techniques, which highlight their unique roles as institutional actors. The analysis was conducted in the original language of the material in order to preserve tone, meaning, and institutional nuance. Interviews were transcribed before coding, while policy documents were analysed directly.

The resulting analysis process consisted of four stages. Due to the inductive nature of the coding, this process was iterative. However, through the constraints of this research, this process was likely less iterative than ideally required.

3.2.1 Reconstruction of policymaking processes

Firstly, this research's analysis focused on familiarisation with the material and a full reconstruction of the RIS process. All interviews and policy documents were read multiple times, and quotes and summaries on the basis of the research questions and literature were made to highlight preliminary findings on the general production of RIS. Rather than identifying isolated opinions or counting recurring statements, this approach allowed to give a general understanding of how RIS was produced and implemented in practice, and produce the basis for further analysis.

Special attention was given to descriptions of the processes of shaping RIS, as well as hindrances and solutions interviewees came across. This was largely in line with general areas of focus, such as: deliberation before policy production; negotiations between actors; areas and moments of influence; factors influencing choices within implementation; monitoring guidelines; selection of projects or innovations; practical hindrances; and descriptions of acceptable regional futures.

This stage was especially important because the interview design itself aimed to reconstruct the entire RIS process and allowed for starting to compare experiences across governance levels and between regions.

3.2.2 First-cycle coding: Process coding and Descriptive coding

Secondly, a process of initial coding was created through a mixture of process coding and descriptive coding. Wherein interview data from consultants was analysed through process coding, followed by policy data analysed through descriptive coding, and the remaining interview data from the programme managers through process coding again. This allowed for the coding process to be inspired by the order of the policy process, and allow for new phases of coding to be inspired only by earlier phases -as is the case with deliberations for the finalised programme documents, and programme managers alike.

Process coding was selected as a coding technique because the interviews were designed to uncover how policymakers negotiate influences and produce policy throughout the RIS lifecycle rather than merely report opinions (Saldaña, 2026). Process coding captures actions, developments, and negotiations, and therefore allowed this research to identify how governance relationships actively shape policymaking. Through coding on the basis of processes, this research wanted to capture developments and the influences shaping them, and the codes have been built on the basis of formal procedures and personal deliberations.

Descriptive coding was selected as a coding technique because the function of the documents within this research is primarily to describe intended policy, as a crystalised product of decision-making, rather than reveal decision-making directly (Saldaña, 2026; Skjott Linneberg & Korsgaard, 2019). Therefore, coding focused on identifying formally stated policy priorities and institutional assumptions. This was used to develop a sense of the coercive direction of RIS, and could later be used to compare this with coercive or normative powers surrounding its production and implementation seen through the interviews

As such, the purpose of using two coding styles was not to create separate analyses, but to allow both forms of data to contribute different forms of evidence in one analytical process. Which have been united in the second-cycle coding. The coding scheme for both first and second-cycle coding have been included in appendices C & D.

3.2.3 Second-cycle coding: Thematic coding

After the initial coding, codes from interviews and policy documents were compared and grouped according to recurring meanings and relationships (Gibbs, 2007; Saldaña, 2026). During this stage, individual codes were reorganised into broader themes capable of explaining the overarching policymaking process across both regions, and the influences shaping them. These themes were developed in line with the research questions and the theoretical framework. As such theme development was guided by three questions:

- How are decisions within RIS produced?
- Through whom does influence enter policymaking?
- Which assumptions shape which innovation is deemed supportable?

The resulting themes have guided the structure of the results chapter, and are separated in two parts. First, themes descriptive themes on the production of the RIS programmes -deliberations before producing RIS, the process of the production itself, the implementation and monitoring of RIS, and the aims of RIS or the types of innovation they support. Second, themes aiming at understanding the influences driving the production and implementation of RIS from a MLG perspective -EU, national, regional, local, and programme managers. These themes allow for a complete reconstruction of the RIS programme, the reasoning behind its various parts, and an understanding of the influences from various institutional scales involved in the process. The themes and subthemes can be found in appendix E.

3.2.4 Interpretation

Lastly, the data and analysis were interpreted through the theoretical framework in the discussion chapter (Ngulube, 2015). First, the analysis on MLG was expanded to include a discussion

on the MLG-process guiding the development and implementation of RIS. This was done to understand the power structures that could arise from the interplay and negotiations between different levels of actors.

Afterwards, the effects of the influences from various levels -allowing for place-based or one-size-fits-all policymaking- were placed in the context of policy isomorphism (DiMaggio & Powell, 1983; Irwin et al., 2021). Where all four kinds of theorised isomorphism are discussed according to their main drivers or opponents within the MLG-framework.

Importantly, these concepts were not coded directly. Rather, they emerged as theoretical explanations for patterns identified through thematic analysis. As such, the discussions are not aimed in a certain direction. They merely describe the presence or absence of an MLG or isomorphic process through the empirical data, and have later been turned into theorisations on the effects they could have on regional development and very broad and general policy advise directions to halt their potentially negative consequences.

3.3 Case selection & population

This research makes use of a case study research design (Yin, 2009). Such a design is necessary, due to the complex and interconnected nature of RIS, as well as its naturally defined areas as policy containers. A case study research design allows for this study to create a holistic interpretation of the region's various influences, while lessening the possibility of misinterpreting data.

This research has selected two case studies as its area of interest. This allows for a comparative perspective, where the differences between levels of influence from various levels of actors -which creates the different circumstances on which isomorphism is built (DiMaggio & Powell, 1983). However, two case studies also allow for more information regarding the crystallisation of isomorphism, slight validity on convergence, and building a way of controlling for false results. More case studies are impossible within the constraints shaping this research.

The following two case studies have been selected: The Eastern and Southern Netherlands (De Pater, 2019; Pugh, 2025; van Meeteren & Smit, 2025). The Southern Netherlands is amongst the most

innovative regions worldwide, with particular strengths in sectors relevant to European strategic autonomy, digitalisation, and the chemical industry. The region consists of three very different provinces: Limburg, Noord-Brabant, and Zeeland (the latter usually belongs to the Western Netherlands, but its RIS has been administered within the context of the Southern Netherlands). Commonly Limburg and Zeeland are considered peripheral, while Noord-Brabant has great industrial prowess through, amongst others, Eindhoven where companies such as Phillips and ASML hail from. In contrast, the Eastern Netherlands has largely been successful in the food and manufacturing sectors. Interestingly, it has largely avoided the decline other regions with similar specialisations have faced. Within its provinces of Gelderland and Overijssel (excluding Flevoland; for RIS purposes it is part of the Western Netherlands), has created innovative areas surrounding its key industries, which are heavily embedded in local specialisations.

These case studies gain legitimacy as selected research areas in a plethora of ways. Primarily, both regions showcase the professionalisation emblematic of isomorphism, through its standardised and multi-actor RIS production. Both regions have requested for non-local consultancy agencies to shape the RISs, in order to ensure evidence-based programmes, while creating identical comprehensive implementation and monitoring instruments. As such, clear external influences could be recorded, and extensive interactor interactions can be expected, as well as clearly codified ways of handling these influences and interactions. This results in both cases being potentially rich with comparable data. Moreover, this data would largely be considered new, due to the low number of case studies researching either regions' RIS programmes.

Meanwhile, both regions have completely diverged in the framing of their RIS programmes. The Eastern Netherlands takes effort to explicitly align with national policies, and bolster its main industries (Provincie Gelderland & Provincie Overijssel, 2020). In contrast, the Southern Netherlands hopes to build mostly on European policies, and further general societal transitions (Hagens et al., 2020). This divergent fulfilment of RIS demands demonstrates a large variety of interpretations to influences, and could lead to high number of trajectories for isomorphic processes

to take place. As such, through the use of extreme cases, this research aims to uncover more motivations of actors embedded in RIS, while allowing for key similarities to stand out more clearly.

Furthermore, this case selection befits the researcher's own institutional background. In turn, this allows for less demanding communication in stakeholders' native language, as well as provide an understanding of institutional normativity within which the regions function. As such, these case studies provide relatively rich data.

Through the case study selection, the research population is automatically decided; the programme managers and consultants for the regions RISs. Within the Southern Netherlands, this research has interviewed the main-contact point of the programme manager for the region's RIS. Furthermore, consultants from both consultancy agencies involved in policymaking have been interviewed. Within the Eastern Netherlands, this research has been able to interview programme managers from all provinces involved, as well as one consultant. As such, this research has interviewed all actors involved within the RIS production and implementation process, and has conversed with the majority of its population. These interviewees are denoted as CR1, PrM1 & PrM2 for the Eastern Netherlands and CR 2, CR3 & PrM3 for the Southern Netherlands within the results and discussion chapters.

Other, similar actors, have declined interviews on the basis that they did not believe to be able to inform the research in a different way than the interviewed actors. Unfortunately, this research was not allowed to conduct interviews in the monitoring phase. However, they have been discussed at length within the interviews. Through these actors, this research hopes to create decent insight on the RIS within the Eastern and Southern Netherlands, and understand their decision-making processes in relation to MLG actors.

The selected interviewees are the primary actors actively creating and performing these regions' RIS programmes. They achieve this decision-making through an extensive formalised process, wherein personal decisions and considerations are oftentimes shared with all other actors involved in the process. Furthermore, their deliberations are explicitly stated before a project can be proposed towards the expert

and monitoring committees. As such, these interviewees occupy positions that provide extensive insight into the governance processes shaping RIS policy.

To triangulate the interview findings, this research additionally analyses the official RIS programme documents of both regions. These documents provide insight into the formal articulation of regional priorities, implementation strategies, and policy rationales. Comparing interview data with policy documents allows this research to examine potential discrepancies between formal policy narratives and policymakers' descriptions of the practical decision-making process.

3.4 Limitations & ethics

This research considers itself to be subjective. This holds more true when considering normative isomorphism, especially in the context of both respondents and researcher originating in similar contexts. This choice has been made to understand the underlying reasoning behind those normative decisions that have been identified. However, a plethora of normative decisions has gone unnoticed. This research does not aim to claim an extensive overview on these decisions, nor does it aim to notice them. Doing so might result in misidentifying and misinterpreting random or personal decisions as entirely informed by normative power.

Moreover, this research is large in scale and ambition, other isomorphic processes have undoubtedly been missed. This research merely aims to identify a small number of these processes, and understand how and why they take place (in both regions), in order to learn about avoidable or usable impact on RISs ability to engage with bottom-up principles. A more extensive overview of isomorphic processes, or comparison with more regions would undoubtedly be useful.

This research also does not have the ability to accurately predict impacts of isomorphism, nor does it have the ability to combine isomorphic processes with the results of the region's RISs. This is due to the qualitative nature of the methodology and the lack of existing research.

The positionality of the research is unlikely to have other impacts than missing or misidentifying normative isomorphic processes, and this research is actively interested in promoting successful sustainable regional economic and social development through EU measures. To ensure

harm does not befall the respondents, all data has been collected with their full consent and the results section has been proofread by a number of respondents.

The respondents have always had the chance to remove statements or change questions to their liking. Anonymity has been ensured as much as possible. However, as the population is small, and interviews directly discuss respondents' regions, this is only partially possible. The respondents are aware of this, and have given their explicit approval. The ethical process is made conform the Good Research Practice guidelines from Vetenskapsrådet (2024, pp. 6–40) described at length in the consent form (Appendix B).

The data collection for this research has been funded by Lund University's Centre for European Studies, this has not interfered with the results of this thesis.

4. RESULTS

The results chapter aims to showcase the various factors that influence both the RIS policy and its execution within the Eastern and Southern Netherlands. The results chapter does so by mainly providing an overview of the policymaking process in both regions, as well as analyse the interviews which have been conducted with policy advisors and RIS programme managers. This highlights their thought processes, the formalised procedures, and underlying goals regarding the decision making through different phases of RIS in an MLG perspective, while showing the policy they build to or from. In turn this provides the basis for the discussion on MLG influences driving isomorphic processes.

The results chapter is structured as follows. First, a general overview of the RIS programmes, their production processes, and the implementation structure for RIS-supported subsidies is provided, as well as the guiding intentions and assumptions on innovation processes. Afterwards, this chapter describes the position of RIS within EU, national, provincial and local networks, as well as, the benefits and hindrances mentioned to arise from them. Lastly, this chapter mentions everyday procedural issues, innovations within RIS itself, and the future of RIS.

4.1 Producing the RIS programmes in the Eastern and Southern Netherlands

4.1.1 Deliberations before producing the RIS programmes

This research has aimed to understand ‘EFRO OOST’, the RIS programme present within most of the NUTS-2 region of the Eastern Netherlands -Within RIS this includes Gelderland and Overijssel (PrMR1)-, and ‘OPZuid’ of the Southern Netherlands -Limburg, Noord-Brabant, and Zeeland. Within these NUTS2-regions both programmes are function as broad innovation focused regional development programmes, with a focus on early stage innovations (PrMR1, 3, & 6).

Despite the policy processes in both regions being similar to one another, they differ greatly from the other Dutch RIS programmes in its framework. The policies in both regions are, to a larger extent than in Dutch regions, developed through consultancy agencies from outside of the regions, put a larger emphasis on completely new innovations, aim for prioritised goals, and have been developed from an industry-centred evidence-based approach (CR1, CR2 & CR3). All interviewed actors consider the stronger prioritisation to be the main driver behind the possibility for any success within the limited RIS budgets (CR1 – PrMR3). Thus, it is the main driver behind the whole RIS programme (CR1, PrMR1 & PrMR3).

Both programmes follow a similar policy-making process and operate through a comparable institutional structure. The provinces all come from a history of similar place-based regional development programmes since the period of 2007-2013 (PrMR2 & PrMR3). As a result, both NUTS-2 regions came into RIS 2.0 with a predetermined understanding of their regional specialisations, and a group of institutionally embedded, experienced, programme managers. As such, all programme managers mention that they believe to be able to navigate the RIS’s EU guidelines quite confidently.

‘We try to follow the demands from Europe, and the demands from the ordinances. We know them well, and we try to do this as well as possible. But we also try to take the ways we can make things possible into account. We don’t want to scare consortia away with too many strict checks. By now we have learned how to do these risk-analyses. ... We know how to keep a balance between

Europe and local consortia. We keep personal contact [with locals], and know what they need to develop (PrMR2, 1:02:37)'

Accordingly, the EFRO Oost programme managers have been heavily involved in the production addendums to their RIS programme (PrMR1).

Despite this confidence, familiarity, and established background of the civil servants, both regions have decided to outsource the policy-making process to consultancy agencies. According to all interviewed consultants this decision arose from a need to produce evidence-based policy, rather than perceived familiarity with prior policy and the regions (CR1, CR2 & CR3). However, both regions instructed the consultant to develop programmes on the basis of prior experiences.

There was an emphasis on professionalising the RIS policymaking process. As such, the RIS policy's aim was to produce results made possible by a theory and EU-policy supported foundation (PrMR1 & CR2). Interestingly, both regions have selected consultancy agencies from outside of their respective regions.

4.1.2 EFRO Oost

EFRO Oost's programme was developed by Technopolis Group's office in Amsterdam (the Western Netherlands) (Provincie Gelderland & Provincie Overijssel, 2020; van Barneveld-Biesma et al., 2020). After procuring the project through a public tender, the advice was developed by a team of five consultants with backgrounds in business administration, policy research and ecologically sustainable innovations. This team was largely composed for scheduling reasons (CR1).

Technopolis' expertise within its Dutch office is mostly within comprehensive policymaking on the national level. Herein, Technopolis specialises in integrating EU-level processes, sustainable technologies, and business administration within national policies. Therefore, Technopolis entered the project within the context of the Dutch national innovation landscape. The programme was aimed towards national innovation processes for a more integrated innovation chain.

'[The programme] is a mixture of regional, national, and European perspectives. But don't forget that the national and European perspectives are designed to align, the region probably wants to

align too. ... The relation between Dutch and European policies, it's a chicken and egg style discussion. But, as the Dutch things also align with unique Dutch funds, and the European aims, of course, there are only differences in the exact tone, we decided to follow the Dutch key technologies.
(CR1, 11:56)'

The central aim was creating future-proof policy (CR1). Partly, this required evidence-based policy advice to ensure a sustainable development of the local economy. Furthermore, this largely resulted in ensuring that the RIS programme ran parallel to innovation developments within broader EU or national innovation policies (CR1).

The resulting policy advice covers a policy-background and a plethora of motivations behind the region's RIS, innovation pressures from the national level, an analysis of the region's innovation capacity, highlights three cross-overs within which innovations are most likely to arise (four cross-overs within the eventual programme), and the ways to implement and monitor investments into the cross-overs.

Within the entire programme document, no scientific theoretical understanding of the functioning of RIS, or impacts of various ways to govern this are given. The data to create this evidence-based approach entirely arose from (national) statistics and conversations with stakeholders provided by the provincial governments. On the data source and theoretical understanding, CR1 (40:00) mentioned:

'With all due respect, there is a lot of knowledge in it [scientific concepts], but in practice it serves no function. Because, it [the RIS programme] is really about chances and developments, and how to make people really believe in it'

This lack of scientific backing and depth is on purpose (CR1, 13:58):

'we don't work scientifically; science is a different thing. We work evidence-based..., this is ever-present in the policy. We work on the basis of data, but the sources are imperfect.'

CR1 (40:29) explains later:

'We have limited energy. Which things can we spend our energy in? How do we ensure that the strategy is supported [by the region]? The strategy can't be optimised, which science does, we look at practical solutions'.

However, it should be noted that the RIS policy is created as a 'living document' (p.48). Hence, it was designed to be finetuned and adjusted based on societal changes and RIS experiences (CR1). EFRO Oost has chosen to do so with help from Prof. Dr. Boschma (University Utrecht), who examined the embeddedness and innovativeness of investments through a relatedness model (Hidalgo et al., 2018). These monitoring documents and resulting advices have restricted access, but the results were mostly positive (PrMR1). However, the innovative capacity of two cross-overs were questioned, as they did not produce the types of innovations in line with EU-guidelines.

Secondly, the programme document presents themes (called cross-overs), which have been selected as updated versions for themes from prior RIS programming periods. This is done to deepen investments into prior subsidised sectors, and further improve the regions' competitiveness (CR1). All missions are created and explained to stand in support of national policy guidelines.

The document does so by examining whether it can support the Dutch ministries, by working towards their national goals and aligning the themes with these national goals. Proper alignment with EU goals is said to be unlikely (p.21), as the region's RIS and Horizon programmes had not yet been unveiled. Furthermore, no explicit attempt is made to directly align the programme with other EU-wide goals, or goals from surrounding regions. However, it should be noted that the consultants assumed this to not create issues as:

'for many stakeholders it's important to connect with what's happening nationally and European. But interestingly, the Dutch national policy is for a large part generic. And the largest financial instrument, WBSO, its providing tax benefits if you innovate. ... It is very broad, the European policy is very broad. So the chances of finding a space where your innovation fits is large. You just have to use the right terminology to fit both. And we start this in the programme from the national perspective ... Getting things in one line is not that complicated. What is complicated is choosing what you will do, and what you won't do. In a region there are many wishes, and if you

don't choose which ones to support, then there is no strategy. We chose to start with industries within the national strategy present in the region. We could connect that to the European strategy later.' (CR1, 17:56).

The consultants, however, have selected a plethora of other NUTS-2 regions with similar make-ups. These regions are mostly used to consider the comparative advantages of the Eastern Netherlands. However, the cross-overs do not only exist for comparative advantages. Instead, they also function as points of alignment for important local industrial transitions present in the whole industrial ecosystem.

In the document themes are shown to be cross-overs; ideals which benefit various regional specialisations at the same time, and were expected to bring deep societal changes. This could allow for limited funding to be bundled into key pathways, while allowing for innovative ideas from a broad group of industries to be supported. As such, the RIS was aimed to focus resources, while being able to select the brightest ideas from the region. These cross-overs were based on the region's key industries -according to prior policy, patent analyses and stakeholder meetings with actors whom were largely provided by the provincial governments-, as well as national transitions programmes.

Importantly, all key industries have to exist within a knowledge cluster, have a triple helix background, and the resulting consortia have to be able to fundamentally be present largely or fully within the Eastern Netherlands. As such, the cross-overs were thought up to function around the region's universities. This resulted in the final policy focussing its investments entirely within the following cross-overs: Foodtech (the main industry to connect the identity through identity; strongest innovative base in the Foodvalley around Wageningen Research University in Gelderland); Medtech (Around the Radboud University in Gelderland, and around the (Technical) University Twente in Overijssel); Materialtech (Strong at all universities in the region and formalised innovation hubs around 10+ multinational companies); Sustainability (no clear prior presence within the region).

Foodtech, Medtech, and Materialtech overlap with previous RIS programming periods, Sustainability as a core pillar is new and was the first recommended cross-over from the consultants:

I believe that [ecological] sustainability was prominent from our analyses. Energy and the material transition... It immediately fit well with [European] developments. (CR1, 20:18)'

Later adding that it was already important in the region, as:

'if there were no players in this field, we would have had different conversations. (CR1, 21:39)'

Sustainability was included on the basis of national and EU-level aims, and stakeholder conversations. All investments into the four cross-overs have been divided equally.

Lastly, the RIS programme advises on ensuring successful implementation and monitoring of the RIS support. Mostly, the monitoring is done through the use of national statistics and meetings with the stakeholders involved in the creation of the RIS policy. After starting this programming period, the results of the monitoring process, and new societal pressures, have not led to adjustments within the programme. This largely results from incomplete data and staggering projects due to the Covid-19 pandemic (PrMR1).

Within the implementation of the policy, investments have to be incremental and focused. While this heightens the need for correctly uncovered and supported regional trajectories, it allows for the relatively small RIS budget (250 million Euro's, provided by the EC and the provinces), to create a sustainable and measurable impact on specific innovative parts of the regional economies. To further heighten the impact of RIS, project managers are asked to seriously consider communication (p.31). Part of the role of EFRO Oost is expected to be bringing actors together and introducing those actors to new innovations (which have potentially been produced within the region, through the RIS programme).

Within the assumption that the policy would benefit at most a practical optimum of support to the regional economy (CR1), the consultants' advice has largely directly been transformed into EFRO Oost's RIS policy.

In practice, consortia of three businesses (at least two from within the region) submit a Project-Idea, after which the project managers guide those project which could potentially be fitted within the through all of the stages they deem necessary for likely project approval (PrMR1). Project approval is given by an expert committee consisting largely of civil servants from the various levels of governance involved

in RIS, the region's universities, environmental agencies, and both organisations representing employers and employees.

4.1.3 OPZuid

The core of OPZuid's RIS programme '*Stimulus*' was written by a collaboration between consultancy agencies. Namely, Bureau BUITEN (situated in Utrecht, the Western Netherlands), and IDEA Consult (situated in Brussels with a focus on Dutch-speaking Belgium).

Interestingly, this collaboration was not intended as a two-sided project where different offices produce policy befitting their expertise. The selection of Brussels-based IDEA consult was not intended to ensure correctness in relation to EU demands. While both consultancy agencies have regularly advised and collaborated with the EC on projects related to regional development, as well as supporting EU funding procurement for regional organisations (CR2 & CR3). This consortium was selected on the assumption that an understanding of economic developments within the surrounding regions is required for a sustainable future of the Southern Netherlands (CR2). However, it is important to note that this mostly applies to Flanders and the Western Netherlands. The surrounding German- and French-speaking regions were considered to a smaller extent within the production of opportunities for the regional economy (CR2 & Stimulus, addendum p.18).

Stimulus has been produced by five consultants as an understanding of how to effectively guide the projects (and the broader region) playing into societal transitions. Furthermore, according to CR2 their main goal within producing Stimulus was to:

'Find the strengths and challenges of the region, developing a way for institutions to support those innovations that can provide breakthroughs within these, and ensuring that, when the innovation befits RIS goals, the support for these innovations fits the European conditions to finally be eligible for funding' (CR2 0:00).

The Stimulus document has been researched and developed by a collection of economic geographers and political scientists. Many of the consultants have a strong background in working with EU policy, and while the consultants were not specifically selected for this expertise, it played a role

within their selection as part of the team (CR2). These consultants were given freedom to try and create independent and neutral conversations between triple helix actors (CR2). However, the majority of the foundations for the RIS were already decided by the EU and the regional governments.

‘The requirements for a RIS, in broad terms, are clear from the EU. Of course, the club of civil servants hiring us had deliberated on the front end too... Their ideas are quite well translated in the document. [for instance] At first..., there was a more sectoral design. And their [provincial governments] idea was, we need more key technologies as the focus’ (CR3, 18:06).

Therefore, the consultants largely to give a detailed implementation of the starting goals, and decided whether these goals befit reality. Yet, both consultants mention that the EC was not too strict and involved within the production of Stimulus (CR2 & CR3).

The programme documents consists of two sections. Firstly, Stimulus provides the strategy for RIS, and some ways in which RIS can function effectively. The latter is immediately achieved by providing an overview of other EU programmes OPZuid can work in conjunction with. This is done through a wide range of options: overarching EU goals, like the Green Deal and Digital Europe; OPZuid’s role within the Dutch NSP or the two Interreg’s around the region; thematic funds which align with the Stimulus’s key technologies, like the Horizon Programme, or LIFE+.

Then, acceptability of innovations is discussed on the basis of RIS within the EU’s innovation chain, and, to a lesser degree, the Dutch national innovation plans. This is combined with key technologies explored through stakeholder meetings with the strongest, most embedded, enterprises and governmental support. Through these technologies, Stimulus present **5** key transitions as central to the prolongation of the competitiveness of the region.

These transitions are energy, resources, climate, agriculture and food, and health, and were selected by the provincial governments’ foundation upon which Stimulus was designed (CR2). All of these transitions are described as befitting the Dutch national innovation plans (KIA), as well as other aims of Dutch national governmental institutions and ministries. As such, in a matrix the consultants attempt

to connect the Dutch national innovation plans with the region's key technologies, to describe ways in which RIS-approved types of innovations can be found for programme managers to support.

The consultants have met dozens of stakeholders, provided by the provincial government, to understand which sectors exist within the region and which triple helix organisations exist for the region's key industries. From this understanding, the consultants have drafted ways in which the region can help the development of solutions within the five transitions. Important to note is that the consultants held the belief that RIS should also contribute to European strategic autonomy and strengthen not just the regional economy, but primarily ensure wider European prosperity (CR2).

Stimulus further supports project managers in implementing RIS-policy when combating broader societal challenges, and finding support from the EU. Stimulus provides OPZuid with an overview of EU funds they could advise innovative enterprises to apply to, with additional information on which phase of the innovation chain the various EU funds focus on. Furthermore, Stimulus provides more examples of projects for OPZuid to support, and regional stakeholders within these transitions. The monitoring of the projects is identical to EFRO Oost, and Stimulus has fully been accepted as the central framework for the region's RIS policy.

4.1.4 Designing innovation

Despite efforts to ensure neutral and bottom-up policy, the RIS programmes are built upon values. All actors involved within the production of these policies are aware of a variety of these values. For example, one main driver behind the decision for both regions to employ consultancy agencies was to overcome power imbalances when communicating with their selection of regional actors (CR2). Similarly, Technopolis' consultants tried reducing stakeholder interference by proclaiming an evidence-based research method which also included Dutch statistics (CR1). However, while Technopolis believed that their research was (mostly) able to overcome 'gut feelings (IR.1)', all consultants agreed that the RIS programmes were limited in comprehensiveness.

All consultants believed that these limits could help create a more effective and usable programme (PrMR1, CR2 & CR3). In part, this allowed for more focused investments through RIS's limited budget (PrMR1 & CR2). Furthermore, undercutting the neutrality of RIS allowed for a higher easy-of-use for programme managers, as requirements would be less restrictive and lengthy (CR1).

However, more neutrality might benefit the bottom-up nature of RIS, by unclouding the vision of consultants and programme managers. As such, respondents asked for more support from the EC within production, implementation and monitoring of RIS (CR1 - PrMR3). By, for example, providing more guidance within the selection of data, deciding on stakeholders to include, connecting the programmes with EU or national policies, and further standardised foundations for the policies. Through this part of the tricky decision-making process can be eliminated.

Moreover, this reduced workload can be utilised towards further analysing the regional economies and pathways. This clearly highlights the discrepancy between type-I and type-II MLG policies denoted within the RIS governance. Policy-makers are given a strict framework regarding requirements for the RIS programmes, while being given large amounts of responsibilities and flexibility. In turn leading to overstretched resources when deciding on the foundations of the policy (CR2).

Before moving on, it is important to note that RIS designs innovation. This is achieved partly through the selection industries, technologies, and actors it deems worthy of support. Furthermore, RIS also shapes the regional understanding of future-proof and regionally befitting types of innovations which SMEs and ICs should strive for. As such, it is of the essence that an understanding of innovation, according to the RIS programmes, is developed.

Potentially as a result of the policies' production processes and values, the regions' understanding of acceptable innovation differs drastically from one another. For instance EFRO Oost's reliance on data-driven policy development, has resulted in a lacking understanding of ways for innovations to benefit the regional identity, as well as undermine the ability to assess non-technological innovations, such as retrovation or social innovations. As PrMR1 said about social innovations:

'We don't really have them, it would be complicated... Yeah, it would be the odd man out. So we have never been able to do it, we only do product and sometimes process innovations. We try to do innovations with social impact. It doesn't always immediately have to make a profit. Innovation is also a victory. But social innovation, it would be scary... We can't monitor its impact. How do we know if it's actually good for society? (19:53)'

Unfortunately, an understanding of innovations which does not fit could have real impacts. For instance, the combination of quantitative data with a prior focus on university-dependent innovation has overemphasised innovation capabilities within just three urban areas (PrMR1). Not only has this worsened programme managers' difficulties when ensuring growth within the whole region, but it has originally left Overijssel with both an excess and shortage of funding. Overijssel has one university, around which much of the region's RIS funding is deployed. However, as this university does not specialise in all cross-overs, little interest arose in part of the cross-overs, while other cross-overs were overflowing with project ideas.

'We are can't direct the innovation into a region. ... It would be nice if something happens in Steenwijk, or something [furthest point from the university of Overijssel]. It happens, and that's really nice. But most of it comes only to the science park Twente [around the University of Twente]... Sometimes, when I read a project-proposal, I can see that it isn't going to work. And I tell them 'why do you not try and involve the universities?' ... Partly, they don't consider it because of the distance. But its only half an hour from Hardenberg [random town]. Also, the companies in the science park are practical [so companies can collaborate for profit]. However, often the innovations don't fit the university, or they are not in the networks of the companies. (42:33).

Aside from innovation ideals, these issues also stem from assumptions within the policy-making process regarding the programme managers abilities to handle complex cases. In order to simplify their support process and avoid unnecessary confusion, no complete underlying theoretical framework has been implemented. This has led to projects which were not grounded within the regional economy to be approved, and pushed many projects into similar moulds, through which part of the bottom-up capabilities of the RIS have been lost (PrMR1, PrMR2 & PrMR3).

As such, innovation -the acceptable types of innovation, the sectors and regions whose innovations receive support, and the way in which programme managers can support innovations- are designed by the consultants and programme managers through values which are supported by various levels of stakeholders.

Hence, through the consultants' focus on building the policy from the local stakeholders' understanding of societally supported innovations, OPZuid has placed a large emphasis on social innovations which can create capabilities for future growth (Stimulus, p.46 & PrMR3, 43:10). This practice has produced nature-based investments, green social housing for elderly, as well as defence-industry investments (PrMR3, 44:06).

However, this process was not devoid of subjectivity. While a large array of triple helix actors - selected by the provincial governments- were involved within early phases of Stimulus:

'the key challenge was opposite [from allowing representation of the entire regional economy] ... The challenge was came from the broad input. How do we make choices? How do we make an important programme with a clear focus? (CR3, 33:31)... We made this choice in three ways. First, ... we looked outside of the region, to allow for a distinctive character. Second, we discussed with stakeholders. Third, our steering committee [a committee made up of industries which can build upon regional strengths (CR3, 35:23)]' (CR3, 34:44).

Therefore, OPZuid's allowed innovation is largely build on provincial ideas as well as by industries embedded in the current regime. Trough, for instance, the selection of key technologies which could drive the region's innovations by industries largely founded in one province, this has largely benefited powerful industries, and innovative regions. Regions with less strong and unique capabilities have not been able to compete with central urban areas. As a result just one quarter of all large projects (€10+ million) supported by OPZuid take the two less 'innovative' provinces. Three quarters of all large-scale funding was invested in one province, and overwhelmingly in Eindhoven (PrMR3). Furthermore, this tactic has resulted in vague project requirements, and lacking communications with industries far from

the centre. As such, only enterprises which are familiar with the EU subsidisation process comfortably apply to the programme (CR2 & PrMR3).

Innovation has been designed within both regions' RIS programmes. This is an unavoidable fact inherent to decision-making. However, in order to mitigate this, policymakers should be aware of a part of the values behind the decisions they make, as well as common pitfalls hidden behind these decisions. Designing innovation is to a large extent influenced by the various levels of actors involved in (and benefitting from) the production of the policy. In part, this results from MLG practices, where responsibilities, expectations, stakes, and copying higher levels policies highly influence the innovations deemed acceptable.

4.2 RIS as a product of influence

4.2.1 RIS as a product of EU policy

The main force behind both regions' RIS design, implementation and monitoring is the EU. This fact is a. RIS is an EC-led programme. The EC decides part of the policy-making process, while providing half of the funding for both regions.. However, the EC has created an MLG-structure through which it claims to have given away large swathes of this power and allow for place-based policy-making.

Despite this, the EU still holds significant sway over both regions' RISs. This seemingly largely happens through three related processes: 1. RISs' position within the EU's innovation chain; 2. Coercion regarding the direction innovation should take; 3. Normative expectations from non-EC actors surrounding funding.

Firstly, the tone of both EFRO Oost and OPZuid have been decided largely through EU-supported key technologies, societal challenges and transitions. While all regions were supposed to shape their innovation pathways through local capabilities and needs, only those innovations which could feasibly be (retro)fitted within the EU's one-size-fits-all goals are likely to receive funding. Partly, this results in projects being adjusted to fit the EU's mould, which could lead to blind spots in EDPs and prioritisation of less locally embedded innovations.

'we always look at European goals. You try to keep it in mind, and don't divert from it a lot. If you work on multiple levels, and you can support each other, then it will have impact. If it doesn't, then the region can try as much as it wants, but it won't become large. So, if a project can be adjusted to fit the goals. Then we definitely advise them to do so. It improves their chances at success (PrMR2, 58:24)'.

In Stimulus' case the transitions and key technologies are directly designed to coalesce with the goals of other (less bottom-up) EU programmes, such as InvestEU or the HORIZON programme. In EFRO Oost's case, the key technologies are built from Dutch ministerial commitments, however, this was on the assumption that its goals align and are derived from EU goals. As such, the foundations of both region's RISs -their goals, the direction for innovations, and the industries/transitions/cross-overs it wishes to develop- are largely decided through EU influence. However, this process mostly consists of selecting 'viable' EU aims and fitting them into the region as a result of regional choices. Hence, RIS is being shaped through normative EU influence.

Secondly, through the EU's image for a sustainable future by means of RIS, the EU influences innovation through coercive power. Most significantly, the EU's insistence on the inclusion of certain technologies and industries, innovations are introduced. For instance, within the four cross-overs supported by EFRO Oost, one cross-over had little backing from local strengths. The sustainability cross-over, was specifically focused on green energy solutions, despite the near complete absence of innovative green energy SMEs within both provinces. Accordingly, a completely new industry was to be founded within the Eastern Netherlands, and was obligated to receive a large share of RIS funding, as it aligned with core values of the EU-wide RIS aims. Due to its perceived important function in innovation it was even allocated 1/3 of funding. Hence, PrMR1 mentioned the following after listing the successfully supported industries, which includes RIS's aim of digitalisation:

Energy, that is the main one. ... How do you say it? It has been pushed down our throats by Europe, because we have to spend one third of our money on 'Green Deal-like' things. We want to do it, but we can't. We don't have an energy-innovation-region. Other regions should have

received that funding, regions that have more of it [energy innovations] ... We managed to do it, the money ran out. But it didn't come naturally, and we couldn't support other innovations because of it. Like Medtech, where we have a continuous flow of great innovation new ideas. But battery development or hydrogen, we don't have too much of it. There are some projects, we also have to switch away from gas, but to pour innovation sauce over it... (PrMR1, 10:30).'

However, it should be noted that these structural investments have successfully led to the development of a blooming green energy cluster in the province of Gelderland (PrMR2). These new industries bring the additional benefit that programme managers are very familiar with the clusters, allowing for more comprehensive investments (PrMR2).

Unfortunately, these EU-wide investments and the demand for completely new innovations within the RIS programme, result in a crowded market with investment problems.

'Noord-Brabant is very strong in it [green energy]. We are internationally strong players in the transition. Especially here [Eindhoven], with the large Tech cluster. Luckily, we get to support this with OPZuid. Energy is one of our key transitions, and receives a large share of our funding. So we have developed it a lot.... However, some great projects don't make it through the expert committee. The province might have to pay if Europe doesn't agree with the innovativeness of the project. [after asking why?] Now, many regions invest a lot more in it [green energy], many projects come from this. These SMEs don't always survive, but we can't do the market entry, so our similar projects can't always receive EC subsidies. The expert committee considers this carefully (PrMR3, 18:25).'

Thirdly, many consortia and innovators are influenced by the EU in a contra-productive way. A significant part of the prospective RIS-supported enterprises gets scared off by opaque and complex EU subsidy guidelines, as well as the resulting degree of mingling in company affairs and finances. Part of the applicants consider this system as so restrictive and long-term, that funding might cause more harm on the innovation process than the profit gained from EU funds (PrMR1). As such, these projects

either merely ask for advice on project-development at programme managers, or even get turned away from considering RIS through assumptions regarding overly complex funding processes.

Similarly, programme managers have assumptions regarding EU funding complexity. For instance, many projects which could fall outside of EU subsidisation requirements, don't get support from either programme managers or the expert committee out of the fear that funding could be annulled and retroactively has to be funded by the provincial governments.

'We interpret it [EU requirements] and we try to fit in with this. We do this very strictly. We know that we are checked unbelievably close on this. [after asking whether this has effected the innovations EFRO Oost supports] Yes, regularly. The financial test in 'subsidyland' is infamous. Everyone understands why this is the way it is... But most innovative companies don't fit the requirements, because of the way they are financed, they lose a lot of money before market introduction. This is exactly our target group... Very often, colleagues say: 'Yes, this is a good idea', even the expert committee approves of the idea. But we don't dare to ask for subsidies' (PrMR1, 1:00:22).

All programme managers say that they are flexible in which innovations they try to support, but they are extremely careful when it comes to remarkable types of innovations or ideas outside of the EU's main aims for RIS (PrMR1, PrMR2 & PrMR3).

In short, the EU has a multifaceted but consistent influence between regions. The EU has large coercive and normative power, and other stakeholders are cautious when interacting with EU demands. In particular, the EU holds large direct and indirect influence over the direction a region's RIS goals, aims, and instruments. Moreover, through the structural nature of the fund, extraregional capabilities can be introduced to regions. Furthermore, by the (perceived) complexity and power of EU subsidy schemes, part of the region's innovators are not reached, and strict boundaries to the types of innovation supported by programme managers are erected.

4.2.2 RIS as a product of national institutional frameworks

National actors partially have a similar way of influencing RIS programmes as the EU. This is specifically true within the production of the RIS policies, where both regions aim to fit their programmes into the frameworks of the Dutch national key technologies. In turn, these technologies - which are in part created through EU aims- shape the types of innovations which are eligible to gain support and subsidies by the RISs. Furthermore, in a similar vain to other programmes, the RISs hope to coalesce their goals with national innovation programmes (CR1, CR2 & CR3). Ensuring an innovation chain through which the regions' innovations can be supported through the different phases of marketisation (CR3).

However, it should be noted that the EU and national aims put emphasis on different parts of the innovations and their functions (CR1). Due to their different scales, the national programmes have a higher level of detail (CR2). As such, the national influence leaves a lower degree of flexibility (CR1). This is further emphasised by the presence of ministerial representatives in both the expert and monitoring committees, where projects can be asked to align with national aims (PrMR3). These demands crystallise as less flexibility, and lead to a further narrowing of possible types of innovation within RIS, as well as more top-down policy guidance.

Contrastingly, all programme managers, and all consultants from Stimulus shared their worries about the future of RIS. Currently, the coming programming period might focus on the NRPP (Dutch national and regional partnership fund). This would nationalise RIS, and further remove investment and focus from regional specialisations.

'They want to introduce one NRPP, one national plan for the whole country. We keep giving feedback, and what's important is us saying 'guys, don't lose the regional character. Some things we can only do because we are very good at it within the region. So we can also reserve a separate budget for regional funding.' When you do a national EFRO, it doesn't have any effect anymore. ...We can easily switch to fit changing local needs. Most innovations that work, do so because we know regional parties. It starts in the region. That regional power, and regional input, we shouldn't lose it' (PrMR2, 1:08:22).

Furthermore, PrMR1 is scared that the NRPP will mostly fund projects within the nationally innovative regions, creating future left-behind regions.

In short, national influences within the Netherlands are expanding, and the influence mostly relates to the foundational goals of RIS programmes. This is mostly done by influencing the guidelines within which policy-makers and programme managers work, in turn shaping the types of innovations allowed within the RIS programmes. However, all actors involved are actively worried about the consequences of this for the bottom-up aspect of RIS, and strive to solve this imbalance.

4.2.3 RIS as a product of regional capabilities?

RIS, as a place-based programme, is supposed to be implemented by regional actors, on the basis of regional capabilities, and developed by regional stakeholders. However, influence of the local levels seems limited.

Within the production of both regions' policies, individual stakeholders have regularly been included in discussions. Mostly, the influence of these enterprises was to highlight their needs, and for consultants to uncover ways for provincial, national and EU-level aims to fit in with local capabilities.

'We didn't include the entire local economy. We only built it with a few stakeholders You can't summarise the whole economy. We work on the basis of the transitions, on key technologies. We selected the stakeholders that fit this best. It allowed for more focus... We mostly talked with trade unions, but also with the strongest companies in the region. Most smaller companies only come within the implementation of the fund. (CR2, 29:58).'

Furthermore, transitions relevant to the future survival of their industries have been highlighted by the industries -such as energy prices, resource scarcity, or demographics- (CR2). In both regions these needs have become intertwined with the main RIS goals. Moreover, during the production of Stimulus locally embedded and internationally strong actors were prioritised as a way to deepen the effectiveness of the limited RIS funding (CR3).

However, this does mean lacking support for budding industries, as well as a reliance on key technologies present within a select number of enterprises. Similarly, the assumption could be made that before narrowing to more influential and embedded enterprises, the general picture provided through stakeholder meetings could be skewed towards regime-level industries. Within both regions, consultants acquired stakeholders solely through provincial recommendations, and further stakeholders were selected after being recommended by these provincial recommendations (CR1 & CR3). As such, institutionally embedded industries, who are likely familiar with subsidising processes, played a large role in narrowing higher level aims towards the regional scale.

One tangible outcome place-based outcome comes from the demand to allow for extraregional enterprises within consortia applying to RIS in the Eastern Netherlands. In turn, this allows for overcoming local knowledge gaps, as well as for enterprises on the boundaries of the region to collaborate with close-by actors outside of EFRO Oost's jurisdiction.

'a big improvement we have made is collaboration outside of the region, we made it much easier. If a company says 'I need a party from Noord-Brabant, because there is no party in the region' there is space for this. But the main contribution has to be from the region. Thus, the main results have to be measured in the region too' (PrMR2, 1:11:03).

Within the implementation and monitoring of both regions' RISs, the role of these embedded industries and stakeholders has largely been relegated to programme managers' normative assumptions regarding the opportunity spaces of the regions. This is limiting, as programme managers largely connect with projects through existing networks. Many new applicants come from actors from similar backgrounds to apply for RIS subsidies, due to higher exposure (PrMR2).

Local influence within implementation and monitoring of local actors largely comes through societal organisations, trade unions, and trade organisations. These actors largely focus on the effects of innovations on the broader society and the fit with local industries. In turn, they are major proponents of social innovations as a part of the practical reality of RIS.

The aversion to EU subsidy complexity, and bureaucracy as whole, has also been a driver behind the regions' lobbying efforts at the EC for simplified and more flexible RIS guidelines (PrMR1

& PrMR3). While the effects of this remain to be seen, it has already influenced the amount of flexibility from programme managers in supporting projects, as well as provoked more outreach from the programme managers.

In short, local actors have a surprisingly small, yet important role. They allow for EU and national plans to be translated into local policy, while providing an essential link between innovation policy and society. Meanwhile, they drive some small innovations within the shape of the RIS policy itself. However, the main proponents behind these influences within the policy itself, and to a lesser extent beneficiaries within the implementation, have been institutionally and regionally embedded regime-level industries.

4.2.4 RIS as a product of programme managers

According to the programme managers the current programming period has been a resounding success, with new industries, a plethora of world-leading innovations, and social projects as a result of it. They share a great sense of pride on seeing the burgeoning local innovations in their region, and are generally very willing to support interesting and remarkable projects outside of initial RIS expectations (PrMR1; PrMR2 & PrMR3). However, they mention that this flexibility is being made harder by the consistently shrinking budget section of the RISs' budget aimed at programme management. Furthermore, many programme managers believe in the strength and potential of their region. As a result most programme managers accept many projects outside of regional specialisations.

'There is specialisation [through RIS]. But I also think, well, why not let a thousand flowers flower. A good idea is a good idea... and if we have good hopes for it. Then, we will make sure that it fits the mould [non-italics are authors addition. Non-direct translation of an idiom to show the meaning of the idiom]. And I am not talking about something like arranging flowers, but something highly innovative. Especially since, like digitalisation or Medtech, they are inherent to the University of Twente. Alumni will roll out of it, and they will found companies by themselves. Not automatically of course, by why not support new ideas?' (PrMR1, 1:21:00)

Interestingly, the programme managers at EFRO Oost have also tried to, and according to the EC succeeded at, innovating the general purpose and shape of the EU-level RIS programme. Out of frustration regarding the inability of RIS, and specifically the Vanguard initiative (an industrial innovation collaboration between a select number of NUTS-2 regions), to support European strategic autonomy and garner the strengths of interregional collaboration, EFRO Oost has allocated part of their budget to a new cross-over.

Namely, an interregional cross-over, where consortia can consist of key actors from various regions in order to strengthen and share innovation throughout the EU. In turn, the goal is for this to fast-track innovation by providing knowledge to other regions with similar innovation pathways, while allowing for enterprises to open the European market. This has started bearing fruits and has started to influence other regions.

'It's very unique what we did, also within Europe. We got a lot of feedback on it. Also invitations from other regions. Like, we also want to do this. Can you advise us on it? So it was quite unique that we started an international collaboration with our own funding. ...It was only possible because we had the same kind of regional innovation programme, and we all paid our own companies' (PrMR2, 44:00).

However PrMR1 saw one critical flaw in the collaboration:

'I am not sure if we can do this later. Our funding is likely decreasing, so we can't pay for experiments with the EFRO anymore' (PrMR1, 1:25:35).

5. DISCUSSION

5.1 *Designing innovation policy through multi-level conflicts*

This research has aimed to understand whether place-based policymaking hold true as the key motivator behind choices within the RIS production, implementation and monitoring of the Eastern and Southern Netherlands. Specifically, this research has attempted to do so through understanding the influences of actors within RIS's MLG-system, and the role they played in adjusting local industrial pathways. Formal aims regarding bottom-up governance, and a theoretical need for understanding local context to ensure sustainable economic and social development, suggest RIS to be primarily concerned with understanding and embedding itself within local contexts. Despite this, the data collected within this research largely points towards the bottom-up perspective to be one of many aspects that make up the RIS programmes in both regions. Rather than building innovation pathways from entirely local EDPs, the RISs base their foundations for the opportunity spaces around the local contextualisation of higher scale aims. Furthermore, instead of mostly supporting key local industries, RIS also supports extraregionally imported industries and programme managers also put focus on unrelated diversification.

Programme managers have showed themselves as active and strongheaded. They desire to support their regions, and lend support to whatever project they deem fit for regional growth. However, through funding requirements, more remarkable projects always have to be reshaped to fit the mould of key technologies, transitions or challenges decided by higher level actors. Innovations that cannot do so remain unsupported. This is not an inherently negative process: the greater focus on a strict set of types of innovations lends impact to RIS -if programme managers adhere to this-, but it could limit broadness of investment and potentially the local fit.

The foundations of the researched RIS3s heavily shape the innovations accepted within the programme through MLG -by EU aims on societal transitions, or Dutch ministerial alignment. Yet, these influences don't have to be negative. However, both processes do highlight that the innovation is

produced on the basis of higher scale ideals. This top-down process has been strengthened through insecurities regarding the flexibility of the RISs and unclear basis upon which the policies have to be build. When embedding the policy, this is largely done through limited actors, due to flexible guidelines on stakeholder inclusion. In turn, this led to largely rewriting pre-existing policy instead of ensuring an updated local fit.

The unclarity regarding RIS as a type-I or type-II MLG-system are key to understanding the ability of RIS to create sustainable regional economies. Currently, the policy itself is created from a type-I understanding, where policy is created on the basis of strict multi-layered reciprocal systems, and implementing higher-level policies within the lower level. This is despite the EC's assumption that RIS should function as a type-II MLG-system, and gives flexible support accordingly. An opposite trend is seen with programme managers, where they believe in a responsible region-led type-II system, yet are bounded by fears of stricter type-I separations.

Through institutional hierarchy EU and national policies are considered the basis for the production of innovation in both region's RISs, as consultants implement higher-level innovation ideals into the regions and aim to align the policy with surrounding regions. Furthermore, the higher level-actors constrict the flexibility of projects taking place within the RIS, due to volatility regarding EU funding and the high failure-rate of innovative enterprises.

Local actors are largely relegated to a supporting role in the contextualisation of higher-level aims, while key enterprises are likely to see their aims directly represented through their exclusive key technologies. Within the limited funding and by aiming to balance MLG pressures in the long term, programme managers have been seen to innovate on the RIS programme and embed the programmes within the region. However, as they are not involved in policy production, this is consistently considered in hindsight, retrofitted and underfunded.

In short, RIS designs innovation through RIS's MLG-framework. This research's results show that the policy-making process relies on a top-down, yet consistent, logic. It does not necessarily get built from the ground up in local contexts, nor does it fully embed within local contexts, as seen through

the introduction industries. Within the implementation and monitoring of RIS within both regions, power is not negotiated within the MLG framework. Instead, power is loosely projected, and innovations are not internally consistent and prioritised as a result. All industries are funnelled into limited directions, while a plurality of reshaped innovations from a large variety of industries are partly supported.

5.2 Isomorphism within RIS

Instead of being produced fully through place-based policymaking, RIS pulls in large part from other policy actors. The data has shown the mimicry of the RIS policy from actors on other scales, geographical contexts or from familiar historical policies. As such, this research can discuss various ways in which isomorphism has taken root in the RIS programmes of the Eastern and Southern Netherlands. In turn, understanding the isomorphic tendencies allows for this study to categorise policy areas where bottom-up policymaking has not been the main driver. As such, it allows for an answer to the research questions.

Evidence for the existence of all forms of conceptualised isomorphism appear to be present within the RIS programmes of the Eastern and Southern Netherlands. Moreover, the various types of isomorphism largely seem to correspond with specific relationships in RS3s MLG.

Firstly, coercive isomorphism -power which pushes policies in a similar direction through direct force-, appear mostly through EU demands on RIS. This power primarily holds significant sway of the policy production. Mostly regarding the thematic direction and subsidy obligations of the policies, as well as the introduction of specific key technologies or even complete industries.

However, it does not directly create the overarching selection of innovations within the policies. The EC can provide guidelines regarding the elements needed for a comprehensive RIS to be eligible for funding, as well as the general direction all innovations have to take -like a focus on digitalisation or green energy-. However, the details are largely not coerced.

When this does happen, it results in the push to invest significant funds into industries with limited regional embeddedness, like green energy in EFRO Oost's case, and divert investment from local industry. These coercive forces are likely present within the entire EU; these general guidelines exist as requirements for RISs to receive funding.

Theoretically, their impact is not negative, as it funnels all regions into a seemingly viable innovation pathways. However, it does lead to higher levels of competition, which could result in innovations losing their competitive edge and RIS funding to less innovations in less embedded regions, as well as a lack of support for existing industries. As such, this lack of bottom-up policymaking can lead to blind spots in the local economy -and with it lacking economic and social sustainability-, as well as losing resources through too high levels of competition.

This is furthered by the other main source of coercive isomorphism. The provincial level governments act as conductors and strengtheners of EU-level coercion, because of funding mechanisms. As provincial governments have to bear the financial weight of potential subsidy withdrawals, the underlying EU aims in RIS are amplified by demands from provincial governmental actors in the implementation and monitoring stage of RIS. As a result, many locally embedded innovations are subsidised only when they could be transformed to fit the EU-wide RIS mould. Further strengthening the coercive isomorphism, and its beforementioned effects, within the RIS programmes.

Secondly, normative isomorphism is present in a large variety of ways within both regions' RIS programmes. Mostly, this results from the professionalisation of RIS, and limited contact moments with local actors.

RIS is considered sustainable, when the RIS aligns itself with broader innovation schemes and innovation chains. Key technologies and general EU-level or Dutch innovation aims were held as the standard for the types of innovations which ought to be supported by RIS at the regional level. This decision comes from a widely held believe that higher-level aims create viable futures, shape other

regional innovation investments, and will be able to create support for RIS projects in later stages of its development. As such, this normative force is built upon a desire to fit in as a way to create shared growth, as well as mimicry in ideals out of trust to higher level actors.

In comparison to coercive isomorphism in RIS, this achieves not only a similar general forced outline, but it also heightens the chance at alignment of ideals and aims between different regions, resulting in more strongly coalescing innovations. As many regions invest in similar industries and push them in similar directions, abilities to learn from each other and a larger scale of investments in certain directions are to be expected. However, diversification could be dampened by higher levels of competition, and lowered funding for unique industrial elements in regions. Similarly, innovations can be less likely to arise, as their needs are not met in the local capabilities.

Contrasting this, local stakeholders perform a contra-isomorphic influence. Through the need to embed outside ideals of innovation into the regions, stakeholders can adjust the RIS policy to fit in which local capabilities. However, as provinces have mostly shared stakeholders with strong institutional ties, a higher perceived innovation potential within RIS, and stakeholders are reduced to a selection which is considered most useful for the consultants, the effect of stakeholders is likely limited. Stakeholders aligning themselves with broader innovations values -stakeholders likely to be aligned with the sketched out RIS-, hold the largest sway on the local embedding of the RIS. This all stems from values in policymaking, and hinders local embeddedness.

Moreover, the selected stakeholders are regime-level actors with remarkable technologies - around which the RIS is build -, which makes subsidy alignment for other industries less likely. As such, power stays concentrated within limited industries, diversification is lessened, and ideals around the future of the region are strengthened. Hence, through normative isomorphism not only place-based policymaking principles are weakened, but also potentially the future sustainability of the regions. However, it should be noted that in practice programme managers support a large variety of industries. Yet, they are all pushed into one mould.

Thirdly, mimetic isomorphism seems to be limited and highly dependent on divergent RIS ideals. While it was theorised that policymakers could learn from other regions, the only interaction with other regions was to explicitly differentiate themselves from the policies of other regions. Similarly,

when deciding on EFRO Oost's international collaborations, efforts were explicitly made to not move policies towards each other. Instead, the programme managers hoped to collaborate with the most naturally fitting industrial bases of regions. They aimed to keep their policies bound within local context as much as possible, and were aware of the risks of copying each other.

However, when interacting with the general ways the policy instrument could work, in contrast to the industries it supports, regions might turn towards one another. This can clearly be seen by the call from other regions to understand and copy EFRO Oost's way of creating interregional RIS collaborations. Yet, despite its potential for creating mimetic isomorphism, this research has not collected data on the ways other regions try to implement EFRO Oost's measures, nor their motivations behind inquiring into it.

Lastly, clear indications for temporal isomorphism are present within the results section. This is partially present due to both regions requiring consultants to incorporate prior strengths into the new RIS policies. In order to ensure the effectiveness of RIS through its function of a structural investment fund, and to increase the speed of policymaking, the consultants in both regions have largely used the core concepts of prior RIS policy to build the 2021-2027 RIS programmes. As a result, this frees up time for the production and embedding of the RIS policies in the local context, improves the familiarity and ease-of-use of the programme for the programme managers, and ensures further strengthening of prior specialisations. Furthermore, this temporal isomorphism is strengthened by the specialised knowledge of programme managers. They could be more likely to be able to see the possibilities in transforming projects into the RIS mould when they are similar to projects which the programme managers are familiar with. Similarly, programme managers are more likely to reach out to actors in industries they are familiar with, through an understanding of their networks and connections.

However, temporal isomorphism could also perpetuate prior shortcomings, disallow part of the diversification process, and further embed strong local actors into the regional identity -with future impacts on the potential for lock-ins as a result.

6. CONCLUSION

This research set out to understand how isomorphic processes shaped the Research, innovation and smart specialisation strategy (RIS) programmes of the Eastern and Southern Netherlands through RIS's Multi-level governance (MLG) system. This research goal allows for furthering the understanding on whether the RIS policies are fully developed local industrial ecosystems, and which external influences lessen this potential place-based elements of RIS programmes. Through semi-structured interviews and document analysis, this study has shown that the RIS programmes in both regions are heavily shaped by MLG-dependant isomorphic processes. Moreover, these processes follow consistent rationale between both regions, suggesting potentially generalisable insight regarding isomorphism in multi-level innovation policy.

In particular, this research has highlighted the major role of the EU within various forms of isomorphism in both regions. Interestingly, the research has shown the relationship between the influence of the EU and unclarities regarding the negotiation of power within RIS's MLG structure. Through the results of this research, this thesis hopes to broaden the limited knowledge of isomorphism within the context of MLG research on RIS as a way of conceptualising one-size-fits-all policymaking through negotiations of power. Furthermore, this study's relevance also comes from its theorisation and practical usage of temporal isomorphism as a relevant term within policy isomorphic research.

6.1 Research limitations & Suggestions

Unfortunately, the claims made within this thesis have come with limitations. Most importantly, the size of this research is relatively small; consisting of six lengthy expert-interviews and two regions' policy documents. This data source could be sufficient for this thesis, as the research aimed to map the policymaking, implementation and monitoring process. This has been done in whole. However, a larger number of respondents would allow this research more validity, by gathering and verifying more data. The inclusion of more respondents from the same regions was impossible within the constraints of this research, and would increase the thesis's size and ambition further. Moreover, claims regarding normative elements can't be made at full, due to the researcher's background and the timeframe of this research.

Another shortcoming in this research is the limited number of regions. Isomorphism in practice is a process visible through multiple region's policies. This research has only shown the potential for alignment between regions, and could only be generalised with more case study areas. Unfortunately, increasing the geographical scope of the research would decrease the conceptual depth, or bloat this thesis further.

Lastly, this thesis has aimed at achieving the analytical and conceptual depth this research demands, through the many dependents on which both isomorphism and RIS are build. However, this has resulted in an ambition too large to comprehensively accommodate the nuances essential to understanding and operationalise either concept, and connect all aspect of this research. Ideally, this research would widen the scope of the thesis and present its findings and theory in a more coherent and focused manner.

As such, future research could focus on alleviating these limitations. More case studies could be considered, as well as a focus on one specific type of isomorphism. Similarly, research furthering the findings of this research could be carried out, such as inquiries into the effects of isomorphism on RISs' impact on regional economies, or a research into the way mimetic isomorphism has shaped other programmes on the basis of EFRO Oost's interregional collaborations. Lastly, research inquiring into conceptual topics, such as expanding on theorised temporal isomorphism or the variability of isomorphism between regions focussing on national and EU policies, could be explored.

6.2 Research questions

Despite these, and other, limitations, this research has been able to provide consistent and applicable results. Regarding the first sub research question: *'Through which multi-level governance mechanisms and power relations does policy isomorphism emerge in RIS, and what forms does it take?'*, unified results arise. This research has shown that RIS within both regions does not consist merely of the local needs. Instead, the shape, direction, and themes of the RIS programmes arise largely from the negotiation of power between the regional policymakers and actors between levels. Through uncertainty regarding the exact type and intend of MLG in the EU-wide RIS project, impact on the regional policies

largely rest upon EU guidelines. Furthermore, through professionalisation and values regarding innovation and societal transitions, the RIS policies are shaped through ideals and aims from higher scale actors. As such, RISs within both regions are showcasing coercive and normative isomorphism. This could make regions prone to misaligning with regional strengths, as well as outcompete each other into less diversification.

Furthermore, policymakers in both regions largely depend on known strengths and prior policies for the other sections of the policies. In turn, this temporal isomorphism allows for structural investments, but also potential oversights on lock-ins and the broadness of local industrial trajectories. Contrastingly, policymakers seemingly either do not focus on other regions' innovation policy on the types of innovation to support, or they actively try to not copy their policies. However, regions might be performing mimetic isomorphism by learning about other regions' innovative implementation of RIS, as well as its general foundations. Yet, due to limited data, this cannot clearly be stated.

Regarding the second sub research question *'Which regional growth trajectories are articulated in RIS policy documents, and how are these influenced by patterns of policy isomorphism?'*, a clear alignment with EU- or national level innovation aims can be seen. Both regions have designed their supported types of innovation, industries and societal transitions through a plethora of normative assumptions. Specifically, by way of copying intent from higher level actors, policymakers within RIS have aimed to align with broader innovation chains. This is often presumed to allow for more comprehensive and varied funding for innovative enterprises, as well as create a larger immediate impact on the regional economies through increased financial power. Furthermore, broadly shared innovation ideals have played a central role in the production of the RIS programmes, where internationally supported industries were often singled out, or even introduced to the regions. As such, trajectories related to digitalisation or green energy found great support through normative isomorphism, as well as a focus on societal transitions on EU-wide challenges. This has been further strengthened by means of limited provincial spending power. Resultingly, a relatively cautious approach is taken regarding risky investments.

Contrastingly, the regional industrial imagination also stems in large part from prior innovation policies within the region. These were considered important through earlier assessments, regional identities, or the benefits of structural funding. Thus, regional industrial identities were often added to the drafts from provincial governments. This is furthered through existing understandings of the regional economies, as well as existing social networks by programme managers. Hence, not only did the regional trajectories fit in with EU-wide ideals, but also with a continuation of support to institutionally embedded industries, through means of temporal isomorphism.

Lastly, regarding the third sub research question *‘How much space is available to integrate local initiatives and interests into the implemented RIS policy, and how do policymakers decide how and with whom this space can be filled?’*, a dynamic answer arises.

Within the production of the RIS policy, the included stakeholders are entirely based on provincial suggestions and the immediate suggestions of these stakeholders. In both regions the policymakers deemed this variety of these stakeholders too great. As a result, the consultant attempted to focus the impact of RIS by mostly furthering integration with actors involved with key technologies -as derived from higher level policy-, and those actors considered most influential to the regional economies. As such, a lopsided imagery of the local initiatives and interests is likely to have been formed.

However, all programme managers wished for diversified innovations to further regional economic growth and societal development. As such, the programme managers often accepted a large variety of projects for early support. Hence, a large number of local initiatives and interests could be supported. However, given the limited social networks and reach of programme managers, the avoidance of EU subsidies for many local actors, the general caution of provincial funding towards ‘risky’ investments, and the mould all accepted projects have to be fitted in, the variety of local

initiatives and interests implemented through RIS might be low. This is especially true as regime-level industries continue to specialise and strengthen through RIS support.

Given the results of these three sub research questions, the main research question '*How do multi-level governance pressures shape policy isomorphism in RIS implementation in the Eastern and Southern Netherlands?*' can be answered. RIS is largely designed upon ideals from higher level actors in a process of normative isomorphism. Its general shape, as well as a plethora of details, is derived from EU guidelines in a process of coercive isomorphism. Contra-isomorphic processes have limited effect, and largely influence the detailed implementation of isomorphic RIS policy. This largely stems from unclear MLG-structures, as well as assumptions regarding the correctness and abilities of other levels of actors. Mimicry between regions is potentially unlikely to happen between regions. In accordance with this, the policy lends heavily from prior innovation policies and interactions to build its foundations and understanding of the region. In accordance with these conclusions, RIS is potentially less place-based than initially hoped, and less capability-rich regions might not reach the sustainable growth they aim for.

6.3 Implications

This result shows clear isomorphic forces within the production of RIS3. This does not have to have negative implications. Regions can learn from successful policies instead of producing their own failing policies. However, it does result in a lessened degree of building upon local strengths and needs. Accordingly, as less capability-rich places -unlikely to excel in generalised EU-wide strategic goals-, and left behind regions are unlikely to gain the full ability to develop based on their capabilities to create economic and socially sustainable growth. This result contradicts with the goals of RIS directly and could hamper its intended impact of EU-wide growth and economic convergence. These effects of RIS could potentially be overcome through clearer procedures on the negotiation of power, a higher degree of local influence in the policymaking process, and lessened financial strains within all phases of the RIS programme. Through these conclusions a plethora of general pathways for policy suggestions arise

from this research. Four suggestions directly arise from the literature and interviews as part of this research:

First, clearer procedures which explicitly define and adhere to MLG principles, wherein actors take responsibility for local inclusion. By providing official positions, expectations and relationships fewer assumptions and insecurities would arise within the RIS4 programmes. Differentiated roles could allow for clearer guidelines on where and how to perform place-based policymaking. Clear expectations could provide an incentive against myths arising from professionalisation, by showing trust and respect for lower level processes and obligating their inclusion. Official relationships allow for lowered insecurity when applying for funding for out-of-the-box projects.

Second, the local influence could be broadened from existing embedded industries to a variety of industrial and social actors. Currently, the local stakeholders involved within the RIS policymaking and implementation are largely from a select number of innovative areas. This arises in part from a mismatch between the innovative industries and types of consortia RIS can support, and the ones which are available in less innovative areas. This might not fully be resolvable, however, within the current programmes fewer stakeholders representing interests from less innovative regions are involved in the policymaking process. As enterprises gain more support, they grow more and get more institutionally embedded. In turn, this allows for more subsidies, importance in the regional economy, and a higher likelihood of getting invited as a stakeholder in future programmes. This feedback-loop could lead to lock-ins. Ensuring a place-based policy which does not only rely on a select number of key technologies available in one city could provide better support for the broader region.

Thirdly, structural financial support within the policymaking process could simplify costly parts of the RIS4 process which allows for more dedicated time to include local actors. Currently, larger parts of the programme have to be designed by the regions, and have to be interpreted by programme managers, then for many other EU-programmes. This was expected to allow for more place-based policymaking. However, this research has shown that within many segments of the programme, higher-

level general policymaking ideals are reproduced, but take more effort than they should. Simplifying processes or more direct guidance on specific segments frees resources for other segments to be produced from a place-based perspective. Similarly, allowing for more clarity on guidelines for funding of projects could allow for programme managers to accept more innovative and remarkable projects. Furthermore, many enterprises are hesitant to engage with EU subsidies. Simplified and clarified funding guidelines could allow for more innovative ideas to be developed through the support of RIS4.

Lastly, less financial reliance on provincial funding allows for less cautious project support stances, while simplified subsidy applications allow for less over-implementation of EU demands, and could produce a looser mould for projects to fit. Currently, half of the RIS3 budget is derived from provincial funding. These relatively small institutions cannot bear the risks of the unpredictable nature of innovations. Given the early-stage of innovations supported by RIS, this results in many promising ideas being rejected. Despite them aligning with EU-goals, RIS ideals, and being able to get interest from programme managers in the project-idea phase. This financial insecurity does not only harm the projects directly supported by RIS, but also the ability for programme managers to dedicate space towards innovating RIS4 itself and implementing these innovations broadly. Moreover, to partially prevent possible risks, the provinces try to align with EU goals within their initial drafts of the RIS3 programmes -weakening place-based elements of the eventual programmes.

In short, paradoxically, more direct guidance from the EC could be beneficial to the effectiveness of RIS4 at achieving its goal by allowing for representation of the local economy and place-based policymaking.

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APPENDIX A – INTERVIEW GUIDE

Bold questions are the main questions. Each with an expected duration of roughly 5 minutes. These questions are primarily focused on understanding the MLG-framework and influences of RIS, as well as forces pulling policy closer. As such, there were some aspects to the questions that needed to be mentioned to clearly identify the MLG process. These are the lower level questions. However, as this research mostly asks for a process and deliberations within it, all interviewees mostly kept their own stories going in the desired direction without asking additional questions. As such, the main difficulty was keeping answers within the context of this research. In all interviews no more than 4 lower level questions had to be asked. In reality most follow-up questions were about going into more depth on prior statements and about connecting things explicitly to the earlier questions.

Consultants:

Wat was uw rol in de RIS-beleidsvorming? (*What was your role in RIS policymaking?*)

- Wat was uw positie? (*What was your exact position?*)
- Wat was uw taak binnen het team en hoe werd dit verdeeld? (*What tasks did you have to perform as part of the team, and how was this decided?*)
- Had u eerdere ervaringen met EU of regionaal economisch beleid? (*What prior experiences with EU or regional development policy do you have?*)

Wat was de opdracht van uw organisatie in RIS-beleidsvorming? (*What job did your organisation have to do in RIS-policymaking?*)

- Weet u waarom uw organisatie gekozen is om mee te helpen aan RIS? (*Do you know why your organisation was selected to help with RIS?*)
 - Hoe is bepaald hoeveel en welke medewerkers betrokken werden? (*How did they decide how many/what kind of employees to involve in the project?*)
- Hoe is de balans tussen verschillende instanties en betrokken bepaald? Is dit actief besproken en bepaald? (*How was a balance between different institutions decided? Was this discussed and chosen proactively?*)
 - Hoe communiceerde uw team met de overheid? (*In what ways did your team communicate with the client?*)

- Hoe was de relatie met betrekking tot hen? (*How was your relationship with the client?*)
- Hoe was de relatie tussen de verschillende provincies betrokken hierin? (*How was the position between the different involved provinces?*)

Wat was de MLG strategie binnen de opdracht en was dit expliciet besproken en vastgelegd? (*What was the MLG strategy for this project, and did you explicitly discuss and formalise this?*)

- Binnen uw team, weet u nog welke regels u heeft afgesproken qua richtlijnen met betrekking tot het balanceren van belangen? (*Within the team, do you remember which rules on balancing interests you decided?*)
 - Waren er vooraf afspraken omtrent het wegen van een belang, of was dit meer een gewoonte? (*Were their prior agreements on methods to weigh interests, or did you do this through experience?*)
- Moest u richtlijnen van de provincie invullen, was er veel vrijheid om de regio te onderzoeken, of stond alles al vast? (*Did you have to follow guidelines from the provinces when making the policy, or was there a large degree of freedom in researching and on what to include?*)
- Hoeveel tijd hadden jullie om RIS-beleid te maken? (*How much time did you have to make the RIS policy?*)
- Waren er aannames die vooraf gesteld werden m.b.t. de regionale economie om alles sneller te maken? (*Were there assumptions in relation to the regional economy to make the development of the policy faster?*)

Hoe werd dit vormgegeven door EU RIS richtlijnen en doelen? (*How did it get shaped through EU RIS guidelines and goals?*)

- Hadden jullie specifieke EU-doelen die jullie wilde bereiken? Werden jullie geleid door de industriële ontwikkelingen die de EU wilde zien, of was de EU meer achteraf? (*Did you have specific EU-goals you wanted to achieve? Do you get guided by specific industrial developments in the EU goals, or did you fit EU requirements in afterwards?*)

- Hoe gingen jullie om met de EU richtlijnen omtrent MLG? (*How did you handle EU-guidelines on MLG?*)
- Hoe interpreteerden jullie EU-richtlijnen in de praktijk? (*How did you decide how to interpret EU-guidelines?*)
- Waren er strategieën om EU-fondsaquisitie makkelijker te maken? (*Were there strategies to align with other EU funds more easily?*)
- Is het beleid in samenspel met ander EU beleid gemaakt? Welke is ondergeschikt? (*Was the policy created in conjunction with other EU policies? Did it shape your guidelines?*)

Moest het RIS-beleid zich binnen nationale regionale economische ontwikkelingsstrategieën passen? (*Did the RIS policy have to fit within national development strategies?*)

- Hoe is het RIS beleid in de nationale strategie en richtlijnen gepast? (*How did the RIS fit in national strategies and guidelines?*)
 - Had de provinciale overheid belangen in het beleid? (*What did the provincial government request on this matter?*)
 - Waren deze belangen duidelijk vastgelegd, of is het meer normatief? (*Were the needs and demands clearly defined, or did you follow general ideals?*)
 - Hoe gingen jullie om met het passen van strijdende belangen tussen overheid, EU en regio's? (*How did you handle it if the demands between the EU, national governments and regional governments clashed?*)

Hoe werd ruimte voor lokale noden hierin gewaarborgd? (*How did you ensure space for local needs?*)

- Hadden jullie genoeg tijd en ruimte om hierin een plaats gebaseerde positie te vinden en hoe werden deze gebalanceerd? (*Did you have enough time and means to make a place-based policy, and how did you balance this with other demands?*)
 - Wat was de rol van de regio in het beleid en hoe werd met de regio gecommuniceerd? (*What was the role of the regional actors in the policy, and how did you communicate with them?*)
 - Hoe hebben jullie geprobeerd in te spelen op eerder beleid? (*How much did you try to utilise prior policy?*)

- Hoe bepaalden jullie welke lokale actoren meegenomen moesten worden in het proces? *(How did you decide which local actors to include in the policymaking process?)*

Hoe navigeerde u en uw organisatie deze verschillende belangen van verschillende actoren om een neutraal beleid te maken? *(How did you and your organisation treat these different needs from various actors, and did you try to make neutral policy?)*

Hebben jullie voor de oplossing voor problemen naar andere regio's of het verleden gekeken? *(Did you get inspiration from other regions or past policy to solve issues?)*

Hoe is hieruit een EDP-analyse gedaan? Welke actoren zijn hierin meegenomen en op welke manier is hun ontwikkeling voorgesteld? Was er focus op specialisatie door upgraden of diversificatie? *(How did the EDP go exactly? Which actors and what data did you include exactly and how is their development envisioned? Was there a focus on specialisation and upgrading or diversification?)*

- Welke actoren hebben jullie gekozen voor spiegelgroepen en workshops, en hoe zijn deze gekozen? *(Which actors did you choose for stakeholder meetings and workshops, and how did they get selected?)*
- Was het doel om een volledig beeld te geven of om een direct bruikbaar beeld te geven? *(Was the goal to make an immediately utilisable or complete idea of the region?)*
- Welke fases qua innovatie zagen jullie daarin? *(Which phases of innovation did you prioritise?)*
- Hoe werd gecontroleerd of de uitkomsten neutraal waren? *(How did you check whether the results were neutral and complete?)*
 - Is de EDP beïnvloed door EU- of nationale doelen? *(Was the focus of the EDP influenced by EU or national aims?)*
 - Hoe kwamen jullie in contact met actoren? *(How did you get in contact with local actors?)*
- Hoe hebben jullie advies gecreëerd op basis van het EDP? *(How did the EDP translate to policy advice?)*

Hoe is het hieruit gekomen beleid doorgezet naar implementatie? Worden jullie hierbij nog steeds betrokken? *(How were the results of the process passed into implementation? Where were you involved?)*

Had u verder nog iets willen toevoegen? *(Did you want to add anything else?)*

Programme managers:

Wat was is uw rol in RIS-implementatie? (*What is your role in RIS implementation?*)

- Wat was uw positie? (*What was your exact position?*)
- Wat was uw taak binnen het team en hoe werd dit verdeeld? (*What tasks did you have to perform as part of the team, and how was this decided?*)
- Had u eerdere ervaringen met EU of regionaal economisch beleid? (*What prior experiences with EU or regional development policy do you have?*)

Wat is de structuur van het provinciale team en wat proberen jullie te bereiken? (*What is the structure of your organisation and what are your goals?*)

- Hoe is bepaald hoeveel en welke medewerkers betrokken werden? (*How did they decide how many/what kind of employees to involve in the project?*)
- Hoe begeleid u een project-idee en hoe kiest u welke te begeleiden? (*How do you support a project-idea and how do you select which ones to support?*)
- Wat is de structuur van de regionale economie en komt dit overeen met het beleid? (*What is the structure of the regional economie, and does this match with the policy?*)
- Hoe is de balans tussen verschillende instanties en betrokken bepaald? Is dit actief besproken en bepaald? (*How was a balance between different institutions decided? Was this discussed and chosen proactively?*)
 - Hoe communiceert uw team met andere actoren binnen en buiten de provincie? (*In what ways does your team communicate with other institutions inside and outside the province?*)
 - Wat is de verhouding tot de monitoringscommissie? (*What is the relationship with regards to monitoring?*)

Wat was de MLG strategie binnen de opdracht en was dit expliciet besproken en vastgelegd? (*What was the MLG strategy for this project, and did you explicitly discuss and formalise this?*)

- Binnen uw team, weet u nog welke regels u heeft afgesproken qua richtlijnen met betrekking tot het balanceren van belangen?

(Within the team, do you remember which rules on balancing interests you decided?)

- Waren er vooraf afspraken omtrent het wegen van een belang, of was dit meer een gewoonte? *(Were their prior agreements on methods to weigh interests, or did you do this through experience?)*
- Moest u richtlijnen van de provincie invullen, was er veel vrijheid om de regio te onderzoeken, of stond alles al vast? *(Do you have to follow guidelines from the provinces, or was there a large degree of freedom in on what to include?)*
- Bent u voorzichtig als het gaat om projecten die misschien buiten de richtlijnen vallen? *(Are you careful when selecting projects which might be outside of the guidelines?)*
- Waren er aannames die vooraf gesteld werden m.b.t. de regionale economie om effectiever te maken? *(Do you make assumptions in relation to the regional economy to decide which projects are more viable?)*

Hoe werd dit vormgegeven door EU RIS richtlijnen en doelen? *(How did it get shaped through EU RIS guidelines and goals?)*

- Hadden jullie specifieke EU-doelen die jullie wilde bereiken? Werden jullie geleid door de industriële ontwikkelingen die de EU wilde zien, of was de EU meer achteraf? *(Do you have specific EU-goals you wanted to achieve? Do you get guided by specific industrial developments in the EU goals, or do you fit EU requirements in afterwards?)*
- Hoe gingen jullie om met de EU richtlijnen omtrent MLG? *(How did you handle EU-guidelines on MLG?)*
- Hoe interpreteerden jullie EU-richtlijnen in de praktijk? *(How did you decide how to interpret EU-guidelines?)*
- Waren er strategieën om EU-fondsacquisitie makkelijker te maken? *(Are there strategies to align with other EU funds more easily?)*

Moest het RIS-beleid zich binnen nationale of provinciale regionale economische ontwikkelingsstrategieën passen? *(Does the RIS policy have to fit within national or other provincial development strategies?)*

- Hoe is het RIS beleid in de nationale strategie en richtlijnen gepast? *(How does the RIS fit in national strategies and guidelines?)*

- Had de provinciale overheid belangen in het beleid? *(What did the provincial government request on this matter?)*
- Waren deze belangen duidelijk vastgelegd, of is het meer normatief? *(Were the needs and demands clearly defined, or did you follow general ideals?)*
- Hoe gingen jullie om met het passen van strijdende belangen tussen overheid, EU en regio's? *(How did you handle it if the demands between the EU, national governments and regional governments clashed?)*
- Communiceren jullie met andere departementen om samen impact te maken? *(Do you communicate with other departments for a shared impact?)*

Hoe werd ruimte voor lokale noden hierin gewaarborgd? *(How did you ensure space for local needs?)*

- Hoe komen jullie in contact met ondernemers? *(How do you get in contact with entrepreneurs?)*
- Hoe vormen jullie de project-ideeën? *(How do you reshape project-ideas?)*
- Hoe vinden jullie industrieën of regio's waar jullie minder ervaringen mee hebben? *(How do you find industries and regions with which you have less experience?)*
- Hoe verbinden jullie actoren met elkaar? *(Do you connect actors with each other?)*
- Hoe verspreiden jullie de algemene ontwikkelde ideeën met andere lokale bedrijven? *(How do you spread the developments in the region with others?)*

Hoe navigeerde u en uw organisatie deze verschillende belangen van verschillende actoren om een neutraal beleid te maken? *(How do you and your organisation treat these different needs from various actors, and did you try to make neutral policy?)*

Hebben jullie voor de oplossing voor problemen naar andere regio's of het verleden gekeken? *(Do you get inspiration from other regions or past policy to solve issues?)*

Wat voor innovaties ondersteunen jullie vooral? *(What types of innovations do you support?)*

Had u verder nog iets willen toevoegen? *(Did you want to add anything else?)*

APPENDIX B – CONSENT FORM

Project: "Isomorphism in RIS3 policymaking and implementation."

Information form for research participants

Through this form, I am asking for your cooperation within this research. The following text will give you information on the project, and what taking part in this research involves.

Introduction to the research, and the role of participants.

Research and Innovation Smart Specialisation Strategies (RIS3) currently is the most important EU tool in regional economic development. As such, much weight should be placed upon its ability to weather current geopolitical storms, as well as procure economically and socially sustainable growth and divergence in all regions. Both the EU and the literature underpinning RIS3 believe that these ambitious goals are achievable through a strategy of building upon local capabilities. Through RIS3's Entrepreneurial Discovery System (EDP) it aims to assess local entrepreneurial networks, industrial knowledge bases, as well as uncover unexploited potential related diversification. As such, RIS3 allows for industrial development with a higher level of local alignment, and provide more 'sticky' and efficient investments befitting the local economic and social structure. As such, by utilizing bottom-up policymaking principles, it allows for *all* regions to experience sustainable growth, with a high level of specialisation and regional uniqueness. However, this uniqueness needs to find a place within EU-level policy goals. This can streamline policymaking, yet it might not fully align with regional strengths, and pushes different regions towards similar specialisations. The balancing of these top-down and bottom-up has to be performed through small technical policymaking teams. This research aims to understand the deliberations made by NUTS-2 level RIS3 policymakers and implementers regarding including the desires of various policy levels in RIS3 policy. Eventually, this will allow for the literature to further improve the effectiveness of RIS3 on economic development, through the multi-level governance systems in RIS3, by providing support for policymakers in their policymaking processes.

Within this research I ask you, as someone involved in policymaking and policy implementation, about your deliberations within policymaking. Specifically, focusing on the ways in which the policy finds space for the priorities of various stakeholders, and the discussions or guidelines regarding these issues. Your insights will be valuable in highlighting the strengths and weaknesses of the current multi-level policymaking process, and the effects this could have on economically and socially sustainable growth on a regional level, and strategic autonomy on an EU-level.

This research is being conducted by Tjores Thadde van Rems, supported through funding from Lund University's Centre for European Studies. The resulting paper will be published within Lund University's collection of Master's theses, and the data will be kept within Lund University's secure database (LUSEC) for one year.

How will your participation work?

Your participation in the project involves an interview that will take between thirty minutes and one hour. During the interview, you will be asked one or more questions and asked to speak freely and at ease about the subject of the study, which concerns your experience with RIS3-policy and the ways in which different stakeholders are included within this policy. You may answer the questions in as much detail as you feel appropriate. The method used is known as the qualitative inductive research method and involves interviews based on semi-structured and open-ended questions.

Possible consequences of this interview

The data collected from this interview is to be used only within the confines of this research on the multi-level governance of RIS3. The interview only goes into the way in which RIS3-policy is created, those factors driving its creation, the discussion within balancing these factors, and the expected results from RIS3-policy. As such, no private details are to be asked, and given the economic and macroeconomic scale of the policy, the interview is unlikely to trigger distress, pain or a sense of violation of your privacy. However, if this does happen, you are encouraged to not answer the questions, ask for an interruption, or suggest to rephrase the interview questions. You can go into the level of depth you feel most comfortable with, when answering the questions, and ask for answers to be deleted at any time.

The data will be anonymised, but given the small number of people involved within RIS3-policymaking, findings are relatively likely to connect to you. To mitigate this, the final research only aims to create generalised findings and advises, and will only delve into region or role specific details, when describing the reality of the RIS3 process. Claims and individual remarks will not be included in this, nor will criticisms be directly linked to low-level RIS3 processes. This research aims to describe the RIS3 process, uncover points where more support, guidance or freedom from an EU-level, or a shifting of responsibilities, are needed to ensure a more streamlined and effective future RIS3. Similarly, this research only describes generalised shortcomings balancing multi-level requirements and influences within the RIS3 process.

I ensure complete anonymity for the data collected. Personal details and any information that could directly lead to your identification will be removed, including details of your work and employer, and none of your experiences will be directly mentioned. All interview data will be stored securely in accordance with Lund University's regulations.

You may withdraw your consent for the data to be used in the research at any time during or after the interview.

How will your data be used?

The interviews will be stored only for the duration of this research, and the audio-files will be

Project: "Isomorphism in RIS3 policymaking and implementation."

deleted after transcription. This transcription will be done by hand. Following transcription, qualitative inductive data analysis will be carried out using the NVivo software. Only the researcher, supervisor, and co-examiner will have access to this data.

The information is collected in accordance with Article 6(e) of the GDPR, which permits the processing of data necessary for the performance of a task carried out in the public interest. The data processing is necessary for the purposes of research which is in the public interest (Article 9(g) of the GDPR) and for scientific research purposes (Article 9(j) of the GDPR)

Your responses will be processed in such a way that unauthorised persons cannot access them. Under the EU General Data Protection Regulation, you have the right to access, free of charge, the data about you that is processed within the project, and, if necessary, to have any errors corrected. You may also request that your data be erased and that the processing of your personal data be restricted. However, the right to erasure and to restriction of processing does not apply where the data is necessary for the research in question. If you wish to access the data, please contact Tjores Thadde van Rems, tjores_thadde.van_rems@circle.lu.se, or +31618636653.

The Swedish Data Protection Officer can be contacted at dataskyddsbud@lu.se, telephone 0462220000. If you are dissatisfied with how your personal data is processed, you have the right to lodge a complaint with the Swedish Data Protection Authority, which is the supervisory authority.

How can I learn about the results of the project?

You can access both the audio recording of your interview and the transcript. To access these, please contact the project coordinator (see below). The research findings will be published as Master's thesis, and will be available in the Swedish thesis database. If you would like to be notified of upcoming publications, please contact the project coordinator (see below).

Participation is voluntary

Your participation is voluntary and you may choose to withdraw at any time. If you choose not to participate or wish to withdraw, you do not need to give a reason.

If you wish to withdraw, please contact the project coordinator (see below).

Project coordinator

Tjores Thadde van Rems
tjores_thadde.van_rems@circle.lu.se
Faculty of Human
Geography; Lund
University
Tel +31618636653

Consent to participate in this research project

I have been given verbal and/or written information about the study and have had the opportunity to ask questions.

- I am participating in the project on isomorphism in RIS3 policymaking and implementation

Place and date	Signature
	Name

APPENDIX C – PROCESS CODES (INTERVIEWS)

Coding theme	Process codes	Analytical purpose	Main thematic addition (Appendix E)
Producing RIS	Negotiating priorities; selecting directions; translating goals into policy; legitimising choices	How policymaking is actively produced	Producing RIS programmes
Stakeholder interaction	Selecting stakeholders; negotiating interests; incorporating expertise	How actors shape outcomes	RIS as product of influence
Knowledge production	Building evidence; benchmarking; assumptions on innovation; assumptions on planning	How professionalisation and knowledge build validity	Producing RIS programmes
Governance influence	Interpreting EU expectations; aligning national agendas; negotiating autonomy; embedding external priorities	How influence travels across scales	RIS as product of influence
Innovation design	Choosing technologies; prioritising transitions; filtering projects	How supportable innovation is constructed	Producing RIS programmes
Implementation	Evaluating projects; monitoring implementation; adjusting procedures	How strategy becomes practice	Producing RIS programmes
Continuity and learning	Reproducing previous policy; learning from prior periods	How earlier policy shapes current choices	RIS as product of influence

APPENDIX D – DESCRIPTIVE CODES (PROGRAMME DOCUMENTS)

Coding theme	Descriptive codes	Analytical purpose	Main thematic addition (Appendix E)
Strategic priorities	Regional competitiveness; growth; green transition; digital transition	Formal policy direction	Producing RIS programmes
Innovation structure	Cross-over innovation; key technologies; innovation pathways; smart specialisation	Formal understanding of innovation	Producing RIS programmes
Governance structure	Participation; implementation framework; monitoring; coordination	Formal organisation of policymaking	Producing RIS programmes
Regional identity	Regional strengths; place-based growth; comparative advantage	Formal regional opportunity space	RIS as product of influence
Institutional assumptions	Evidence-based policymaking; innovation-led growth; continuity	Explicit policy logic	Producing RIS programmes
Evaluation and delivery	Indicators; accountability; implementation outcomes	Formal execution mechanisms	Producing RIS programmes

APPENDIX E – THEMATIC CODING

Final theme	Subtheme	Input from first-cycle coding	Main aim
Producing RIS programmes	Deliberations before production	Producing RIS, Stakeholder interaction, Knowledge production, Strategic priorities & Governance structure	How are decisions within RIS produced?
	Programme production	Producing RIS, Institutional assumptions & Evaluation and delivery	How are priorities translated into policy?
	Implementation and monitoring	Implementation, Governance structure & Evaluation and delivery	How does policy become practice?
	Constructing supportable innovation	Innovation design & Innovation structure	Which innovation becomes supportable?
RIS as product of influence	EU influence	Governance influence & Strategic priorities	Through whom does influence enter policymaking?
	National influence	Governance influence & Strategic priorities	Through whom does influence enter policymaking?
	Regional and local influence	Regional identity & Stakeholder interaction	How are regional priorities preserved?
	Programme manager influence	Implementation & Continuity and learning	Who translates policy into action?