

Institute for Transnational and Euregional cross border cooperation and Mobility / ITEM

Cross-Border Impact Assessment 2020

Dossier 3: Ex-ante evaluation of the (potential) cross-border impact of the structural reinforcement programme to end coalbased power generation in Germany (Kohleausstieg)



The Institute for Transnational and Euregional cross border cooperation and Mobility / ITEM is the pivot of research, counselling, knowledge exchange and training activities with regard to cross-border mobility and cooperation.

Institute for Transnational and Euregional cross border cooperation and Mobility / ITEM

Universiteit Maastricht

Grenseffectenrapportage 2020

Dossier 3: Ex-ante beoordeling van de (potentiële) grensoverschrijdende impact van het structurele investeringsprogramma om de opwekking van de energie op basis van kolen in Duitsland te beëindigen (Kohleausstieg)

Folkert de Vries1

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¹ Note from the editors: This research report is a provisional version of Dossier 5 because the research activities for this dossier could unfortunately not be concluded as planned due to unforeseen circumstances.











Gemeente Maastricht







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IRR	Innovations region Rheinisches Revier GmbH (managig the RRP through its executive agency, the Zukunftsagentur)	
RRP	Rheinisches Revier Programme	
WSP	Wirtschafts- und Strukturprogram für das Rheinische Zukunftsrevier (structural transformation programme for the Rheinisches Revier)	

1. Introduction

In the framework of becoming greenhouse gas emissions neutral by 2050, the German Federal Government has recently launched a new generous subsidy program to initiate the end of coal-based power generation – known as the "Kohleausstieg" – in Germany. More concretely, it has – amongst others – made available a sum of approximately 15 billion Euros for the Rhenish mining district, the "Rheinisches Revier", to realize a highly ambitious structural transformation process. The aim is to finalise this process by 2038. This will be the year in which no more lignite is to be extracted any more from the territory of the Rhenish coal district.

The Rheinisches Revier (the Rhenish mining district) is situated between the metropolitan areas of Aachen, Köln and Düsseldorf – located right next to the Dutch and Belgian borders. It includes the municipalities of Düren, Euskirchen, Heinsberg, Rhein-Erft-Kreis and the Rhein-Kreis Neuss, the Städteregion Aachen and the city of Mönchengladbach. This mining district has hitherto been highly dependent on the extradition and usage of lignite. Currently, some 10.000 people are directly employed in this industry and 18.000 indirectly in this region.

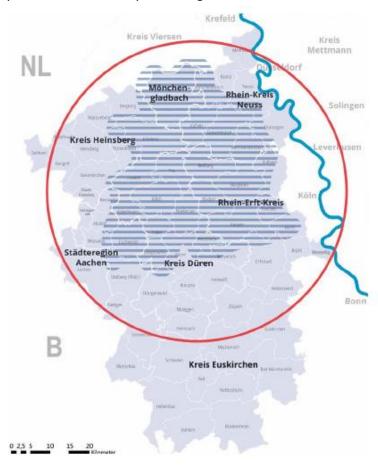


Figure 1: Illustration of the geographical location of the Rheinisches Revier. Source: Zukunftsagentur Rheinisches Revier, Dezember 2019.²

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² Zukunftsagentur Rheinisches Revier, Das Making-Of des Wirtschafts- und Strukturprogramms für das Rheinische Zukunftsrevier 1.0, Dezember 2019: https://www.rheinisches-revier.de/media/191211 making of fachkonf revierknoten klein.pdf (last accessed 25 October 2020).

1.1 Background: The coming about of the German Structural Reinforcement of Coal Regions Act

Within Germany's diverse energy sector, almost a third of the total amount of electricity fed into the grid stems from coal-fired power generation (some 29,6% in the fourth quarter of 2019), whilst the level of lignite extraction is rapidly declining.³ This energy source has a sizeable share in harmful greenhouse gas emission and is, therefore, not future-oriented.⁴

In November 2016, the German Federal Government presented its ambitious Climate Action Plan ('Klimaschutzplan 2050') which aims for Germany practically to become greenhouse gas neutral by 2050 (requiring an 80 to 95% reduction compared to the zero-point in 1990). This plan entails a roadmap with measures, policies and monitoring systems towards achieving that goal. It specifically lists those sectors or domains in which action needs to be taken and emission reduction targets need to be achieved, such as energy supply. In fact, the energy sector is a key sector within this plan. For Germany to achieve these greenhouse emissions goals, its energy sector needs to undergo far-reaching structural change.

Currently most of Germany's lignite is (or has been) extracted from four regions: (1) Lausitzer Revier (Brandenburg/Saxony), (2) Mitteldeutsches Revier (Saxony/Saxony-Anhalt), (3) (former) Helmstedter Revier (Lower Saxony) as well as (4) the Rheinisches Revier. Within these regions there is an economic dependency on lignite with that sector employing a significant number of people. Accordingly, this sector also has a far-reaching social impact on the region. A one-dimensional solution of simply closing the mines was therefore not acceptable and would have been politically and socially unfeasible. In that context, German Chancellor Merkel stated:

"Es geht nicht darum, als Erstes irgendwelche Ausstiegsdaten zu beschließen, sondern es geht darum, Menschen Hoffnung zu geben, Zukunft zu geben, Strukturwandel wirklich vorzubereiten."
"Und dann kann man auch den Ausstieg ins Auge fassen." ⁷

This meant that a vision needed to be created through which these regions could redefine themselves by focusing on modern, more future-oriented, sectors. That vision would form the basis of structural

³ 'Coal was thus still the most important energy source in electricity generation, followed by wind power (25.7 percent), nuclear power (14.0 percent) and photovoltaics (3.8 percent).' (own translation) See Bundesregierung, *Energiewende – Strom aus Kohle rückläufig*, press release of 6 March 2020: https://www.bundesregierung.de/breg-de/aktuelles/weniger-strom-aus-kohle-1728772

⁴ In 2018, coal-fired electricity generation accounted for 30% of global CO₂ emissions, whereby coal-fired power plants were the single largest contributor to the growth in emissions observed in 2018. See International Energy Agency (IEA), Global Energy & CO2 Status Report 2019 – The latest trends in energy and emissions in 2018, Flagship report — March 2019: https://www.iea.org/reports/global-energy-co2-status-report-2019/emissions.

⁵ See the map of these regions on: https://braunkohle.de/braunkohle-in-deutschland/uebersicht-und-geschichte-der-reviere/. See also §2 and §11 of the German investment law for coal-mining regions, *Investitionsgesetz Kohleregionen* of 8 August 2020 (BGBI. I S. 1795): https://www.gesetze-im-internet.de/invkg/InvKG.pdf.

⁶ 'It is not a question of deciding on any exit dates first, but it is about giving people hope, giving them a future, properly preparing for structural change. [...]' (own translation). https://www.dw.com/de/merkel-macht-kohleausstieg-zur-chefsache/a-47096910

⁷ 'And then you can also consider the exit' (own translation). https://www.handelsblatt.com/politik/deutschland/angela-merkel-im-ard-interview-braunkohleausstieg-und-keine-kompromisse-mit-der-tuerkei/20068168-2.html?ticket=ST-3957193-zBNthYe7hPae7GdqrARq-ap5

transformation processes within these regions. Attached thereto an organization needed to be establish in order to properly manage such ambitions and execute the vision.

That is why the German government set up the Commission on "Growth, Structural Change and Employment" (Kommission Wachstum, Strukturwandel und Beschäftigung – KWSB) – in short the "Kohlekommission" – in 2018. Established under the Federal Ministry for Economic Affairs and Energy, it involved different stakeholders such as representative of different federal ministries, Länder, local authorities, trade unions and private companies. Its aim was to balance the different interests and to establish a broad social consensus on how to shape the coal phase-out in line with energy and climate policy aims and the associated structural change in the relevant areas in Germany. The Commission completed its work by publishing a report to the German government on 31 January 2019.8 It recommended the end of lignite extraction and coal-based electricity generation in Germany by 2038 at the latest. It included in its advice some concrete recommendations on the basic criteria for a successful regional structural transformation process, including, the allocation of the necessary financial means to the impacted regions, taking into account the strengths and weaknesses of the concerned regions. The ultimate aim would be the development of model regions for the successful transformation. On the basis of the process described above and input from other (expert) commissions on behalf of the German federal Government, cornerstones were developed and a budget defined for stimulating and supporting the structural transformation process.

On 3 July 2020, the German Bundestag adopted the Act on the Structural Reinforcement of Coal Regions (*Strukturstärkungsgesetz Kohleregionen*) formalizing the beginning of the end of German coalbased power-generation and the beginning of an ambitious transformation process. It was published in the Federal Law Gazette on 13 August 2020 and entered into force on 14 August 2020.⁹ At the point of writing (August 2020), the associated public law contract for the reduction and termination of lignite-based electricity generation with the operators of lignite-fired power plants, among which the company RWE, still awaited approval by the federal Parliament.¹⁰ Besides setting a clear timeline for the closure of the mines in the four mentioned regions, the Federal Government and the Länder of Brandenburg, North Rhine-Westphalia, Saxony and Saxony-Anhalt have agreed that the process of structural change will be supported with financial aid of up to €40 billion until 2038.¹¹

A total of €15 billion have been reserved for the Rhenish district, the Rheinisches Revier. Consequently, the district in collaboration with local and regional administrations and stakeholders have established the *Zukunftsagentur Rheinisches Revier GmbH* as the central instrument to steer the transformation process of the area together with the regional government of North Rhine-Westphalia (NRW).¹² In December 2019, these partners have defined a strategic first version of the regional investment

⁸ https://www.bmwi.de/Redaktion/DE/Downloads/A/abschlussbericht-kommission-wachstum-strukturwandel-und-beschaeftigung.pdf? blob=publicationFile&v=4

⁹ https://www.bmwi.de/Redaktion/DE/Gesetze/Wirtschaft/kohleausstiegsgesetz.html

¹⁰ The next hearing in the Bundestag was scheduled for 7 September 2020. See for the current version: https://www.bmwi.de/Redaktion/DE/Downloads/M-O/oeffentlich-rechtlicher-vertrag-zur-reduzierung-und-beendigung-der-braunkohleverstromung-entwurf.pdf? blob=publicationFile&v=4

¹¹ https://www.bundesregierung.de/breg-de/themen/klimaschutz/kohleausstieg-1664496

¹² The Zukunftsagentur is the executive agency of the Innovationsregion Rheinisches Revier GmbH (IRR).

programme Wirtschafts- und Strukturprogram für das Rheinische Zukunftsrevier (WSP) 1.0,¹³ hereafter referred to as the Rheinisches Revier Programme (RRP).

1.2 Research question and outline

Against this background and since location factors play a crucial role in any investment programme, the Rhenish district's proximity in particular to the Dutch border (as evident from Figure 1 above) is worth highlighting. And so is — once more — the significant size of the RRP, compared to other investment programmes in the region (see below). Therefore, this dossier addresses the following main research question: What are the (potential) cross-border effects of the structural reinforcement programme to end coal-based power generation in Germany in the Dutch border region neighbouring the Rheinisches Revier?

After outlining some important methodological aspects, the analysis will first zoom in on the (envisaged) impact of the Rheinisches Revier Programme on the border region from the perspective of socio-economic development. It will look at the main features of the Rhenish district and then consider the RRP's thematic ambitions, the size of structural investment and the project-based implementation. Furthermore, we will examine to what extent cross-border considerations have been included in the programme's conception (phase) and whether cross-border ambitions can be detected in the (plans for the) RRP's implementation. In that context, we will also discuss what role the RRP may play in the context of Dutch-German cross-border cooperation.

2. Methodology

2.1 Geographical demarcation and type of evaluation

This dossier will focus on the influence of the RRP on the border region with the Dutch Province of Limburg, in particular Zuid Limburg. The Rheinisches Revier is firstly an area situated in the border area with the Netherlands (and Belgium¹⁴). Secondly and more specifically, the Rhenish district borders with the Dutch Province of Limburg, which is a "border province" *par excellence* as it is squeezed between the German and the Belgian border geographically speaking. It is therefore dependent on its interaction with German and Belgian neighbours and also maintains clear cross-border ambitions according to its official communications (see below).¹⁵ Several of the municipalities that are part of the RRP are also members of the Euregio Meuse-Rhine and Euregio Rhine Meuse North and are directly and indirectly involved in European cross-border programs such as "Interreg Euregio Meuse-Rhine" and "Interreg Deutschland-Nederland".

¹³ See: https://www.rheinisches-revier.de/media/wsp_1-0_web.pdf. The shareholders' assembly of the Zukunftsagentur Rheinisches Revier GmbH is the most important decision-making body. The shareholders are the Städteregion Aachen (association of municipalities) and the development agency Region Aachen Zweckverband, the city of Mönchengladbach and the districts of Düren, Euskirchen, Heinsberg, Neuss, and Rhein-Erft; also including the Chambers of Industry and Commerce of Aachen, Cologne and the Middle Lower Rhine region, the Chambers of Trade and the Industrial Union BCE, and the union federation DGB NRW. Through the Supervisory Board, the State of North Rhine-Westphalia, the Cologne District Government and RWE Power AG also hold shares. Idem, pp. 25-26.

¹⁴ The Belgian territories neighbouring and their cross-border links with the Rhenish district are beyond the scope of this research.

¹⁵ See, for instance, the Mission-driven economic policy framework of the Province of Limburg, pp. 77-80: https://www.limburg.nl/publish/pages/4723/missiegedreven economisch beleidskader.pdf.

The research conducted for this cross-border impact assessment is qualitative of nature due to the (early) maturity of the RRP. In that sense the dossier presents an ex ante evaluation of possible border effects of the RRP. Therefore, it is mainly based on a set of interviews conducted with different stakeholders on both sides of the border. This analysis will cover the design phase, the selection of the first projects and the programme's future.

2.2 Principles, benchmarks and indicators regarding the (potential) cross-border effects of the RRP

In relation to the three themes of the ITEM Cross-Border Impact Assessment, mainly aspects of socio-economic/sustainable development and Euregional cohesion, with a focus on cross-border cooperation will be discussed. Aspects of European integration, notably those to enabling/facilitating cross-border mobility of EU citizens and the exercise of fundamental freedoms in the Internal Market, do not seem relevant yet at this early stage of the RRP. Accordingly, such a discussion would only result in speculations and is therefore beyond the scope of this dossier. However, this does not exclude the possibility of including an examination of the European integration theme in a follow-up ex-post study of this German investment programme in the future, whereby for instance aspects of cross-border effects on employment and research mobility could be included.

Table 1: Principles, benchmarks and indicators of this dossier

Theme	Principles	Benchmark	Indicators
Sustainable / Socio- Economic Development	Euregional objectives (EMR and ERMN) in the field of cross-border sustainable economic development	Structural change from end of lignite production without the Rheinisches Revier structural investment programme Investment programmes in the neighbouring regions Environmental impact of the end of mining activities, start of other activities	Size of the investment programme compared to other/EU funding schemes, compared to investments in NL/BE in the border regions Potential investments in certain sectors Future changes water management Changes air quality Future land use
Euregional Cohesion	General/European: EU Treaty objective of social, economic and regional cohesion (Article 175 TFEU); Promotion of European policy objectives through the European structural and investment funds	RRP influence on cross-border cooperation Coordination of the investments with policy goals in the neighbouring regions	 Quality of information flow across the border Quality of cross-border planning and strategy building/participation Extent of joint economic specialisation Quality of the coordination of investment programmes and better governance

¹⁶ The interview partners included representatives of the Region Aachen Zweckverband, the city of Aachen, the Interreg programs Germany-Netherlands and Interreg Euregio Meuse-Rhine, as well as the two Euregions (EMR and ERMN). For a complete list, please refer to the Annex.

3. Socio-economic/sustainable development: (envisaged) impact of the Rheinisches Revier Programme (RRP) on the border region

3.1 Main features of the Rheinisches Revier

As mentioned above one of the regions that is directly affected by the ambitious policy of the German Federal Government is the Rheinisches Revier. Situated between the metropolitan areas of Aachen, Köln and Düsseldorf, the Rhenish mining district is located right next to the Dutch and Belgian borders. Given the district's historical dependency on the extradition and usage of lignite, currently the employment of almost 30.000 people in this region is directly and indirectly dependent on this industry.¹⁷

The "Rhenish mining district" is the largest lignite mining area in Europe with just under 100 million tonnes of coal being extracted annually through the open-cast mines which are up to 400 metres deep. There are currently three open-cast mines scattered throughout the region:

- (1) Garzweiler (current area of 31 square kilometres, 30 to 40 million tonnes of lignite extracted annually and about 1500 employees),
- (2) Hambach (current area of 17 square kilometres, 19 million tonnes of lignite extracted annually and about 700 employees and
- (3) Inden (current area of 43 square kilometres, 40 million tonnes of lignite extracted annually and about 1300 employees).

The open-cast mining of lignite has led to the development of a number of important industrial sites (including chemicals, aluminium and foodstuffs). "RWE Power AG", a subsidiary of the electricity giant RWE, is solely responsible for the industrial use of the area with the complete value chain from coal mining to electricity generation.

In addition, the mining activities have left traces on the landscape in this region (figure 2 below) and profoundly affect the ecology of the region and beyond. Massive moon-like craters characterize the region. Open-pit mining has created deep craters in the landscape, complete landscapes disappeared and a number of hills increased due to the residues of open-pit mining. The three major open-cast mines of the Rhenish district will within the frame of the transformation process be turned into lakes for leisure and tourism.

Despite the district's "mono-industrial" structural dependency and the ecological impact, the Rheinisches Revier can build on certain strengths as the basis for the transformation process. Firstly, the region is surrounded by several strong metropolitan areas, namely Aachen, Cologne, Leverkusen and Düsseldorf. It also possesses strong knowledge centres, Forschungszentrum Jülich, and, on its border, has RWTH Aachen. These knowledge centres will become pivotal in the entire process as stressed by the different reports that led to the legislation passed in August 2020. The report, moreover, mentions that the region has strengths as to the energy sector, resource efficiency and biobased economy. These could enable this region to create high-valued and future-oriented jobs in the energy sector, mobility and sustainable production.¹⁸

¹⁷ The Rheinisches Revier counts a population of about 2.4 million inhabitants (May 2020). See: https://www.rheinisches-revier.de/polisconvention?search_highlighter=einwohner

¹⁸ See Zukunftsagentur Rheinisches Revier, WSP 1.0, April 2020.



Figure 2: Extract "Ausgangssituation", presentation of Dirk Brügge, Rhein-Kreis Neuss, Chairman of REVIERKNOTEN INFRASTRUKTUR UND MOBILITÄT, Bergheim, 6. September 2019 (photo credits: Zukunftsagentur Rheinisches Revier / Andreas Schmitter).¹⁹



Figure 3: Extract "Ausgangssituation", presentation of Dirk Brügge, 6. September 2019 (photo credits: Zukunftsagentur Rheinisches Revier / Andreas Schmitter).²⁰

¹⁹ Zukunftsagentur Rheinisches Revier, *Auftaktkonferenz Revierknoten* (kick-off conference), 6 September 2019 MEDIO.RHEIN.ERFT, Bergheim, p. 29: https://www.rheinisches-revier.de/media/190906 revierknotenauftakt 6 9 web 1.pdf .

²⁰ Zukunftsagentur Rheinisches Revier, Auftaktkonferenz Revierknoten (kick-off conference), 6 September 2019, p. 30.

Particularly from an economic perspective, it is worth highlighting that a couple of these strengths (see figure 3 above²¹) highlight the relevance of cross-regional/transnational interlinkages: notably, the aspects of 'goods transit traffic to the North Sea ports in Belgium and the Netherlands ([expected to] increase in the future)', and the recognition of the district as a 'transit region from the Rhine railroad to the BeNeLux region'.

3.2 The Rheinisches Revier Programme (RRP)

The Rheinisches Revier Programme (RRP) is managed through the *Innovationsregion Rheinisches Revier GmbH* (IRR) and its executive agency, the *Zukunftsagentur*. On 12 December 2019, the IRR published the overall vision for the structural transformation programme of the Rheinisches Revier entitled *Wirtschafts- und Strukturprogram für das Rheinische Zukunftsrevier* 1.0.²² It is a first version of a vision that is currently being subjected to an extensive public participation processes.²³

Thematic ambitions

On the basis of this vision the RRP's focus, and organization structure, will be on specific thematic clusters. These are organised into expert working groups under so-called "Revierknoten" (nodes)²⁴: Energy & Industry, Space and Infrastructure, Resources and Agrobusiness, Innovation and Education, and Building and Technology.²⁵ These thematic clusters are meant to be future-oriented, to help creating sufficient high-valued jobs and reflect the ecological ambitions of the region and the country.

The respective expert working groups are responsible for sector/theme-specific strategies and selection of projects based on a two-pronged participation approach. That approach entails consultation rounds on selected themes with experts from governmental organizations, knowledge centres and the private sector. These expert consultations will translate the overall vision into more concrete proposals. Some of the latter are then put to the region's citizens through different platforms such as public meetings and online consultations.

These on-going consultation and promotion endeavours aim, on the one hand, to enable all regional stakeholders to influence its final version and, on the other, to create societal awareness and acceptance of the ambitious programme. Even though this version of the vision is still subject to changes on the basis of a public participation process we can assume that it will not fundamentally change, especially as to its analysis of the region's strength and potential that will form the basis of the future of this region.

²¹ The text boxes in the illustration (figure 3) read as follows (own translation, from left to right): Regular congestion of the transport network; travel time delays and high environmental pollution; strong commuter networks; economically strong industrial location; polycentric structure; area with high quality of life; intensive division of labour between locations; goods transit traffic to the North Sea ports in Belgium and the Netherlands (increase in the future); and transit region from the Rhine railroad to the BeNeLux region.

²² See: https://www.rheinisches-revier.de/media/wsp 1-0 web.pdf

²³ https://www.rheinisches-revier.de/neues/zukunft-durch-partizipation-beteiligung-im-rheinischen-revier-2019-12-11/

²⁴ The *Revierknoten*-thematic clusters are expert working groups, established under the umbrella of the Zukunftsagentur. Their central task is to support the agency by preparing and updating technical sub-concepts for the economic and structural programme, by involving the relevant specialist actors from the region and bundle their expertise and ideas for the development of the Rhenish mining district. In addition, an International Building and Technology Exhibition (IBTA) is to be designed to act as a bracket and showcase for the ambitious measures in the Rhenish district. See WSP 1.0, p. 26.

²⁵ These themes include: agrobusiness and resources; energy; industry; infrastructure and mobility; spatial planning and infrastructure; innovation and education. See for more information: https://www.rheinisches-revier.de/themen/uebersicht

The size of structural investment

It is worth noting that the RRP program in mere financial size, besides the ambition content-wise, overshadows all other (cross-border or European) subsidy programs specifically aimed at this region. To illustrate this, see the available budget provided for the respective programme areas for the last funding cycle 2014-2020 (Interreg programme V) based on the European Regional Development Fund (ERDF):

ERDF - Program V (2014-2020)

Available funds

Interreg Germany-Netherlands	approximately EUR440 million EFRD ²⁶	
Interreg Euregio Meuse-Rhine	approximately EUR96 million EFRD ²⁷	

Table 2: Available ERDF funding, Interreg Programme V, 2014-2020.

It becomes evident that the RRP is therefore significantly bigger than comparable EU-supported programmes, and supposedly any cross-border subsidy programme, in this region.

Implementation through projects

In order to launch the entire programme and create more awareness of the program, the RRI has promoted an initial set of 83 projects by awarding a first star.²⁸ Projects achieve full approval and permission to start if they receive three stars (of the 83 recommended project 19 have in the meantime received a second star (August 2020)).²⁹ This has been an important step for the program because concrete projects give the programme a "face" and make it easier to communicate with the stakeholders in the region.

Finally, it is important to be aware of the status of the program when analysing its cross-border effect. It's vision and strategy have been clearly established even though the vision will most likely be amended on the basis of the public consultation process. This will, nevertheless, not fundamentally change that vision. In addition, the budget and legal framework have been promulgated.

²⁶ See: https://www.deutschland-nederland.eu/en/interreg-programma-2/.

²⁷ See: https://www.interregemr.eu/about-interreg.

²⁸ See: https://www.rheinisches-revier.de/projekte

²⁹ See: https://www.rheinisches-revier.de/ueber-uns/downloads.

4. Euregional cohesion: Cross-border Rheinisches Revier?

Having acquainted ourselves with the details of the RRP, it is now important to examine what influence the RRP can be expected to have on cross-border cooperation. With respect to the indicators defined above, this section will deal more specifically with the question to what extent this regional investment programme could provide a basis for joint special planning, joint economic specialisation, better coordination of investment programmes and better governance. The following analysis is based on insights obtained from discussions with representatives of the Region Aachen, city of Aachen, the two Interreg programs and the two Euregions.

First, we will demonstrate how, to date, the RRP's designers have steered clear from any cross-border ambitions in their vision, participation process and selection of projects. Second, we will discuss to what extent relevant stakeholders in the border region perceive the future of the RRP's implementation as "cross-border".

4.1 Conceptual phase

4.1.1 Lack of cross-border ambitions in the RRP's vision

The vision 1.0

The RRP's strategic "kick-off" document³⁰ mentions the international context of the RRP. Most notable may be the pioneering role that the Rhenish mining area is to play in realising the federal government's goal of developing the German lignite regions into European model regions for successful transformation in politically motivated structural change. According to the envisaged coal phase-out timetable, the power plant closures in the Rhenish mining area are scheduled to begin in 2022.³¹ However, those few references mostly do not specifically pertain to the border-region as such.³² The only exceptions are passages within that document that refer to mobility as a cross-border theme. There is also a mention of the strength of the network of Euregional universities that will be important to successfully realise the programme's high ambitions.³³ Especially the reference to a cross-border higher education network is noteworthy:

"Die Forschungslandschaft ist durch die geografische Lage des Rheinischen Reviers auch überregional in einem starken Forschungsnetzwerk verankert. Hierzu zählen die Universitäten und Fachhochschulen in Düsseldorf, Mönchengladbach, Köln und Bonn sowie im euregionalen Kontext die Universitäten Maastricht, Eindhoven, Lüttich, Leuven und Hasselt."³⁴

³⁰ See: https://www.rheinisches-revier.de/media/wsp 1-0 web.pdf

³¹ See, for instance, Zukunftsagentur Rheinisches Revier, WSP 1.0, p. 21.

³² Idem: p. 14, p. 37, p. 49, p. 50, p. 77.

³³ Idem: p. 115 (mobility) and p. 96 (universities).

³⁴ 'Due to the geographical location of the Rhenish mining area, its research landscape is also anchored in a strong crossregional research network. This includes the universities and universities of applied sciences in Düsseldorf, Mönchengladbach, Cologne and Bonn, and in the euregional context the universities of Maastricht, Eindhoven, Liège, Leuven and Hasselt.' (own translation) Idem: p. 96.

This was confirmed during discussions with representatives of the RWTH. They insisted that the knowledge centres will play an essential role in the RRP and that this role cannot be limited to the involvement of the RWTH and Forschungszentrum Jülich. They clearly see a role for other knowledge centres, most notably the University of Maastricht and Hogeschool Zuyd. Defining that role is still unclear according to those representatives of the RWTH. From a Dutch perspective, those representatives of the University of Maastricht and of Hogeschool Zuyd (linked to the themes the program will focus on) mentioned that they are vaguely aware of the RRP's existence and have not had internal discussions within their respective faculties to see how this program will influence their work and what they can do within the RRP.

Figure 2: "University & research" institutions in the Euregio Meuse-Rhine (own indications added in pale, in reference to the WSP-quote above). Source: The Locator, accessed 25-09-2020: http://the-locator.eu/72EMR_Frontend/research.xhtml

Cross-border perceptions

The RRP vision, however, fails to acknowledge how the development of the Revierknoten might also benefit from the presence of other strong sectors at the Dutch side of the border region, such as circular building or renewable chemicals. This is probably due to the fact that any mention of cross-border cooperation has (so far) been a "no go" in the conception phase of this initial strategy.

During interviews with different actors who were involved in the process of designing the vision, it was clear that, during those early stages of the RRP, any reference to cross-border collaboration needed to be avoided in order to not jeopardize its fragile public support.³⁵ Several reasons were mentioned during those interviews.

The first simply being that many within the Rheinisches Revier simply do not support the basic need for executing such a profound transformation process. Many are employed or know people employed directly or indirectly in the lignite sector and others have a family history in this sector. A significant part of the population associates their identity with this sector.

The second reason mentioned during interviews was the fact that at this stage in the programme's existence there is still very little awareness of the programme and its impact. The executive body of the programme therefore needs to focus, at this stage, on creating such awareness (and improving public acceptance).

Thirdly, municipal elections will be held in the Rhenish District in September 2020. The RRP is one of the subjects of those elections. Within this context, the perception of money floating away to other regions, especially across the border, is to be avoided. This of course also linked to the other reasons.

³⁵ See, for instance, also: https://www1.wdr.de/nachrichten/rheinland/pressekonferenz-keyenberg-protest-tagebau-100.html.

A final argument used by those interviewed to exclude cross-border components from the RRD during this early stage is the complexity of including stakeholders from across the border. This is a recurring issue in cross-border collaboration, involving several concerns. Public authorities and project initiators generally find it difficult to identify the relevant stakeholders and to understand how to activate their participation. Besides this, there is even the perception and a fear among those interviewed from within the IRR that adding partners from across the border, especially governmental organizations, might slow-down the programme's pace. In addition, during such a first phase it is very important to quantify with data the issues that one wishes to counter. When it comes to cross-border cooperation obtaining and sharing comparable data is still primitive.

4.1.2 Participation process

The RRP's participation process entails two main parts: the process that involves citizens and organizations representing the interests of those citizens and the process that involves other stakeholders such as private companies and local municipalities.

The participation process involving citizens has been described in detail by the RRI.³⁶ This process will be finalized in November 2020 and its input will contribute towards a new version of the vision, version 1.1. It is a process that only involves citizens from within the Rheinisches Revier, not from the neighbouring areas. Citizen participation is a relatively new concept for governmental organizations at the regional level (as demonstrated, for instance, by a recent test in the province of Limburg³⁷) and is often restricted from a geographic perspective. It is difficult to conceive, within that perspective, a citizen participation process within a larger geographic area than the one already in place and also involving citizens from across the border. ³⁸

The on-going participation process that involves private and semi-private actors and that involves governmental organisations appears at this early stage of programme implementation within the Rheinisches Revier to be very ad hoc.³⁹ The interviews have revealed that many of these actors seem to have difficulties positioning themselves within the program. This uncertainty is even more pronounced when it comes to the possible involvement of actors on the Dutch side of the border, whilst "unawareness" seems to be a determining factor in that respect.

Through different interviews with potential Dutch stakeholders it has become clear that these have not, and probably will not, be(en) involved in this part of the participation process. A representative of the Dutch Provincie of Limburg, working at the consulaat-generaal (Dutch consulate) in Düsseldorf admitted not being aware of the status of the RRP and the existence of a consultation process, and was surprised that her German counterparts did not proactively inform them of this. In contrast, among the smaller Dutch municipalities within direct border proximity, representatives of both relevant Euregios (EMR and ERMN) seem to be (roughly) informed about the programme but they

³⁶ https://www.unser-zukunftsrevier.de/informationen#/faq/wie-laeuft-der-buergerbeteiligungsprozess-ab

³⁷ In 2016, the Province of Limburg organised a participatory process called "Burgertop", see details http://www.burgertoplimburg2018.nl/.

³⁸ See Dossier 2 of this ITEM Cross-Border Impact Assessment 2020, which deals with the possible cross-border effects of the Dutch Strategy on Spatial Planning and the Environment (NOVI), for a more detailed discussion of the complication of cross-border citizen participation.

³⁹ The municipality of Inden – located in immediate proximity to one of the open-cast mines – seems to provide an exception. See its Masterplan 2030 (https://www.indeland.de/assets/userfiles/Downloads/1-2015-03-23 Masterplan-indeland.pdf) and an outline of four visionary scenarios for the community by 2050 (https://www.indeland.de/assets/userfiles/Downloads/4-ACStift_Szen_gesamt.pdf).

underlined that the themes at the programme's focus were less relevant for them. These municipalities miss a theme such as tourism, which is not explicitly mentioned in the communication of the RRP, but nonetheless existent. Altogether, today some of the relevant actors on the Dutch side do not see the necessity to be involved in this process.

In summary, the programme's conception phase and its on-going participation process have at this stage not involved Dutch partners from the cross-border region deliberately. At the same time, the Dutch actors, whom it would be logical to see involved in the programme's implementation, seem to lack clarity/find it difficult as to how to get involved and to play a role the entire process. In this context, it is also noteworthy that the website of the RRP is in the German language.

4.2 A cross-border future for the implementation of the Rheinisches Revier structural investment programme?

There is compared to other cross-border territories, a rather developed structure of cross-border cooperation in the area that is affected by the investment programme. Geographically, parts of the Rheinisches Revier belong to the territory of the Euregion Meuse-Rhine. This Euroregion is one of the oldest in the European Union, it has been recently strengthened by the transformation of its legal structure from a Dutch foundation to a European Grouping of Territorial Cooperation. In the Euregion Meuse-Rhine, five partners from the three neighbouring countries work together with respect to strategic planning. Economic questions were part of the existing "EMR 2020" strategy. At the moment, this common strategy that comprise many policy sectors is under review and will lead to a strategy "EMR 2030", the strategy for the next decade. Meaning that cross-border strategic thinking would be not a new phenomena.

In addition, as the main investment instrument for cross-border projects, there is a special INTERREG Programme Euregio Meuse-Rhine comprising almost the identical territory as the Euroregion. Partners from BE, DE and NL (mainly also from regional and national ministries) are currently developing the investment priorities of the next programming period after 2021. Also, the INTERREG programme formulates cross-border investment priorities and common objectives. Innovation, the transformation of industry towards a low carbon economy are main elements of this strategy.

In addition, there are smaller investment programmes that have a cross-border dimension. The Dutch government invests 50 Million Euros for project in Parkstad as part of the "Regio deal Parkstad". Also, these investments have a cross-border section. Cross-border projects were developed in consultation with German partners. ⁴² In fact, there is a sort of routine in cross-border consultation and common strategy-making. Hence, respective consultation processes in the framework of the RRP could be based on existing cross-border governance structures. So far, the existing cross-border stakeholders are informed about the process but even the information flow seems to be rather limited. And on the other hand, the interest of non-German partners of the Euregional governance structure, seem to be rather low.

 $^{^{40}}$ Details on the institutional set-up and the partner regions can be found on https://euregio-mr.info/.

⁴¹ https://euregio-mr.info/euregio-mr-wAssets/docs/EMR2020-D.pdf

⁴² The Regiodeal https://parkstad-limburg.nl/2020/04/23/regio-deal-parkstad-investeert-in-jeugd-en-in-leefbaarheid/

4.2.1 First projects of the RRP in approval phase

As mentioned above a first list of 83 projects were recommended by the RRP and have, therefore, already advanced in the initial phases of the three-pronged approval process. Those 'recommended' projects (strategically) cover the entire territory of the programme area and the main themes described above.⁴³

The list is still in an early stage it seems, on the basis of informal feedback received from those within the RRP having reviewed those projects. Therefore, this selection should be considered strategic. Two striking elements, however, that all of the pre-selected projects seem to have in common are:

- (1) the selection is indicative of what the programme will focus on content-wise, and
- (2) none have a cross-border component let alone a Dutch (cross-border) partner.

In the next stage the RRP will finalize its vision, version 1.1., on the basis of which it will start approving projects. In view of the pace of this programme, being relatively fast, it is essential that partners on both sides of the border start including cross-border elements in its execution phase.

As to the German side of the border, there are some encouraging signals emanating from representatives of certain Revierknoten and most notably *Raum & Infrastruktur* and *Energie & Industrie*. Representatives of these nodes noted that it is merely a matter of time for cross-border elements to be included in the execution phase of these themes.

As to the node 'Raum & Infrastruktur', its representative stated that it was actually unavoidable to include partners from the Dutch side of the border, since this theme could not be extracted from a larger, cross-border, context. Within that node initiatives have already been taken to do so. Its representatives have initiated additional spatial planning research of regions that border the Rheinisches Revier, the region between Bonn and Köln and the Euregio Meuse-Rhine. The latter study in fact focuses on the South of Dutch Limburg (*Zuid-Limburg*) specifically. ⁴⁴ The idea behind this is to ensure that any spatial planning and mobility strategy for the RRP will not be stand-alone but will include the analysis of the bordering regions. This new project research on spatial planning (including mobility) for the Euregio Meuse-Rhine is conducted and co-financed by relevant partners on the Dutch side of the border – namely, Stadsregio Parkstad Limburg, the municipalities of Heerlen, Sittard-Geleen and Maastricht as well as the Dutch Province of Limburg. ⁴⁵ Through this particular project, Dutch partners might actually become more involved in the upcoming programme implementation. That could potentially also provide a framework for formulating positions, or even strategies, also regarding

⁴³ See, for example, the list of projects that have received one-star rating on 28 August 2020, here: https://www.rheinisches-revier.de/media/starterpaket kernrevier erster stern 20200828 1.pdf.

⁴⁴ See: L'EAU: Laboratory for European Augmented Urbanism, RWTH Aachen Fakultät Architektur, Lehrstuhl und Institut für Städtebau RHA Reicher Haase Assoziierte (Aachen), MUA Maurer United Architects (Maastricht), December 2019.
⁴⁵ Ibid page 8: Acoording to the project description, the results of the project will form a fundamental, independent vision on the full agglomeration area. It will be an "informal advice" that can contribute to future decision making. "De uitkomst van het L'EAU onderzoek vormt een gefundeerde, onafhankelijke visie op het volledige agglomeratie gebied, die rekening houdt met alle bekende data en lopende tendensen. Het is een 'informeel advies', dat een bijdrage kan leveren aan toekomstige besluitvorming. De aanhaking bij de ontwikkeling van het 'Rheinische Revier' is voor Zuid-Limburg van groot belang. De enorme transformatie die in het naastgelegen gebied gaat plaatsvinden ("Die grösste Baustelle Europa's") zal ook invloed hebben op de Nederlandse Provincie. De betrokkenheid vroeg in het proces maakt een onderlinge afstemming - en daarmee de ontwikkeling van een gezamenlijke strategie - mogelijk. Ook voor de lopende en in gang gezette processen is een gezamenlijke, 'informele' planning met de Duitse buren van belang en gewenst."

the other themes of the RRP. Whether this project can actually lead to better awareness and involvement of Dutch partners in the RRP is still an unknown.

4.2.2 Regional, local and European development strategies

Room for economic policy visions across the border?

As highlighted above, the pre-selected RRP-projects themselves lack any cross-border components. This omission however might, potentially, be compensated in the future by the fact that the first of the above-mentioned commonalities – i.e. the indication of what shape the implementation of the RRP is going to take based on this strategic selection of initial projects – provides concrete information for (cross-regional) partners in the border region to use and capitalise on in their own economic/regional development strategies.

Even though some Dutch partners from now on will be linked to the Infrastructure node of the RRP (see above), it is still noteworthy that there is still a remarkable absence of awareness on the Dutch side among the different actors. This is based on discussions held with representatives of the department of economic affairs in Heerlen, Maastricht and within the Province of Limburg. The representatives of the Province of Limburg in Düsseldorf (based in the Dutch Consulate) and those responsible at the Ministry of Interior (BZK), responsible for cross—border collaboration were either completely unaware of the existence of the RRP or, in the best case, had very basic and vague knowledge of its existence.

As to current economic strategies or political plans on the Dutch side of the border, a diffuse picture emerges. Firstly, the recently published economic strategy of the Dutch Province of Limburg, *Beleidskader 2019-2023, Missiegedreven Economisch Beleidskader*. There is within this document not a single mention of the Rheinisches Revier even though it does mention the potential strength and importance of euregional cross-border cooperation.

Speaking to strategists and lobbyists of the Province of Limburg, it emerges however that their awareness of the RRP is growing and that they are starting to get organized around this subject. Because of the thematic diversity of the programme, it is challenging for an organization such as the Dutch Province of Limburg to adapt itself towards that.

In contrast to this stands the Regio Deal of Stadsregio Parkstad. That policy document quite explicitly refers to the Rheinisches Revier. Under the passage that pertains to cross-border cooperation the following passage was included:

"Het tot stand brengen van economische samenwerking tussen kennisinstellingen en bedrijven, bijvoorbeeld met betrekking tot mogelijkheden rondom duurzame energietransitie (o.a. aansluiting vinden bij het structuurversterkingsprogramma Rheinisches Revier rondom de afbouw van de bruinkoolwinning) en het realiseren of verbeteren van grensoverschrijdende mobiliteitsoplossingen, onder andere voor het versterken van de verbinding tussen Heerlen en Aken." (emphasis added, FV)⁴⁷

⁴⁶ https://www.limburg.nl/publish/pages/4723/missiegedreven_economisch_beleidskader.pdf.

⁴⁷ 'Establishing economic cooperation between knowledge institutions and businesses, for example with regard to opportunities for sustainable energy transition (e.g. linking up with the Rheinisches Revier structural reinforcement programme for the phasing out of lignite mining) and realising or improving cross-border mobility solutions, for example to

On this basis the Stadsregio Parkstad Limburg decided to co-finance and otherwise support the spatial planning process as described above. In contrast to other regional stakeholders, within this organization there is thus already an outspoken enthusiasm to be(come) involved in the RRP and stimulate necessary adaptions.

Defining the relation with the European Regional Development Fund (INTERREG VI 2021-2027)?

Finally, the presence of two important Interreg programme areas, which have already been pointed out earlier, should also not be left unmentioned in this context. Both areas – Interreg Deutschland-Nederland and Interreg Euregio Meuse Rhine – are currently designing the implementation framework for the next programme phase "INTERREG VI 2021-2027". The current Interreg Europe 2021 – 2027 programme draft defines the overall objective for the Interreg Europe programme:

'To improve the implementation of regional development policies, including Investment for jobs and growth goal programmes, by promoting the exchange of experiences, innovative approaches and capacity building in relation to the identification, dissemination and transfer of good practices among regional policy actors.'⁴⁹

Against this background, discussions were also held with the management authority of the Germany-Netherlands programme and those involved as programme partners in the Interreg-EMR programme. From these discussions, it has emerged that the Rheinisches Revier has (at least, so far) not taken any prominent role in the elaboration of the new programme phase in both areas. This, certainly, is remarkable when comparing the size of both these programs and the fact that these cannot (or should not) be integrated.

strengthen the connection between Heerlen and Aachen.' (own translation) <u>file:///C:/Users/PSL-LT008/Downloads/Regio_Deal_Parkstad_Limburg%20(1).pdf</u> See also: <u>https://www.rijksoverheid.nl/onderwerpen/regio-deals/de-regio-deals-van-10-regios/regio-deal-parkstad-limburg.</u>

⁴⁸ For an overview of the elaboration of the programming process for INTERREG VI 2021-2027, see: https://www.interregeurope.eu/about-us/2021-2027/ (last accessed 01 October 2020).

⁴⁹ See Draft INTERREG EUROPE 2021-2027 Cooperation Programme document, Draft version 1, 28 July 2020 (provisional first version of the 2021-2027 Interreg Europe cooperation programme, available at https://www.interregeurope.eu/fileadmin/user_upload/documents/Programming_Committee/2021-2027_Interreg_Europe_Cooperation_Programme.pdf). The current draft programme envisages that 80 % of the available budget (still to be determined) goes to four thematic policy objectives (Smarter Europe, Greener Europe, More connected Europe, and More social Europe) and 20 % going to certain specific objectives with the aim of achieving a 'better cooperation governance'. See ibid., pp. 14-15.

5. Conclusion

Given the very extensive future investments on the German side of the Euregio Maas-Rhine, the main question of this research has been: What are the (potential) cross-border effects of the structural reinforcement programme to end coal-based power generation in Germany in the Dutch border region neighbouring the Rhenish district? And what are effects or necessities in the field of cross-border cooperation, meaning what type of cooperation across the border was so far initiated by the German activities. Because of the early stage in the planning process, the focus of the research was on the quality of the cooperation in the this phase. Possible socio-economic effects are still difficult to assess, but are obviously related to the sheer size of the investment and the so far know investment priorities.

5.1 Possible Socio-Economic Effects?

The investment program in the Rhenish District is in mere financial size, besides the ambition contentwise, overshadows all other (cross-border or European) subsidy programs specifically aimed at this region. A total of €15 billion have been reserved for investments in this part of NRW out of a total investment of €40 billion for the whole of Germany. The investments are made against the background of phasing out domestic brown coal fired power plants until the year 2038. These € 15 billion for the Rhenish district should enable according to the "Wirtschafts- und Strukturprogram für das Rheinische Zukunftsrevier (WSP) 1.0" the creation of high-valued and future-oriented jobs in the energy sector, mobility and sustainable production. It is portrayed as a profound transformation process for the area with positive impacts for the whole of NRW. With regard to the size, it becomes evident that the programme is therefore significantly bigger than comparable EU-supported programmes, and supposedly any cross-border subsidy programme, in this region. In comparison, investments under the two INTERREG programmes with German and Dutch participation are between 2013-2020 around € 550 million. It is also evident, that it will be a decisive factor of future employment opportunities for the whole cross-border territory if the investments will lead to the successful substitution of mining related jobs. As shown, it is to early to make any assessments about potential employment effects and predict the economic development for the German border area let alone the cross-border territory as such. The same goes for the potential benefits with respect to other objectives link to the sustainability of future economic activities. Since the ultimate objectives of closing down coal fired power stations is the reduction of greenhouse gases, there is of course a general benefit that the border territory will make huge improvements with respect to climate policy. The same goes for the environmental situation with respect to local emissions from the sites. Since it is so far not entirely clear what the future size and mix of electricity production in the area will substitute the power plants, it is too early to assess future positive environmental effects on the border region. What is evident already today: the investment decisions will lead to a major regional economic specialisation on the German side. In this respect, the potential positive impacts for the entire cross-border territory will depend on the coordination of German priorities with priorities formulated by Dutch and Belgian partners. This is an unique challenge with respect to a cross-border formulation of common objectives and goes far beyond the joined formulation of INTERREG programmes. One could describe that as a major crossborder "smart specialisation" strategy in according to the concept developed by the European Commission in the context of regional policies.⁵⁰ This includes a focus on identifying niche areas of competitive strength, solving major societal challenges, bringing in a demand-driven dimension, fostering innovation partnerships emphasising greater coordination between different societal stakeholders and aligning resources and strategies between private and public actors from different governance levels. Hence, today the most relevant question is whether the quality of information, consultation and participation is up to the dimension of the cross-border challenge in relation to the big investments.

5.2 Effects with respect to cross-border cohesion and the quality of cooperation

Through different discussions held in the region it seems that local stakeholders, citizens, companies and municipalities, are struggling to position themselves within the program. This is a program that by its size and ambitions is too large to be easily understood by those stakeholders enabling to comprehend what this means for them and how they can influence its execution. This is an important element when also executing the cross-border nature or influence of the programme as has been analysed above. Various factors seem to make it hard for relevant stakeholders within the region to position themselves vis-à-vis the Rheinisches Revier Programme.

A crucial point for attention is the status of the program when analysing its cross-border effect. It's vision and strategy have by now been clearly established. In addition, the budget and the legal framework have now been promulgated. Still, it is foreseen that the vision will most likely be amended on the basis of the public consultation process conducted this summer. This will, nevertheless, not fundamentally change that vision but merely help to finetune certain aspects.

The analysis above has highlighted that at this stage, the most relevant regional stakeholders in the border region seem to feel "remote" from this program. This was emphasized during discussion with representatives of the Region Aachen, city of Aachen, of the Interreg programs and of the two Euregions.

Through discussions with a wide-range of relevant stakeholders in the Netherlands it is clear that the mere awareness of the RRP is so far low. The reasons have been described above. This awareness is essential in order to form proper policies and integrate it into the own local, regional and even national policies. A first and careful step has been taken by (co-)financing a research project as to the overarching subject of spatial planning and mobility.

Whilst during the conception phase and the on-going initial consultation processes with experts and the public, the RRP has been characterised by a remarkable lack of including (almost) any cross-border aspects. On the German side of the border, there now seems to be nonetheless an openness for including cross-border cooperation aspects into the implementation of the Rheinisches Revier Programme in the future. This is currently still in the phase of general wording; it is not concrete.

Also, regarding this current early stage of the programme's implementation phase (first round where numerous projects are awaiting approval), the picture on attention for cross-border aspects is still relatively modest. From the interviews with Dutch and German stakeholders and the analysis above,

⁵⁰ Over the programming period 2014-2020, developing a strategy for Smart Specialisation has been a prerequisite in order to receive funding from the European Regional Development Fund (ERDF). See: https://ec.europa.eu/jrc/en/researchtopic/smart-specialisation.

it can be concluded that (at least, so far) there is clearly no common strategy towards cooperating at a cross-border level within the programme. Equally, hitherto there have also not been any serious efforts to set up targeted cross-border governance mechanisms or even more information exchange regarding the potential euregional implications and possible opportunities of the RRP. The stakeholder conversations in the framework of this study have shown: whilst a range of established cross-border cooperation structures seems to provide communication channels and a basis for topical cooperation in general, these have so far failed to provide a platform for concrete exchanges related to the (potential) impact of the generous national structural investment funds directed towards the German territories of the Euregio Meuse-Rhine and the Euregio Rhine-Meuse North. In that sense, there is evidently up to date no clear efficient cross-border governance in place that could have succeeded in bringing parties together at an earlier stage and keep including cross-border parties involved in the programme.

The described case of the German investment programme illustrates an important weakness in the cross-border cooperation of the cross-border territory. There is no strong governance in place to align parties and, on that basis, form cross-border cooperation programmes that will support cross-border collaboration projects beyond the routine of INTERREG programming. Currently, individual investment programmes of sub-regions of the two Euroregions in question are not sufficiently coordinated, therefore often cross-border projects are ad-hoc, stand-alone and not framed by a clear overall vision and strategy and not linking it to other programmes on the other side of the border.

One important task for the near future, would be to undertake a profound analysis of cross-border networks and institutions, starting with working groups and networks of the Euroregions EMR and ERMN. Which existing networks and cross-border organisations could play a crucial role in the formulation of joined priorities in the course of the further development of the investment programme of the Rhenish district? Given the following phases of the planning process on the German side, there has to be a future information, consultation and participation routine, to better ensure that synergies for the cross-border territory can be explored.

Annex: List of interview partners

Overview of interview partners of dossier 3 (Kohleausstieg)

Institution	Administrative level (European, national, regional/ municipal/ cross-border)	Territory	Name	Position/ Expertise interviewee
Parkstad Limburg	Municipal	NL	P. Bertholet	Director/secretary
Grensregio Charlemagne	Cross-border (regional- municipal cooperation structure)	DE-NL	- H. Klinkers - German representative	Representatives of the Bureau Charlemagne
RRI/ RWTH University of Aachen	University	DE	Prof. C. Reicher	Chairwoman of the <i>Revierknoten Raum</i> (spatial development)
Region Aachen Zweckverband	Municipal	DE	Prof. Dr. C. Vaessen	Director
Stadt Aachen	Municipal	DE	Peter Sellung	Advisor to the Mayor of Aachen (Referent)
Interreg-EMR	European (EU agency)	BE-DE- NL	Representative	Representative of the INTERREG-EMR secretariat
Gemeente Heerlen	Municipal	NL	E. Raedts	Adviseur concernstrategie
AVV (public transport company Aachen)	Public transport	DE	Dr. D. Elsmann	Head Euregional Coordination Office
Provincie Limburg	Regional	NL	S. KupersC. SchreursS. Manders	 Senior Advisor Internationalisation Policy Officer Spatial Development Public Affairs Advisor, Consulategeneral of the Limburg Province in NRW (Düsseldorf)
Maurer Architecten/RWTH	Company/University- collaboration	NL	- N. Maurer - M. Maurer	Founders of Maurer United Architects

Dutch Ministry of Economic Affairs (EZK)	National	NL	T. Bakker	Senior Policy Advisor
Dutch Ministry of Interior Affairs and Kingdom Relations (BZK)	National	NL	S. Hupkes	Senior Policy Advisor
Interreg Germany-Netherlands	European (EU agency)	D-NL	P. P. Knol	Representative of the Joined INTERREG- secretariat Gemeenschappelijk INTERREG- secretariaat
Euregio Rijn-Maas Noord	Cross-border (administrative structure)	D-NL	- M. Haijoubi - M. Spaargaren	 Director Programme manager INTERREG V A & Vice-Directeur Programmamanager INTERREG V A & Plv. Directeur