Are you a Stakeholder or Streekholder? Formal and informal planning in the Flemish-Dutch Delta

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Abstract
Grenspark Groot Saeftinghe (Borderpark of Saeftinghe), a transboundary region along the Scheldt estuary in the Flemish-Dutch Delta, faces overlapping ecological, climate, and socio-political pressures. As part of the INTERREG project, this region brings together formal stakeholders, and local citizen groups known as "*streekholders*" (Grenspark Groot Saeftinghe, 2025). This paper investigates how formal stakeholders and *streekholders*, co-shape spatial planning decisions in this contested landscape. Drawing on qualitative methods, including stakeholder mapping, literature review and discourse analysis, the study analyses partnerships across formal, informal, and research-based planning domains. It reveals how tensions between environmental, economic, and cultural values are negotiated through multi-actor collaborations. By comparing dynamics at both regional and delta scale, the paper illustrates how the planning arrangements can enhance adaptive governance and demonstrate pathways towards resilient and transnational development.

Keywords: Transnational territory; Stakeholder dynamics; Spatial planning; Flemish-Dutch Delta.

1. Introduction

Spatial planning in transboundary regions increasingly requires governance approaches that transcend national jurisdictions, administrative silos, and sectoral boundaries (Slinger, 2023; Merk & Notteboom, 2013). This paper proposes to examine spatial planning and governance across two interrelated scales. At the macro-regional level, it considers the Vlaams Nederlandse Delta as a complex, coordinated but fragmented visions (OECD, 2013; CBK Zeeland, 2020) where ecological vulnerabilities and socio-economic transitions converge with intricate institutional arrangements (Deelstra et al., 2020). At the local level, it focuses on Grenspark Groot Saeftinghe, a tidal landscape at the border of Flanders and Zeeland, where water management, ecological restoration, and cultural heritage practices demonstrate embedded modes of "living with water" (Grenspark Groot Saeftinghe, 2024; Interreg Vlaanderen–Nederland, 2023). This dual-scale lens provides insight for an interesting case to understand how formal governance frameworks interact with more informal and culturally embedded planning practices in cross-border contexts (Slinger, 2023; Van der Valk & Van Dijk, 2009). The urgency of climate adaptation adds another layer of complexity, requiring coordinated action across different sectors and administrative systems.

A key inquiry is how governmental institutions, civil society groups, research consortia, and local collectives are integrated into decision-making processes. By identifying the interscalar dynamics between formal stakeholders and informal "*streekholders*" Grenspark Groot Saeftinghe, 2025), this paper contributes to the discourse on adaptive and inclusive governance under conditions of climate transition and ecological uncertainty (Mundell, 2018; (van Bets et al., 2020).

The research is developed alongside the New European Bauhaus project *Bauhaus of the Sea Sails*[1], which facilitates co-design activities with regional actors. Data are drawn from storytelling sessions, participatory workshops, and interviews conducted as part of this broader PhD research. This article presents the first phase of an ongoing research project, aimed at analysing the current institutional and governance configurations of the selected case study. In the coming years, the research will be expanded to examine historical path dependencies and explore future-oriented planning scenarios.

1 https://bauhaus-seas.eu/

2. Setting the transnational context

Water has a major role in maintaining peace and political stability across borders (Transboundary water cooperation, European Commission2). This research focuses on two significant scales for spatial analysis: the Border Park of Saeftinghe and the Flemish Dutch Delta. In the Border Park of Saeftinghe, water emerges as a pivotal force driving collaboration among stakeholders. Conversely, at the larger scale, Flemish Dutch Scheldt Delta, the foundation is water for shaping both the physical and socio-economic fabric of the region. However, due to the presence of the two largest ports, Rotterdam and Antwerp-Bruges, water presents challenges marked by conflicts and competition, reflecting the complexities of industrial and urban landscapes intertwined with maritime activities. Each of these scales reveals distinct dynamics concerning the relationship between water, land, and human activities. As a result, spatial planning in such a transnational delta calls for a multi-scalar governance approach that bridges institutional divides and connects strategic visioning with operational capacity.

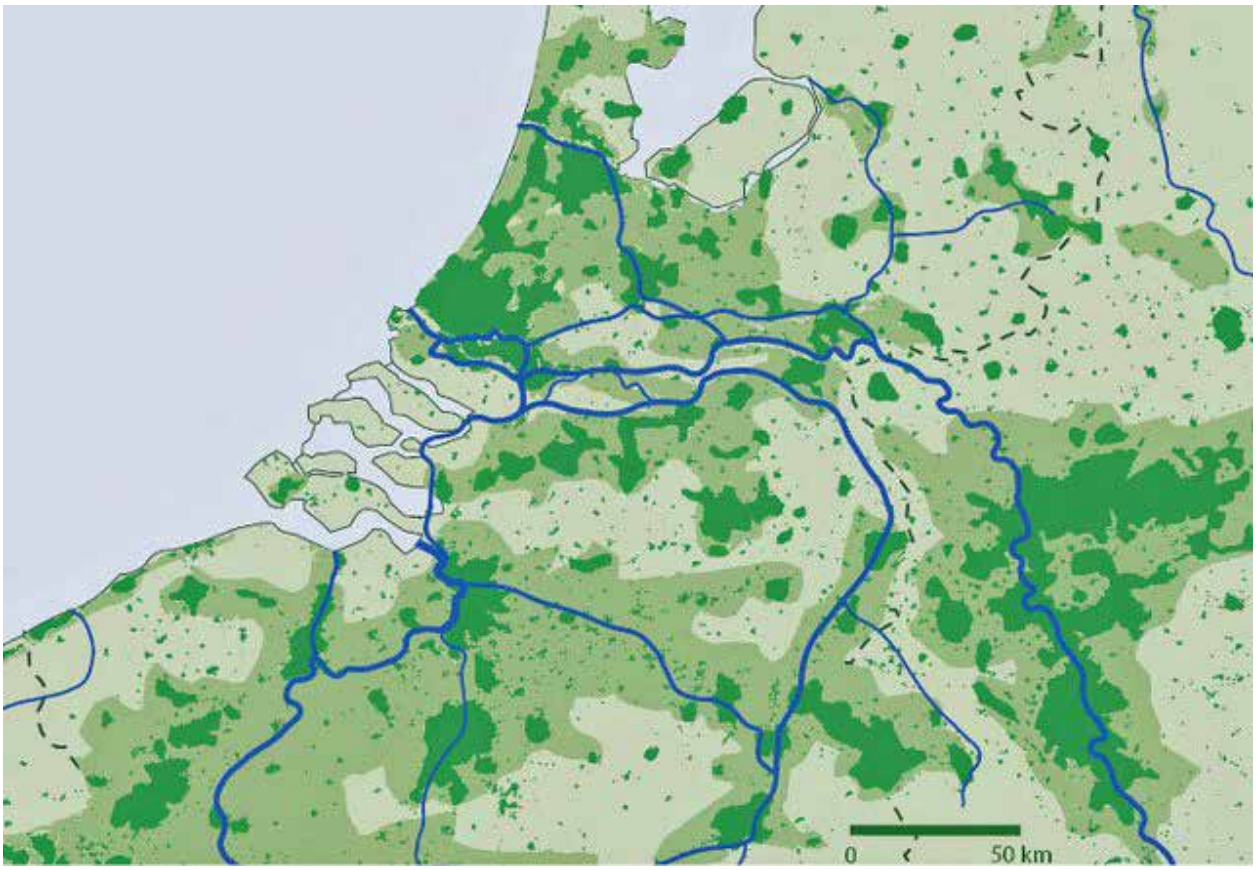

Fig 1: The Dutch Belgian Rhine Meuse Scheldt Delta Deltanet-2014

2.1 Grenspark Groot Saeftinghe (GGS) (Region and community)

At the very local scale of Scheldt estuary, spanning the border between the Netherlands and Belgium, is the Drowned Land of Saeftinghe (*Verdronken land van Saeftinghe*). Along with the drowned land, one of the largest contiguous salt marshes and mudflat ecosystems in Europe, covering 3,500 hectares is the area of Grenspark Groot Saeftinghe, including 18000 hectares and roughly 27,000 population (2020). It connects with adjacent reclaimed polders such as the Hedwige, Prosper, and Doel polders, forming a border zone shaped by hydrological dynamics, port development, and agrarian landscapes (Grenspark Groot Saeftinghe, 2024). This spatial configuration brings together ecological sensitivity and strategic economic infrastructure, as the park borders the Port of Antwerp and the Doel nuclear power plant (The Brussels Times, 2022).

2 https://international-partnerships.ec.europa.eu/policies/climate-environment-and-energy/transboundary-water-cooperation_en

Fig 2: Gebiedsagenda Grensark Groot Saeftinghe, 2019

In recent decades, the Saeftinghe region has been shaped by a series of overlapping dynamics that bring competing spatial agendas into conflict. The expansion of the Port of Antwerp has frequently intersected with ecological protection and local community interests, particularly in the contested future of the village of Doel, which was designated for demolition in the 1960s to accommodate industrial expansion but was officially returned to its residents in 2022 following prolonged civic opposition (The Brussels Times, 2022). Simultaneously, the decision to depolder the Hedwige and Prosper polders was formalised through the 2005 Dutch-Flemish Scheldt Treaty and later upheld by the Dutch Council of State in 2012. This triggered intense political controversy in the Netherlands, where farmers and local representatives opposed the intentional flooding of agricultural land for estuarine habitat restoration (Van Buuren & Warner, 2014). The measure was framed as nature compensation for deepening the Western Scheldt shipping channel, which was necessary to maintain the competitiveness of the Port of Antwerp. These events illustrate a spatial environment where water safety, environmental policy, and economic development collide, producing a complex and politically charged planning landscape.

In response to these intersecting dynamics and competing spatial agendas, Grenspark Groot Saeftinghe was formally established through a cross-border EU INTERREG project launched in 2016. This initiative was supported by the EU's Interreg Vlaanderen-Nederland programme and co-funded by regional governments and environmental agencies (Interreg Vlaanderen-Nederland, 2025; (Nationale Landschappen en Nationale Parken, 2019)). The project sought to integrate ecological restoration with economic and cultural development, creating a cross-sectoral planning agenda for this vital border region. Key formal stakeholders involved in the GGS include the Province of Zeeland and the Province of East Flanders, nature conservation bodies, as well as various municipal administrations and port authority. These actors operate within a collaborative framework that has been further institutionalised by the European Grouping for Territorial Cooperation (EGTC) Linieland van Waas en Hulst, established in 2011 to promote structured governance between border municipalities (EGTS Linieland, 2024).

In addition to institutional actors, the GGS initiative places significant emphasis on civic participation through the concept of "streekholders." These are local citizens, farmers, and entrepreneurs who are actively involved in the planning and development of the park. They contribute to working groups, thematic sessions, and decision-making processes, offering locally grounded perspectives on nature-based solutions and cultural heritage (Grenspark Groot Saeftinghe, 2024). Their involvement reflects a broader shift toward participatory spatial governance at the landscape scale.

2.2 Flemish-Dutch Delta (Territory and governance)

The Flemish Dutch Delta (Vlaams Nederlandse Delta) is a transboundary estuarine region located in the southwestern part of the Netherlands and northern Belgium. It spans six provinces: Zeeland, South Holland, and North Brabant in the Netherlands, and East Flanders, West Flanders, and Antwerp in Belgium. The delta has a population of approximately 1.5 million people and is shaped by the interaction of the Rhine, Meuse, and Scheldt river systems (Vanelslander et al., 2011). Spatial developments in this delta are shaped by decisions taken at multiple levels of government. At the national level, spatial and environmental strategies are influenced by the Dutch Ministry of Infrastructure and Water Management and the Flemish Department of Environment and Spatial Development. At the provincial level, spatial policy and land-use regulation fall under the authority of the respective provincial governments, who act as key stakeholders in planning processes and cross-border cooperation (Vanelslander et al., 2011). These government institutions also contribute to joint spatial visions and regional development strategies.

Fig 3: Administrative boundaries of Vlaams Nederlandse Delta (https://www.vndelta.eu/)

The confluence of river delta and the coastal front of North Sea creates a dynamic hydrological system of tidal wetlands, estuarine ecologies, complex freshwater–saltwater gradients and reclaimed landscapes. Due to the ecological pressures such as salinisation and sea-level rise, a range of environmental stakeholders are active in the region (Schelde Delta Geopark, 2024), including Rijkswaterstaat (Netherlands) and the Flemish Environment Agency, and nature conservation organisations such as Natuurpunt and Staatsbosbeheer. These actors are involved in water management, flood risk mitigation, and the ecological restoration of tidal zones (Schelde Delta Geopark, 2024). These agencies are not merely supportive actors; they constitute the backbone of ecological stewardship and climate adaptation in the region.

The territory occupies a central position and plays a significant role in European and global trade. The broader Seine to Scheldt zone accounts for around 17 percent of the European Union's gross domestic product and manages 60 percent of its maritime trade (Advisory & Oost-Vlaanderen, 2013). The two principal maritime

stakeholders are the Port of Rotterdam Authority and the Port of Antwerp-Bruges. Both institutions have far-reaching influence on regional infrastructure, industrial zoning, and hinterland connectivity. Their role in shaping spatial development is reinforced by their partnership in spatial-economic initiatives such as the North Sea Port District (including Ghent-Terneuzen- Vlissingen). These economic stakeholders are integral to port expansion, land reclamation, and affecting the delta regarding climate adaptation.

3. Research question and methodology

This study is fundamentally guided by the central research question: "How do formal and informal governance frameworks/partnerships interact in transnational spatial planning, and what role do stakeholder and "*streekholder*" dynamics play in shaping sustainable development in the Flemish-Dutch Delta?" This overarching inquiry is further explored through two key lines of investigation: identifying the various types of partnerships and collaborations at play and gaining a deeper understanding of the "*streekholders*" concept, particularly how local citizens are actively influencing and shifting established narratives in spatial planning.

To answer this, the study adopts a multi-scalar qualitative research. The analysis focuses on two interlinked spatial levels: (1) the Vlaams Nederlandse Delta as a macro-regional, transboundary planning context shaped by intergovernmental coordination; and (2) Grenspark Groot Saeftinghe as a localised case of civic participation situated along the Dutch-Flemish border. This dual-scale lens allows for an exploration of how formal planning institutions (e.g., governments, port authorities, interregional commissions) interface with informal actors (e.g., citizens, farmers, civil society groups), particularly in contexts where ecological urgency and socio-economic transformation converge.

Empirical data were collected through a combination of qualitative methods. These include extensive document analysis of strategic planning documents, INTERREG project reports, and online communication platforms maintained by GGS. Stakeholder mapping is employed to systematically identify and categorise the diverse actors involved in the region's governance and planning. Participatory observation in storytelling workshops and co-design sessions carried out as part of the *Bauhaus of the Sea Sails* project. Semi-structured interviews are conducted with key formal stakeholders from public authorities and port entities, as well as representatives from civil society groups. A reflective component is highlighted in this method and is critical for interrogation of the literature, highlighting discrepancies and convergences between documented policies and on-ground practices. A comprehensive literature review situates the study within broader academic and policy discourses on interscalar governance and transnational collaboration. This approach enabled triangulation across multiple sources and actor perspectives, offering grounded insights into the existing governance arrangements and frictions. The methodology is designed to bridge theoretical frameworks with practical insights, providing a nuanced understanding of the interplay between formal planning structures and informal "*streekholders*."

The structure of this paper reflects the layered nature of the inquiry. Following the introduction, context-setting of the two spatial scales, the problem statement, section 5-6 presents the partnership analysis in transnational spatial planning, distinguishing between formal, informal, and research-based configurations, examining actor roles, scalar negotiations, and tensions between environmental, economic, and cultural objectives. Section 7-8 concludes by identifying opportunities for adaptive and inclusive governance, emphasising the potential of transboundary planning to respond to climate, ecological, and social challenges when both stakeholders and streekholders are meaningfully involved.

4. Problem statement – escalating conflicts and environmental pressures

The governance of the Flemish-Dutch Delta is characterised by a "wicked problem" where economic, environmental, and societal conflicts are not isolated but deeply interconnected and intensified by the overarching impacts of climate change. This intricate web of interdependence means that addressing one issue often creates unintended negative consequences in another, making the interplay between nature, industry, and society a continuous process of negotiation. While the region is functionally interdependent, it remains institutionally fragmented across national borders, challenging the development of cohesive and resilient spatial planning.

The Flemish-Dutch Delta, despite its historical resilience and economic importance, is currently grappling with intensifying environmental pressures that fundamentally threaten its long-term sustainability. Formal cooperation has emerged between institutional actors through the Vlaams Nederlandse Delta platform, which facilitates

coordination between provinces and includes national ministries, planning departments, and intergovernmental entities such as the Benelux Union and are engaged in policy alignment and development of shared planning agendas (Vanelslander et al., 2011). On the local scale, Grenspark Groot Saeftinghe, a landscape of intersecting future opportunities, climate-related vulnerabilities, and ongoing tensions between conflicting interests, where efforts toward environmental resilience are continually challenged by socio-economic transformation. GGS illustrates how formal and informal governance frameworks must interact in complex border landscapes, where spatial planning must mediate between environmental resilience and socio-economic transformation.

Social acceptance is eroded by this policy patchwork. The inherent tension between nature, port, and society is not merely a policy challenge but a fundamental conflict deeply embedded in the delta's identity. This conflict is demonstrably intensifying with the climate crisis and the lack of efficient decision-making frameworks. Local residents perceive ecological restoration as an imposed sacrifice for metropolitan shipping interests; port communities fear economic stagnation if draft limitations are introduced; and farmers view nitrate caps as threats to cultural identity. Without a governance framework capable of coupling economic, ecological and cultural values across scales, each incremental intervention re-ignites hidden conflicts.The contested future of the village of Doel is a stark example, having been designated for demolition in the 1960s for industrial expansion, only to be officially returned to its residents in 2022 following prolonged civic opposition (The Brussels Times, 2022).

Economic growth or dredging or PFAS, what are port activities - On both scales, port-driven growth is the principal engine of prosperity yet simultaneously the main driver of cumulative environmental degradation, dredging, land reclamation and heavy logistics emit pollutants (PCBs, PFAS, trace metals) and accelerate habitat loss (Baeyens et al., 2005). While deepening the Western Scheldt shipping channel secures Rotterdam and Antwerp-Bruges in global trade networks, it also triggers compensatory depoldering of agricultural polders such as Hedwige-Prosper, provoking intense local resistance and exposing a persistent gap between national competitiveness narratives and everyday rural livelihoods (Van Buuren & Warner 2014).

Pollution illustrates this systemic misalignment. High livestock densities load the delta with nitrate and phosphate, fuelling eutrophication and biodiversity decline (Van Meerbeek et al. 2015). Intensive agriculture in the region contributes significantly to nutrient pollution, leading to high concentrations of nitrogen and phosphorus in surface and groundwater (Greenhood, 2025). Simultaneously, sediment-bound POPs and heavy metals from historical industrial discharges exceed ecological thresholds in the Scheldt estuary, making routine seafood consumption unsafe (Van Ael et al., 2012). Emerging PFAS contamination now compounds these legacies, highlighting weak preventive regulation and fragmented monitoring regimes. Addressing any one pollutant in isolation risks displacement effects: dredged contaminated sediments are relocated, nutrients are exported downstream, and carbon-intensive port retrofits shift emissions offshore.

Water is the binding medium of these tensions. Centuries of "Dutch Approach" hydraulic engineering have produced a technically safe but rigid landscape whose dykes and sluices struggle to accommodate twenty-first-century sea-level rise, salt-water intrusion and episodic droughts (Meijer, 2016; Interreg 2 Seas[3]). In Saeftinghe the tidal gradient between salt marshes and reclaimed polders increasingly undermines farming viability, while across the wider delta peat dykes desiccate, freshwater shortages intensify, and salinisation erodes both ecological integrity and agroeconomic resilience (Vermeulen 2025). Climate change thus multiplies the trade-offs already inherent in the port–nature–society triangle.

Living with water and sea-level rise. Sea-level rise and climate change impacts pose an existential threat to the Flemish-Dutch Delta. Global mean sea level is projected to rise significantly by 2100 and potentially by 2 to 5 meters by 2300, necessitating urgent and comprehensive adaptation strategies (Interreg 2 Seas). While the Drowned Land of Saeftinghe showcases dynamic estuarine processes, the surrounding reclaimed polders highlight the constant challenge of living with water in intensely used land. This includes the direct impacts of tidal dynamics, the complex interplay of fresh and saltwater (salinisation in coastal areas), and the vulnerabilities of agricultural lands being less suitable for traditional crops to changing water levels. These intensive uses of the delta landscape, coupled with the impacts of climate change, collectively threaten the integrity of natural ecosystems, the viability of agricultural areas, and the overall resilience of urban environments (Vermeulen, 2025).

3 https://www.interreg2seas.eu/

5. Mapping the actor landscape

The actors involved in the governance and planning of the Flemish-Dutch Delta, particularly within the Grenspark Groot Saeftinghe framework, are 11 partner organisations from the Netherlands and Flemish side of the border. They are typically governmental bodies at various levels, including the Province of Zeeland and East Flanders, De Vlaamse Waterweg, Municipality of Beveren and Hulst, which operate within established legal and administrative frameworks. Environmental organisations like Stichting Het Zeeuwse Landschap, Maatschappij Linkerscheldeoever, Agentschap voor Natuur & Bos and Natuurpunt Waasland also fall into this formal category, advocating for nature conservation and ecological restoration and includes influential Port of Antwerp-Bruges, whose economic interests are central to the region's development. It also includes EU funded organisation EGTC (European Grouping of Territorial Cooperation) Linieland van Waas en Hulst, which in itself is a group of eight Flemish and Dutch authorities joining forces around various themes

In contrast, Informal "*Streekholders*" represent a grassroots layer of engagement. This group encompasses local citizen groups, residents, farmers, businesses, tourism guides, youth, and enthusiastic volunteers. They are distinguished by their deep connection to and commitment to the future of their immediate region, or "streek". Volunteers, such as the "hosts and hostesses" in GGS, provide invaluable local knowledge and lead excursions, further integrating community perspectives into the region's activities. Table 1 provides a comprehensive overview of these key organisations and groups, illustrating their respective roles within the Grenspark Groot Saeftinghe project.

Table 1: Key actors in Grenspark Groot Saeftinghe

Actor Type	Organisation	Critical review
Lead Partner (2023–2026)	EGTS Linieland Van Waas en Hulst	Key facilitator of cross-border cooperation; its legal structure enables formalised collaboration, yet it may struggle with visibility at the community level.
Co-lead Partner	Province Zeeland (NL)	Strong institutional actor with strategic oversight; however, it may be constrained by national priorities or limited regional flexibility.
Governmental Authority	Gemeente Beveren (VL)	Crucial for implementing local strategies but may face political pressure from port expansion, land-use tensions and lack of finance.
Governmental Authority	Gemeente Hulst (NL)	Provides local governance input; may have limited resources compared to larger partners.
Governmental Authority	Province Oost-Vlaanderen (VL)	Important for aligning regional planning, though its coordination with other provinces, across the border and national authorities may be complex.
Port Authority	Port of Antwerp-Bruges (VL)	Economically dominant actor, positively influencing economy and negatively influencing land and water; pressurised for sustainable transformation.
Nature Conservation	Stichting Het Zeeuwse Landschap (NL)	Anchors ecological concerns in governance; its involvement in crowdfunding reflects creative approaches to citizen engagement.
Nature Conservation	Natuurpunt Antwerpen Noord vzw (VL)	Key player in preserving biodiversity; complements state-led efforts but lack political leverage.
Governmental Authority	Vlaamse overheid (Flemish Government) (VL)	Provides overarching governance support and coherence across sectors; but perceived as distant from local needs.
Governmental Authority	Vlaamse Landmaatschappij (VLM) (VL)	Key in land management and farming-related strategies; bridges rural stakeholder interests with ecological targets.
Governmental Authority	De Vlaamse Waterweg (VL)	Critical for flood safety and water infrastructure; however, technical focus underrepresent socio-cultural factors.
Tourism Body	Toerisme Oost-Vlaanderen (VL)	Promotes regional identity and sustainable tourism; yet their role in spatial planning remains secondary.
Informal Actors	"*Streekholders*"	Represent bottom-up, place-based knowledge; strengthen cultural sensitivity but lack of decision-making power.
Volunteers	Hosts and Hostesses	Act as knowledge representation; enhance public outreach, though their input is often symbolic rather than decisional.

6. Multi-scalar partnerships in transnational spatial planning

Spatial planning challenges in border regions often transcend administrative boundaries, requiring strategies that integrate efforts across various levels of governance, from local to global (Laine, 2016). Metropolitan regions have emerged as dominant economic units globally, with their growth governed by complex networks of organisations that extend beyond single geographic bounds and involve multiple levels of government (Healey, 2007). This necessitates multi-scalar interactions, often forming large institutional networks. Effective spatial planning in such dynamic and complex environments requires collective action and collaboration across various actors and scales (Marin et al., 2023). The integration of diverse perspectives and resources, from local communities to international bodies, is crucial for developing sustainable and equitable solutions that address interconnected challenges like climate change, pollution, and socio-economic disparities (Adger, 2003). This section elaborates on the necessity of such partnerships and defines key typologies: formal planning partnerships, informal planning partnerships, and research-based (or research by design) partnerships.

6.1 Formal planning partnerships

Formal planning partnerships are collaborative arrangements involving established governmental bodies, intergovernmental organisations, and legally recognised entities. These are partnerships which are structured within defined institutional frameworks, typically formalised through treaties, agreements, or statutory mandates (Perkmann, 2003). They have clear mandates, hierarchical or coordinated decision-making processes, and are often designed to operate on and across national, regional, and local administrative levels in order to achieve shared policy objectives (Popescu, 2008).

Such partnerships play a crucial role in fostering cross-border cooperation, particularly in spatial and territorial development. For example, the European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities (Madrid Convention) offers a legal basis for establishing cooperative frameworks between municipalities or regional governments across borders (Council of Europe, 1980). These institutional arrangements can take the form of Euroregions[4], cross-border metropolitan platforms, or European Groupings for Territorial Cooperation (EGTCs), and are often designed to support sustainable regional development initiatives (Sustainable Planning, 2018).

Table 2: Analysis of formal planning partnerships

Initiative	Description	Key Actors	Reflection
Flemish-Dutch Long-Term Vision for the Scheldt Estuary (LTV) (Slinger, 2023)	A foundational bilateral policy adopted in 2001 to create a healthy and multifunctional estuarine water system, balancing safety, accessibility, and nature. Established specific cross-border organizations for daily management.	Netherlands (Government, Parliament), Flanders (Government, Parliament), Technical Scheldt Commission (TSC), Joint Nautical Authority (GNA)	The LTV stands as a monumental achievement in cross-border governance, providing a foundational, enduring bilateral framework for integrated estuarine management. Its strength lies in explicitly balancing competing objectives (safety, accessibility, nature) and establishing dedicated cross-border organisations (TSC, GNA). However, its "long-term" nature can sometimes struggle with adapting to rapid, unforeseen challenges (like extreme climate events or new pollution concerns), and achieving the delicate balance in practice often leads to ongoing political and social tensions, as demonstrated by depoldering controversies.
INTERREG Projects (e.g., Grenspark Groot Saeftinghe)	European Union funding instrument promoting cross-border cooperation. The GGS project (2016-2021 and 2023-2026 phases) brings together numerous partners to balance ecological, economic, and social interests in a transnational nature park.	11 institutional partners (government organisations)[5]	INTERREG projects are vital catalysts for fostering transnational cooperation by providing dedicated funding and a structured framework for diverse partners. Their strength is the direct promotion of cross-border integration and the ability to address specific regional challenges through collaborative action. However, their project-based, time-limited nature can create challenges for long-term sustainability and institutionalisation of outcomes once funding cycles end. Moreover, coordinating such a broad range of formal actors across different national legal and administrative systems remains inherently complex.

4 Euroregions: http://www.espaces-transfrontaliers.org/en/resources/territories/euroregions/

5 11 partners - EGTS Linieland Van Waas en Hulst (Lead Partner), Provincie Zeeland (Co-lead), Gemeente Beveren (Waas), Gemeente Hulst, Provincie Oost-Vlaanderen, Stichting Het Zeeuwse Landschap, Port of Antwerp-Bruges, Agentschap voor Natuur en Bos, Natuurpunt Antwerpen Noord vzw, De Vlaamse Waterweg

Dutch Delta Program / Multilayered Safety (MLS)	A national program in the Netherlands aimed at flood risk management, shifting from traditional prevention to a more adaptive, polycentric governance approach emphasising resilience and adaptivity.	Dutch Delta Program, various levels of Dutch government, civil engineers, planners, spatial designers	This program represents a progressive shift in national flood risk management, moving beyond solely "hard" engineering to embrace adaptive, polycentric governance and resilience. Its strength is its systemic approach to climate adaptation, integrating spatial planning with water safety. A potential critique is that while it advocates polycentricity, its implementation can still be largely driven by national priorities and expert-led frameworks, sometimes struggling with genuine local-level integration and the inherent socio-cultural resistance to transformative land-use changes.
International Scheldt Commission (ISC)[6]	An international body involving France, Belgium (Walloon Region, Brussels-Capital Region, Flanders), and the Netherlands, focused on integrated water management for the entire Scheldt river basin.	Governments of France, Belgium (Walloon Region, Brussels-Capital Region, Flanders), Netherlands	The ISC is fundamental for comprehensive, basin-wide water management across multiple nation-states. Its strength lies in providing a high-level, formal platform for international dialogue and coordination on shared water resources and pollution control. However, as an intergovernmental body, its effectiveness can be limited by the lowest common denominator of agreement among sovereign states, potentially slowing down decisive action or limiting the scope of truly integrated, binding policy implementation across the entire basin.
Territorial Water Management Strategies (Belgian Pilot Action) [7]	A Belgian initiative under the Territorial Agenda, focusing on cross-border cooperation to address risks of flooding, drought, and water shortages, involving regional governments and European partners.	Brussels-Capital Region, Flemish Region, Walloon Region, European partners (e.g., European metropolis of Lille)	This initiative highlights a commendable effort within the Belgian context to address water risks through cross-border cooperation at a regional level, linking to broader European agendas. Its strength is the direct focus on specific risks (flooding, drought) and involving regional governments. The challenge often lies in scaling up pilot actions, ensuring consistent implementation across different regional administrations, and securing sustained political will and funding beyond the initial pilot phase.
Vlaams-Nederlandse Scheldecommissie[8] (VNSC) and Schelderaad	Promotes collaboration between Flanders and the Netherlands on Scheldt Estuary policy and management, including monitoring and research. The Schelderaad is an advisory platform to the VNSC.	Vlaams-Nederlandse Scheldecommissie (VNSC), Schelderaad, scientists, policymakers, water authorities	The VNSC is a critical operational arm of the LTV, ensuring ongoing collaboration between Flanders and the Netherlands on the Scheldt Estuary. Its strength lies in providing a dedicated, structured platform for policy coordination, monitoring, and research. The inclusion of the Schelderaad as an advisory platform is positive, but a critical perspective would examine whether this advisory role genuinely translates into significant influence on policy and decision-making, particularly when faced with strong economic or political imperatives.
Interreg Flanders-Netherlands	A specific INTERREG program funding cross-border projects like Grenspark Groot Saeftinghe, focusing on smart, green, and inclusive growth.	European Union (ERDF), EGTS Linieland van Waas en Hulst, Provincie Zeeland, other project partners	As a specific INTERREG program, its value lies in providing targeted EU funding and a clear framework for cross-border projects within this specific region. It directly supports smart, green, and inclusive growth, fostering practical cooperation. Similar to other INTERREG initiatives, its project-based funding can lead to a focus on discrete project successes rather than deeply embedded, continuous institutional change, and long-term financial sustainability for the outcomes of these projects remains a concern.
EGTS Linieland van Waas en Hulst	Lead partner for the current phase of the Grenspark Groot Saeftinghe INTERREG project, responsible for territorial cooperation.	EGTS Linieland van Waas en Hulst	As a European Grouping for Territorial Cooperation, EGTS Linieland provides a crucial legal and institutional framework for cross-border collaboration between local and regional authorities. Its strength is formalising and structuring territorial cooperation, enabling more effective joint planning and project management (e.g., as lead partner for GGS). A potential weakness lies in its administrative overhead and the need for continuous political commitment from constituent municipalities to fully leverage its potential and move beyond coordination to integrated governance.
Zuidwestelijke Delta[9] (Southwest Delta)	A regional program in the Netherlands focused on water safety, freshwater supply, and spatial quality in the southwest delta region, including coastal realignment initiatives.	Dutch government, regional authorities, water boards, local communities	This regional program is essential for integrating water safety, freshwater supply, and spatial quality challenges at a sub-national level in the Netherlands. Its strength is its comprehensive, multi-faceted approach to regional delta management, including potentially controversial initiatives like coastal realignment. The challenge lies in managing the complex trade-offs between these different objectives and ensuring local community buy-in and acceptance for potentially impactful interventions, as seen in past depoldering resistance.

6 https://www.isc-cie.org/en/
7 https://territorialagenda.eu/pilot-actions/territorial-water-management-strategies/
8 https://vnsc.eu/over-de-vnsc/schelderaad-en-samenwerking/
9 https://www.zwdelta.nl/

North Sea Port (North Sea Port, 2025)	A merged port authority encompassing Vlissingen, Terneuzen, and Ghent, designated as a NOVEX area, crucial for regional economy and quality of life in Zeeuws-Vlaanderen.	North Sea Port Authority, municipalities of Vlissingen, Terneuzen, Ghent, Dutch government	The merger of Vlissingen, Terneuzen, and Ghent into North Sea Port represents a powerful strategic move for economic competitiveness and efficiency, and its designation as a NOVEX area highlights its national strategic importance. Its strength is its unified approach to port development and logistics. However, its immense economic power often places it in direct tension with environmental protection and local quality of life. A critical analysis would focus on the effectiveness of its sustainability pledges, its real commitment to mitigating its environmental footprint, and how genuinely it integrates broader societal and ecological concerns into its expansion and operational strategies beyond economic imperatives.

The formal planning partnerships reveals a consistent engagement of governmental and intergovernmental bodies, such as national ministries, regional authorities, and cross-border governance platforms like the European Grouping for Territorial Cooperation (EGTC). These stakeholders typically possess formal authority and high decision-making power, grounded in legal mandates and institutional legitimacy. Their actions are often governed by structured procedures and long-term planning agendas, enabling policy continuity and spatial coherence across borders.

Long-Term Vision for the Scheldt Estuary (2001), which involves Dutch and Flemish authorities cooperating on flood protection, accessibility, and ecological restoration is an example of how formal partnerships address complex environmental and economic priorities through negotiated, treaty-based agreements(Slinger, 2023). Although top-down in nature, these partnerships may include consultative frameworks to engage municipalities or regional platforms. Their strength lies in orchestrating durable, cross-border strategies that transcend electoral cycles. However, there are lack responsiveness to emergent local dynamics and societal values, unless actively integrated with informal or participatory processes. This integration of administrative coordination with participatory governance makes formal planning partnerships a foundational component of multilevel territorial governance. In the Flemish-Dutch Delta, formal partnerships serve as institutional transnational cooperation, structuring governance in regions where ecological interdependence and logistical functions coincide.

6.2 Informal planning partnerships

Informal planning partnerships includes communities and citizens as community-led initiatives, grassroots groups, and local networks that emerge organically, often in response to local needs or perceived gaps in formal planning processes. These partnerships are flexible with ad-hoc decision-making structures, relies on social norms, trust, and reciprocity, and may operate outside formal governmental regulations, though they can interact with formal structures (Meijer, 2018).

Such initiatives are frequently driven by inhabitants who possess a deep connection to their local living environment. They play a crucial role in shaping spatial development, particularly in contexts where formal planning mechanisms may be insufficient or unresponsive to local needs. In the Netherlands, for example, community-led planning has been observed in rural regions where residents initiate projects to preserve public facilities or develop village plans, often navigating complex policy domains and sometimes conflicting with formal planning systems (Meijer, 2018).

Table 3: Analysis of informal planning partnerships

Initiative	Description	Key Actors	Reflection
Streekholders in Grenspark Groot Saeftinghe	Local citizen groups, residents, farmers, businesses, tourism guides, and youth who actively preserve the region's socio-cultural identity and provide local insights. They complement formal governance and use mechanisms like the "Grenspark Denktank."	Local residents, farmers, businesses, tourism guides, youth, enthusiastic volunteers (hosts and hostesses), Grenspark Denktank members	This initiative represents a significant and innovative step towards genuine co-creation in spatial planning, moving beyond tokenistic public consultation. Its strength lies in integrating local experiential knowledge and fostering social cohesion, potentially mitigating the top-down tensions historically seen in the Delta. However, its long-term effectiveness will depend on truly empowering "*streekholders*" beyond advisory roles, ensuring their contributions genuinely shape outcomes, and preventing potential co-option by more powerful formal actors or fragmentation of local interests.
Room for Rivers (Local Implementation)	While a formal national program, its success relies on local engagement and adaptation, linking water safety directly to spatial quality, social issues, and broader economic and ecological improvements.	Local communities, farmers, landowners, environmental groups, local authorities	As a formal program with local engagement components, "Room for Rivers" is commendable for fostering broader ecological and economic improvements alongside water safety. Its success hinges on effective local mediation between diverse stakeholders (farmers, landowners, environmental groups). A critical aspect is ensuring that local implementation truly reflects community needs and equitably distributes the benefits and burdens of land-use changes, rather than being a merely consultative layer on a predetermined, national strategy.
Crowdfunding for Bird Hides (Grenspark Groot Saeftinghe)	A specific local initiative within GGS where a nature conservation organization (Stichting Het Zeeuwse Landschap) raises funds from the public to enhance park features, demonstrating community support and informal contributions.	Stichting Het Zeeuwse Landschap, local citizens, birdwatchers, nature enthusiasts	This is an excellent example of a specific, tangible local initiative within a larger park framework that leverages citizen support and informal contributions for conservation. Its strength lies in direct community engagement and ownership of small-scale nature enhancements. However, while valuable for local impact and demonstrating commitment, such initiatives are typically limited in scope and cannot address systemic, large-scale environmental challenges or substitute for robust institutional funding and strategic planning for core conservation goals.

Doel 202010	A local action group advocating for the preservation of the village of Doel, often in response to port expansion plans, representing community resistance and heritage preservation efforts.	Local residents of Doel, activists, heritage preservationists	Doel 2020 exemplifies profound and sustained community resistance against top-down port expansion plans, successfully challenging a decades-long designation for demolition. Its critical role lies in asserting local agency and heritage preservation against powerful economic interests. While demonstrating the power of civic opposition, its reactive nature highlights the inherent tension between economic development and local identity, and the considerable social cost and protracted conflict that can arise from a lack of early and genuine participatory planning.
Participative Platform11 (Grenspark Groot Saeftinghe)	An online platform facilitating direct engagement and feedback from local citizens within the Grenspark Groot Saeftinghe initiative, allowing citizens to participate in various groups.	Local citizens, Grenspark Groot Saeftinghe team	This online platform is a tool for facilitating direct and ongoing engagement, democratising access to participation beyond physical meetings. Its strength lies in its potential to broaden reach and enhance transparency, fostering continuous feedback loops. The critical challenge will be to ensure that online engagement translates into tangible influence on decision-making, bridging the digital divide, and preventing the platform from becoming a mere 'listening' mechanism rather than a true co-design space where diverse local voices are genuinely heard and integrated into park management.

Informal planning partnerships, studied in this research, highlights the role of grassroots actors, local associations, cultural institutions, and civic coalitions. These stakeholders often emerge in response to perceived gaps in formal governance, acting autonomously or semi-autonomously to represent local values, challenging top-down decisions, or even articulating alternative futures. While their formal decision-making power is limited and may lack structural durability, their influence can be substantial in shaping public discourse and pushing institutional actors toward more inclusive or culturally sensitive agendas. A prominent example is the Doel 2020 movement, where local residents resisted port expansion and advocated for cultural preservation and heritage-based regeneration. These partnerships tend to focus on socio-cultural sectors, landscape heritage, and identity politics, often linked to spatial claims over land, water, and memory. Their temporality may be fluid and adaptive, but they demonstrate a strong sense of place-based continuity.

6.3 Research-based planning partnerships

Research-based partnerships or Research by Design partnerships involve collaborations between academic institutions, research organisations, knowledge institutes, and practitioners to generate, integrate, and disseminate spatial knowledge. These partnerships aim to inform policy, improve planning practices, and develop innovative solutions through data collection, analysis, modelling, and participatory knowledge exchange. They are crucial for understanding complex social-ecological systems and developing transformative pathways (Henrick et al., 2017). These are long-term, mutually beneficial collaborations that promote the production and use of research. They often involve co-production of knowledge, where researchers and practitioners work together to address persistent problems of practice (Coburn et al., 2013). By integrating diverse perspectives and expertise, research-based partnerships can produce more relevant and actionable insights for policy and practice (Farrell et al., 2021).

In the context of spatial planning, research-based partnerships can facilitate the development of innovative

10 http://www.doel2020.org/index.php

11 https://www.streekholders.grensparkgrootsaeftinghe.eu/default.aspx

instruments, tools and approaches, such as scenario planning, to support decision-making processes (Geertman et al., 2013). They also play a vital role in capacity building, enhancing the skills and knowledge of both researchers and practitioners (Penuel et al., 2015).

Table 4: Analysis of research-based planning partnerships

Initiative	Description	Key Actors	Reflection
Schelde Monitor12	A Flemish-Dutch knowledge and information system established in 2003 for research and monitoring in the Scheldt Estuary. It provides expertise, literature, datasets, measurements, projects, maps, and indicators to support policy and management.	Flemish-Dutch Scheldt Commission (VNSC), scientists, policymakers, water authorities	ScheldeMonitor is a foundational asset for evidence-based decision-making in the Scheldt Estuary. Its strength lies in centralising and continuously providing comprehensive, multi-disciplinary data, research, and expertise, crucial for informed policy and management. A potential critique is ensuring its accessibility and usability for diverse stakeholders (beyond just scientists and policymakers) and maintaining its independence and funding to continue providing objective data in a politically charged environment. Its long-term operation since 2003 speaks to its established value.
SPADES13 Project (EU Soil Mission)	A Horizon Europe project combining 19 partners in 10 countries, including Deltares and TU Delft. It investigates integrating soil health into spatial planning and design through 17 pilot projects in urban, peri-urban, and rural areas.	Deltares (project coordinator), TU Delft, 19 partners from 10 European countries (universities, knowledge institutes, private partners), spatial planners, policymakers	The SPADES project is a highly relevant initiative addressing the critical but often overlooked issue of soil health within spatial planning, connecting it directly to EU policy goals. Its strength is its transnational, multi-partner approach, integrating diverse knowledge institutes and applying research through practical pilot projects. The challenge lies in ensuring that the insights from these 17 pilots are effectively scaled up and translated into implementable policy changes across varied national and regional contexts, overcoming bureaucratic and practical barriers to adoption.

12 Schelde Monitor - https://www.scheldemonitor.be/nl
13 SPADES - https://www.spades4soils.eu/

"Estuaries on the MOVE" (EMOVE) EU Interreg Project (Jan et al., 2015)	An EU Interreg project aiming to turn stakeholders into "shareholders" by fostering a shared understanding of the estuary's physical and ecological functioning and collectively formulating projects. It involves scientists and policymakers.	Scientists, policymakers, various stakeholders (e.g., environmental groups, port authorities)	EMOVE's ambition to turn stakeholders into "shareholders" by fostering shared understanding of estuarine functioning is a commendable step towards deeper collaborative governance. Its strength is building common knowledge and promoting collective project formulation among diverse actors, which is crucial for complex socio-ecological systems. However, achieving genuine "shareholder" status requires more than just shared understanding; it necessitates power-sharing, which can be challenging to implement in projects with inherent power imbalances among stakeholders (e.g., between port authorities and environmental groups).
Collaborative Eco-morphological Modeling (Scheldt LTV)	A specific activity during the development of the Scheldt Long-Term Vision (1999-2001) that used modeling to facilitate communication and create a shared understanding of the estuary's intrinsic character among diverse actors.	Scientists, policymakers, various actors involved in LTV development	This specific modeling activity during the LTV development demonstrates the power of scientific tools in facilitating communication and building shared understanding among diverse stakeholders regarding complex natural systems. Its strength is in using visual and data-driven methods to bridge knowledge gaps and facilitate consensus. However, the models are only as good as their inputs and assumptions, and their complexity can sometimes alienate non-expert stakeholders if not effectively communicated, potentially limiting genuine co-production of knowledge.
"Drought in the Delta" (IABR Atelier)[14]	A design research project portraying freshwater shortages in the Dutch Delta through visualizations and design proposals, aiming to inform a change in thinking and acting towards water retention.	IABR (International Architecture Biennale Rotterdam), researchers, designers	This initiative highlights the critical role of design research and visualisation in raising awareness and fostering new perspectives on pressing environmental challenges like freshwater shortages. Its strength is its ability to communicate complex issues through accessible design proposals, inspiring a change in thinking and action. A potential limitation is that design proposals, while visionary, often require significant political will, funding, and public acceptance to move from conceptualisation to large-scale implementation.

14 https://iabr.nl/en/research/atelier-droogte-in-de-delta

Deltaplatform Living Labs15	Initiatives focused on fostering knowledge exchange and developing practical, scalable solutions for urban resilience and water management through collaborative discussions.	Deltaplatform, international experts, various urban contexts	Living Labs are excellent mechanisms for fostering real-world knowledge exchange and developing practical, scalable solutions through iterative, collaborative processes. Their strength is in their hands-on, experimental approach that directly involves end-users and promotes rapid learning cycles. The challenge for Deltaplatform's labs lies in ensuring that the solutions developed within specific urban contexts are truly scalable and adaptable to other diverse environments, and that the knowledge generated is effectively disseminated and integrated into broader policy frameworks.
Bauhaus of the Seas	An EU initiative promoting new ways of living with water, integrating design, science, and art, with pilot projects like the Delta pilot (including Grenspark Groot Saeftinghe) as living examples.	New European Bauhaus, researchers, designers, local communities, public agencies	This EU initiative, connecting design, science, and art to re-imagine living with water, is highly innovative and holistic. Its strength is its interdisciplinary approach and emphasis on practical pilot projects like the Delta pilot, offering "living examples" of new ways to interact with aquatic environments. A potential challenge is translating broad, aspirational visions into concrete, universally applicable policy measures, and ensuring that artistic and design-led approaches are genuinely integrated with scientific rigor and policy implementation.
Panorama Zeeuws-Vlaanderen16 (De Zwarte Hond)	An investigative design study exploring the coexistence of a flourishing economy with an aging society in Zeeuws-Vlaanderen, focusing on quality of life and cross-border cooperation.	De Zwarte Hond, municipalities of Sluis, Hulst, Terneuzen, Creative Industries Fund	This investigative design study is valuable for exploring the complex interplay of economic prosperity, demographic shifts (aging society), and quality of life at a regional scale, with a focus on design solutions. Its strength is its holistic perspective and emphasis on cross-border cooperation for sustainable regional development. As a design study, its impact relies on the subsequent political uptake and financial commitment to implement its proposals and ensuring that design-led insights are fully integrated with broader planning and economic development strategies.

The aim of such partnerships, as studied within this research, is to co-produce spatial knowledge and develop experimental or adaptive planning frameworks. A key feature is their sectoral breadth, ranging from climate resilience (e.g., Resilient Delta17) to socio-economic transitions and port-city interrelations (e.g., PortCityFutures18). These partnerships often include universities as knowledge anchors, combining empirical analysis with

15 https://www.deltaplatform.nl/en/living-labs
16 https://dezwartehond.nl/projecten/panorama-zeeuws-vlaanderen
17 https://convergence.nl/resilient-delta/
18 https://www.portcityfutures.nl/

normative policy recommendations. Their decision-making power is indirect but influential, operating through policy advice, scenario development, and evidence-based recommendations. Long-term thinking is embedded in their iterative and systemic approaches, often guided by principles of transition management, participatory design, or adaptive planning.

In most of the cases, there are some partners from the government organisations in for implementation and dissemination of knowledge. While the formal government organisations are not part of the project decisions, they act as mediators between sectors and scales. By aligning research with planning needs, these partnerships can influence formal agendas and bridge governance gaps, particularly in complex transboundary contexts like the Flemish-Dutch Delta.

7. Discussion - Stakeholder and "*Streekholder*" dynamics

The governance in the Flemish-Dutch Delta illustrates a complex and elaborately intertwined interactions of diverse actors, ranging from established formal institutions to community-driven groups, referred to as "*streekholders*" (Grenspark Groot Saeftinghe, 2024). The divergent priorities of these groups, the underlying vulnerabilities of the region and the cultural mindsets, inherent the dire need for structural collaboration.
There are 4 focus points areas recognised for this region; (i) Economically, formal stakeholders such as port authorities are focused on continuous economic development and enhanced accessibility for shipping. (ii) Environmentally, this objective frequently generates friction with conservation goals pursued by environmental organisations and certain governmental bodies, particularly in a sensitive ecological zone like the Scheldt estuary. (iii) At the policy and management level, living with water inherently involve balancing the water management "safety," "accessibility," and "nature" of the Scheldt estuary. (iv) At the local level for the communities, "*streekholders*" often prioritise the preservation of their socio-cultural identity, their livelihoods (e.g., agriculture), and their quality of life.

Reflecting on the actor landscape

After critically reflecting on the vast array of partnerships, reveals certain gaps and limitations. A primary missing element is a truly unified political leadership at the transnational level capable of consistently "breaking down" borders and overcoming entrenched national interests and diverse regulatory landscapes. Despite the understanding of the advantages of cross-border collaboration, the full realisation and implementation of the potential remains largely a "political problem". Informal actors, or *streekholders*, focus on maintaining socio-cultural integrity, livelihoods, and community quality of life, which can (sometimes) directly clash with regional or national objectives, or the long-term bigger picture, vividly illustrated by the protests against depoldering initiatives (Van Buuren & Warner, 2014). Existing partnerships tend to underrepresent or inadequately integrate certain voices, including youth, marginalised communities, and small-scale local entrepreneurs, leading to a governance gap wherein grassroots perspectives remain peripheral or symbolic rather than decisively influential (Meijer, 2018).

Patterns and trends in partnerships

The evolution of stakeholder partnerships in the Flemish-Dutch Delta reveals a gradual yet persistent shift toward multi-actor engagement. Since the early 2000s, initiatives such as the Grenspark Groot Saeftinghe have increasingly institutionalised informal stakeholder involvement through frameworks like EU-funded INTERREG projects (Interreg Vlaanderen–Nederland, 2025). These initiatives have fostered dialogue among formal and informal actors, significantly marked by structured entities such as EGTC Linieland van Waas en Hulst (EGTS Linieland van Waas en Hulst, 2024). Despite growing inclusivity, the decision-making influence of informal actors remains constrained, highlighting an ongoing imbalance where strategic and economic stakeholders dominate the core decision-making processes (Popescu, 2008).

Learnings from these partnerships

The lack of integration of informal and local perspectives into formal planning frameworks to enhance legitimacy, resilience, and adaptive capacity (Adger, 2003) is purely visible. The GGS initiative itself functions as a testing ground, fostering experimental and adaptive governance approaches adept at addressing complex interactions among ecological vulnerabilities, socio-cultural identities, and economic interests. It is vital to ensure that planning processes are not only effective but also socially accepted. Thus, fostering truly inclusive governance requires specific mechanisms that formalise the roles of *streekholders* in decision-making processes, facilitate continuous dialogue, and mediate conflicting interests through sustained, adaptive collaboration (Henrick et al., 2017).

8. Conclusion and recommendations

This paper demonstrates that the future of transnational spatial planning lies not only in formal structures but in the symbiotic relationship between institutional stakeholders and local *streekholders*. In the Saeftinghe case, this interplay has produced experimental and adaptive governance models that navigate ecological vulnerabilities, socio-cultural identity, and economic interests. The study reveals that when local voices are actively incorporated, as in the case of *streekholders*, planning processes gain legitimacy and resilience. This dual involvement challenges conventional stakeholder frameworks and offers a more inclusive, place-based approach to transboundary spatial governance. The insights from Saeftinghe provide a valuable precedent for regions across Europe facing similar multi-scalar complexities. Despite promising initiatives on multiple levels, formal governmental planning, informal planning grassroots initiatives and research driven partnerships, the study reveals a critical disconnect. These approaches currently operate in parallel in different scales, limiting the potential for inclusive and resilient and integrative spatial planning in the delta. Why it matters? Below are some initial recommendations for more holistic governance at regional and delta scales:

Power of shared visions – Lack of shared frameworks for integrating diverse perspectives across scales, sectors and stakeholders, hinders the co-creation of a shared vision of future proof solutions. A centralised platform that facilitates data sharing and communication between all scales and actors could promote intentional collaboration and implementation of interventions.

Formalised process of inputs – Policy frameworks in a transnational scale, which actively incentivises collaboration across governmental, research and citizen-led initiatives. Aligning institutional mandates with participatory planning is essential for legitimacy and impact. A clearly articulated process for integrating local knowledge and feedback mechanisms into decision-making would further enhance transparency, responsiveness, and long-term institutional learning.

Navigating values and tensions – GGS presents a trinity of nature, port, and agriculture as both identity and site of contestation. This conflict is also a strength. On a delta scale, the ports hold a strong hand and are responding to these escalating pressures, strategies are emerging to balance economic growth with sustainability. Ports like Rotterdam have adopted "Green Port" initiatives, investing in renewable energy sources such as wind and solar power and actively developing a hydrogen economy to reduce reliance on fossil fuels. Antwerp also demonstrates leadership in green logistics through initiatives like dual-fuel watercraft.

Nature inclusive long-term approaches – The growing advocacy for Nature-Based Solutions as an alternative to traditional "hard" infrastructure (e.g., concrete dikes) for coastal protection and climate adaptation, are being proposed for their environmental benefits, contributing to climate resilience and biodiversity enhancement. These approaches restore ecosystems while offering flexible, robust climate adaptation strategies, while simultaneously providing vital flood protection.

Rebalancing power and sustaining collaboration – The success of integrating "*streekholders*" demonstrates that local ownership and community-based approaches are vital for the long-term sustainability and social acceptance of large-scale regional development initiatives. Interventions such as coastal realignment, while designed to enhance ecosystem services, have met with negative social responses due to the perceived loss of cultural ecosystem, including agricultural polders and traditional livelihoods. By granting local communities "real agency" and ensuring their voices are genuinely heard for building trust, initiatives must address the socio-cultural implications of spatial interventions.

Embrace adaptive and integrated planning – The evolution of governance in the Flemish-Dutch Delta reveals a dynamic interplay, or paradox, between centralisation and decentralisation in adaptive planning. While the Dutch approach has shifted towards "multilayered safety," a more polycentric and inclusive model, there remains an ongoing discussion about "Decentralisation of the Spatial Planning System" versus a potential "Recentralisation of Planning" due to doubts about locational choices. This indicates that effective adaptive governance in deltas is not a simple linear progression of control, but rather a continuous re-scaling of governance functions. Multilayered governance must balance top-down strategic direction with bottom-up contextual implementation. Such dynamic fosters a "network of governance" that is better equipped to navigate spatial challenges across administrative and national borders.

Addressing legal and administrative obstacles in cross-border water management demands systemic coordination across sectors and scales. This includes integrating water, spatial, and economic strategies to address "wicked problems" holistically, recognising their interconnected nature. Regular and sustained dialogue is therefore crucial for encouraging commitment and synergy between national and local actions, ensuring that strategies are truly effective across all levels of governance. These recommendations stem from the early phase of research within the Bauhaus of the Sea Sails project and fieldwork in the Borderpark of Saeftinghe. As a research-in-progress contribution, the next steps will deepen the analysis of institutional evolution, path dependencies from the history and future trajectories for delta scenarios. This will include extending the empirical base with national, provincial, regional and municipal policy documents from the Netherlands and Belgium.

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