

# MULTI-LEVEL GOVERNANCE AND INFRASTRUCTURE DEVELOPMENT: CHALLENGES AND OPPORTUNITIES IN IMPLEMENTING THE TRANS- EUROPEAN TRANSPORT NETWORK (TEN-T) POLICY AT THE BRENNER PASS



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# Abstract

This master thesis examines the implementation of the Trans-European Transport Network (TEN-T) policy at the Brenner Pass, focusing on the challenges and opportunities of Multi-Level Governance Type 2. The Brenner Pass, a critical segment of the Scandinavian-Mediterranean Corridor, exemplifies the complexities of cross-border infrastructure projects within the European Union. The study investigates how diverse governance levels, from supranational to local authorities, interact and manage the multifaceted dimensions of this transport route.

Utilizing a case study, the research explores the roles of key stakeholders, including the European Commission's Directorate-General for Mobility and Transport, the European Parliament's Transport and Tourism Committee, national governments of Italy and Austria, regional and local authorities, civic organizations and industry groups. By applying frame analysis, particularly Entman's framing model, the thesis shows how these stakeholders present and interpret the TEN-T policy, concentrating on economic, environmental, and social impacts.

The research addresses the central question: "How does the implementation of the Trans-European Transport Network (TEN-T) policy at the Brenner Pass exemplify the challenges and opportunities of Multi-Level Governance Type 2?" Through this case study, the research presented the complexities and dynamics of coordinating a large-scale, cross-border infrastructure project within the European Union.

The findings reveal that while the TEN-T policy aims to enhance connectivity, economic growth, and sustainability, its implementation at the Brenner Pass is filled with challenges such as jurisdictional overlaps, conflicting regulations, and varying national priorities. These challenges indicate the need for improved coordination and cooperation across governance levels. The study also identifies opportunities for enhancing governance mechanisms through better stakeholder engagement, alignment of policy objectives, and innovative solutions to regulatory discrepancies.

Overall, the thesis offers perspective on the dynamics of Multi-Level Governance Type 2, demonstrating the importance of flexible, adaptive, and collaborative governance structures in managing complex transnational infrastructure projects. The Brenner Pass case serves as a microcosm of broader European integration efforts, reflecting the ongoing endeavour towards cohesive and sustainable infrastructure development across the European Union.

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# Acronyms

BBT SE - Brenner Basistunnel SE

DG MOVE - Directorate-General for Mobility and Transport

EIB - European Investment Bank

EU - European Union

MLG - Multi-Level Governance

TEN-T - Trans-European Transport Network

TRAN - Transport and Tourism Committee

WKO - Austrian Federal Economic Chamber

# 1 Introduction

Infrastructure's importance within the broader European context cannot be overstated, as it is fundamental to the European Union's objectives of economic resilience, social cohesion, and environmental sustainability. High-quality, well-connected infrastructure networks are central for facilitating the seamless flow of goods, services, and people across the continent, supporting the EU's single market, and bolstering its global competitiveness. The difficult relationship between infrastructure development and the EU's broader goals emphasizes the central role of infrastructure in shaping the future of Europe (Mischke & Garemo, 2013).

Economically, infrastructure serves as the determinator of the internal market, enabling the efficient movement of goods and reducing logistical barriers, which are deciding for maintaining the competitiveness of European businesses. By ensuring that products and services can be transported quickly and cost-effectively across borders, infrastructure directly impacts the EU's economic growth and its integration into the global economy. Moreover, well-developed transport, digital, and energy networks attract investments, stimulate job creation, and support the development of new markets and industries, thereby further strengthening the economic framework of the EU (Ayomitunde et al., 2020).

Socially, infrastructure plays a key role in bridging the gap between different regions of the EU, encouraging equal access to opportunities, and enhancing the quality of life for all citizens. It connects remote areas with major urban centres, ensuring that the benefits of economic growth and digital advancements are shared widely. This connectivity is necessary for supporting social inclusion, reducing disparities, and enhancing mobility, which are key to building a more cohesive and resilient European society (Scheurer & Haase, 2017).

From an environmental perspective, the emphasis on sustainable infrastructure development reflects the EU's commitment to addressing climate change and promoting a green economy. Initiatives that prioritize green transport solutions, renewable energy sources, and energy efficiency not only mitigate the environmental impact of infrastructure projects but also align with the EU's ambitious goals for sustainability and carbon neutrality. The transition towards sustainable infrastructure is a strategic investment in the future, aiming to preserve the environment while ensuring long-term economic and social well-being (Biodiversity Information System for Europe, 2023).

Furthermore, the development of cross-border infrastructure projects embodies the spirit of European integration, enhancing connectivity between member states and reinforcing

the EU's cohesion. These projects facilitate collaboration and mutual understanding among countries, contributing to the realization of a unified Europe (Medeiros et al., 2021).

Yet, the realization of collaborative infrastructure projects across national borders within the EU presents a series of serious challenges as well, which are evident in specific initiatives such as the Baltic Pipe Project, Fehmarn Belt Fixed Link, Rail Baltica or Brenner Pass. These endeavours are representative of the ambitious scope and complex nature of cross-border infrastructure development efforts within the EU. Beyond engineering achievements, these projects serve as platforms for negotiation and consensus-building among EU member states, presenting the challenges of aligning strategic infrastructure development with environmental concerns, economic sustainability, and the harmonization of regulatory frameworks (Brabo & Rasmussen, 2023; European Court of Auditors, 2020).

The Baltic Pipe Project, aimed at enhancing energy security through strategic energy infrastructure, needs to address geopolitical sensitivities alongside environmental concerns, balancing the need for energy security with adherence to stringent EU environmental standards (Brabo & Rasmussen, 2023). The Fehmarn Belt Fixed Link, a major infrastructure project intended to connect Denmark and Germany, revives the complexities involved in financing large-scale projects and conducting comprehensive environmental impact assessments (Pompeu-Santos, 2016). The Rail Baltica aims to integrate newer EU member states into the continental transport network, exposing the logistical challenges and historical complexities of standardizing operational and safety protocols across different national contexts (Van Leijen, 2021). Similarly, the Brenner Pass, facilitating improved connectivity between Italy and Austria, exemplifies the challenges of synchronizing national infrastructure policies within a broader EU context, requiring the integration of diverse regulatory environments and environmental considerations (Goldstone, 2024).

These projects stress the multifaceted nature of cross-border infrastructure development within the EU, illustrating the difficult negotiations required to align varying national interests, regulatory standards, and environmental policies. They reflect the EU's commitment to developing integrated, sustainable, and cohesive infrastructure solutions that respect both the collective objectives of the Union and the distinctiveness of its member states.

Given the complex interplay of governance levels and the diverse stakeholder interests, it becomes important to examine the opportunities and challenges presented by such projects within the framework of one of the integration theories. To be precise, this approach will allow an understanding of how the principles of Multi-Level Governance theory, facilitate, or hinder

the execution of significant infrastructural initiatives like the Brenner Pass within the EU's policy landscape.

## **1.1 Introduction to the Trans-European Transport Network (TEN-T) and the Brenner Pass**

Bridging the discussion from the broad importance of infrastructure within the EU to a focused examination of specific endeavours such as the Trans-European Transport Network (TEN-T) policy presents the practical application of EU strategies.

The TEN-T policy, initiated by the EU, stands for a strategic effort to transform the continent's transport infrastructure, supporting the above-mentioned economic growth, enhancing connectivity, and promoting sustainable mobility across its member states. This policy, rooted in the vision of cohesive and efficient trans-European transport routes, seeks to develop an integrated network of roads, railways, inland waterways, maritime shipping routes, ports, airports, and terminal hubs that span the entirety of the European Union. Such an ambitious infrastructure project covers physical connectivity, and simultaneously aims to reduce environmental impact, facilitate the smooth movement of goods and people, and bridge the economic disparities between regions, thereby strengthening the EU's internal market (European Commission, 2021).

Central to the TEN-T policy is its dual commitment to economic and social cohesion. By improving the linkage between peripheral and more central regions, the policy plays a central role in ensuring equitable development across the EU. It provides access to the single market, strengthens regional economies, and lays down the foundation for a more balanced economic landscape. This strategic integration of transport networks directly contributes to the competitiveness of European businesses and stimulates job creation, supporting a sense of unity and shared prosperity among EU citizens (European Parliament and Council of the European Union, 2013).

In alignment with the European Green Deal, the TEN-T policy stresses the EU's dedication to sustainability and environmental protection. It promotes the transition towards green transport solutions, advocating for the expansion of high-speed rail networks, the shift of freight from road to rail and waterborne transport, and the electrification of vehicles. Moreover, the policy advocates for the deployment of alternative fuel infrastructure, aiming to drastically reduce the transport sector's carbon footprint and support the EU's visionary climate objectives (European Council and Council of the European Union, 2023).

Despite its ambitious goals, the implementation of the TEN-T policy encounters a multitude of challenges, ranging from financial constraints and logistical complexities to the

harmonization of cross-border regulations. These obstacles show the critical need for cooperation among EU member states, regional and local authorities, and the private sector. Nonetheless, these challenges also present unique opportunities for innovation, encouraging collaborative solutions, and harmonizing transport policies across the continent (Ezgeta, Čaušević, & Mehanović, 2022).

The Brenner Pass, located at the Italy-Austria border, represents a critical component of the Trans-European Transport Network, particularly within the Scandinavian-Mediterranean Corridor. This pass, one of the lowest and most accessible points in the eastern Alps, serving as an urgent corridor for cross-Alpine transport, has central role in enhancing economic cohesion and facilitating trade and social interaction between diverse regions of the continent. By ensuring connectivity between northern and southern Europe the Brenner Pass incorporates the objectives of the TEN-T policy. By offering a direct route that bridges the gap between the industrial northern Europe and the Mediterranean's economies, the pass supports the policy's goal of reducing travel times, improving freight efficiency, and enhancing the environmental sustainability of transport modes (Bundesministerium für Verkehr Innovation und Technologie et al., 2016).

Moreover, the Brenner Pass serves as a prime example of the challenges and opportunities inherent in cross-border infrastructure projects, especially those involving sensitive Alpine environments. Its development and management necessitate a delicate balance between promoting economic growth and safeguarding the environment, pointing out the importance of innovative and sustainable solutions such as the Brenner Base Tunnel project. This ambitious project demonstrates the TEN-T's commitment to cutting-edge infrastructure development, aiming to reduce transit times and the environmental footprint of cross-Alpine transport (European Territorial Cooperation, Alpine Space Programme, 2013).

The significance of the Brenner Pass within the context of the TEN-T policy and European transport infrastructure touches on the complexities of stakeholder coordination needed to progress major infrastructure projects. This involves a broad array of participants ranging from local and national authorities to EU entities. The difficult dynamics at play shows the challenges in synchronizing various regulatory frameworks, financial models, and development objectives. Moreover, it indicates the opportunity for achieving shared aims through collaborative efforts, emphasizing the potential for partnership and cooperation across different sectors and regions (Arner, 2013).



Investigating the Brenner Pass within the context of the TEN-T Network reveals the complexities of harmonizing diverse national interests, incorporating various levels of governance, and managing the interplay among different actors and stakeholders across the EU. This examination shows the EU's efforts to synchronize policy coherence among its member states, regional authorities, and private stakeholders, guiding the multifaceted landscape of transnational infrastructure development. It showcases the challenges of balancing economic goals, environmental protection, and social cohesion in a way that respects the varied priorities and concerns of all parties involved. The Brenner Pass serves as a microcosm of the broader challenges facing European unity, showing the EU's endeavours to overcome the complexities of policy implementation on a continental scale. This scenario accentuates the tactical successes and hurdles encountered in the pursuit of integrated European infrastructure and reflects the ongoing journey towards deeper European integration. It stresses the importance of infrastructure in bringing together the varied elements of the EU's member states, regional bodies, and multiple stakeholders, explaining the task of harmonizing various levels, participants, and interests across the EU.

## **1.2 Research objective and question**

This master thesis seeks to answer the following question:

**“How does the implementation of the Trans-European Transport Network (TEN-T) policy at the Brenner Pass exemplify the challenges and opportunities of Multi-Level Governance Type 2?”**

The research objective is to uncover the governance challenges faced in implementing the TEN-T policy at the Brenner Pass and to identify opportunities for enhancing governance mechanisms. This focus acknowledges the complexity of implementing large-scale transportation policies across multiple jurisdictions and stakeholders (Held, 2010), with the Brenner Pass serving as a significant case study due to its strategic importance in European transportation networks and its environmental, economic, and social implications (Cavallaro & Nocera & Sommacal, 2021).

The research question posed, guides the investigation into the specific dynamics of governance involved in the TEN-T policy execution. This question is elemental for understanding how various levels of governance, example given European Union, national, regional, and local interact, potentially conflict, and cooperate in the context of implementing a policy aimed at improving cross-border transportation infrastructure. It also explores how

these interactions exemplify the broader challenges and opportunities of multi-level governance, particularly type 2, which emphasizes non-hierarchical interactions across different governance levels and sectors (Hooghe & Marks, 2003).

To address this question, the research employs frame analysis within the context of TEN-T and MLG. This methodology is chosen to examine how the TEN-T policy is presented and interpreted by various stakeholders. The analysis aims to identify the different frames—such as economic development, environmental sustainability, regional integration, national sovereignty, and local community impact—used by these stakeholders when discussing the TEN-T policy. By analysing how these frames are constructed, compete, and align within the MLG structure, the research seeks to understand their influence on policy implementation, stakeholder engagement, and the resolution of conflicts (Entman, 1993).

Through this approach, the research will uncover the diverse perspectives on the TEN-T policy's implementation at the Brenner Pass, showcasing the governance challenges encountered, such as jurisdictional overlaps, conflicts between local interests and broader EU objectives, or regulatory discrepancies. Additionally, it will explore opportunities for enhancing MLG mechanisms, such as through improved stakeholder engagement, better alignment of policy objectives across governance levels, or eventually innovative funding and regulatory approaches (Enderlein et al., 2010). This analysis will provide perspective on the dynamics of MLG and the potential for collaborative solutions to complex policy implementation challenges.

### **1.3 Stakeholder constellation**

#### **EU- Level Governance**

European Commission's Directorate-General for Mobility and Transport (DG MOVE) spearheads the TEN-T initiative, formulating policies and funding mechanisms to enhance connectivity and mobility across Europe, including projects like the Brenner Pass (European Commission, 2022). European Parliament's Transport and Tourism Committee (TRAN) shapes Europe's transport policies by inspecting and influencing TEN-T legislation, ensuring infrastructure aligns with objectives of economic growth, sustainability, and regional integration (European Parliament, 2020).

#### **National governments**

At the national level, the Ministry of Infrastructure and Transport represents Italy in the TEN-T project, balancing free movement of goods and sovereignty concerns with cross-border

infrastructure benefits at the Brenner Pass (Mitterwachauer, 2023). Meanwhile, Austria's Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology advocates for sustainable transport solutions that respect the Alpine environment while enhancing connectivity (Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology, 2020).

### **Regional and local authorities**

Regional and local authorities play an important role as well. The Tyrolean government's involvement underscores the importance of regional perspectives in transnational projects, with a focus on mitigating environmental impacts while boosting regional development (Amt der Tiroler Landesregierung, 2023). South Tyrol brings insights into the implementation of the TEN-T policy, emphasizing the need for infrastructure that respects local community interests while promoting economic development and environmental sustainability (Greiter, 2023).

### **Local communities and civic organisations**

Local communities and civic organizations are also integral to the process. Brenner Basistunnel BBT SE, the company responsible for the Brenner Base Tunnel, embodies the intersection of local economic development and European connectivity ambitions, reflecting broader debates on infrastructure in sensitive areas (Brenner Basistunnel BBT SE, 2024). Civic groups like "Transitforum Austria Tirol" represent local communities, emphasizing the necessity of balancing economic development with environmental protection and community well-being (Transitforum Austria-Tirol, 2024).

### **Business and industry groups**

Business and industry groups such as the Confederation of Italian Industry (Confindustria) and the Austrian Federal Economic Chamber (WKO) represent the business community's interests. These groups stress the economic imperatives driving the TEN-T policy, advocating for infrastructure that supports market expansion and enhances the competitiveness of European businesses (Austria's Federal Economic Chamber, 2020; Confindustria, 2024).

## **2 Theoretical Framework**

In this section, I will first explain the overall idea of MLG and the interconnection between MLG Type 1 and Type 2. I will then briefly describe what MLG Type 1 entails. Afterwards, I will examine MLG Type 2, particularly the segments of the theory that are

relevant to the Brenner Pass. In the second part of this section, I will articulate the reasons behind my choice of frame analysis, specifically opting for Entman's frame analysis. This will include an explanation of how frame analysis aligns with the goals of the research and its suitability for examining MLG. Furthermore, I will describe the operationalization process of Entman's frame analysis, detailing how it is applied to dissect and interpret the data.

## **2.1 Multi-Level Governance**

Multi-Level Governance (MLG) is an essential theory, developed by Gary Marks in the early 1990s, which elucidates how authority and decision-making responsibilities are dispersed across various layers of governance—supranational, national, regional, and local—particularly within complex political entities like the EU. This framework is crucial for implementing policies that need to navigate the interconnected jurisdictions of diverse member states, each with its own unique political, cultural, and legal environment (Bache & Flinders, 2004; Tortola, 2017; Enderlein et al., 2010).

In the EU, MLG enables a structured yet flexible approach to governance, facilitating systematic interactions between different government levels to align national actions with EU-wide objectives. It ensures that policies are crafted and executed in a way that respects the diversity of the union while promoting cohesive action across its breadth (Benz, 2015).

MLG is broadly categorized into two types, each serving different governance functions. Reflecting on these dynamics, it becomes evident how the strategic interplay between Type 1 and Type 2 governance systems underpins the MLG framework. While Type 1 governance excels at establishing structured and predictable frameworks crucial for overarching policy initiatives, Type 2 governance is indispensable for fostering innovative and adaptive solutions that address localized and specific challenges. Their coexistence is essential, as it leverages the strengths of both systems to forge a dynamic and comprehensive governance structure. By complementing each other, they fill gaps and provide support where needed, enhancing the overall effectiveness and adaptability of governance across the various layers and challenges within the EU (Hooghe & Marks, 2003).

### **2.1.1 Multi-Level Governance Type 1**

Type 1 MLG is characterized by a hierarchical, structured approach to governance, where clearly defined roles and responsibilities are distributed across multiple layers of government. This traditional form of MLG is important in contexts where uniformity and coordination across various administrative levels are crucial for effective policy implementation.

In Type 1 MLG, each level of governance—from the supranational to the national, regional, and local—has distinct, formalized responsibilities that align with its jurisdictional authority. This clear delineation helps prevent overlaps and conflicts in policy execution, ensuring that each layer operates within its scope while contributing to the overarching goals set by higher levels of governance.

The hierarchical nature of Type 1 MLG facilitates a top-down approach to policymaking and implementation. Higher levels of government typically set policy agendas and frameworks, which are then implemented by lower levels. This method is effective for managing large-scale initiatives that require a consistent and unified approach across diverse regions, such as national security, fiscal policy, and standard setting in environmental regulations (Newig & Koontz, 2014).

One of the strengths of Type 1 MLG is its ability to provide stability and predictability in governance. With roles and responsibilities clearly defined, each level of government can plan and execute its duties without ambiguity. This stability supports the long-term planning and the implementation of policies that require sustained efforts over time (Hooghe & Mark, 2001).

However, the hierarchical structure of Type 1 MLG can also be seen as rigid, potentially stifling innovation and flexibility in responding to local conditions and needs. It may limit the capacity of lower levels of governance to adapt policies to better suit local circumstances or to innovate based on local knowledge and expertise (European Committee on Democracy and Governance, 2023).

### **2.1.2 Multi-Level Governance Type 2**

MLG provides a framework to understand the interaction between different levels of government and non-governmental actors in policymaking. MLG Type 2 was developed to address the increasingly complex and interconnected nature of governance in Europe and beyond. This framework recognizes the necessity for flexible, overlapping, and dynamic structures in policymaking, especially as traditional hierarchical and territorially bounded models have struggled to keep up with modern challenges (Bache & Flinders, 2004; Tortola, 2017; Enderlein et al., 2010).

MLG Type 2 emerged from the work of Gary Marks and Liesbet Hooghe, who identified the need for governance structures that could accommodate the diverse, overlapping, and dynamic nature of modern policymaking. Initially conceptualized in the context of European integration, MLG Type 2 has since grown to reflect global trends of decentralization,

regionalization, and the increasing importance of non-governmental actors in governance. As governing structures transcend traditional administrative boundaries, the framework acknowledges the critical role of a range of public and private stakeholders (Allain-Dupré, 2020).

The significance of MLG Type 2 lies in its ability to address complex policy challenges through flexible and targeted responses that span multiple jurisdictions and policy areas. The framework shifts from hierarchical government to network-based governance, dispersing authority across multiple actors and levels. This approach favours collaboration among diverse stakeholders, leading to comprehensive and innovative solutions. Moreover, MLG Type 2 enhances democratic participation by involving non-governmental actors, regional authorities, and private stakeholders, broadening the policymaking process to encourage greater inclusivity (Hooghe & Mark, 2003; Zürn, 2004).

In addition to enhancing democratic participation, the overlapping and cross-cutting nature of MLG Type 2 helps address the fragmentation of governance structures. This is particularly important in areas where traditional administrative boundaries hinder effective policy implementation. For instance, initiatives like the TEN-T illustrate how MLG Type 2 can facilitate cooperation between national governments, regional authorities, and private stakeholders to achieve ambitious cross-border infrastructure goals (Zürn & Neyer, 2005).

Another key application is in regional development policies. The European Union's cohesion policy, aimed at reducing disparities between regions, relies heavily on the principles of MLG Type 2 to engage a diverse set of actors and ensure effective policy implementation (Medeiros et al., 2021). Similarly, cross-border environmental initiatives, such as the Alpine Convention, demonstrate how MLG Type 2 frameworks can facilitate international collaboration to address shared environmental challenges (Alpenkonvention, 2022).

### **2.1.3 The Relevance of Multi-Level Governance Type 2 at the Brenner Pass**

The TEN-T policy at the Brenner Pass is an exemplary case to analyse through the lens of MLG Type 2 due to the complex, multi-faceted nature of the policy and the diverse array of stakeholders involved. I will analyse several relevant aspects of MLG Type 2, each illuminating different dimensions of the governance involved. I will address each aspect individually, focusing on distinct elements. However, given the integrated and interconnected nature of these aspects within MLG Type 2, some overlap between segments is unavoidable.

## **Multiple Levels of Authority and Interaction**

The aspect of Multiple Levels of Authority and Interaction in MLG Type 2 shapes the structural arrangement of governance, recognizing and delineating the roles and responsibilities across various governmental layers. The implementation of the TEN-T policy at the Brenner Pass illustrates how multiple layers of authority interact in a MLG Type 2 framework. The EU provides the overarching policy direction and funding via the Connecting Europe Facility, setting goals for cross-border connectivity. Austria and Italy try to align their national infrastructure projects with these EU-wide goals, navigating the interactions, bilateral agreements and legislation required to synchronize their efforts. Regional governments, such as Tyrol in Austria and South Tyrol in Italy, play an intermediary role, managing local impacts while advocating for regional interests. At the local level, municipalities directly implement policies affecting their communities, addressing citizen concerns related to the constructions and operations at the Brenner Pass, including those connected to the Brenner Base Tunnel (European Commission, 2022; Mitterwachauer, 2023; Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology, 2020; Tiroler Landesregierung, 2023; Greiter, 2023; Brenner Basistunnel BBT SE, 2024).

Each level of government has distinct authority, regulatory frameworks, and capabilities that contribute to the policymaking and implementation process. Local governments are primarily responsible for the day-to-day administration, implementing policies at the ground level, and engaging directly with citizens. Regional governments act as intermediaries, adapting broader national policies to regional specifics and representing regional interests at the national level, which is particularly pertinent in areas like the Brenner Pass, where regional nuances are significant. National governments synchronize these efforts by aligning national infrastructure plans with EU-wide objectives, legislating, and securing financing. At the top, supranational entities like the EU devise overarching policies and frameworks that aim to enhance connectivity and integration across member states, providing standards and substantial funding for projects like the TEN-T (Hooghe & Mark, 2003).

Effective MLG Type 2 requires defined roles and also proficient management of the interactions between these levels of authority. This involves establishing communication channels to ensure policies are uniformly understood and implemented, coordination mechanisms such as joint committees and intergovernmental meetings to facilitate cooperation, and feedback systems that allow lower levels of government to influence policy refinement at higher levels (Zürn & Neyer, 2005). An example is the Dreier-Landtag, a joint intergovernmental meeting of the parliaments of Tyrol, South Tyrol, and Trentino. This

collaborative body brings together representatives from the three provinces to discuss common challenges, align policy efforts, and foster cooperation in areas such as infrastructure, transportation, and environmental protection. The Dreier-Landtag acts as a platform for aligning efforts and ensuring coherence in policy execution across the different administrative layers of these regions. It provides an opportunity for the three provinces to address shared concerns, particularly regarding the implementation of the TEN-T policy at the Brenner Pass. Through this framework, they try to establish unified positions, coordinate strategies, and work together (Südtiroler Landtag, 2024 a). Such structures are fundamental for aligning efforts and ensuring coherence in policy execution across different administrative layers (Zürn & Neyer, 2005).

However, challenges such as jurisdictional overlaps, conflicting regulations between government levels, and differences in priorities can complicate these interactions. Jurisdictional overlaps arise when multiple governmental entities have authority over the same geographic or policy area, leading to conflicting directives (Elazar, 1991; Watts, 1999). At the Brenner Pass, Austria, Italy, and the EU each claim jurisdiction, creating a complex web of regulations and priorities. Austria's, and thus Tyrol's, stricter environmental standards often clash with Italy's infrastructure development goals. The additional involvement of EU bodies, coupled with the reliance on EU funding, further complicates the situation. Balancing national and regional regulations with EU-wide transport policies and funding requirements has proven challenging. All these factors together, for instance, have led to delays in the approval and construction of the Brenner Base Tunnel (Railway Gazette International, 2021; Fender, 2021). Furthermore, this overlap becomes challenging, as Austria's stricter regulations, particularly those concerning air quality and emissions standards, conflict with Italy's more tolerant policies. For example, Austria enforces a ban on night-time truck traffic through Tyrol, while Italy has different trucking regulations, complicating cross-border freight transport coordination (Gowans, 2021).

Conflicting regulations between governments can present barriers to policy implementation (Stephenson, 2011). The TEN-T policy, by setting European-wide standards for transport infrastructure, sometimes does not align with national or regional legislation. Noise pollution regulations differ significantly between Austria and Italy. In Austria, the government enforces strict noise limits for rail and road transport, particularly near sensitive areas like residential zones. Italy's national standards are less strict, which leads to conflicting requirements during cross-border rail construction. For instance, the construction of noise barriers for the BBT has had to meet both Austrian and Italian standards (Spiegl, 2022).



## **Cross-border cooperation**

The aspect of Cross-border Cooperation within MLG Type 2 deals with necessities for effective collaboration across national boundaries, which enables managing and implementing transnational projects. This facet of governance focuses on the mechanisms and frameworks that facilitate joint decision-making, policy harmonization, and cooperative action between sovereign states.

Cross-border cooperation is grounded in the recognition that no single nation can independently manage the affairs that span across borders. Such cooperation is relevant in projects that involve shared resources, common environmental concerns, or infrastructure networks that naturally cross geographical and political boundaries. The theory emphasizes the need to forge agreements that align diverse regulatory standards, synchronize infrastructural development, and integrate environmental, economic, and social policies across different jurisdictions (Held, 2010).

Cross-border cooperation is therefore particularly relevant for transnational projects like the Brenner Pass. The Euregio initiative, involving the regions of Tyrol, South Tyrol, and Trentino, creates a platform for aligning regional transport policies, ensuring a cohesive approach to traffic management and environmental protection. Furthermore, the European Grouping of Territorial Cooperation (EGTC) framework facilitates collaboration between Austria and Italy, promoting joint decision-making and policy harmonization (Euregio, 2024; EGTC, 2024).

From a governance perspective, cross-border cooperation requires the establishment of institutional structures that support regular dialogue and negotiation between countries. These structures are often formalized through international treaties or agreements, which lay out the terms and conditions of cooperation, including the roles and responsibilities of each party, the objectives of collaboration, and the methods for conflict resolution.

In essence, cross-border cooperation in the context of MLG-2 creates synergies and manages interdependencies in ways that enhance the capacities of individual nations through collective action and shared purpose (Denemark & Hoffmann, 2008).

## **Flexibility and Adaptability**

Flexibility and adaptability in MLG Type 2 are constructs that facilitate responsive and effective policymaking in diverse and dynamic contexts. This aspect of governance emphasises the necessity for systems that can adapt policies to local conditions while still striving to achieve

overarching goals. These concepts underscore the importance of a governance structure that is not rigid but capable of evolving in response to changing conditions.

The aspect of flexibility in governance posits that decentralized decision-making processes are crucial. By empowering local and regional authorities, governance systems can leverage local knowledge and expertise to tailor policies that are more suited to specific needs and conditions. This decentralization is not a matter of administrative convenience but a fundamental principle that enhances the relevance and effectiveness of policies at the ground level (Oates, 2000).

Adaptability, on the other hand, involves the capacity of governance systems to learn from implementation and to modify approaches as required. This dimension emphasizes the need for feedback mechanisms within the governance structure, which facilitate continuous learning and improvement of policies. Such mechanisms ensure that policy adjustments are informed by practical experiences and emerging data, reflecting a dynamic approach to problem-solving that remains sensitive to local specifics. For instance, adjustments to tolling systems, traffic management practices, and environmental protection measures at the Brenner Pass illustrate how adaptive governance can respond to changing transport patterns, economic shifts, and environmental challenges (Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie, 2023).

Furthermore, the feature of adaptability suggests that governance should primarily react to changes, but also be able to anticipate them. This encompasses the development of policies that have built-in flexibility to adjust to unforeseen circumstances or new challenges. The concept of adaptive governance provides design of institutional and legal frameworks that permit variations in implementation across different regions, allowing for experimentation and innovation in policy application. In the case of the Brenner Base Tunnel, adaptability has been crucial. As construction progressed, unforeseen geological challenges required adjustments to the project's timeline and engineering solutions. The ability of local authorities, project managers, and the European Commission to collaboratively adapt to these challenges while keeping the project's strategic objectives intact demonstrates the importance of flexible and adaptable approach (Moore, 2021).

The emphasis on flexibility and adaptability in MLG Type 2 thus challenges the traditional, centralized models of governance, advocating instead for a more fluid and responsive approach. It recognizes the complexity of managing issues that span multiple jurisdictions and diverse populations, proposing a governance model that is both decentralized

in its execution and cohesive in its strategic direction (Hodson and Maher, 2001; Radaelli, 2003; Zeitlin et al., 2005).

## **Stakeholder Engagement**

Stakeholder engagement in MGL Type 2 represents a shift toward more inclusive and collaborative decision-making within governance structures (Hooghe & Mark, 2003). This approach is predicated on the notion that effective and equitable governance benefits from the inclusion of a diverse array of societal voices beyond traditional governmental actors. This includes private sector entities, non-governmental organizations, and community groups. The theory argues that the participation of these varied stakeholders not only enhances the decision-making process by introducing multiple perspectives but also ensures that policies are robust, equitable, and reflective of broader societal needs (Zürn, 2004). In the context of the Brenner Pass and the implementation of the TEN-T policy, stakeholder engagement is critical due to the diverse interests and potential conflicts involved.

The stakeholder engagement asserts that the process must be actively managed to ensure meaningful participation. It begins with the accurate identification of stakeholders, recognizing all those affected by or capable of influencing policy outcomes. This identification decisive as it sets the stage for whose voices will be included and whose interests need consideration (Zürn, 1998; Held & Koenig-Archibugi, 2005). In my mapping of stakeholders at the Brenner Pass, I identified various groups, including local residents affected by environmental changes, regional authorities responsible for economic and infrastructural development, national governments seeking to improve trade and connectivity, and EU-level bodies coordinating the TEN-T policy. The process involved an analysis of policy documents, reviews, and interviews to determine key stakeholders such as local governments, business and industry groups, civic organizations, and cross-border institutions like the European Commission.

Once stakeholders are identified, the next step involves fostering dialogic interactions. This means establishing a two-way communication channel where stakeholders can both receive information and actively contribute their views. For instance, at the Brenner Pass, the Brenner Corridor Platform has been established to provide a forum where stakeholders from Italy, Austria, and Germany can discuss issues and contribute to the TEN-T implementation (Brenner Corridor Platform, 2024). The goal of these interactions is to inform and to engage stakeholders in a manner that allows them to have a substantive impact on policy formulation. While the objective is to include all relevant stakeholders, it's understood that not all will participate equally due to varying levels of interest, influence, and capacity. Therefore, the

emphasis is on creating an inclusive environment that encourages participation from as many stakeholders as possible (Zürn, 1998; Held & König- Archibugi, 2005).

However, the true measure of effective stakeholder engagement lies in how these contributions are integrated into the final policy decisions. The theory emphasizes the need for transparent mechanisms that allow stakeholders to track how their input is utilized and to understand the impact of their contributions on policy outcomes. At the Brenner Pass, stakeholder input has led to adjustments in the construction schedule of the Brenner Base Tunnel and modifications to tolling systems to address traffic congestion concerns (Fender, 2021; Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie, 2023). This transparency is crucial for building trust and ensuring the accountability of the decision-making process.

Additionally, the theoretical approach to stakeholder engagement includes the creation of adaptive feedback mechanisms. These mechanisms are designed to capture ongoing feedback from stakeholders, allowing policies to be continuously refined and adapted in response to new information and changing conditions. This adaptiveness is essential for maintaining the relevance and effectiveness of policies over time (Enderlein et al., 2010).

### **Conflict Resolution Mechanisms**

Conflict Resolution Mechanisms in MGL Type 2 serve as tools for managing disputes that can arise in complex governance settings involving multiple levels of authority and diverse stakeholders. These mechanisms are designed to handle conflicts constructively, ensuring that disputes do not derail the implementation of policies that span various jurisdictions and sectors.

Theoretical approaches to conflict resolution in MLG Type 2 emphasize the importance of maintaining coherence and cooperation among stakeholders, facilitating a process where governance can proceed smoothly despite inherent disagreements. This involves employing strategies such as mediation and arbitration, where neutral third parties assist in resolving disputes. Mediation facilitates dialogue between conflicting parties to find a mutually agreeable solution, while arbitration provides a binding resolution based on a more structured evaluation of the arguments presented by all involved (Ostrom & Walker, 1997).

Conflicts in MLG Type 2 tend to arise between a variety of actors. Differences in policy priorities, resource allocation, or jurisdictional boundaries often lead to conflicts between local and national governments. In the case of the Brenner Pass and the Brenner Base Tunnel local authorities in South Tyrol (Italy) and Tyrol (Austria) expressed concerns about increased traffic and environmental degradation in their regions. The national government of Italy pushed for

the project to ensure cross-border connectivity and economic development, resulting in a need for arbitration and negotiation between these levels of governance (Fischer, 2023).

Stakeholders, including non-governmental organizations, private businesses, and community groups, often have conflicting interests with official authorities, particularly in urban planning and development. The Brenner Pass project involves stakeholders such as transport companies, environmental groups, and local communities, each with unique perspectives. Local communities, for instance, have expressed concerns regarding the BBT's environmental impact, while transport companies emphasize the economic importance of the tunnel (Transitforum Austria-Tirol, 2024; Austria's Federal Economic Chamber, 2023; Confindustria, 2024).

Another strategy is negotiation facilitation, which supports direct engagement between conflicting parties and helps clarify needs and identify common ground. Skilled facilitators play an immense role in guiding these negotiations, ensuring that the discussions are productive and lead to sustainable agreements (Raiffa, 1982).

Joint problem solving is also a favoured approach within MLG Type 2, promoting a collaborative method where stakeholders work together to identify shared objectives and develop solutions that consider the collective best interest. This strategy transforms potential conflicts into opportunities for cooperative problem-solving, emphasizing the benefits of combining diverse resources and expertise (Kohler-Koch & Eising, 1999).

Additionally, establishing clear precedents and guidelines for handling disputes is recommended to prevent conflicts from escalating. These guidelines provide transparency and consistency in the resolution process, which helps all parties understand how their disputes will be managed (Zeitlin et al., 2005).

Proactive monitoring and feedback mechanisms are equally important. These allow for the early detection of conflicts during policy development and implementation, offering timely interventions that can adjust or redirect strategies as necessary (Dai, 2007).

In the context of TEN-T, the BBT SE a bi-national company established by Austria and Italy to oversee the Brenner Base Tunnel project, serves as a collaborative framework that involves representatives from both nations to resolve disputes and streamline decision-making ((Kainz, 2023). Mediation helps address local government-stakeholder conflicts, where neutral parties can bridge differences between authorities and communities over environmental regulations. At the Brenner Pass, negotiation facilitation and joint problem-solving assist different stakeholders, from logistics companies to environmental organizations, in finding common ground (Holzinger, 2000).

## **Policy Coherence and Coordination**

Policy Coherence and Coordination focuses on aligning and synchronizing actions across various levels of government to achieve unified policy objectives. This aspect is ensuring that decentralized actions remain consistent with overarching goals, particularly in contexts that require cooperation across multiple governmental jurisdictions.

Policy coherence and coordination asserts that for governance to be effective, all levels must understand and actively pursue a shared set of objectives. Disjointed or uncoordinated policies can lead to inefficiencies and contradictions that undermine the effectiveness of governance as a whole (Pierre, 2000). For example, at the Brenner Pass, Austrian authorities prioritize reducing road congestion and environmental impact by promoting rail freight transport, while Italian authorities focus on economic development through improved road connectivity. These divergent priorities create challenges in implementing coherent and unified strategies across borders (Kurmayer, 2023).

Achieving this coherence starts with a clear articulation of the overarching goals at the highest level of governance. These goals must then be effectively communicated to subordinate levels, ensuring that all entities within the governance structure understand the broader strategic context of their specific actions (Pierre, 2000).

## **Resource Allocation**

The resource allocation within MLG Type 2 when applied to large-scale infrastructure projects like the TEN-T elucidates the complexities and challenges inherent in managing resources across multiple layers of governance. This multi-level approach requires a balance of local, national, and supranational interests and resources, which is a significant departure from more centralized forms of governance.

In the context of such infrastructure projects, resource allocation requires coordinating diverse funding sources and governance levels to achieve coherent and effective outcomes. The funding mechanisms typically involve contributions from various governmental levels—each with its own fiscal policies and budgetary constraints—which necessitate frameworks for collaboration and coordination (Enderlein et al., 2010). At the Brenner Pass, this is particularly evident in the financing of the Brenner Base Tunnel, a major component of the TEN-T network. The project receives funding from the European Union, Austrian and Italian national governments, and regional authorities like the Province of Bolzano and the Tyrol region (BBT SE, 2024).

Fiscal coordination is a critical component, especially given the absence of a unified fiscal policy. In MLG Type 2 settings, while monetary policy might be centralized, fiscal policies typically remain decentralized, leading to potential inefficiencies and disparities in resource distribution (Enderlein et al., 2010). For instance, the Brenner Base Tunnel project illustrates the challenges of harmonizing national fiscal policies, as Austria and Italy have different budgetary constraints and priorities. The European Union's co-financing mechanisms, including grants from the Connecting Europe Facility (CEF), play a crucial role in bridging these fiscal gaps and incentivizing national governments to contribute their share (European Court of Auditors, 2022).

Resource allocation also depends on output legitimacy, which is derived from the governance system's ability to deliver measurable and beneficial outcomes based on clear mandates and objectives (Enderlein et al., 2010). In the case of the TEN-T policy at the Brenner Pass, output legitimacy could be demonstrated through the benefits of reduced road congestion, improved rail freight transport, and enhanced cross-border connectivity (ÖBB, 2024). This aspect points out the need for governance structures to not only distribute resources efficiently but also ensure that these resources translate into tangible benefits, thereby supporting the legitimacy of the governance system.

Moreover, the context of projects like TEN-T at the Brenner Pass involves the development of mechanisms to enhance fiscal coordination without full fiscal union—a concept that seeks to maximize the benefits of shared monetary policies while respecting the fiscal autonomy of individual governance levels. Such mechanisms might include structured co-financing arrangements, predefined funding formulas, and enhanced legal frameworks that ensure compliance with funding obligations and equitable distribution of financial burdens and benefits (Enderlein et al., 2010, p. 426). The Brenner Base Tunnel project is managed by a joint Austrian-Italian venture, BBT SE, which coordinates funding agreements and ensures compliance with EU standards and timelines (BBT SE, 2024).

## **2.2 Frame Analysis**

This section of the thesis provides an explanation of why and how frame analysis, specifically Robert Entman's model, is employed to analyse the implementation of the TEN-T policy at the Brenner Pass.

Frame analysis, as introduced by Erving Goffman in his seminal 1974 book "Frame Analysis: An Essay on the Organization of Experience," is a theoretical and methodological approach in the social sciences. This approach helps to decipher how individuals and groups

organize and perceive their experiences, thereby interpreting the world around them. Goffman conceptualized frames as "*schemata of interpretation*" (Goffman, 1974, p.21), which are essentially mental structures that allow people to identify and comprehend events, guiding how they interact with the world (Goffman, 1974).

The theory behind frame analysis suggests that frames act like filters. These filters highlight certain elements, while downplaying others, shaping the understanding and responses to various situations. This process allows to categorize and interpret complex arrays of information into coherent, socially recognizable scenarios (Zeletdinova & Diakova, 2019).

Methodologically, frame analysis offers researchers a tool to explore how meanings are constructed in communication. Whether it's through direct interactions or mediated communications such as news media, frame analysis looks at how specific issues are framed, which involves recognizing the angles and perspectives emphasized and how these frames shape perception (Van Hulst & Yanow, 2014).

Frame analysis is a tool used across various fields to understand how interpretations and perceptions are shaped by underlying frameworks of understanding. In political communication, for example, the way an issue is framed can influence stakeholders and decision-making, potentially affecting policy outcomes and processes (Lecheler & De Vreese, 2012). In the implementation of the TEN-T policy at the Brenner Pass, frame analysis becomes an essential tool, helping to elucidate how different governance levels frame the policy to various stakeholders. This approach examines how politicians, governing bodies, and interest groups articulate the challenges and opportunities associated with this policy. By looking at speeches, policy documents, and public discourse, frame analysis allows to see how the implementation is framed differently at each level of governance (Björnehed & Erikson, 2018). For instance, at the local level, the framing might focus on the direct impacts on local communities, such as potential environmental degradation or economic benefits from increased trade. Conversely, at the national or European level, the framing could emphasize broader benefits like improved European integration and economic cohesion.

### **2.2.1 Operationalization and Entman's framing model**

Incorporating the Entman framing model, which examines "How does the implementation of the TEN-T policy at the Brenner Pass exemplify the challenges and opportunities of MLG type 2," facilitates the analysis of policy framing. Utilizing Entman's perspective on framing in the context of policy communication is particularly relevant as it



provides a method for examining how the TEN-T policy is portrayed and understood across different governance levels.

Entman's model is essential for investigating how framing of various stakeholders—ranging from local to European Union levels—shapes the implementation of the TEN-T policy. The application of Entman's framing method, widely utilized in communication studies, extends beyond its original discipline, offering useful tool for various fields (Entman, 1993). This adaptability makes it suitable for analysing complex phenomena such as MLG, where understanding diverse perspectives and communications is crucial. In MLG, especially of the type 2, disparate actors, institutions, and policy spheres interact, often without a unifying framework, leading to fragmented and sometimes conflicting policy implementations (Maggetti & Trein, 2019).

Reflecting on Entman's observations about the pitfalls of insufficient interdisciplinary exchange, it becomes evident that substantial benefits arise when methods and knowledge are actively shared across disciplines. Interdisciplinary exchange refers to the active sharing of methods, knowledge, and perspectives among professionals from diverse fields. Insufficient exchange might lead to isolated research efforts and missed innovative opportunities. In contrast, robust interdisciplinary collaborations can bridge gaps in understanding, enhance the scope and impact of research findings, and address problems with more comprehensive solutions. This point of view is directly applicable to this master thesis using Entman's method for analysing the frames used when discussing Ten-T policy at the Brenner Pass. By applying Entman's framing model, my thesis aims to analyse how different governance levels frame the needs and outcomes of the TEN-T policy, potentially leading to varied understandings and implementations of this infrastructure project.

Moreover, the application of Entman's method allows for an exploration of how the framing by various stakeholders influences perception and policy outcomes regarding the TEN-T implementation (Entman, 1993). By identifying and making explicit the common tendencies among the various frames used by local, national, and EU policymakers, the thesis will contribute to a more precise and universal understanding of multi-level interactions and their impacts on policy execution.

During the analytical phase of my research, I will apply Entman's framing model to the data I have collected, aiming to decode and assess the underlying framing strategies. This examination will unfold through a series of structured steps directed to uncover how various stakeholders have framed the TEN-T policy and how certain aspects of the TEN-T policy are emphasized or overlooked.

As part of this analysis, I will conduct a textual review to identify specific keywords, phrases, and thematic clusters that indicate framing efforts. This step will help identify how various elements—economic, environmental, or social impacts—of the TEN-T policy are presented in public and official narratives. Additionally, I will explore how different stakeholder groups interpret and respond to these frames. Understanding these perspectives enables to assess the different impact of the framing across various stakeholder segments (p.52).

Furthermore, I will evaluate how the framing of the TEN-T policy interacts with norms and values. This part of the study will focus on identifying whether the policy's implementation is in harmony with or in opposition to prevailing beliefs of each stakeholder. Understanding this interaction reveals how the framing can either facilitate or hinder the policy's acceptance and successful implementation. This evaluation will show the broader societal implications of the policy, focusing on how deeply entrenched values and norms can shape the trajectory of policy outcomes (Tversky & Kahneman, 1986).

Entman's model analyses the narrative and discourse surrounding the policy through four aspects: defining the problems, diagnosing their underlying causes, making moral judgments about the issues, and involved stakeholders, and suggesting potential remedies. The core of my thesis will involve an application of all four framing functions to analyse how various stakeholders communicate about the TEN-T policy. However, *“a single sentence may perform more than one of these four framing functions, although many sentences in a text may perform none of them. And a frame in any particular text may not necessarily include all four functions”* (Entman, 1993, p.52).

## **Defining the Problems**

The analysis will involve an exploration of the discourse employed by each stakeholder group to articulate their views and concerns regarding the policy. My approach will focus on dissecting how these stakeholders highlight different aspects of the TEN-T policy, such as its impact on economic development, environmental conservation, regional connectivity, or social implications. This stage of my research aims to map out the various narratives used by these stakeholders to describe what they perceive as the central problems that the TEN-T policy intends to solve, as well as those issues that might inadvertently arise as a result of its implementation. By identifying and understanding these diverse perspectives, I can comprehend the interplay of interests and concerns that shape the discourse surrounding this European policy initiative. This analysis will reveal the principal interests and priorities of each

stakeholder group, while also identifying areas of agreement and discord, presenting a view of the varied consequences of the TEN-T policy (p. 52).

### **Diagnosing their underlying causes**

In the subsequent phase of my analysis, I will focus on how different stakeholders attribute causes and responsibilities within their respective frames regarding the TEN-T policy. This step uncovers the underlying dynamics of how groups perceive and articulate the origins of issues and who should be accountable for them. By dissecting the narratives, I will identify key patterns of causation and responsibility as framed by each group. This involves examining whether stakeholders blame existing structural deficiencies, policy oversights, other stakeholders, or similar factors for the challenges they address. Similarly, I will also explore which stakeholders are viewed as primarily responsible for the positive outcomes in the implementation of the TEN-T policy at the Brenner Pass. Additionally, I will investigate whom stakeholders credit with the capability to provide effective solutions when needed, whether through governmental action, private sector initiatives, or community-driven efforts. This part of the study will examine perceptions of leadership and accountability by identifying which stakeholders are viewed as key contributors to the successes of the TEN-T policy at the Brenner Pass and who is deemed capable of addressing future challenges. By understanding these narratives, I can clarify the underlying assumptions and interests that drive the discourse around the TEN-T policy. This step will offer deeper understanding for the interplay between different perspectives on the matter, enhancing the understanding of the policy's impact and the dynamics of stakeholder interactions within the MLG framework. Ultimately, this approach will delineate the landscape of accountability and responsibility as perceived by various actors involved in or affected by the TEN-T policy (p. 52).

### **Making moral judgments about the issues and involved stakeholders**

In the moral evaluation segment of my analysis, I will systematically assess how various stakeholders render ethical judgments regarding the TEN-T policy within a MLG framework. This entails examining representations of the policy as either just or unjust, and beneficial or detrimental at different governance levels. By investigating these moral judgments, I aim to uncover the underlying value systems that shape stakeholder perspectives at each level, offering an understanding of how these values influence their responses to the policy. This phase of the analysis will evaluate stakeholder perceptions regarding the policy's impact on social, environmental, and economic dimensions. It will explore whether stakeholders regard the policy as consistent with principles of sustainability, or whether they perceive it as

compromising these principles. Such moral framing by different groups discloses their prioritized values. Additionally, I will explore how these moral evaluations impact stakeholder engagement with the policy, influencing both its acceptance and the implementation process. This step reveals how moral perceptions can facilitate or hinder policy execution, suggesting where policy adjustments may be necessary. By synthesizing these diverse moral perspectives, my analysis will delineate the ethical contours of the debate surrounding the TEN-T policy. It will identify areas of moral consensus and discord, providing an understanding of the role of ethical negotiations in achieving effective MLG outcomes (p. 52).

### **Suggesting potential remedies**

The final component of my analysis focuses on treatment recommendations, where I will conduct an examination of the solutions and remedies proposed by various stakeholders to address the issues identified in the TEN-T policy. This segment involves assessing how these actions are justified and evaluating the anticipated impacts of such interventions.

During this process, I will look at the measures proposed by each stakeholder group. This involves exploring the underlying rationale for each recommendation, how stakeholders expect these measures to rectify the identified problems, and the mechanisms they propose for effective implementation. This includes examining steps such as policy amendments, infrastructure upgrades, innovations in governance, and eventually enhanced community engagement strategies.

Additionally, I will continue with investigating the expected outcomes as envisioned by the stakeholders. This aspect of the study provides understanding for the strategic thinking of stakeholders regarding the long-term efficacy and sustainability of their proposals. Evaluating both the immediate and extended outcomes forecasted by these recommendations will allow me to look at the stakeholder's strategies for the future of the TEN-T policy.

This exemplifies how the collaborative and non-hierarchical interactions that define MLG type 2 either support or complicate the implementation of these solutions. Specifically, the dynamics of cooperation across different governance levels and how these interactions influence the feasibility and effectiveness of the proposed measures (p. 52).

## **3 Methodology**

This section outlines the research design and data selection used to investigate the TEN-T policy at Brenner Pass. The study utilizes a case study approach, enabling an analysis of the interactions within MLG that influence this policy's implementation. The choice of data, from

policy documents to articles, supports an exploration of the governance dynamics, ensuring that the study consistently addresses the central research question.

### **3.1 Research design**

In the following part I will explain the reasons for selecting a case study as the primary research design. This discussion will explore the essential characteristics of a case study and illustrate how these characteristics are evident in my investigation of the Brenner Pass.

#### **3.1.1 Case Study**

Case study research facilitates an in-depth examination of a phenomenon within its real-life context. This approach allows for an understanding that goes beyond the scope of quantitative descriptions, capturing the essence of complex systems in operation. Particularly effective at revealing the concealed dynamics within such systems, case study research uncovers the operational and interactional dynamics that quantitative methods might overlook. This method is acclaimed for its ability to delve deep into the complex scenarios (Yin, 2009). Utilizing a case study methodology to investigate the Brenner Pass enables an examination of the economic, environmental, and social impacts, as well as the governance challenges and opportunities, resulting from the implementation of the TEN-T policy. This approach also explores the processes that lead to these outcomes. Therefore, the approach allows to analyse the interplay of political, social, and economic forces that influence outcomes.

Case studies are particularly adept at analysing the influence of specific environmental, social, and political contexts on the phenomena under study. This research method enables scholars to observe how theoretical frameworks are applied in real-world scenarios, capturing the interplay between external and internal factors that shape outcomes. The approach of case studies facilitates an understanding of dynamics, illustrating the practical application of theoretical constructs and identifying the factors that influence key outcomes (Baxter & Jack, 2008). In the context of the Brenner Pass, employing a case study methodology offers an understanding of how the region's unique geographic and environmental characteristics influence the execution of the TEN-T policy. The Alpine terrain, with its distinct ecological sensitivities, poses numerous challenges that necessitate innovative solutions in engineering and environmental management. This scenario is a typical example of MLG Type 2, where diverse governance levels collaborate to address complex, site-specific challenges. Investigating these complexities, the case study approach uncovers how stakeholders adapt strategies to align local environmental concerns with European transportation objectives. This focused analysis demonstrates the real-world application of governance theories and

exemplifies the need for flexibility and responsiveness within such frameworks to accommodate local conditions.

Additionally, case studies are instrumental in applying, testing, and potentially expanding theoretical frameworks. By observing how theories operate in specific instances, researchers can identify both the strengths and limitations of theoretical constructs, thereby contributing to theory refinement and development (George & Bennett, 2005). Applying this perspective to the Brenner Pass, the region serves as a critical test bed for the theories underpinning MLG Type 2. A case study of this scenario can examine whether the theoretical predictions of MLG Type 2—such as improved collaboration and decision-making through non-hierarchical governance structures—hold true under the pressures and complexities of real-world infrastructure development.

Case studies of unique or extreme cases demonstrate what may not emerge from studying more typical cases. These instances often push the boundaries of existing theories and reveal aspects of phenomena that can lead to theoretical and practical advancements (Turner & Danks, 2014). The Brenner Pass, by virtue of its strategic significance, complex operational requirements, and sensitive Alpine environment, constitutes an extreme case within the TEN-T policy. This case study illustrates the challenges of coordinating among diverse international stakeholders, managing significant environmental impacts, and integrating advanced technological systems (Fliesser, 2022).

In contrast, more typical cases might include projects like the upgrading of urban transport networks in cities like Seville, where the focus is largely on improving local infrastructure without significant cross-border elements. These projects, while important, involve fewer coordination challenges across national borders and entail less complex environmental impact assessments (Rodriguez, 2023). Another example is the development of railway segments in central Poland, which, unlike the Brenner Pass, does not engage multiple countries or require navigating significant ecological sensitivities (Ministerstwo Infrastruktury, 2024). Such projects, although part of the broader TEN-T framework, face relatively straightforward implementation processes.

Studying the Brenner Pass offers insights into the limits of current governance models and informs future policy and infrastructure planning within Europe, especially in managing high-stake, transnational infrastructure projects. These observations help illustrate the necessity for specialized strategies in handling extreme cases, distinguishing them from the more routine challenges encountered in typical TEN-T projects.

### **3.2 Choice of data**

In this section, I detail the selection and significance of various types of data utilized to analyse the implementation of the TEN-T policy at the Brenner Pass from 2020 to 2023. The thesis is further enriched with literature from earlier years and recent data from 2024. The dataset includes strategic work plans from EU coordinators, parliamentary briefings, national position papers, news articles, and government reports.

To provide a comprehensive analysis, documents were selected based on their relevance, credibility, and ability to represent diverse perspectives on the TEN-T policy implementation at the Brenner Pass. The selection process involved searches in academic databases, government websites, and news outlets. The criteria focused on documents directly related to the Brenner Pass, sourced mostly from authoritative entities. Each document was chosen to address specific aspects of MLG, illustrating high-level EU strategies, national policy perspectives, and local governance dynamics. This approach ensures that the analysis covers the broad spectrum of influences and interactions within the TEN-T policy framework.

#### **Fifth Work Plan of the European Coordinator Pat Cox**

Including the Fifth Work Plan of the European Coordinator Pat Cox for the Scandinavian Mediterranean Corridor in my analysis of the TEN-T policy implementation at the Brenner Pass aims to provide an overview of the broader TEN-T network's developments. This document, published by the European Commission, maps out the infrastructural advancements and highlights the complex interdependencies within the network that intersect with key areas like the Brenner Pass. Exploring these broader connections allows to comprehend how regional and continental dynamics influence local infrastructure challenges and successes.

The Work Plan also details the coordination required between various levels of governance, from local stakeholders to EU-wide authorities, mirroring the governance dynamics at the Brenner Pass.

Furthermore, exploring the significant EU policies and funding mechanisms outlined in the Work Plan, such as the Connecting Europe Facility and the European Green Deal, provides insights into the policy and financial frameworks shaping infrastructure development. This understanding is crucial for assessing how such policies impact the Brenner Pass and can guide strategic planning and implementation in MLG contexts (European Commission, 2022).

## **Briefing from the European Parliament's Committee on Transport and Tourism**

Incorporating the briefing document from the European Parliament's Committee on Transport and Tourism on TEN-T into my thesis provides an overview of TEN-T policy from 2020, shedding light on the specific role of the Brenner Pass within the EU's extensive transport network. This document allows to place the Brenner Pass's challenges and developments within the broader context of European transport initiatives.

Secondly, the briefing outlines the legislative and financial frameworks that govern TEN-T. This analysis is allowing for understanding the MLG involved in shaping such significant infrastructure projects, illustrating the interplay between European, national, and regional efforts in areas like policy implementation and funding.

Lastly, the briefing discusses the alignment of EU-wide goals with national and regional priorities, a key theme in my study of MLG at the Brenner Pass (European Parliament, 2020).

## **Austrian Vision for the Trans-European Transport Network**

I have chosen to incorporate the Position Paper from Austria's Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation, and Technology into my analysis. This decision is based on several factors.

First, the document serves as an official articulation of Austria's policies and strategies regarding the TEN-T, providing a credible and authoritative perspective. It is important to accessing the national-level insights necessary for a comprehensive understanding of MLG within the context of TEN-T implementation.

Secondly, this position paper is particularly relevant to my research as it directly addresses strategic initiatives and infrastructural projects that impact the Brenner Pass, a key area of focus in my study. Its inclusion allows for an examination of how national and European Union policies converge and interact.

Furthermore, the choice of this document is motivated by its relevance to the Brenner Pass itself. The Pass is a major component of trans-Alpine transport strategies covered in the TEN-T policy, making this position paper particularly pertinent as it directly addresses infrastructural projects and collaborative initiatives that impact this area (Federal Ministry of Climate Action, Environment, Energy, Mobility Innovation and Technology, 2020).



### **Article regarding Italian Minister of Infrastructure and Transport Mr. Salvini from the “Tiroler Tageszeitung”**

I have included an article from the “Tiroler Tageszeitung” featuring statements by the Italian Minister of Infrastructure and Transport, Mr. Salvini, since it showcases the complex interactions and disputes between EU member states, such as the conflict arising from Austria's truck ban, which Italy claims is unfair and illegal. This dispute exemplifies the challenges of enforcing EU-wide policies at the national level and reflects broader issues in MLG.

Second, the move by Italy to bring Austria before the European Court of Justice underscores the legal mechanisms within the EU for resolving such disputes. This aspect is crucial for understanding how legal frameworks support or complicate the implementation of transnational infrastructure projects.

By incorporating this article, I aim to enrich the analysis of political, legal, and operational dynamics at play in the TEN-T network, particularly highlighting how national actions can impact broader European objectives (Mitterwachauer, 2023).

### **Tyrolean Government Report on Kompatscher’s discussions with the European Commission**

Choosing the article about South Tyrolean Governor Arno Kompatscher's discussions with the European Commission in my analysis is important for understanding how regional leaders influence EU policymaking. It illustrates the dynamics of MLG by showing the capacity of regional authorities like Governor Kompatscher to impact broader policy outcomes at the EU level.

Additionally, the discussions on technological advancements and infrastructure improvements provide insights into the practical application of EU policies, particularly how they address regional challenges like those at the Brenner Pass. This helps illustrate the impacts of multi-level decision-making.

Lastly, the focus on the Brenner Pass, a critical point of EU funding and initiatives, underscores the strategic importance of regional actions in shaping major European projects. By incorporating this article, my thesis gains a comprehensive perspective on the influence of regional engagement on EU policy (Greiter, 2023).

## **Tyrolean Governor Anton Mattle's segment from the press conference on Common Infrastructure Management System at the Brenner Pass**

Using Governor Anton Mattle's segment from the press conference on the 12<sup>th</sup> of April 2023 on the Common Infrastructure Management System at the Brenner Pass in my analysis provides insights into the regional strategies Tyrol employs to manage the increasing traffic volumes and environmental impacts at the Brenner Pass. His perspective helps to understand how regional policies align with and respond to broader European Union initiatives within the Trans-European Transport Network (TEN-T).

The conference demonstrates the practical application of MLG, showcasing collaboration between regional leaders from Tyrol, South Tyrol, and Bavaria. This exemplifies the coordination efforts needed to address transnational transport challenges.

To be continued, Governor Mattle's emphasis on innovative traffic management solutions like intelligent systems reflects the integration of technology in governance strategies. This is relevant to my study, as it shows how technological advancements are employed to enhance infrastructure efficiency and sustainability within the TEN-T framework (Amt der Tiroler Landesregierung, 2023).

## **Article on Transitforum Austria- Tirol advocating for Environmental Concerns at the Brenner Pass**

Including the article about Transitforum Austria-Tirol in my analysis provides understanding of the critical local and regional opposition to certain transport policies and practices. Analysing this viewpoint allows me to explore the conflicts and tensions that arise within MLG structures, particularly between local community interests and broader economic and political objectives.

Second, the document sheds light on the specific measures that regional bodies implemented to mitigate environmental and social impacts. These measures exemplify how regional governance bodies attempt to manage or rectify the challenges posed by the implementation of broader EU policies like TEN-T. This is particularly relevant to my study of MLG type 2, as it illustrates the proactive steps taken by regional authorities.

Lastly, the article emphasizes the ongoing struggle to balance economic benefits associated with the Brenner Pass as a major transport corridor with the need to preserve the quality of life and environmental integrity of the region. This struggle encapsulates the central theme of my research question: how the implementation of TEN-T at the Brenner Pass exemplifies the challenges and opportunities of MLG. By including this piece of evidence, my

analysis can more effectively address how different governance levels interact, sometimes contentiously, to shape transportation policy and its outcomes (MeinBezirk, 2023).

### **Article about the role of BBT SE's Exhibition Centre in the Brenner Base Tunnel Project**

Analysing the news article about BBT SE is valuable because it sheds light on the public engagement aspects of the Brenner Base Tunnel project. This project serves shows the importance of public interaction in such large-scale infrastructural endeavours.

The article describes the visitor engagement at the BBT exhibition centre, demonstrating how the project management team tries to involve the public. This engagement is a key element, as it provides information about how society perceives and interacts with major infrastructure projects. The focus on educating and engaging the public at the exhibition centre reveals the strategies used to ensure community involvement and support, which are critical for the success and acceptance of the project. Moreover, the article emphasizes the exhibition centre as a venue where the benefits of the tunnel are communicated to the public, explaining its environmental, economic, and social advantages over the traditional Brenner Pass route (Kainz, 2023).

### **Mobility Masterplan 2030 from Austria's Federal Economic Chamber**

This masterplan provides insights into the transportation strategies and priorities of Austria's business sector, offering a perspective on how national economic interests align with broader European transport policies. Understanding these priorities allows analysing how Austrian economic objectives influence and integrate with the TEN-T initiatives, particularly at the Brenner Pass.

Second, the document details specific infrastructural and technological enhancements that the Austrian business community supports, these plans are vital for assessing how Austria's economic stakeholders contribute to the TEN-T's goals of improving connectivity and sustainability across the European network, presenting the intersection of economic interests and public infrastructure policies.

The emphasis on digital technologies and innovative transport management systems in the masterplan illustrates the proactive approach of Austria's economic sectors in modernizing transport infrastructure. This aspect is relevant to my study of MLG, as it shows the collaborative efforts between the government and the private sector (Austria's Federal Economic Chamber, 2020).

## **Confindustria's Position on Brenner Pass Restrictions During the COVID-19 Pandemic**

Using a news article about the Confederation of Italian Industry (Confindustria) in my analysis shows the position of a significant stakeholder in Italian and European industry. Their perspective on the implementation of the TEN-T policy at the Brenner Pass, particularly during the coronavirus pandemic, points out the tension between economic interests and public health measures, giving an opportunity to analyse the challenges of balancing diverse priorities under MLG.

The article captures Confindustria's call for the European Commission to address what they perceive as unfair restrictions by Austria, arguing that these measures violate European treaties. By looking at how Confindustria frames these issues I can examine the competing frames within the discourse surrounding the TEN-T policy implementation (Redazione ANSA, 2020).

### **3.3 Limitations**

The data collection process in the master thesis was constrained by the reliance on publicly available information from stakeholders. This limitation predominantly stemmed from the unavailability of confidential information that business groups and internal government reports typically safeguard (Sharma et al., 1979). Such data often contain observations into the financial aspects, strategic directions, and internal evaluations of projects like the TEN-T at the Brenner Pass, which could enrich the analysis. The absence of these details could potentially result in a limited understanding of the economic impacts and the operational challenges encountered during the policy's implementation. For instance, specific financial data, strategic decisions, or internal assessments of project management are typically held within organizations and could provide observations into the real economic and logistical complexities of this infrastructure initiative (Mihiotis et al., 2007).

The level of engagement from stakeholders posed a challenge in gathering data, influencing the depth of the collected information. Stakeholder participation varied widely, with entities such as the European Commission and the European Parliament's Committee on Transport and Tourism providing detailed insights, likely due to their obligations toward public accountability and the necessity to maintain transparency in public projects (European Commission, 2020).

Conversely, the Italian Minister of Infrastructure and Transport, as detailed in an article from "Tiroler Tageszeitung," offered a more restricted perspective, potentially influenced by political motivations and public relations considerations. His statements predominantly

criticized Austrian transport policies, focusing less on constructive dialogue or detailed insights into the operational challenges at the Brenner Pass (Mitterwachauer, 2023).

Such variance in stakeholder engagement reflects their differing perceptions of the benefits or risks associated with sharing information. While some stakeholders see engagement as an opportunity to shape the narrative or highlight their positive contributions, others may limit information sharing to avoid exposing operational weaknesses or strategic vulnerabilities (Fung, 1980). This discrepancy potentially impacts the quality of the collected data and the findings.

Another limitation was my inability to speak Italian, which restricted engagement with primary sources from Italian stakeholders. Relying on translations and secondary interpretations via news articles for instance.

Furthermore, the use of frame analysis also introduced the risk of interpretational bias, inherent in the methodology's subjective nature. Frame analysis, which explores how various stakeholders perceive and communicate issues, is susceptible to the researcher's own biases and theoretical inclinations. These personal and theoretical predispositions can subtly influence how data is interpreted, potentially leading to skewed perceptions of stakeholder views and policy implications (Beratšová et al., 2016). While methodological rigor was employed to mitigate these biases, such practice cannot entirely eliminate them. This methodological strategy is designed to ensure that the analysis remains systematic and that overt biases are checked. However, this might not fully account for the more subtle influences of a researcher's background and theoretical leanings, which can influence the interpretation of qualitative data (Braverman & Arnold, 2008).

## **4 Analysis**

In the analysis section, I will first delineate the roles and primary competencies of each stakeholder involved in the implementation of the TEN-T policy at the Brenner Pass. This will provide an overview of the different actors and their specific functions within this TEN-T project. Following this descriptive overview, I will transition into an examination of the key pieces of evidence from each stakeholder. This analysis will employ Entman's framing model to assess how different stakeholders frame their interests and concerns. I will begin with the highest level of governance, focusing on bodies representing the EU, and progressively move to the most localized level of governance, ensuring an exploration of the multi-layered involvement across the spectrum. This analysis will lead to a discussion that combines the frame

analysis with the MLG Type 2 framework, aiming to present the challenges and opportunities stemming from the overlapping and differing stakeholder positions.

Level	Stakeholder	Competences	Interactions
EU Level	European Commission (DG MOVE)	Develops EU transport policies, coordinates trans-European networks, oversees funding allocation.	Coordinates with EIB, interfaces with national governments, supervises project adherence to EU standards.
EU Level	European Parliament (TRAN Committee)	Amends, approves, and inspects EU legislation affecting transport policies.	Works with DG MOVE to shape and oversee EU transport legislation. Collaborates with national governments in legislative alignment.
EU Level	European Investment Bank (EIB)	Finances infrastructure projects across EU, evaluates project funding applications.	Provides financial support to DG MOVE and national governments on TEN-T projects. Collaborates in financial planning and assessment.
National Level	Italian Ministry of Infrastructure and Transport	Manages national transport infrastructure projects, implements EU directives at the national level.	Communicates with Austrian Federal Ministry, engages with regional authorities, EU entities and business groups like Confindustria for policy impact.
National Level	Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility Innovation and Technology	Sets national environmental standards, integrates sustainability in transport infrastructure, implements EU directives.	Communicates with the Italian Ministry. Collaborates with regional governments, business groups and EU entities.
Regional Level	Tyrolean Government	Implements regional transport policies, advocates for regional needs in national planning.	Collaborates with South Tyrol on cross-border regional strategies, infrastructural planning, and synchronizes with national and EU directives. Communicates with local authorities and civic groups.
Regional Level	South Tyrol Government	Oversees local infrastructure development, aligns regional projects with broader national and EU goals.	Engages with Tyrolean Government to synchronize trans-regional and cross-border initiatives. Coordinates with local authorities.

Local Level	Transitforum Austria Tirol	Represents local and environmental interests in public forums, advises on local transport impacts.	Collaborates with regional governments. Communicates local concerns.
Local / Project Level	Brenner Basistunnel BBT SE	Manages the construction and stakeholder engagement for the Brenner Base Tunnel.	Interfaces with local, regional, and EU stakeholders to align project execution with all governance levels.
Business Level	Confederation of Italian Industry (Confindustria)	Influences public policy to favor business conditions, advocates for infrastructure that boosts trade.	Engages with Italian government entities and EU entities to promote business-friendly policies.
Business Level	Austrian Federal Economic Chamber (WKO)	Supports Austrian businesses in leveraging infrastructural developments for economic growth.	Works with Austrian government and EU bodies to ensure infrastructure meets business needs.

Table 1: Stakeholder Overview

## 4.1 Directorate-General for Mobility and Transport

The Directorate-General for Mobility and Transport (DG MOVE) within the European Commission plays a decisive role in guiding the TEN-T policy, particularly in projects such as the Brenner Pass. As the primary EU body responsible for transport infrastructure and mobility policies, DG MOVE's involvement in the TEN-T policy is characterized by its efforts to enhance connectivity across the European Union, support economic growth, and advocate for sustainable transportation solutions.

DG MOVE's responsibilities encompass policy development, coordination with EU member states, and oversight of infrastructure projects. The Brenner Pass, part of the TEN-T core network corridors, is a key example where DG MOVE's objectives converge. In managing the Brenner Pass project, DG MOVE engages in planning and environmental assessments to ensure that the infrastructure development adheres to EU standards for sustainability and environmental protection (Stephenson, 2010).

Financially, DG MOVE collaborates with entities like the European Investment Bank (EIB) to secure the necessary funding for TEN-T projects. This involves identifying financing sources, including EU funds and private investments, to support the complex and capital-intensive nature of infrastructure projects, including the Brenner Pass (European Investment Bank, 2023).

## **Fifth Work Plan of the European Coordinator Pat Cox**

In the European Commission's Work Plan and its description of the Brenner Pass within the Scandinavian-Mediterranean Corridor, several critical issues are unfolded, focusing particularly on the significant congestion and environmental impacts that stem from heavy traffic volumes (European Commission, 2022). The Brenner Pass is depicted as a crucial juncture in the TEN-T network, which necessitates professional management to reconcile efficient traffic flow with ecological conservation. The Commission's framing of these challenges is based primarily on logistical and environmental concerns, positioning them as critical for realizing broader European connectivity and sustainability ambitions.

The problems at the Brenner Pass are mainly attributed to inadequate infrastructure that struggles to meet current demands and disjointed policy enforcement across different governance levels. The European Commission diagnoses these issues as symptomatic of a lack of integrated policy execution and cross-border infrastructural cohesion (European Commission, 2022), indicating a failure in optimal MLG type 2 coordination. This model emphasizes the importance of interactions between various governmental layers and across borders, which in the case of the Brenner Pass, are not being effectively managed (Pierre, 2000).

In its assessment of the Brenner Pass, the European Commission articulates a principled stance, emphasizing the integration of sustainability with economic and infrastructural expansion. The Commission's focus on reducing transport emissions and promoting environmentally friendly technologies in Brenner Pass operations shows a moral judgment that places a high priority on sustainability. This ethical consideration is fundamentally ingrained in the policy-making approach, ensuring that sustainability remains at the forefront of every strategic initiative (European Commission, 2022). By prioritizing environmental values, the European Commission tries to foster a unified approach within MLG structures, trying that all levels of governance contribute effectively to the overarching goals of sustainability (Oates, 2000).

To address these challenges, the European Commission proposes a strategy that integrates several key actions into a cohesive policy response. It advocates for developing robust, multimodal transport facilities that can alleviate congestion and minimize environmental impacts by reducing reliance on road transport. It also emphasizes the importance of strengthening the alignment of national policies with EU-wide goals through enhanced MLG coordination, ensuring that all levels of governance from local to EU are effectively synchronized and directed towards common objectives. Additionally, the Commission supports the innovation and progress in transport technologies, such as alternative



fuels and digital traffic management systems, to improve efficiency and reduce the ecological footprint (European Commission, 2022).

These proposed solutions tie closely to MLG type 2 principles, emphasizing the need for defined roles and effective management of interactions across various levels of governance. The Commission's approach focuses on the importance of flexibility in governance structures, which allows for adaptive responses to evolving challenges associated with managing critical transport. The emphasis on cross-border cooperation and cohesive policy frameworks advocates for proficient management of interactions between diverse levels of authority (Zürn & Neyer, 2005). The European Commission's document suggests a governance model that is collaborative, adaptable, and aligned with long-term European integration (European Commission, 2022).

## **4.2 Transport and Tourism Committee**

Complementing the European Commission's execution of the TEN-T policy, the European Parliament's Transport and Tourism Committee (TRAN) plays an important legislative role that directly influences the shaping and oversight of transport policies across the EU, including infrastructure projects like the Brenner Pass. This committee's work lays mainly in scrutinizing, amending, and approving legislation and policy measures that govern the development and management of the TEN-T network, ensuring these align with the overarching goals of enhancing connectivity, sustainability, and efficiency within the EU's transportation (Laude, 2023).

TRAN's responsibilities encompass a broad spectrum of transport-related issues, from the safety and security of transport modes to the environmental impacts and economic considerations of infrastructure projects. By engaging in a detailed examination of proposed legislative texts, TRAN acts as a bridge between various stakeholders, including EU institutions, member states, industry players, and civil society. Its role in facilitating dialogue and refining policy proposals ensures that the legislative framework supporting the TEN-T policy is robust, comprehensive, and attuned to the evolving needs of the European transport sector (European Parliament, 2014 a).

In the specific context of the Brenner Pass project, TRAN's involvement has a significant impact on various aspects of the project's implementation. For example, the committee's focus on sustainable transport solutions influences the environmental standards and green initiatives integrated into the project. Similarly, TRAN's emphasis on interoperability and cross-border cooperation helps to address some of the logistical and regulatory challenges

inherent in a project that spans multiple jurisdictions, such as Italy and Austria (European Parliament, 2024).

Moreover, TRAN plays a crucial role in the budgetary process, influencing the allocation of EU funds towards transport infrastructure projects. Through its review and recommendations on the EU's Multiannual Financial Framework, TRAN helps to ensure that sufficient resources are dedicated to strategic projects within the TEN-T network. This budgetary influence is important for securing the financial commitment necessary to advance large-scale infrastructure projects, which require significant investment over extended periods.

The committee also engages in ongoing monitoring and evaluation of project progress, offering a platform for accountability and transparency in the implementation of TEN-T projects. By holding hearings, commissioning reports, and conducting site visits, TRAN members gather information on the challenges and achievements of projects like the Brenner Pass, facilitating legislative oversight and policy adjustments as necessary (European Peoples Party, 2024).

### **Briefing from the European Parliament's Committee on Transport and Tourism**

The briefing from the European Parliament identifies a multitude of challenges in developing the TEN-T network, recognizing inefficiencies and incomplete connections. The document details how, despite notable advancements, persistent gaps, bottlenecks, and technical barriers still hinder the network's functionality and efficiency. These issues are emphasized as major obstacles to achieving stronger social, economic, and territorial cohesion within the EU. Moreover, the briefing identifies substantial inconsistencies in policy application among EU Member States, compounded by a varied degree of alignment with EU-wide strategic objectives. This misalignment leads to fragmented infrastructure development, especially pronounced in cross-border sections where national priorities may diverge (European Parliament, 2020). These challenges are typical in terms of difficulties in achieving effective MLG Type 2 coordination, which demands synchronized actions and collaborative policy execution across multiple levels of governance and national borders (Pierre, 2000).

The Parliament's document attributes the problems primarily to inconsistent application of transport policies across EU Member States, changes in national procurement legislation, and varying levels of commitment to the network's goals. Administrative and financial issues, such as insufficient funding and complex project approval processes, are seen as significant obstacles (European Parliament, 2020). Incorporating the MLG Type 2 principle of Resource Allocation, the briefing's analysis suggests that these challenges are also linked to the

complexities, which are unavoidable in managing resources across multiple governance levels. Efficient resource allocation within MLG Type 2 necessitates a coordinated approach to funding, which must reconcile the diverse fiscal policies and budgetary constraints of individual member states with the collective financial needs of trans-European infrastructure projects (Enderlein et al., 2010). Moreover, political will is noted as inconsistent, with some governments reluctant to prioritize cross-border sections that do not align with national investment priorities.

The briefing mirrors the European Commission's moral perspective, emphasizing the need to develop a sustainable and cohesive transport network that supports both decarbonization and digitalization initiatives. It accentuates the importance of aligning infrastructure development with broader European values, including sustainability, resilience to climate change, and the enhancement of multimodal transportation systems. This approach reflects a strong commitment to ethical and responsible development practices that prioritize long-term environmental and social benefits, paralleling the Commission's approach in integrating these values into their policy frameworks.

To address the issues identified, the European Parliament supports various strategic actions including revising financial support mechanisms for the TEN-T from 2021-2027 to better support transport decarbonization, digitalization, and infrastructure resilience. It also advocates for legislative changes to streamline project approvals, enhance cross-border cooperation, and ensure that projects align more closely with EU-wide strategic goals, particularly in line with the European Green Deal (European Parliament, 2020).

### **4.3 National governments**

The Brenner Pass project shows the roles national governments play in balancing distinct national priorities amidst shared European infrastructural objectives. Central to this balancing act are the Italian Ministry of Infrastructure and Transport and the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology. Each ministry embodies the national interests that converge and sometimes conflict in the development of such a significant cross-border project.

The Italian Ministry of Infrastructure and Transport supports Italy's economic interests in the Brenner Pass development. Italy, positioned as a gateway between Southern and Central Europe, seeks to capitalize on the Brenner Pass to enhance its transport logistics, streamline cross-border trade flows, and strengthen its strategic position within the European and global markets. From Italy's perspective, the Brenner Pass is not just a transport project but a critical

economic lever that can spur growth, competitiveness, and job creation across various sectors. The ministry's advocacy for the project represents Italy's emphasis on economic development as a national priority, viewing improved connectivity as a catalyst for broad-based economic benefits (Mitterwachauer, 2023).

Conversely, the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology represents Austria's prioritization of environmental and sustainability concerns in the context of the Brenner Pass project. Austria's approach to the project is framed by its commitment to environmental stewardship, particularly given the sensitive Alpine ecosystem that the Brenner Pass traverses. The ministry is tasked with ensuring that the project adheres to stringent environmental standards, minimizes ecological disruption, and incorporates sustainable transport technologies. For Austria, the Brenner Pass presents a dual challenge: how to facilitate necessary transport improvements while protecting the country's natural heritage and meeting its climate action commitments (Federal Ministry of Climate Action, Environment, Energy, -Mobility Innovation and Technology, 2021).

This difference in priorities shows the complex negotiation process present in cross-border infrastructure projects. The Italian focus on economic enhancement through improved transport efficiency stands in contrast to Austrian concerns about environmental impact and sustainability. The interplay between the Italian Ministry of Infrastructure and Transport and the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology exemplifies the broader challenge of balancing national sovereignty with collective European interests. Each government's engagement in the Brenner Pass project reflects the different side of commitment to achieving shared goals of connectivity, economic development, and environmental sustainability under the TEN-T policy. However, it also underscores the sovereign right of each nation to protect its interests, whether they be economic growth or environmental preservation (Brack et al., 2019).

### **Article regarding Italian Minister of Infrastructure and Transport Mr. Salvini from the “Tiroler Tageszeitung”**

In his framing of the situation, Italian Minister of Infrastructure and Transport Matteo Salvini articulates inappropriate measures posed by Austrian transport regulations at the Brenner Pass. He argues that these policies are overly restrictive, outdated, and not substantiated by the current environmental data, leading to a significant economic detriment to Italy but also affecting the broader European market. This characterization of the problem clearly shows a conflict between national regulatory practices and EU's goals, particularly the principle of free

movement of goods. Salvini's framing suggests that these issues are critical barriers to achieving a unified and efficient European transport network, essentially impeding economic integration and growth (Mitterwachauer, 2023). By framing these policies as misaligned with EU goals, Salvini describes the mismanagement and inefficiency within the MLG system, calling for better integration and uniform policy application across the EU. Therefor this issue indicates a lack of policy coherence and coordination (Zürn & Neyer, 2005).

Salvini identifies the root cause of the transport issues as stemming from Austria's stringent environmental protection measures, which he claims are disproportionate to the actual environmental needs. According to Salvini, these measures reflect a protectionist approach rather than a balanced environmental strategy, suggesting that Austria's policies are more about controlling traffic than genuinely addressing environmental concerns. This framing of Austria's actions suggests that they are economically damaging as well as lacking legitimacy in the context of updated environmental data and EU principles (Mitterwachauer, 2023).

The moral judgment in Salvini's framing is clear and potent. He prioritizes economic growth and the fundamental EU principle of free movement over localized environmental protections, which he views as exaggerated. Salvini casts these protective measures as moral failings that unjustifiably restrict trade and economic freedom, thereby harming Italy's and Europe's economic interests. His framing portrays Austria's policies as a breach of trust and cooperation within the EU, positioning Austria as an outlier that does not adhere to shared European values and legal frameworks (Mitterwachauer, 2023). Salvini's moral judgment suggests that Austrian policies do not adequately consider the broader impacts on EU stakeholders (Zürn, 2004).

Salvini proposes a set of remedies aimed at rectifying the perceived injustices of Austria's transport policies. He suggests implementing stricter inspections on Austrian trucks as a form of reciprocal measure, aiming to exert economic pressure on Austria to induce policy change. Furthermore, Salvini expresses his intention to forward the matter to the European Commission, advocating for an investigation and potential legal action against Austria for violating EU laws pertaining to the free movement of goods. This strategy not only seeks to address the immediate issue at the Brenner Pass but also aims to realign member state policies with EU regulations, emphasizing the need for compliance and unity in European governance (Mitterwachauer, 2023). These actions demonstrate the use of conflict resolution mechanisms within MLG, aiming to resolve discrepancies through formal institutional channels. By suggesting these measures, Salvini seeks to leverage EU mechanisms to ensure that national policies are compatible with EU regulations and standards (Ostrom & Walker, 1997).

## **Austrian Vision for the Trans-European Transport Network**

The Austrian position paper identifies serious inefficiencies and challenges associated with the current implementation of the TEN-T, particularly pointing out the difficulties surrounding cross-border projects. These projects, while having high European interest, often suffer from lower national interest, leading to discrepancies in priority and execution. Austria notes that despite some progress, the existing framework does not adequately foster the necessary cooperation across borders that is necessary for a truly integrated and harmonized trans-continental transport network (Federal Ministry of Climate Action, Environment, Energy, Mobility Innovation and Technology, 2020). This lack of effective cross-border cooperation once again illustrates a broader issue within the MLG framework, where different governance levels sometimes struggle to synchronize their efforts towards common European goals (Denemark & Hoffmann, 2008).

Austria critically assesses the reasons behind the ongoing struggles within the TEN-T network, identifying a noteworthy gap in the EU's current transport policy. The critique focuses on the overemphasis on infrastructure investments without a parallel focus on operational aspects of the network, which are unavoidable for the function of cross-border transport. The position paper argues that the current TEN-T strategy, while sufficient in enhancing physical infrastructure through mechanisms like the Connecting Europe Facility, fails to address the operational harmonization necessary for effective cross-border rail transport (Federal Ministry of Climate Action, Environment, Energy, Mobility Innovation and Technology, 2020). This lack of coherence and coordination in policy formulation and implementation across EU member states and relevant EU bodies indicates a critical area of improvement needed within the MLG to ensure that both infrastructural and operational developments are equally prioritized (Zürn & Neyer, 2005).

Austria's framing within the position paper articulates a principled stance where the enhancement of the TEN-T network must fulfil economic objectives but also adhere to stringent environmental protections. This approach places a clear ethical emphasis on reducing the ecological footprint of transportation developments. Austria advocates for these environmental concerns to be equally weighted with economic benefits, showing a commitment to sustainable development as an ethical imperative. By proposing this balance, Austria aligns its transportation policies with European values of environmental protection, positioning these as non-negotiable in the pursuit of a modernized and cohesive transport network.

Austria proposes some forward-thinking solutions to address the deficiencies identified in the TEN-T framework. These include advocating for enhanced co-financing for cross-border

projects to ensure that these initiatives receive adequate funding and attention. Additionally, Austria calls for a more robust coordination structure between different governance layers and an expanded definition of cross-border projects to include not just infrastructural interoperability but also operational harmonization (Federal Ministry of Climate Action, Environment, Energy, Mobility Innovation and Technology, 2020). These proposals are aimed at developing effective conflict resolution mechanisms within the MLG framework, which would help reconcile national differences and align diverse policies with EU transport and environmental goals (Denemark & Hoffmann, 2008).

#### **4.4 Regional and local authorities**

The involvement of regional and local authorities, such as those in Tyrol (Austria) and South Tyrol (Italy), is indispensable in the Brenner Pass project, enclosing the MLG structure that characterizes the EU's approach to infrastructure development. These authorities represent the immediate regions that the Brenner Pass traverses, making them key stakeholders with vested interests in the project's outcomes. Their engagement is decisive for several reasons, primarily focusing on regional development, environmental concerns, and the well-being of local communities (Land Tirol, 2023).

In Tyrol, the regional government's involvement reflects concerns about the impact of increased traffic through the Brenner Pass on local air quality, noise levels, and the overall living conditions of its residents. Tyrol's authorities are tasked with advocating for measures that mitigate these impacts, such as demanding the incorporation of green technologies and sustainable transport solutions into the project. Additionally, they play an important role in ensuring that the economic benefits of the project, such as improved accessibility and potential tourism boosts, are realized in a way that aligns with the region's development goals and sustainability principles (Amt der Tiroler Landesregierung, 2023).

Similarly, in South Tyrol, the local government's engagement with the project is driven by the dual objectives of promoting regional economic development while safeguarding the unique Alpine environment. South Tyrol's authorities work to ensure that the Brenner Pass infrastructure improvements serve the region's economic interests, including agriculture, tourism, and small businesses, without compromising its environmental heritage. This includes advocating for construction practices and operational protocols that minimize ecological disruption and preserve the natural landscape, which is a cornerstone of the region's identity and economic vitality (Autonome Provinz Bozen – Südtirol, 2023).

The coordination between regional and local authorities across the border is also a critical aspect of the governance structure for the Brenner Pass project. This collaboration is facilitated through cross-border committees and working groups, which serve as platforms for sharing information, aligning strategies, and addressing common challenges. Through these mechanisms, Tyrol and South Tyrol can present a more unified front on issues of mutual concern, such as environmental protection and regional development, enhancing their influence over project outcomes (Südtiroler Landtag, 2024 b).

Moreover, the engagement of regional and local authorities in the Brenner Pass project extends to public consultation and community involvement initiatives. These efforts are aimed to maintain transparency, building public trust, and ensuring that the voices of local communities are heard in the decision-making process. By actively involving residents and local stakeholders, authorities can better understand community concerns, anticipate potential social impacts, and develop strategies to address them effectively (Bassler et al. 2008).

### **Tyrolean Governor Anton Mattle's segment from the press conference on Common Infrastructure Management System at the Brenner Pass**

Governor Mattle articulates a critical perspective on the congestion and environmental degradation issues at the Brenner Pass, identifying them as major problems stemming from an exponential increase in traffic. With truck traffic more than doubling from 11 million in 2000 to 25 million in recent years, he expresses the urgency for effective traffic management solutions. The governor frames these issues as transcending local, national, and even regional boundaries, necessitating a coherent policy response that integrates efforts across multiple administrative jurisdictions.

In diagnosing the causes of severe traffic congestion, Governor Mattle describes the geographic bottleneck at the Brenner Pass and the shortcomings of current traffic management systems. He points out that these systems are not adequately equipped to handle and intelligently distribute the significantly increased flow of vehicles, especially heavy goods traffic. He suggests that this challenge stems primarily from the inflexible and outdated infrastructure, which hasn't kept pace with the sharp increase in traffic volume. This problem is compounded by inefficient technological integration within traffic control systems, which limits the ability to respond dynamically to fluctuating traffic patterns and densities (Amt der Tiroler Landesregierung, 2023). Governor Mattle's diagnosis suggests a broader issue of resource allocation under MLG type 2 principles, emphasizing that the region's challenges go beyond physical constraints and involve significant shortcomings in investment in modern



traffic management technologies and infrastructure enhancement (Enderlein et al., 2010). This deficiency in resource allocation affects the capacity to manage current traffic levels but also hampers the region's preparedness for future increases in transport demands.

Governor Mattle emphasizes the moral imperative to balance the economic benefits derived from heavy traffic flow with the health and environmental well-being of the local populations affected by these transportation corridors. Advocating for solutions that are environmentally sustainable and safe for the population, he supports an approach that more thoroughly considers the diverse needs and impacts on all stakeholders. This moral stance demands a more inclusive and comprehensive approach to transportation planning, one that integrates economic, environmental, and most importantly social considerations.

To address the traffic congestion, Governor Mattle proposes a collaborative and technologically driven approach involving a new joint traffic management system. This system, which would incorporate the coordination of regional and national authorities from Austria, Italy, and Germany, is designed to intelligently manage and optimally distribute traffic to significantly reduce congestion. Governor Mattle emphasizes the incorporation of advanced technological solutions that would enable better control and direction of traffic flows. Additionally, he discusses the importance of long-term infrastructural projects such as the Brenner Base Tunnel, which is aimed at shifting a substantial volume of traffic from road to rail (Amt der Tiroler Landesregierung, 2023).

### **Tyrolean Government Report on Kompatscher's discussions with the European Commission**

Governor Kompatscher identifies significant challenges in the Brenner Corridor, emphasizing the critical state of congestion and the infrastructure's inability to handle current traffic levels effectively. He points out the urgent need for investment and modernization to alleviate traffic loads that often exceed the Brenner Autobahn's capacity, leading to frequent traffic jams, environmental damage, and safety risks. The problem is framed as not merely a local or national issue but as a European concern, requiring a coordinated policy response that transcends regional and national boundaries (Greiter, 2023).

The root causes of the inefficiencies and congestion in the Brenner Corridor, as diagnosed by Kompatscher, stem from outdated infrastructure coupled with a fragmented approach to policy implementation across borders. He critiques the prevalent political gridlock and protectionist tendencies that often prioritize national interests over collective European benefits, hindering the adoption of innovative and unified solutions. His diagnosis uncovers a

gap in effective stakeholder engagement, calling for a robust collaborative framework that includes regional authorities, national governments, and European institutions. This enhanced engagement is important for overcoming the bureaucratic and logistical hurdles that currently fragment the governance and management of European transport infrastructures (Enderlein et al., 2010).

Kompatscher delivers a strong moral call for the adoption of more adaptive and forward-looking transportation policies across Europe. He emphasizes the need to move away from conventional, rigid approaches towards a dynamic and integrated European corridor vision that prioritizes environmental sustainability and modern mobility solutions. His moral judgment advocates for major shifts in policy perspectives, promoting enhancements in digital traffic management and rail transport systems. These shifts, he argues, are needed to reduce the environmental impact of current transportation practices and to improve the overall safety and efficiency of the corridor (Greiter, 2023).

As a solution to the articulated challenges, Kompatscher proposes several innovative remedies aimed at transforming the transportation landscape of the Brenner Corridor. Central to his strategy is the adoption of a digital traffic management system, bolstered by the commitments laid out in the Kufsteiner Declaration. Additionally, he calls for a re-evaluation of the resource allocation processes within the EU to significantly boost the competitiveness of rail transport. By advocating for increased investment in rail infrastructure, such as the Brenner Base Tunnel and its feeder routes, Kompatscher suggests a redirection of financial and policy resources to support more sustainable and efficient transport options. These remedies aim to alleviate immediate congestion and safety concerns and also position the rail network as a viable alternative to road transport, aligning with long-term European sustainability goals (Weiser, 2023; Greiter, 2023).

## **4.5 Local communities and civic organisations**

The involvement of local communities and civic organizations in the Brenner Pass project, particularly through entities like the Brenner Basistunnel BBT SE and groups such as "Transitforum Austria Tirol," shows the essential role these stakeholders play in ensuring that infrastructure projects align with broader societal values and environmental principles (Transitforum Austria-Tirol, 2024; BBT SE, 2024).

The Brenner Basistunnel BBT SE, responsible for overseeing the construction of the Brenner Base Tunnel, is not solely a construction entity, it embodies the interface between the project and the communities it impacts. It is a transnational company structured under European

law, with shareholders equally divided between Austria and Italy (Brenner Basistunnel BBT SE, 2024). This organization addresses the concerns and expectations of local residents, providing a channel through which information about construction progress, environmental mitigation measures, and future benefits can be disseminated. Through public consultations and engagement initiatives, BBT SE works to build trust and foster a sense of participation among local stakeholders, ensuring that their feedback and concerns are incorporated into the project's planning and execution phases. This approach facilitates smoother project implementation and helps in aligning the project outcomes with the aspirations of those directly affected by the construction (European Parliament, 2014 b; Kainz, 2023).

"Transitforum Austria Tirol," on the other hand, represents a collective voice for environmental and community interests, advocating for the importance of integrating sustainable and community-focused practices into infrastructure development. This organization brings attention to the potential environmental impacts of the Brenner Pass project, such as habitat disruption, increased pollution, and the effects of construction on the local landscape. By campaigning for a balanced approach to development, „Transitforum Austria Tirol” emphasizes the need for projects like the Brenner Pass to pursue objectives that do not solely focus on economic and transport efficiency gains but also prioritize environmental preservation and community well-being (Transitforum Austria- Tirol, 2024).

The advocacy efforts of “Transitforum Austria Tirol” and similar groups play a crucial role in ensuring that environmental safeguards and community benefits are not overlooked in the rush to complete infrastructure projects. These organizations often push for the adoption of cutting-edge environmental technologies, the implementation of comprehensive impact assessments, and the development of compensation and mitigation strategies to address the concerns of affected communities and ecosystems (Stephens & Verma, 2006).

Moreover, the engagement of local communities and civic organizations in the Brenner Pass project represents a broader trend towards more inclusive and participatory models of infrastructure development (Frics et al., 2012).

### **Article about the role of BBT SE's Exhibition Centre in the Brenner Base Tunnel Project**

The article does not explicitly outline problems but implicitly addresses the broader challenges of public awareness and stakeholder engagement in large infrastructure projects. The exhibition centre is presented as a solution to educate and inform the public and stakeholders about the complexities and benefits of the Brenner Base Tunnel project. By doing so, it aims to garner support and understanding for a project that has significant implications for

transportation efficiency, environmental conservation, and regional economic development across Europe (Kainz, 2023).

The cause for establishing an exhibition centre like the Tunnelwelten is rooted in the necessity for effective communication and engagement strategies in large-scale infrastructure projects, which span multiple regions and impact numerous stakeholders (König, 2021). The document suggests that enhancing public knowledge and engagement through detailed exhibitions and interactive displays can mitigate potential misunderstandings and opposition, enabling smoother project implementation (Kainz, 2023). This approach addresses the need for dialogue between the project managers and the community, assuring that stakeholders at all levels—from local residents to international visitors—are well-informed and supportive (Zürn, 2004).

The emphasis on showcasing the Brenner Base Tunnel's benefits in terms of environmental impact, population well-being, and economic advantages reflects a moral judgment about the project's alignment with EU goals for sustainable and efficient transport solutions (Entman, 1993). The exhibition communicates a narrative that stresses the project's adherence to EU policies supporting sustainable development and cohesion among member states, thereby framing the BBT as a key component in achieving EU-wide transport and environmental objectives (Kainz, 2023).

The article shows the strategic use of informational and educational resources through the exhibition centre. By doing so, it aims to ensure that the public is well-informed about the project's progress and potential impacts. This approach also suggests a broader strategy of allocating resources not just in physical infrastructure but in building knowledge and consensus among the public and across different levels, which is important for the project's long-term success and integration into European transport networks. The exhibition centre's role in educating and engaging the public exemplifies how infrastructure projects can effectively integrate policy coherence, stakeholder engagement, and resource allocation to support broad objectives (Enderlein et al., 2010; Zürn, 2004).

### **Article on Transitforum Austria- Tirol advocating for Environmental Concerns at the Brenner Pass**

The article contains a critique by Fritz Gurgiser, chairman of the Transitforum Austria-Tirol, against freight associations and certain political actors in the context of transit traffic through the Brenner Pass. Gurgiser outlines a problem where freight associations, supported by politicians, allegedly undermine established environmental and traffic regulations that aim to

protect the local environment and communities from the adverse effects of heavy transit traffic. He articulates the problem as a conflict between economic interests of freight companies and the environmental and social interests of the regions affected by transit traffic, specifically along the Brenner Pass (MeinBezirk, 2023). Therefore the situation calls for enhanced policy coherence and coordination where European and national laws are harmoniously enforced to protect Alpine regions' environmental integrity and public health (Zürn & Neyer, 2005).

The cause of the issue, as diagnosed by Gurgiser, is the intense lobbying and political influence exerted by freight associations which, according to him, results in a form of "anarchy" where economic interests override legal and environmental considerations (MeinBezirk, 2023). This diagnosis points to a failure in stakeholder engagement where the needs and rights of local communities, environmental groups, and broader societal interests are overshadowed by the more powerful freight and political stakeholders. This imbalance in stakeholder power dynamics suggests that current engagement processes are insufficiently inclusive or balanced, leading to governance decisions that favour a narrow set of interests (Zürn, 1998; Held & Koenig-Archibugi, 2005).

Gurgiser makes a moral judgment by opposing the disregard for legal and environmental standards, positioning such actions as unethical and destructive. He expresses the need for a governance approach that adapts to encompass all stakeholder's interests fairly and uphold the rule of law strictly. His moral stance is that the integrity of the Brenner region and its communities must not be compromised for freight efficiency or profit (MeinBezirk, 2023). This shows a call for governance frameworks to be more adaptable in ensuring that economic activities do not detrimentally impact the social and environmental standards of transit-affected regions (Oates, 2000).

To remedy the problems identified, Gurgiser stresses the strict enforcement of existing environmental and traffic laws and suggests that further protective measures be implemented along the entire transit corridor, from Kufstein through Brenner to Southern regions. He advocates for a fair and equitable allocation of enforcement resources to ensure that all parts of the transit corridor adhere to the same high standards of environmental and traffic regulation. This approach aims to mitigate the current issues and establishes a more sustainable and legally compliant framework for managing transit traffic, ensuring that laws are uniformly applied and respected across borders (MeinBezirk, 2023).

## 4.6 Business and industry groups

Business and industry groups, including the Confederation of Italian Industry (Confindustria) and the Austrian Federal Economic Chamber (WKO), play an important role in advocating for the economic benefits derived from the Brenner Pass project. Their involvement shows the project's capacity to serve as a catalyst for economic growth, trade enhancement, and improved competitiveness within the European market (Goudarzi et al., 2015).

Confindustria, representing the interests of Italian businesses, focuses on the strategic advantages the Brenner Pass offers Italy's economy. By facilitating smoother and more efficient transport routes, the project is expected to significantly reduce logistic costs and time for Italian companies, thereby enhancing their ability to compete in European and global markets. Confindustria advocates for the project as a means to boost Italy's export capabilities, underlining the importance of the Brenner Pass in strengthening Italy's economic ties with Central and Northern European countries. The organization's support for the project is rooted in the belief that improved infrastructure is a key driver of industrial growth, innovation, and overall economic resilience (Confindustria, 2024).

Similarly, the Austrian Federal Economic Chamber (WKO) represents the interests of Austrian businesses and industries, emphasizing the project's potential to bolster Austria's role as a central hub in European trade networks. The WKO highlights the Brenner Pass project's significance in enhancing Austria's connectivity with Italy and other EU countries, which is critical for sectors ranging from manufacturing to tourism. By advocating for high-quality infrastructure development, the WKO seeks to ensure that Austrian businesses benefit from reduced transportation barriers, leading to increased trade opportunities and economic integration across Europe (Austria's Federal Economic Chamber, 2020).

Both Confindustria and the WKO stress the importance of the Brenner Pass project in the broader context of TEN-T initiative. From their perspective, the Brenner Pass is not only a regional infrastructure project; it is a critical component of a pan-European effort to enhance economic cohesion and facilitate market access (Austria's Federal Economic Chamber, 2023; Confindustria, 2024).

Furthermore, these business and industry groups actively participate in dialogues and consultations regarding the project, ensuring that the needs and concerns of the business community are considered in the planning and implementation phases. Their involvement also extends to collaborating with governmental and European institutions to advocate for policies and funding mechanisms that support the timely and efficient realization of the Brenner Pass project and other TEN-T initiatives (Borrelli & Conte, 2006).

## **Confindustria's Position on Brenner Pass Restrictions During the COVID-19 Pandemic**

Confindustria points out a disruption in the flow of trade and mobility due to Austria's restrictive measures at the Brenner Pass, which were enacted in response to the COVID-19 pandemic. They frame these actions as overly punitive and not aligned with the actual health needs or EU treaties (Redazione ANSA, 2020), pointing out a critical breakdown in policy coherence and coordination (Pierre, 2000). The issue is framed as one where unilateral decision compromise the foundational EU principle of free movement, indicating a need for a more coordinated European response that balances public health concerns with economic and mobility rights (Letta, 2024).

The document attributes the root cause of the mobility restrictions to a lack of adequate engagement and unilateral decision-making by Austria without sufficient consultation with Italy or consideration of broader EU implications (Redazione ANSA, 2020). This diagnosis points to a failure in stakeholder interaction and cross-border coherence where decisions significantly impacting multiple member states and economic sectors should involve more comprehensive dialogue and joint decision-making processes (Pierre, 2000). The perceived unilateral approach suggests a breakdown in the collaborative mechanisms expected within the EU framework, necessitating improved dialogue and cooperation to address unexpected emergencies effectively (Denemark & Hoffmann, 2008).

Confindustria expresses a strong moral judgment against the restrictive measures, asserting that they are not just an overreach but actively harmful and discriminatory, infringing on rights and freedoms guaranteed by EU treaties. They argue that such measures, while perhaps intended to protect public health, fail to adapt appropriately to the demands of maintaining economic functions and supply chains within the EU (Redazione ANSA, 2020). This judgment suggests a necessity for a governance approach that is more flexible and responsive, ensuring that emergency measures do not disproportionately impact freedoms and economic activities (Moore, 2021).

Confindustria called for immediate and decisive action from the European Commission to address this issue, suggesting that the Commission should not only facilitate the reopening of the Brenner Pass but also sanction Austria for actions that contravene EU laws (Redazione ANSA, 2020). This remedy involves utilizing formal conflict resolution mechanisms within the MLG Type 2 framework to ensure that unilateral measures by a member state do not undermine collective agreements and principles (Ostrom & Walker, 1997). They advocate for a strong enforcement response from the EU to restore compliance and protect the integrity of EU laws and principles regarding free movement (Redazione ANSA, 2020).

## **Mobility Masterplan 2030 from Austria's Federal Economic Chamber**

The masterplan identifies a need for action across multiple transportation sectors to achieve Austria's goals in enhancing mobility. It emphasises the challenges of balancing increasing mobility demands with climate protection, resource efficiency, and energy supply security (Austria's Federal Economic Chamber, 2020). This strategy outlines the necessity for a coordinated approach that integrates different modes of transport and policy areas, including transit routes like the Brenner Pass, to ensure efficient and sustainable mobility solutions (Pierre, 2000).

The document diagnoses the primary cause of current inefficiencies and environmental impact as stemming from outdated infrastructure, piecemeal policy efforts, and underutilization of advanced technologies. It stresses the lack of adequate infrastructure investment, particularly in key areas like the Brenner Pass, and technological adoption as major barriers to achieving the desired state of mobility and environmental targets (Austria's Federal Economic Chamber, 2020).

The Mobility Masterplan implies a moral stance on the necessity of adapting transportation systems to modern demands and sustainability standards. It emphasizes the importance of developing a transportation sector that meets current needs and is also adaptable to future challenges, particularly in terms of environmental sustainability and technological changes (Moore, 2021).

To address the identified issues, the plan suggests a range of remedies including massive infrastructure development, promotion of multimodal and sustainable transport options, and investment in digital and green technologies (Austria's Federal Economic Chamber, 2020). These remedies indicate a strategic move towards more integrated and cooperative governance models, involving various stakeholders from public authorities to private sector players, trying to facilitate that all relevant parties are engaged in the transformation process. The Brenner Pass is emphasized as a focal point for these efforts (Zürn & Neyer, 2005).



Stakeholder	Main Interests	Main Concerns	Key Takeaways	Core Frames	Attitude Towards Other Stakeholders
DG MOVE	Enhancing connectivity supporting economic growth sustainable transport	Environmental sustainability cross-border cohesion	Advocates for robust multimodal transport reducing reliance on road transport promoting alternative fuels and digital traffic management	Problem: Infrastructure inadequacies and environmental impact Cause: Lack of integrated policy execution and outdated systems Moral: Need for sustainable growth and cohesive EU-wide policies Solution: Enhance sustainable connectivity and align policies within MLG	Focus on enhancing EU-wide cooperation coordination with EU member states and financial institutions like EIB
TRAN	Ensuring alignment with EU transport policies promoting sustainable transport solutions	Inefficiencies in policy application cross-border cooperation	Inspects and amends transport policies emphasizes environmental standards and cross-border cooperation	Problem: Policy inefficiencies and fragmented implementation Cause: Misalignment with EU transport policies Moral: Importance of standards and interoperability Solution: Align transport policies and promote cross-border cooperation	Influences budget allocations facilitates dialogue among stakeholders
Italy	Enhancing transport logistics boosting trade flows strategic positioning within Europe	Restrictive Austrian regulations economic impact	Advocates for the removal of restrictive measures emphasizes economic growth	Problem: Restrictive regulations hindering trade Cause: Austrian environmental policies Moral: Economic growth hindered Solution: Remove restrictive measures and enhance transport logistics	Critiques Austria's environmental regulations proposes stricter inspections on Austrian trucks calls for EU intervention
Austria	Protecting the environment sustainable transport	Environmental and sustainability concerns policy misalignment	Advocates for enhanced co-financing improved cross-border cooperation operational harmonization	Problem: Policy misalignment and environmental degradation Cause: Economic activities conflicting with environmental goals Moral: Need for environmental protection Solution: Protective measures and improve policy alignment	Critiques Italian policies emphasizes the need for EU-wide policy coherence
Tyrol	Protecting local communities' well-being and the Alpine ecosystem	Traffic congestion environmental degradation	Advocates for advanced traffic management systems incorporation of green technologies	Problem: Traffic congestion and environmental impact Cause: High volume of transit traffic Moral: Affects local communities and environment Solution: Implement advanced traffic management and green technologies	Seeks coordination with regional and national authorities highlights challenges with increased traffic

South Tyrol	Balancing economic interests with environmental protection	Regional economic development environmental preservation	Advocates for construction practices that minimize ecological disruption	<p>Problem: Economic development and environmental preservation</p> <p>Cause: Potential environmental harm</p> <p>Moral: Need for balanced growth</p> <p>Solution: Balance economic interests with environmental protection</p>	Engages in cross-border cooperation emphasizes public consultation and transparency
BBT SE	Successful project implementation community participation	Public awareness and engagement	Focuses on educational initiatives public consultations	<p>Problem: Public awareness and engagement</p> <p>Cause: Lack of community participation</p> <p>Moral: Need for community support</p> <p>Solution: Ensure successful project implementation and community participation</p>	Facilitates smoother project implementation emphasizes community feedback
Transitforum Austria	Integrating sustainable practices in infrastructure development	Environmental and community impacts of transit traffic	Advocates for strict enforcement of environmental regulations	<p>Problem: Environmental and community impacts</p> <p>Cause: Insufficient regulation enforcement</p> <p>Moral: Need for equitable enforcement</p> <p>Solution: Integrate sustainable practices in infrastructure development</p>	Critiques economic interests of freight companies calls for equitable enforcement across transit corridor
Confindustria	Boosting Italy's export capabilities reducing logistic costs	Trade flow disruptions unilateral restrictive measures	Advocates for reopening Brenner Pass sanctions against restrictive measures	<p>Problem: Trade disruptions due to restrictive measures</p> <p>Cause: Regulatory measures affecting trade</p> <p>Moral: Critical for economic resilience</p> <p>Solution: Boost export capabilities and reduce logistic costs</p>	Critiques Austrian measures during COVID-19 calls for EU intervention
WKO	Enhancing Austria's trade connectivity promoting sustainable transport	Balancing mobility demands with environmental goals	Advocates for massive infrastructure development investment in green technologies	<p>Problem: Mobility vs. environmental goals</p> <p>Cause: Insufficient investment in sustainable transport</p> <p>Moral: Need for coordinated approach</p> <p>Solution: Enhance trade connectivity and promote sustainable transport via various transport modes</p>	Supports the Brenner Pass as a focal point for mobility and sustainability efforts

Table 2: Stakeholder Analysis

## 5 Discussion

This discussion synthesizes observations from frame analysis and the MLG Type 2 framework to exemplify the challenges and opportunities inherent in the governance structure of the TEN-T policy implementation at the Brenner Pass. By addressing the research question, this discussion aims to provide an understanding of the multifaceted interactions among various governance levels and draw parallels with other cross-border infrastructure projects within the EU, such as the Baltic Pipe Project, Fehmarn Belt Fixed Link, and Rail Baltica. The integration of Entman's framing model and the principles of MLG Type 2 show how framing by various stakeholders and multi-level governance dynamics contribute to the successes and challenges in the projects.

One of the primary challenges identified in the implementation of the TEN-T policy at the Brenner Pass is the fragmentation of policy across different governance levels (Enderlein et al., 2010). The European Commission's DG MOVE sets broad EU policies and funding mechanisms (European Commission, 2022). However, national ministries, such as Austria's Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation, and Technology, and Italy's Ministry of Infrastructure and Transport, have their own infrastructure plans and environmental regulations. For instance, Austria's and Tyrol's stringent environmental standards for the Alpine region often conflict with Italy's focus on enhancing logistics and economic benefits. This misalignment can cause delays in the flow of goods and inconsistencies in project implementation, as seen in the conflicting approaches to traffic regulations at the Brenner Pass (Kurmayer, 2023).

The Fehmarn Belt Fixed Link also illustrates these challenges in experiencing fragmentation due to differing national priorities and regulations. Denmark's stringent environmental laws delayed the project as it lost its environmental permit, necessitating a reapplication process that caused significant delays and cost overruns (Rasmussen, 2022). This mirrors the Brenner Pass scenario, where Austria's environmental priorities clash with Italy's market-oriented objectives.

The case of the Brenner Pass also shows jurisdictional overlaps and conflicts (Railway Gazette International, 2021; Fender, 2021). Regional governments, such as Tyrol in Austria and South Tyrol in Italy, have distinct priorities that often clash with national and EU directives. For example, the Tyrolean government has imposed night-time truck traffic bans to reduce environmental impact, which conflicts with Italy's push for continuous freight flow through the

pass (Gowans, 2021). These jurisdictional overlaps lead to legal disputes, such as Italy's action against Austria at the European Court of Justice over traffic restrictions (Mitterwachauer, 2023). These conflicts exemplify the difficulties in achieving coherent policy implementation across multiple governance levels, a core challenge in MLG Type 2 (Pierre, 2000).

Using Entman's framing model, it is evident that each stakeholder group defines the problem and attributes causes differently (Entman, 1993). Austria frames the issue as one of environmental protection, emphasizing the need for stringent regulations to preserve the Alpine region. In contrast, Italy frames the problem in terms of economic efficiency and logistics, prioritizing the free flow of goods to boost trade (Amt der Tiroler Landesregierung, 2023; Mitterwachauer, 2023). These divergent frames result in policy fragmentation as each country pushes for policies that align with its framing of the problem, leading to jurisdictional conflicts (Entman, 1993; Elazar, 1991; Watts, 1999).

From the perspective of MLG Type 2, this fragmentation and conflicts reflect the inherent complexity of managing multiple levels of authority and interaction. The EU sets overarching policy directions, while national and regional governments interpret and implement these policies based on local contexts and priorities (Hooghe & Marks, 2003). Therefore, effective MLG Type 2 requires clear communication channels and coordination mechanisms, such as joint committees and intergovernmental meetings, to facilitate cooperation and ensure coherent policy implementation (Zürn & Neyer, 2005).

Effective stakeholder engagement is critical in MLG Type 2 but is challenging due to power imbalances among different actors (Zürn, 1998; Held & Koenig-Archibugi, 2005). Local communities and civic organizations, like Transitforum Austria Tirol, advocate for environmental protection and community well-being but often struggle to ensure their endeavours are acknowledged amid the competing economic interests of national governments and industrial lobbies. For instance, while local groups raise concerns about pollution and noise from increased traffic at the Brenner Pass, their influence is overshadowed by more powerful national and business interests that prioritize economic gains from improved logistics and transport efficiency (MeinBezirk, 2023).

Rail Baltica has faced similar power imbalances. Local communities in the Baltic States have expressed concerns over environmental impacts and disruption, but their voices often get overshadowed by national and EU-level priorities focused on economic integration and improved transport infrastructure. This exemplifies the difficulty in balancing local concerns with broader economic objectives in large-scale infrastructure projects (Rail Baltica, 2020).

Entman's model helps explain these power imbalances through the concept of moral judgments. Powerful national governments and industrial lobbies frame the economic benefits of the TEN-T policy as morally superior to the environmental concerns raised by local communities. This framing diminishes the perceived legitimacy of local concerns, distorting the policy-making process in favour of economically powerful stakeholders (Entman, 1993).

In the context of MLG Type 2, stakeholder engagement, inclusivity and transparency has shown to be beneficial for achieving policy coherence and legitimacy. Multi-level governance structures need to actively manage the inclusion of diverse voices to ensure policies are equitable and reflective of broader societal needs (Hooghe & Marks, 2003). The Brenner Corridor Platform facilitates dialogue among stakeholders from Italy, Austria, and Germany, integrating local concerns into the broader policy framework (Brenner Corridor Platform, 2024). Furthermore, Public consultations and informational sessions held by BBT SE at the exhibition centre have also helped address community concerns about environmental impacts and highlight the project's benefits (Kainz, 2023). An inclusive approach stimulates public support and cooperation, essential for the project's success (Zürn, 1998; Held & Koenig-Archibugi, 2005).

Coordinating and communicating effectively among various governance levels is another significant challenge. Managing a large-scale infrastructure project like the TEN-T at the Brenner Pass involves synchronizing efforts across multiple jurisdictions (Pierre, 2000). The Euregio initiative, which includes Tyrol, South Tyrol, and Trentino, facilitates regular meetings to align regional policies with EU objectives (Euregio, 2024). However, differences in regional priorities can still lead to miscommunications and delays. Furthermore, the Dreier-Landtag, a joint meeting of the parliaments of Tyrol, South Tyrol, and Trentino, provides a platform for discussing common infrastructure challenges but often faces difficulties in reaching a consensus (Wagner, 2023).

The Fehmarn Belt Fixed Link project also faces coordination and communication challenges between Denmark and Germany. Differing environmental impact assessments and financing structures between the two countries have led to delays and increased complexity in project execution (Scheunpflug & Schüpff, 2024).

Coming back to Brenner Pass and using Entman's framework, these coordination challenges can be attributed to different problem definitions and diagnoses by various stakeholders. Each region and governance level frames the issues and solutions differently based on their unique priorities and perspectives (Entman, 1993). For example, Tyrol frames

the issue around environmental sustainability, while South Tyrol might emphasize environmental concerns as well, however still considers economic development (Amt der Tiroler Landesregierung, 2023; Greiter, 2023). These diverse frames lead to miscommunications and delays as stakeholders struggle to reconcile their differing views and priorities (Fender, 2021).

MLG Type 2 emphasizes the importance of established coordination mechanisms to manage these interactions effectively. Structures such as the Dreier-Landtag exemplify the need for platforms that facilitate intergovernmental cooperation across different administrative layers. Such mechanisms are important to increase the chance for achieving coherent and synchronized policy implementation, particularly in complex cross-border projects like the Brenner Pass (Zürn & Neyer, 2005).

Despite these challenges, the MLG Type 2 framework presents opportunities for enhanced collaboration and innovation (Held, 2010). The joint venture between Austria and Italy, Brenner Basistunnel, exemplifies how collaborative efforts can manage complex infrastructure projects. By working together and securing funding from entities like the European Investment Bank, these countries and involved stakeholders have been able to address challenges during the construction of the Brenner Base Tunnel. The collaborative model supports regional expertise and EU financial support to advance the project effectively (Brenner Basistunnel BBT SE, 2024).

Although challenges in the Baltic Pipe Project are present, the project shows similar collaborative effort between Denmark and Poland, supported by EU funding. This project managed to navigate geopolitical tensions and environmental challenges through collaboration and shared goals, emphasizing the importance of regional cooperation and EU financial support in overcoming obstacles (Energinet, 2024).

Looking at the Brenner Pass again, Entman's concept of suggesting potential remedies is evident here. Collaborative efforts like the Brenner Basistunnel project illustrate how stakeholders can frame solutions in ways that take into account both economic and environmental goals. By focusing on shared benefits and mutual interests, stakeholders can develop frames that promote cooperation and innovation (Entman, 1993).

MLG Type 2 supports these collaborative efforts by emphasizing the importance of multi-level interactions and shared governance. The framework encourages the integration of diverse perspectives and resources, enhancing the capacity for innovation and effective problem-solving in complex projects (Hooghe & Marks, 2003). The success of the Brenner

Basistunnel might potentially demonstrate how multi-level governance can facilitate effective collaboration and resource allocation, ensuring the alignment of national and regional interests with EU-wide objectives (Brenner Basistunnel BBT SE, 2024).

Integrating advanced technologies in traffic management and infrastructure development presents another opportunity for improving the effectiveness of MLG Type 2. The Tyrolean and South Tyrolean Government, as well as the Austrian Federal Economic Chamber, has promoted the use of intelligent traffic management systems to reduce congestion and emissions at the Brenner Pass. These technologies, including real-time traffic monitoring and automated toll collection, streamline transport operations and improve environmental outcomes (Amt der Tiroler Landesregierung, 2023; Greiter, 2023; Austria's Federal Economic Chamber (2020). Additionally, the Brenner Base Tunnel project incorporates newest tunnelling techniques and environmental safeguards to minimize its ecological footprint (Pelzl, 2021).

Evidently, the implementation of the TEN-T policy at the Brenner Pass exemplifies the dual nature of MLG Type 2, where challenges and opportunities coexist. Fragmented policy implementation, jurisdictional conflicts, and power imbalances among stakeholders highlight the difficulties present in this governance framework. However, the potential for enhanced collaboration, adaptive governance, inclusive stakeholder engagement, and technological innovation indicates the opportunities that MLG Type 2 offers.

## **6 Conclusion**

This master thesis examines the implementation of the Trans-European Transport Network (TEN-T) policy at the Brenner Pass, focusing on the challenges and opportunities of Multi-Level Governance (MLG) Type 2. Through this case study, the research showed the complexities and dynamics of coordinating a large-scale, cross-border infrastructure project within the European Union.

The Brenner Pass, a critical corridor between Italy and Austria, exemplifies the nature of MLG Type 2, involving interactions across various governance levels and diverse stakeholders. The findings from this case study stress several key points: the need for enhanced coordination mechanisms to address policy fragmentation and jurisdictional conflicts; the importance of effective stakeholder engagement processes to ensure inclusivity and transparency; and the necessity of adaptive governance to respond to unforeseen challenges and

maintain projects objectives. Additionally, the integration of advanced technologies in traffic management and infrastructure development was shown to enhance operational efficiency and environmental sustainability.

In the broader context of the European Union, the implementation of the TEN-T policy at the Brenner Pass demonstrates the EU's strategic objectives and efforts of enhancing connectivity, economic resilience, and social cohesion. Improved infrastructure that links different regions facilitates the movement of goods, services, and people, strengthening the single market and bolstering global competitiveness.

This research shows both the challenges and opportunities inherent in the MLG Type 2 framework. While managing diverse stakeholder interests and aligning multiple governance levels presents significant difficulties, the potential for enhanced collaboration, adaptive governance, and technological innovation reveals the strengths of this governance model. By effectively addressing these challenges, policymakers can achieve infrastructure development that contributes to the EU's vision of a more connected, cohesive, and competitive Europe. This approach supports regional development and reinforces the EU's commitment to integration and connectivity across its member states.



## List of References

- Amt der Tiroler Landesregierung (2023). Common Infrastructure Management System at the Brenner Pass [Video]. YouTube. Anton Mattle. 12.04.2023. From: <https://www.youtube.com/watch?v=bDd6QGgzFBM&list=PPSV>
- Allain-Dupré, D. (2020). The multi-level governance imperative. SageJournals. The British Journal of Politics and International Relations Volume 22, Issue 4
- Alpenkonvention (2022). Mehrjähriges Arbeitsprogramm der Alpenkonvention 2023-2030. Ständiges Sekretariat der Alpenkonvention. From: [file:///C:/Users/Fam%20Falch/Downloads/AC\\_MAP\\_2023-2030\\_de\\_web.pdf](file:///C:/Users/Fam%20Falch/Downloads/AC_MAP_2023-2030_de_web.pdf)
- Arner, D.W. (2013). Chapter 46 - Organizations of International Co-operation in Standard-Setting and Regulation. Elsevier. Handbook of Safeguarding Global Financial Stability 2013, Pages 481-487. From: <https://www.sciencedirect.com/science/article/abs/pii/B9780123978752000349?via%3Dihub>
- Austria's Federal Economic Chamber (2023). Aufgaben der Wirtschaftskammern Österreichs Unsere strategischen Geschäftsbereiche. 07.11.2023. From: <https://www.wko.at/oe/wko/aufgaben-wko>
- Austria's Federal Economic Chamber (2020). Mobilitätsmasterplan 2030 – Lösungen der Verkehrswirtschaft für den Standort Österreich im Personen-, Güter-, und Individualverkehr. From: <https://www.wko.at/oe/transportverkehr/mobilitaetsmasterplan.pdf>
- Autonome Provinz Bozen – Südtirol (2023). Brenner: Vor 25 Jahren fiel der Grenzbalken. Politik. 01.04.2023, 11:20. From: <https://news.provinz.bz.it/de/news/brenner-vor-25-jahren-fiel-der-grenzbalken>
- Ayomitunde T. A. et al. (2020). Globalization and Economic Growth: Evidence from European Countries. European Financial and Accounting Journal 2020, 15(1):67-82. From: [http://efaj.vse.cz/artkey/efa-202001-0004\\_globalization-and-economic-growth-evidence-from-european-countries.php](http://efaj.vse.cz/artkey/efa-202001-0004_globalization-and-economic-growth-evidence-from-european-countries.php)
- Bache, I., & Flinders, M. V. (2004). Themes and Issues in Multi-Level Governance. In Oxford University Press eBooks (pp. 1-12). From: [https://www.researchgate.net/publication/236218993\\_Themes\\_and\\_Issues\\_in\\_Multi-Level\\_Governance](https://www.researchgate.net/publication/236218993_Themes_and_Issues_in_Multi-Level_Governance)

- Bassler et al. (2008). "Developing Effective Citizen Engagement: A How-to Guide for Community Leaders." Center for Rural America, 2008.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.
- BBT SE (2024). The funding for the Brenner Base Tunnel, a key project in Europe's transport policy, comes from Austria, Italy and the European Union. From: <https://www.bbt-se.com/en/tunnel/funding/>
- Beratšová, A. & Krchová, K. & Gažová, N. & Jirásek, M. (2016). FRAMING AND BIAS: A LITERATURE REVIEW OF RECENT FINDINGS. *CENTRAL EUROPEAN JOURNAL OF MANAGEMENT*. VOLUME 3. NUMBER 2. Masaryk University. From: <file:///C:/Users/Fam%20Falch/Downloads/7912-Article%20Text-17520-1-10-20180619.pdf>
- Biodiversity Information System for Europe (2023). Sectors related to green infrastructure. Green infrastructure's contribution to multiple sectors. 18 May 2023. From: <https://biodiversity.europa.eu/green-infrastructure/gi-related-sectors>
- Björnehed, E. & Erikson, J. (2018). Making the most of the frame: developing the analytical potential of frame analysis. *Policy Studies*. Volume 39, 2018 - Issue 2. Published: Feb 12. 2018
- Borrelli F. & Conte M. (2006). European Commission Policies to support European competitiveness: Contributions from Collaborative Networked Organizations' implementation. *IEEE International Technology Management Conference*. From: <https://ieeexplore.ieee.org/document/7477110>
- Brabo T. & Rasmussen J. N. (2023). Russia's war in Ukraine put pressure on Baltic Pipe, which ends up costing approx. DKK 10 billion. *EnergiNet*. 18.12.2023. From: <https://en.energinet.dk/about-our-news/news/2023/12/12/the-war-in-ukraine-putpressure-on-baltic-pipe-which-ends-up-costing-approx-dkk-10-billion/>
- Brack, N. & Camon R. & Crespy A. (2019). Unpacking old and new conflicts of sovereignty in the European polity. *Journal of European Integration* Volume 41, 2019 - Issue 7: Understanding Conflicts of Sovereignty in the EU. Pages 817-832
- Braverman, M. T. & Arnold M. E. (2008). An evaluator's balancing act: Making decisions about methodological rigor. *New Directions for Evaluation* Volume 2008, Issue 120 Special

Issue: Title: Program Evaluation in a Complex Organizational System: Lessons From Cooperative Extension Winter 2008 Pages 71-86

Brenner Corridor Platform (2024). ONE CORRIDOR FROM MUNICH TO VERONA. THE BRENNER CORRIDOR STUDIES: CROSS-BORDER. WELL FOUNDED. COMMONLY AGREED. From: <https://www.bcplatform.eu/corridorstudies/>

Brenner Basistunnel BBT SE (2024). Informationen. Galleria di Base del Brennero – Brenner Basistunnel BBT SE. From: <https://www.bbt-se.com/en/>

Bundesministerium für Verkehr Innovation und Technologie, fedeministerium für Verkehr und digitale Infrastruktur, Ministero delle Infrastrutture e dei Trasporti, DB Netz AG, ÖBB-Infrastruktur AG, Rete Ferroviaria Italiana S.p.A., Galleria di Base del Brennero – Brenner Basistunnel BBT SE. (2016). Scan-Med Corridor: A New Transport Route for Europe. Edited by RaumUmwelt Planungs-GmbH and Erdgeschoss GmbH. Wien: Grasl Druck & Neue Medien GmbH. From: [file:///C:/Users/Fam%20Falch/Downloads/ScanMed\\_Alpenraum\\_E\\_WEB%20\(2\).pdf](file:///C:/Users/Fam%20Falch/Downloads/ScanMed_Alpenraum_E_WEB%20(2).pdf)

Cavallaro F. & Nocera S. & Sommacal G. (2021). Appropriateness of the “small-scale corridor terminals” scheme for rail-road combined transport: Evidence from the Brenner axis. Research in Transportation Economics Volume 88, September 2021, 100995

Confindustria (2024). About us. General Confederation of Italian Industry. From: <https://www.confindustria.it/en/about-us>

Dai, X. (2007). International Institutions and National Policies, Cambridge: Cambridge University Press.

Denemark R. A. & Hoffmann. M. J. (2008). ‘Just scraps of paper? The dynamics of multilateral treaty making’, Cooperation and Conflict, 43

Elazar, D. J. (1991). Federal Systems of the World: A Handbook of Federal, Confederal and Autonomy Arrangements, 2nd edn, Harlow: Longman.

Enderlein, H., Wälti, S., and Zürn, M. (2010) a. Handbook on Multi-level Governance. Edward Elgar Publishing, Inc.

EGTC (2024). European Grouping of Territorial Cooperation. From: [https://ec.europa.eu/regional\\_policy/policy/cooperation/europeanterritorial/europeangr](https://ec.europa.eu/regional_policy/policy/cooperation/europeanterritorial/europeangr)

[oupingterritorialcooperation\\_en#:~:text=European%20Grouping%20of%20Territorial%20Cooperation%20\(EGTC\)%20allows%20public%20entities%20of,entity%20with%20full%20legal%20personality.](#)

EnergiNet. (2024). Baltic Pipe. Baltic Pipe is a gas pipeline that provides Denmark and Poland with a direct access to Norway's gas fields. From: <https://en.energinet.dk/Infrastructure-Projects/Projektliste/BalticPipe/>

Entman, R. M. (1993). Framing: Toward Clarification of A Fractured Paradigm. Journal of Communication, 43(4), Autumn. DOI: 10.1111/j.1460-2466.1993.tb01304.x

Euregio (2024). Am 25. Mai findet wieder der Euregio-Mobilitätstag statt. 08.05.2024. From: <https://www.europaregion.info/euregio/aktuelles/news/details/am-25-mai-findetwieder-der-euregio-mobilitaetstag-statt/>

European Commission (2020). Freedom of information. From: [https://commission.europa.eu/about-european-commission/service-standards-andprinciples/transparency/freedom-information\\_en](https://commission.europa.eu/about-european-commission/service-standards-andprinciples/transparency/freedom-information_en)

European Commission (2021). Mobility and Transport: Transport Themes: Trans-European Transport Network (TEN-T). From: [https://transport.ec.europa.eu/transport/themes/infrastructure-and-investment/trans-european-transport-network-ten-t\\_en](https://transport.ec.europa.eu/transport/themes/infrastructure-and-investment/trans-european-transport-network-ten-t_en)

European Commission (2022). Fifth Work Plan of the European Coordinator- Scandinavian Mediterranean. Pat Cox. Directorate-General for Mobility and Transport. October 2022. From: [https://transport.ec.europa.eu/document/download/f75010ca-611f-4492-8a1c-a404a47f9572\\_en?filename=work\\_plan\\_scanned\\_v.pdf](https://transport.ec.europa.eu/document/download/f75010ca-611f-4492-8a1c-a404a47f9572_en?filename=work_plan_scanned_v.pdf)

European Council and Council of the European Union (2023). Trans-European transport network (TEN-T): Council and Parliament strike a deal to ensure sustainable connectivity in Europe.

European Court of Auditors (2022). Cohesion and NextGenerationEU: concord or clash? Journal N1. 2022. Next Generation EU. From: [https://www.eca.europa.eu/lists/ecadocuments/journal22\\_01/journal22\\_01.pdf](https://www.eca.europa.eu/lists/ecadocuments/journal22_01/journal22_01.pdf)

European Court of Auditors (2023). Special Report EU transport infrastructures: more speed needed in megaproject implementation to deliver network effects on time. European Union 2020. From: [https://www.eca.europa.eu/lists/ecadocuments/sr20\\_10/sr\\_transport\\_flagship\\_infrastructures\\_en.pdf](https://www.eca.europa.eu/lists/ecadocuments/sr20_10/sr_transport_flagship_infrastructures_en.pdf)

- European Investment Bank (2023). Cross-border infrastructure projects The European Investment Bank's role in cross-border infrastructure projects. PUBLICATION INFORMATION: 2 May 2023, 34 Pages, ISBN: 978-92-861-5536-9
- European Parliament (2014 a). Presentation and competencies. Committees' 7th parliamentary term (2009 - 2014) European Parliament. From: <https://www.europarl.europa.eu/committees/en/archives/7/tran/home/presentation-competencies>
- European Parliament (2014 b). Directorate General for internal policies. Policy department B Structural and cohesion policy. From: [https://www.europarl.europa.eu/RegData/etudes/STUD/2014/529081/IPOL\\_STU\(2014\)529081\(ANN01\)\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2014/529081/IPOL_STU(2014)529081(ANN01)_EN.pdf)
- European Parliament (2020). The trans-European transport network: State of play in 2020. From: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/659430/EPRS\\_BRI\(2020\)659430\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/659430/EPRS_BRI(2020)659430_EN.pdf)
- European Parliament (2024). European Parliament updates trans-European transport network guidelines. 24.04.2024. From: <https://www.europarl.europa.eu/news/en/press-room/20240419IPR20574/european-parliament-updates-trans-european-transport-networkguidelines>
- European Parliament and Council of the European Union (2013). 1 Legislative acts: REGULATION (EU) No 1315/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU. From: [https://publications.europa.eu/resource/cellar/f277232a-699e-11e3-8e4e01aa\\_75ed71a1\\_0006.01/DOC\\_1](https://publications.europa.eu/resource/cellar/f277232a-699e-11e3-8e4e01aa_75ed71a1_0006.01/DOC_1)
- European Peoples Party (2024). Committee Transport and Tourism More investment and less pollution. From: <https://www.eppgroup.eu/what-we-do/economy-jobs-the-environment/transport-and-tourism>
- European Territorial Cooperation, Alpine Space Programme (2013). Strategy Development for the Alpine Space: Final Report. From: [https://www.alpine-space.eu/wp-content/uploads/2022/12/SDP\\_Final\\_Report.pdf](https://www.alpine-space.eu/wp-content/uploads/2022/12/SDP_Final_Report.pdf)
- Ezgeta, D., Čaušević, S., & Mehanović, M. (2022). Challenges of physical and digital integration TEN-T networks in Southeast European countries. Transportation Research Procedia, 64, 270-279.

- Federal Ministry of Climate Action, Environment, Energy, Mobility Innovation and Technology (2020). Austrian Vision for the Trans-European Transport Network. Position Paper of the Federal Ministry of Climate Action, Environment, Energy, Mobility Innovation, and Technology concerning the revision of Regulation (EU) No. 1315/2013 (“TEN-T Guidelines”) and Regulation (EU) No. 913/2010 concerning a European rail network for competitive freight.
- Federal Ministry of Climate Action, Environment, Energy, Mobility Innovation and Technology (2021). T; A 13 Brenner Autobahn; Generalerneuerung Luegbrücke; Feststellungsbescheid gem. § 24 Abs. 5 UVP-G 2000 B. From: [file:///C:/Users/Fam%20Falch/Downloads/generalerneuerungluegbruecke\\_bescheid\\_20210316.pdf](file:///C:/Users/Fam%20Falch/Downloads/generalerneuerungluegbruecke_bescheid_20210316.pdf)
- Federal Ministry of Climate Action, Environment, Energy, Mobility Innovation and Technology (2023). Abschätzungen der Auswirkungen von Mautanpassungen auf das alpenquerende Straßengüterverkehrsaufkommen im Brennerkorridor. From: [file:///C:/Users/Fam%20Falch/Downloads/Endbericht\\_AuswirkungenMautanpassungen-Brennerkorridor.pdf](file:///C:/Users/Fam%20Falch/Downloads/Endbericht_AuswirkungenMautanpassungen-Brennerkorridor.pdf)
- Fender, K. (2021). Governors protest latest delay to Brenner Base Tunnel construction. International Railway Journal. 27.05.2021. From: <https://www.railjournal.com/infrastructure/governors-protest-latest-delay-to-brenner-base-tunnel-construction/>
- Fischer, L. (2023). Italy to Seek EU Intervention on Dispute with Austria. Vienna Times. 21.09.2023. From: <https://www.viennatimes.com/austria-news/italy-to-seek-eu-intervention-on-dispute-with-austria/>
- Fliesser, L. (2022). Klimaneutraler Alpentransit als europäische Herausforderung. Aktuell. From: <https://traktuell.at/news/alpentransit-als-gesamteuropaeische-herausforderung/>
- Fung, K. (1980). Benefits and costs of confidential information: An application of systems theory and catastrophe theory. Behavioural Science. Journal of society for general systems and research Volume25, Issue3. Pages 192-204
- Frics T. et al. (2012). Rethinking public participation in infrastructure projects. Municipal Engineer. Essential engineering knowledge. Volume 165 Issue 2, June 2012, pp. 101-113

- George, A. L., & Bennett, A. (2005). Case studies and theory development in the social sciences. MIT Press. ISBN: 9780262572224.
- Goffman, E. (1974). Frame Analysis: An Essay on the Organization of Experience. Harper & Row ISBN: 9780930350918
- Goudarzi M. R. & Esfandiari K. & Esfandiyari F. A. (2015). Function and Structure of European Economic Interest Group and Its Structural Difference with Multinational Companies. Canadian Center of Science and Education. Asian Social Science; Vol. 11, No. 5. Pages 121- 127
- Gowans, G. (2021). Austrian legal expert confident Tyrol night-time truck ban violates EU law. Trans.Info. 12.02.2021. From: <https://trans.info/en/austrian-legal-expert-confident-tyrol-night-time-truck-ban-violates-eu-law-222416>
- Glodstone, C. (2024). Italy loses patience with Austria over Brenner corridor traffic restrictions. The Loadstar. Making sense of the supply chain. 16.02.2024. From: <https://theloadstar.com /italy-loses-patience-with-austria-over-brenner-corridor-traffic-restrictions/>
- Greiter, A. (2023). Brüssel: LH Kompatscher wirbt für länderübergreifende Lösung. Tirolean Government report- Traffic. Presseamt Südtirol 15.11.2023.
- Held, D. (2002), ‘Law of states, law of peoples: three models of sovereignty’, Legal Theory, 8 (1),
- Held, D. & Koenig- Archbugi, M. (2005). (eds), Global Governance and Public Accountability, Malden, MA: Blackwell Publishing, ISBN: 978-1-405-12678-6. Pages 67–86.
- Hodson, D. & Maher I. (2001). ‘The Open Method as a new mode of governance: the case of soft economic policy coordination’, Journal of Common Market Studies, 39, 719–46.
- Holzinger, K. (2000). Limits of co-operation: a German case of environmental mediation. Volume10, Issue6 Special Issue: The Role of Cooperation in European Environmental Policy November/December 2000 Pages 293-305
- Hooghe, L. & Markus, G. (2001). Types of Multi-Level Governance. European Integration Papers (EIoP), Vol. 5, No. 11, October 12, 2001
- Hooghe, L. & Marks, G. (2003). Unravelling the Central State, but How? Types of Multi-level Governance. University of North Carolina at Chapel Hill 97(2).

- Kainz, T. (2023). 100.000. Besucher wurden in den BBT-Tunnelwelten begrüßt. MeinBezirk.at-Seinach. From: [https://www.meinbezirk.at/stubai-wipptal/c-wirtschaft/100000-besucher-wurden-in-den-bbt-tunnelwelten-begruesst\\_a5891104](https://www.meinbezirk.at/stubai-wipptal/c-wirtschaft/100000-besucher-wurden-in-den-bbt-tunnelwelten-begruesst_a5891104)
- Kohler-Koch, B. & Eising, R. (eds) (1999). The Transformation of Governance in the European Union, London: Routledge.
- König, J. (2021). Ausflugsziele rund um Innsbruck: Der Brenner Basistunnel als Erlebniswelt. 12.07.202. Tirol. From: <https://www.tirol.at/blog/b-familie/tunnelwelten>
- Kurmayer, N. J. (2023). Transit clash with Italy: Vienna not worried. Euractiv. 15.9.2023. From: <https://www.euractiv.com/section/politics/news/transit-clash-with-italy-vienna-not-worried/>
- Land Tirol (2023). 25 Jahre Fall des Grenzbalkens am Brenner. 01.04.2023 LH Mattle Tirol & Europa EU Europaregion. From: <https://www.tirol.gv.at/meldungen/meldung/25-jahre-fall-des-grenzbalkens-am-brenner/>
- Laude, Y. (2023). Our Trans- European Transport Network must be adaptable to the Objectives of the Green Deal. 13.04.2023. Renew Europe. From: <https://www.reneweuropengroup.eu/news/2023-04-13/our-trans-european-transport-network-must-be-adapted-to-the-objectives-of-the-green-deal>
- Lecheler, S. & De Vreese, C. (2012). News Framing and Public Opinion: A Mediation Analysis of Framing Effects on Political Attitudes. Sage Journals. Volume 89, Issue 2 (2012). Published: May 15, 2012
- Letta, E. (2024). Much more than a market. Empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens. Consilium Europa. From: <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>
- Maggetti, M. & Trein, P. (2019). Multilevel governance and problem-solving: Towards a dynamic theory of multilevel policy-making? Special Issue: Symposia: Leadership for Public Value and Integration, Functional Differentiation and Problem-Solving in Multilevel Governance. June 2019 Volume97, Issue2. Pages 355-369
- Medeiros E. et al. (2021). Boosting cross-border regions through better cross-border transport services. The European case. Case Studies on Transport Policy. Elsevier. Volume 9, Issue 1, March 2021, Pages 291-301



- MeinBezirk. (2023). Giergemeinschaft von Frächterverbänden und Politik verlangt Anarchie. Brenner-Transit. Redaktion BezirksBlätter Tirol 29. Januar 2023 at 13:34. From: [https://www.meinbezirk.at/tirol/c-lokales/giergemeinschaft-von-fraechterverbaenden-und-politik-verlangt-anarchie\\_a5840854](https://www.meinbezirk.at/tirol/c-lokales/giergemeinschaft-von-fraechterverbaenden-und-politik-verlangt-anarchie_a5840854)
- Mihiotis A & Oikonomou C. & Konidaris N. (2007). Managing information flow: an important factor in the implementation process of project management. Management Practice. Volume 2. Issue 3. Pages 255-267
- Ministerstwo Infrastruktury (2024). Transeuropejska sieć transportowa – TEN-T. From: <https://www.gov.pl/web/infrastruktura/transeuropejska-siec-transportowa-ten-t>
- Mischke, J. & Garemo, N. (2013). Infrastructure: The governance failures. Vox EU Cepr. 30.03.2013. From: <https://cepr.org/voxeu/columns/infrastructure-governance-failures>
- Mitterwachauer, M. (2023). Notfalls will Salvini schärfer kontrollieren. Tiroler Tageszeitung. 10.10.2023. Number 280.
- Moore, C. (2021). Brenner Base Tunnel | Geological challenges of building the world's longest railway tunnel. New Civil Engineer. 14.12.2021. From: <https://www.newcivilengineer.com/latest/brenner-base-tunnel-geological-challenges-of-building-the-worlds-longest-railway-tunnel-14-12-2021/>
- Newig J. & Koontz T. M. (2014). Multi-level governance, policy implementation and participation: the EU's mandated participatory planning approach to implementing environmental policy. Journal of European Public Policy Volume 21, 2014 - Issue 2. Pages 248-267.
- Oates, W. E. (2000). 'From research to policy: the case of environmental economics', University of Illinois Law Review, 1, 135–53.
- Ostrom, E. & Walker, J. (1997). 'Neither markets nor states: linking transformation processes in collective action arenas', in Dennis C. Mueller (ed.), Perspectives on Public Choice: A Handbook, Cambridge: Cambridge University Press, pp. 35–72.
- ÖBB (2024). Brennerstrecke Kufstein- Brenner. ÖBB Infra. From: <https://infrastruktur.oebb.at/de/projekte-fuer-oesterreich/bahnstrecken/brennerstrecke-kufstein-brenner>
- Pelzl, C. (2021). Brenner Base Tunnel as a Lighthouse Project: Tunnels to become CO<sub>2</sub>-neutral energy suppliers. TU Graz Graz University of Technology. 22.02.2021. From:

<https://www.tugraz.at/en/tu-graz/services/news-stories/tu-graz-news/singleview/article/brenner-basistunnel-als-leuchtturmprojekt-tunnelbauten-sollen-co2-neutrale-energielieferanten-werden0>

Pierre, J. (2000). *Debating Governance: Authority, Steering and Democracy*, Oxford: Oxford University Press.

Pompeu-Santos, S. (2016). Meet the Challenges of the Fehmarnbelt Fixed Link. Conference: IABSE Congress, Stockholm 2016: Challenges in Design and Construction of an Innovative and Sustainable Built Environment. Research gate. From: [https://www.researchgate.net/publication/349133109\\_Meet\\_the\\_Challenges\\_of\\_the\\_Fehmarnbelt\\_Fixed\\_Link](https://www.researchgate.net/publication/349133109_Meet_the_Challenges_of_the_Fehmarnbelt_Fixed_Link)

Radaelli, C. M. (2003). *The Open Method of Coordination: A New Governance Architecture for the European Union?*, Sieps Report 2003:1, Stockholm: Swedish Institute for European Policy Studies.

Raiffa, H. (1982). *The Art and Science of Negotiation*, Cambridge, MA: Belknap.

RailBaltica, (2020). Körvek: Conducting Rail Baltica's environmental impact assessment discussions electronically has proven itself useful. 15.07.2020. From: <https://info.railbaltica.org/en/news/korvek-conducting-rail-balticas-environmental-impact-assessment-discussions-electronically-has-proven-itself-useful>

Railway Gazette International. (2021). Brenner Base Tunnel opening postponed. 27.05.2021. From: <https://www.railwaygazette.com/infrastructure/brenner-base-tunnel-opening-postponed/59190.article>

Rasmussen, J. N. (2022). New environmental permit restarts construction on halted parts of Baltic Pipe. EnergiNet. 01.03.2022. From: <https://en.energinet.dk/About-our-news/News/2022/02/28/NEW-ENVIRONMENTAL-PERMIT-RESTARTS-CONSTRUCTION-ON-HALTED-PARTS-OF-BALTIC-PIPE/>

Redazione ANSA (2020). Confindustria urges 'reopening' of Brenner Pass- EU should sanction Austria for illegitimate and damaging closure. From: [https://www.ansa.it/english/news/2020/03/12/confindustria-urges-reopening-of-brenner-pass\\_8fb5ddef-f8a2-42f6-adf3-8a68-101df9cb.html](https://www.ansa.it/english/news/2020/03/12/confindustria-urges-reopening-of-brenner-pass_8fb5ddef-f8a2-42f6-adf3-8a68-101df9cb.html)

Ridriguez, B. (2023). El Ayuntamiento de Sevilla destinará 63 millones de euros hasta 2025 en recuperar patrimonio y nuevos equipamientos públicos. Sevilla- 20 Minutos.

08.03.2023 From: <https://www.20minutos.es/noticia/5107865/0/ayuntamiento-sevilla-destinara-63-millones-euros-hasta-2025-recuperar-patrimonio-nuevos-equipamientos-publicos/>

Scheunpflug, L. & Schüp D. (2024). Deconstructing The Fehmarnbelt Fixed Link: Local Resistance And Counter-Discourses Against The World's Largest Immersed Tunnel. Undisciplined Environments. From: <https://undisciplinedenvironments.org/2024/02/22/deconstructing-the-fehmarnbelt-fixed-link-local-resistance-and-counter-discourses-against-the-worlds-largest-immersed-tunnel/>

Scheurer, L. & Haase, A. (2017). Diversity and social cohesion in European cities: Making sense of today's European Union–urban nexus within cohesion policy. SageJournals. European Urban and Regional Studies Volume 25, Issue 3

Sharma, P. D. et al. (1979). Secrecy Needs in Police Administration. SageJournals. First published October 1979. Volume 25, Issue 4

Spiegel, K. (2022). Lärmschutz leicht erklärt. Asfinag Blog. From: <https://blog.asfinag.at/hinter-den-kulissen/laermschutz/>

Stephens, J. C. & Verma P. (2006). The Role of Environmental Advocacy Groups in the Advancement of Carbon Capture and Storage (CCS). From: <https://www.belfercenter.org/sites/default/files/legacy/files/tech%20session%20001.pdf>

Stephenson, P. J. (2010). The Role of Working Groups of Commissioners in Co-ordinating Policy Implementation: The Case of Trans-European Networks (TENs). Wiley Library. Journal of Common Market Studies. Volume48, Issue3. June 2010. Pages 709-736

Stephenson, P. (2011). From Policy to Implementation in the European Union: The Challenge of a Multi-Level Governance System. Journal of Contemporary European Studies Volume 19, 2011 - Issue 4. Pages 580-581

Südtiroler Landtag (2024 a). Dreier-Landtag. From: <https://www.landtag-bz.org/de/dreier-landtag>

Südtiroler Landtag (2024 b). Zusammensetzung – Aufgaben. From: <https://www.landtag-bz.org/de/zusammensetzung-aufgaben>

- Swoboda, N. (2024). Wie sich die Eisenbahn 64 Kilometer durch die Alpen fräst. Kleine Zeitung. 31.03.2024. From: <https://www.kleinezeitung.at/oesterreich/18172440/wie-sich-die-eisenbahn-64-kilometer-durch-die-alpen-fraest>
- Tortola, P. D. (2017). Clarifying multilevel governance. European Journal of Political Research, 56(2), 234-250. From: <https://ejpr.onlinelibrary.wiley.com/doi/10.1111/1475-6765.12180>
- Turner J.R. & Danks, S. (2014). Case Study Research: A Valuable Learning Tool for Performance Improvement Professionals. Issue 4.
- Transitforum Austria- Tirol (2024). LEBENS- UND WIRTSCHAFTSRECHT VOR TRANSITUNRECHT. Einmischen, Mach mit-Schweig nicht. From: <https://www.transitforum.at/>
- Tversky, A. & Kahneman, D. (1986). The Framing of Decisions and the Evaluation of Prospects. Science Direct- Journals & Books. Volume 114, 1986, Pages 503-520.
- Van Hulst, M. & Yanow, D. (2014). From Policy “Frames” to “Framing”: Theorizing a More Dynamic, Political Approach. Sage Journals. Volume 46, Issue 1 (2014). Published: May 30, 2014
- Van Leijen, M. (2021). Will the ride on Rail Baltica smooth out after a long bumpy run-in? RailFreight. 12.11.2021. From: <https://www.railfreight.com/railfreight/2021/11/12/will-the-ride-on-rail-baltica-smooth-out-after-a-long-bumpy-run-in/?gdpr=accept>
- Wagner, R. (2023). Streit um Verkehrslösung im Dreier-Landtag. Dolomitenstadt. From: <https://www.dolomitenstadt.at/2023/06/15/streit-um-verkehrsloesung-im-dreier-landtag/>
- Watts, R. L. (1999). Comparing Federal Systems, 2nd edn, Kingston, Ontario: McGill/Queen’s University Press.
- Weiser, M. (2023). Mit einer Absichtserklärung zu Lkw-Slots ist noch nichts erreicht! Wasserburg 24. 13.04.2023. From: <https://www.wasserburg24.de/service/reingeklickt/ku-fsteiner-erklaerung-im-transitstreit-was-bringt-sie-dem-inntal-92206434.html>
- Yin, R. K. (2009). Case Study Research: Design and Methods (4 ed.). Thousand Oaks, CA: Sage Publications.

- Zeitlin, J. & Pochet P. & Magnusson L. (eds) (2005). The Open Method of Coordination in Action. The European Employment and Social Inclusion Strategies, Brussels P.I.E.-Peter Lang.
- Zeletdinova, A. & Diakova, V.V. (2019). FRAMES OF SOCIAL REPRESENTATIONS: STRUCTURE AND FORMATION FEATURES. Humanities & Social Sciences Reviews, Maya Global Education Society, Vol. 7 No. 6 (2019): November Article Published: December 21, 2019
- Zürn, M. (1998). Regieren jenseits des Nationalstaates: Globalisierung und Denationalisierung als Chance. Frankfurt a.M.: Suhrkamp. 19.10.1998. ISBN: 3518410180
- Zürn, M. (2004). 'Global governance and legitimacy problems', Government and Opposition, 39 (2), 260–87.
- Zürn, M. & Neyer J. (2005). 'Conclusions – the conditions of compliance', in Michael Zürn and Christian Joerges (eds), Law and Governance in Postnational Europe, Cambridge: Cambridge University Press