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Action-oriented planning methods as a tool for improving regional governance in Switzerland: Evidence from the Sisslerfeld area

Theodora Papamichail [a], Ana Perić [b,c,*,1]

[a] Planteam S AG, Inseliquai 10, 6005 Luzern, Switzerland
[b] School of Architecture, Planning and Environmental Policy, University College Dublin, Planning and Environmental Policy Building Richview, Belfield, Dublin 4, Ireland
[c] Faculty of Architecture, University of Belgrade, Bulevar kralja Aleksandra 73, Belgrade, Serbia

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ABSTRACT

Faced with challenges such as rapid transformation of existing settlements, reorganisation of mobility patterns, and climate change mitigation management, the governance of spatial development in Switzerland demands institutional and procedural innovations, particularly noticeable at the regional scale. Although cantons, the middle-governmental tier between the federal and communal authorities (municipalities), play a coordinating role supported by numerous formal and informal planning instruments, the small size of the institutional territory, coupled with administrative decentralisation of the country and autonomy of the lowest administrative levels, often challenges a multi-governmental and multi-sectorial approach to regional spatial development. Against the concepts of regional governance, regional planning and the action-oriented planning, and using the mixed-method research approach (focusing on documentary analysis and ethnographic methods), the article critically assesses a planning method – test planning – applied in the process of creating a development vision of Sisslerfeld, the largest land reserve in the Swiss canton of Aargau. Research results highlight the potential and limitations of informal collaborative procedures and elucidate the approaches of critical actors in an effort to achieve joint institutional action.

1. Introduction

Megatrends, including globalisation, digitalisation, migrations, climate change, and financialisation, among others, trigger political and professional discussions about the future of spatial development worldwide. Due to their complexity, such challenges take attention away from solely statutory mechanisms and procedures and bring to the fore informal spatial planning instruments and ad-hoc stakeholders' arrangements. As these mechanisms usually serve specific groups of the stakeholders involved, they may diminish the power of the statutory regulatory planning tools designed to protect common goods, values and the public interest. Recent debates revolving around the 'post-political' narrative (Swyngedouw, 2011), restricting the role of participation in planning only to that of veil or smokescreen to the actual decision-makers, have become a dominant paradigm in contemporary urban development in many urban settings worldwide (Shatkin, 2017; Tansel, 2019; Petretta, 2020; Machiels et al., 2021; Perić and Maruna, 2022). In countries with limited settlement capacity, i.e., where the land is considered a scarce resource, the consequences of such globally-driven spatial development trends are even more pronounced (Pütz et al., 2008; Lendi, 2018).

The land available for settlement area in Switzerland amounts to only 7.5 per cent of the overall surface area of the country; this causes adverse effects, such as: high demand for living areas and transport infrastructure followed by increasing rental costs; increase of construction, operation and maintenance costs for infrastructure and transport routes; and additional space needed for producing and transporting energy (Gilgen Thétaz and Kellenberger, 2018). These trends make it clear that the Swiss federal government, cantons, and communes face an increasing complexity of planning tasks further intensified by the existing institutional and administrative borders.

To address such complexity, non-conventional spatial planning approaches appear critical to support sustainable development, and it seems these find a fruitful ground in the Swiss socio-spatial setting

* Corresponding author at: School of Architecture, Planning and Environmental Policy, University College Dublin, Planning and Environmental Policy Building Richview, Belfield, Dublin 4, Ireland.
E-mail address: ana.pericmomcilovic@ucd.ie (A. Perić).
[1] https://orcid.org/0000-0002-5029-3556

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(Keller et al., 1996; Steiner, 2003; Perić and Hoch, 2017; Scholl, 2011): economic prosperity, coupled with a stable political environment, handles cultural diversity well; direct-democracy institutions make a continuous effort to deal with pluralism in power and harmonisation of adversarial interests; and, public officials, private firms and civic organisations often collaborate in strategic spatial planning decision-making in spatial development. Furthermore, different institutional levels cooperate in and coordinate the policymaking processes, as the administrative structure of Switzerland supports strategic and decentralised decision-making in spatial planning, with cantons acting as mediators in coordinating spatial development between the local and federal levels. Finally, complementary to the formal planning context, informal planning instruments and procedures enhance tailor-made and pragmatic solutions for complex planning tasks aimed at achieving public consensus in a planning process.

However, despite all the aforementioned advantages, Swiss spatial development practice often illustrates the following paradox: the shared responsibility and pragmatic approach are not sufficient, on the one hand, for improving public participation and social inclusion (Keller et al., 1996; Debrunner et al., 2022), and, on the other, for dealing with communal autonomy (Fiechter, 2010; Gerber, 2016). This is evident especially in the functional spaces of regional development that address a great number of multiple stakeholders' adversarial interests and ask also for cooperation across administrative units (Füeg, 2016). In cases of long-term spatial development, the actors' readiness to pursue proactive planning approaches depends on the experience and expertise of local authorities in innovative planning procedures and their interests and goals. Set between cooperation as the main normative value in the legislative and regulative Swiss planning framework (RPG SR700, 1979), and difficulties in conducting genuinely cooperative planning processes (Perić et al., 2023; Gerber and Debrunner, 2022), the paper examines the potential of informal planning procedures to improve the regional governance of Swiss spatial development, tested on the case of Sisslerfeld, an 85-hectare area in the canton of Aargau, on the Swiss-German border along the Rhine River, near the German city of Bad-Säckingen and spanning four Swiss communes, i.e., municipalities (Fig. 1).

The Cantonal Structural Plan of 2010 (Canton of Aargau, 2010) defined Sisslerfeld as a key development area of cantonal importance for high-value-added and low-CO2-emission companies, setting the formal basis for further planning of the area. The cantonal authorities' ambitious vision, significant administrative fragmentation, conflicting interests of multiple stakeholders for future development, and local values and needs make Sisslerfeld an interesting testbed for exploring regional spatial governance. Taking due consideration of the mechanisms used in guiding cooperation across various governmental authorities and sectors (private, public and civil), the paper aims to critically elucidate the so-called test planning procedure that entails collaborative visioning of the future development of the area and reveal its significance in improving regional governance. As the planning process is analysed through the lens of the regional governance features and principles of the action-oriented planning approach, the following questions are addressed: What are the core measures that contribute to the inclusive and transparent planning processes? How to achieve consensus building by combining formal and informal planning tools and mechanisms of cooperation? What are the roles and relationships of key actors in new cooperative forms and how do they contribute to problem-solving? What is the nature of multi-disciplinary and multi-sectoral networks? Which cooperation and steering modes can enhance coordination among administrative levels and sectors?

The paper is structured as follows. After a brief introduction, the next section introduces the concepts of regional governance, regional planning and action-oriented planning, followed by a brief description of the methodological approach used. The following section presents the foundations and challenges for the regional governance of Swiss spatial development, serving as an introduction for an in-depth analysis of the spatial laboratory of Sisslerfeld. The discussion part critically examines the research results against the conceptual background, while conclusions share ideas on enhancing regional planning and governance under the broader narrative of contemporary spatial development.

2. Conceptual background: governance and planning through the lens of cooperation

2.1. Regional governance: between formal and informal responsibility

The concept of governance has gained prominence in Europe since the 1990s, signifying a shift from government-centred planning to a

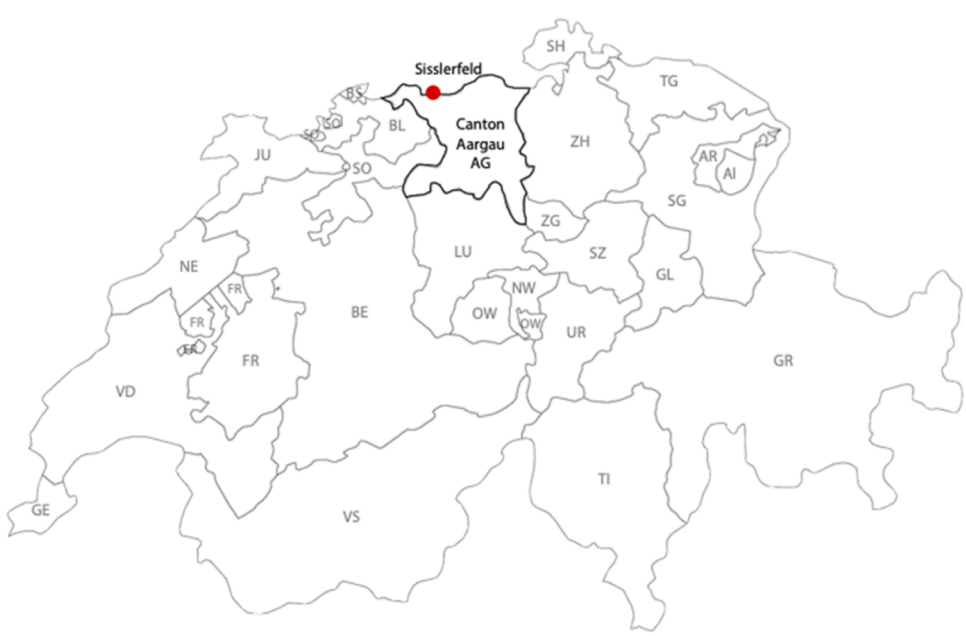

Fig. 1. The position of the Sisslerfeld area within the Canton Aargau, one of 26 cantons of the Swiss Confederation.
Source: Authors.

more collaborative and flexible approach involving various actors and organisations (Rhodes, 1996, 2007; Salet and Thornley, 2007; Klijn, 2008; Davoudi and Strange, 2009; Koch, 2013). Various attributes to the concept of governance were defined over time: Weiss (2000) emphasises the importance of regional or national collective action and different forms of power; Fürst (2003) focuses on formal institutions and informal arrangements in the interest of both institutions and people; Benz and Kilper (2018) embrace the totality of the collective and interdependent action of actors and organisations; finally, inspired by Lefebvre's (1992) and Friedmann's (1987) ideas on social learning, the governance approach emphasises spaces as social constructs, and, hence, planning as a social practice influenced by multiple actors' knowledge and skills.

Within the framework of New Regionalism (Savitch and Vogel, 2000), governance encourages inter-local agreements and decentralised cooperation, focusing on flexible and self-organising activities among involved actors rather than top-down government approaches. Shifting the administrative and institutional borders of statutory planning through joint action, strategy-making, and policy delivery brings attention to 'soft spaces' (Allmendinger et al., 2015) or 'functional spaces' (Füeg, 2016), focusing on social, economic, and cultural relationships. Hence, the following key features describe regional governance in terms of the organisation and coordination of networks and processes at different scales, mainly reflecting the regional scale (Fürst, 2001, 2003; Rhodes, 2007; Benz and Kilper, 2018):

1) Regional governance involves coordinating policies and processes across different administrative levels, promoting collaboration among organisations and actors, addressing concrete problems, supplementing traditional institutions, and emphasising multi-level cooperation to facilitate collective action;
2) Intergovernmental and intersectoral networks based on functional differentiation allow self-organising and self-governing networks that coordinate strategic planning activities within a region, implying a significant degree of autonomy of the region from the state or municipalities;
3) Multidisciplinary (social and organisational) networks focused on trust-based communication relationships include both the internal institutionalisation of decision-making structures in the region and the external institutionalisation of relations between the region and other levels of action;
4) To deal with a broader spectrum of spatial conflicts, the governance approach comprises different steering modes, often illustrating synergies among regulation, incentives, competition, and negotiation mechanisms.

However, the regional governance approach varies depending on the broader institutional context. Salet and Thornley (2007) highlight functional coordination, where cooperation occurs through a specific service to provide functional solutions; one such service is inevitably regional planning, comprising both strategic dimension and 'soft planning' methods. With a recent distinct transformation of strategic planning from a government-led to a multi-sectorial approach (Healey, 2009) and the rise of 'soft spaces' (Haughton et al., 2010; Allmendinger et al., 2015) and place-based approaches (EU Ministers, 2020; Weck et al., 2022), the current challenges and visions for the future of regional planning are described in greater detail in the following subsection.

2.2. Regional planning and action-oriented planning methods

New theoretical understandings about the future of regional planning are heterogeneous and sometimes contradictory. Some researchers believe that regional planning has recently lost its political and practical significance (Harrison et al., 2021a, 2021b), however others argue that formal regional planning is needed mainly to address: 1) the flaws in regional research and empirical studies emphasising informal (neoliberalised) forms of regional planning characterised by mostly 'soft spaces' and 'soft' management arrangements (Smas and Schmitt, 2021), and 2) the complexity of planning induced by conflicting interests, numerous institutions involved and complex relationships, particularly in European macro-regions (Purkarthofer et al., 2021; Friedmann, 2019; Sielker and Rauhut, 2018). Cotella et al. (2021) emphasise the importance of innovative planning mechanisms and instruments to improve the strategic dimension of regional planning. To incentivise innovation in strategic planning, as strategic interventions are considered only partially government-led, there is a need for recomposing governance relations, overcoming the 'silo' approach among the governmental offices, and shifting to multi-sectorial activities that span diverse economic and local community stakeholders (Albrechts et al., 2003). Elaborating on the transforming nature of strategic planning, Healey (2009) points out the following dimensions: mobilise attention – to highlight neglected opportunities and challenges; scope the situation – to discover the energy for change and, accordingly, build coalitions; enlarge intelligence – to access multiple sources of knowledge; and create frames and select actions – to make priorities, provide justification and coherence.

Action-oriented planning approach resonates well with the abovementioned dimensions of strategic planning, as it assumes that conflicts in planning have their roots in the decision-making problems of one or more actors (Scholl, 1995, 2011, 2017). The goal of action-oriented planning is, therefore, to overcome these problems through suitable processes and planning actions and, ultimately, to bring them into a state in which decisions are taken by the actors involved based on a holistic view of possible 'options for action' and possible 'circumstances.' To this end, action-oriented planning provides methodological and organisational approaches in order to achieve a robust focus. In contrast to hierarchical planning approaches, action-oriented planning is directed at multi-disciplinary and multi-organisational cooperation and usually succeeds whenever there is simultaneous vertical (intergovernmental) and horizontal (intersectoral) convergence of interests. Briefly, the planning procedures and methods associated with the action-oriented planning approach are based on a link between formal and informal responsibility (Hoch and Scholl, 2018).

One of the widely used informal planning methods that fits well into the action-oriented planning approach is the test planning. Many cities were pioneers in implementing the test planning, such as Vienna, given its need for flood protection along the Danube River (Vienna Model); Frankfurt, for its regeneration of the urban area along the Main River waterfront; and, in Switzerland, Solothurn, which used test planning to revitalise a major brownfield site, and Dübendorf near Zürich, which transformed an abandoned military airfield (Scholl, 2017). According to Scholl et al. (2013), there are seven key principles underpinning test planning as a method and these are succinctly given in Table 1.

If situating the previous principles into the broader setting of various planning paradigms, the conceptual background of action-oriented planning methods aligns well to the paradigmatic tenets of the 'argumentative and communicative turn in planning' (Fischer and Forester, 1993) and its associated ideas. More precisely, the closest analogy to the principles ingrained in test planning are the principles of collaborative rationality as proposed by Innes and Booher (2010): 209, 211: 1) diversity and interdependence; 2) collaborative dialogue and collaborative development of knowledge; 3) networks; 4) monitoring and feedback; and 5) small and diverse working groups. Both groups of principles involve cooperation between numerous stakeholders, obtaining valid information, and exchange of information and different types of knowledge, both expert and experiential (Papamichail and Perić, 2018). The relationship between the principles of test planning and collaborative rationality is depicted in Fig. 2.

Based on the comparison between the key principles of test planning and collaborative rationality and informed by the case study evaluation of different action-oriented planning methods (e.g., test planning and concurrences of ideas), the more advanced basic principles of action-oriented planning methods are defined as follows (Papamichail, 2019):

Table 1
The principles of test planning.

Principles of test planning	Description of principles
Concurrence of ideas	A concurrence of ideas leads to the most efficient solution delivered to the contractor within the framework of the given conditions.
Rhythm	Ideas and solutions mature due to repeated discussions and continuous testing throughout regularly scheduled meetings.
No 'winner'	Since complex tasks often do not have ideal solutions, unlike a traditional competition, test planning examines the different ideas of the teams and selects the most appropriate one, which is usually a combination of the various ideas offered throughout the process.
Ad hoc organisation	Organisation of the process is tailored to local conditions and even the contributions of local and regional officials are adjusted to the test planning rules.
Communication	Communication and marketing of the various steps and solutions are important from the beginning to gain public support for the results and attract various actors.
Finding problems and solutions	Apart from the final solutions, a redefinition or identification of new problems in addition to the given ones often takes place, making it a dynamic process.
'Protected' process	Ideas and solutions are first discussed and tested in closed meetings between the teams and the steering committee before any public announcements in order to develop strong argumentation for a fruitful dialogue with various actors and the public later.

Source:Source: Scholl et al. (2013); Scholl (2017).

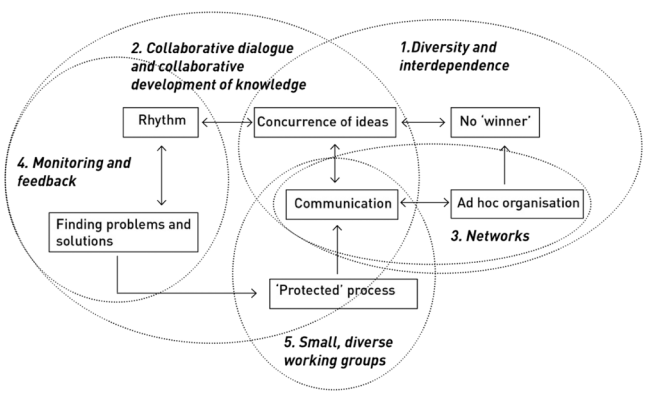

Fig. 2. The interrelation between five principles of collaborative rationality and seven principles of the test planning process.
Source: Papamichail and Perić (2018).

1) inclusive, flexible and transparent processes towards joint responsibility;.

2) non-linear, but simultaneous processes based on the three-cycle design;.

3) negotiation focused on building public consensus;.

4) potential and problem-oriented scenarios and solutions;.

5) actor-networks based on role differentiation and local response.

The critical examination of the given principles as informed by the case study will be presented in the discussion part (Section 6).

3. Research approach and methodology

Based on the above overview of the features of regional governance and the principles ingrained into the action-oriented planning methods, this research interrelates the respective variables (Fig. 3). The interrelation creates a type of model empirically tested in the case of Sisslerfeld. More precisely, the research firstly evaluates the extent to which the principles of the action-oriented planning methods (right-hand side, Fig. 3) were implemented in the Sisslerfeld test planning procedure. Drawing conclusions on the scope of the case study itself, the research further critically attends to the specific context of regional governance of spatial development in Switzerland by assessing how the main features of regional governance (left-hand side, Fig. 3) have been implemented in practice. The results of such analyses are provided in Section 6 (discussion). To conduct the complex two-level analysis, comprising the so-called 1) macro-level that refers to the contextual institutional and regulative framework within the case study is embedded in, and the so-called 2) micro-level related to the implementation of the test planning procedure, the following methodological approach has been applied.

Firstly, a comprehensive overview of the spatial planning and development-related literature was conducted through desk research. This included documentary analysis (in-depth overview of the main legislation, strategic documents, plans, and formal and informal procedures) relevant to the various territorial scales (federal, cantonal, and communal), particularly attending to the notion of cooperation and similar concepts (e.g., coordination, collaboration). This analysis aimed at providing an informed overview of the diverse (statutory and non-statutory) planning mechanisms used for steering spatial development at different administrative levels in Switzerland. A particular focus was on the instruments related to the challenges and spatial problems recognised as of regional importance.

Secondly, to obtain data for the case study analysis (the nature of governance and planning mechanisms in visioning the future development of the Sisslerfeld area), the complex method of ethnography was applied.[2] In addition to the review and assessment of the internal fact sheets and documents used in the visioning process, accompanied by a review of documents from the archive of the canton of Aargau, the ethnographic methods included: participatory observation, thematic discussions and thematically oriented interviews with selected stakeholders. Participatory observation was possible for the entire duration of the test planning procedure. Thematic discussions occurred during the workshops organised between the representatives of each of the five local authorities, on the one hand, and the cantonal authorities and experts (Fricktal Regional Planning Association) on the other. In total, there were five face-to-face discussions, separately for each of five concerned communes, held over the course of the test planning procedure (throughout 2020), with the aim for each local authority to independently express their developmental visions. Finally, two in-person interviews with two important cantonal representatives (one involved in the project since 2007) were conducted. The aim of such an approach was to identify the interrelations between stakeholders. Finally, a combination of findings from the micro-level analysis (case study) and macro-level analysis (institutional and regulatory framework) helped elucidate the ways of integrating formal and informal procedures to improve the regional governance of spatial development in Switzerland.

4. Switzerland: the foundations and challenges of regional governance

As rooted in the Germanic administrative and legal family (Newman and Thornley, 1996), and hence influenced by the comprehensive-integrated planning approach dominant in the countries belonging to the mentioned family (Knieling and Othengrafen, 2009), spatial planning, or, literally, spatial ordering (*Raumordnung*) in Switzerland is focused on the coordination of spatially relevant policies (Faludi, 2010). This is mainly characterised by a systematic and formal hierarchy of plans as the main planning instruments that coordinate public activities across different administrative levels. Spatial planning instruments are enacted mainly on a cantonal (regional) and communal (local) level, whereas the federal level is in charge of producing general

[2] This was possible as one of the paper's authors directly participated in the process (as a member of the working team of the Sisslerfeld test planning procedure).

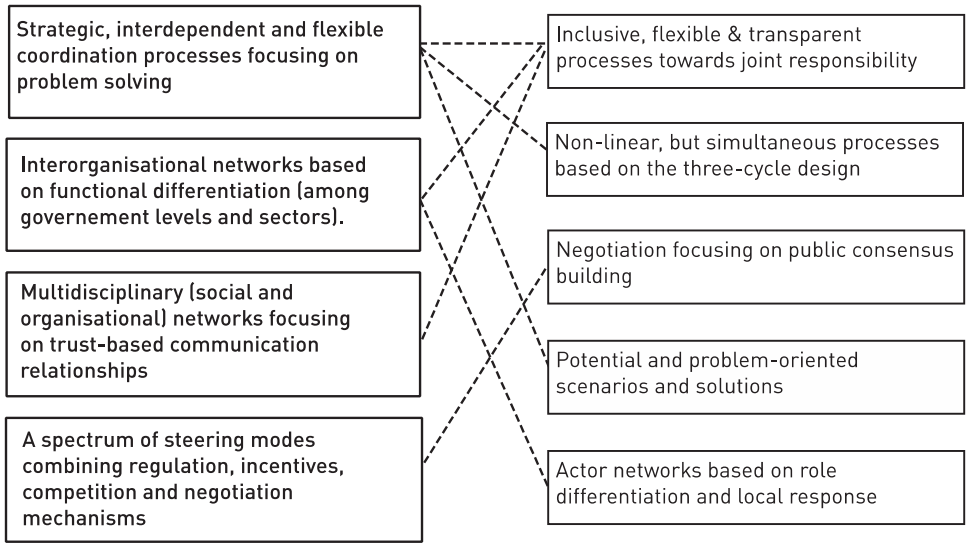

Fig. 3. Interrelation between the features of regional governance and the principles ingrained into the action-oriented planning methods. Source: Authors.

guidelines. Nevertheless, spatial planning in Switzerland is an activity that involves a range of various actors that cooperatively aim at defining joint visions for further development of an area at hand. Hence, strategic dimension of deliberating joint and long-term visions for development is ingrained in the essence of Swiss spatial planning. In this sense, it overcomes the limitations of land use planning approach, focused mainly on the land use control and other regulatory functions, to embrace planning as still mainly public-driven, but highly cooperative and pragmatic activity (Berisha et al., 2021; Perić et al., 2023). To better portray the actors wielding political power in decision-making and the complexity of administrative responsibilities, this section describes the Swiss institutional and regulatory planning framework, highlighting the elements that enhance but also limit regional governance.

4.1. Administrative division of spatial development powers

The Swiss Federal Constitution (BV SR101, 1999) lays down the powers of the Confederation (the national level) and the cantons, which, in turn, define the powers of their communes and have their own arrangements with them, while constitutional amendments are required to alter the balance of responsibilities. On the Confederation level, the Federal Assembly[3] (Swiss Parliament) sets the structure and the procedures through the Federal Act on Spatial Planning and Ordinance (RPG SR700, 1979). The federal Department of the Environment, Transport, Energy and Communications (UVEK) oversees policymaking in environmental protection, energy, transport, land use planning, and communication through a variety of federal offices. As for spatial planning, the federal Office of Spatial Development (ARE) develops spatial, environmental and mobility policies, collaborates with the cantons and communes, and leads international cooperation projects concerning spatial planning issues.

Similarly, each canton has its own constitution, executive council (*Regierungsrat*), and legislature council (*Grosser Rat*). The 26 cantons direct spatial development and act as mediators between the federal and local planning administrations. Each canton has a department for spatial development, headed by a member of the legislature council. The department is divided into specialist units, each responsible for different fields, such as land use planning, transport, energy, landscape, forestry management, and civil engineering. The spatial planning unit, usually found under different names,[4] plays a coordinating role in promoting sustainable development and balancing adversarial interests.

In the 1990s, economic and social reasons led to intercommunal collaboration and amalgamation of the Swiss communes to improve the handling of the complex responsibilities of local authorities and permit better use of the financial resources (Steiner, 2003: 552). Today 2172 communes (ARE, 2021), based on the amendments to the Federal Constitution in 1999, and cantonal laws, have autonomy in defining their institutional structure, e.g., the functions of the executive members of the communal executive council (Fiechter, 2010; Füeg, 2016), which plays a decisive role in decision-making for project implementation. Due to the reorganisation of the financial equalisation system (according to which the federal government provides financial transfers to ensure that cantons have similar funding at their disposal) and the division of duties between the Confederation and the cantons, the principle of subsidiarity[5] (BV SR101, 1999, Art. 5a) mandates intergovernmental collaboration. In planning practice, the allocation of planning competencies is not solely regulated by this principle, however, it creates a frame for the federal government and cantons to justify their decisions (Füeg, 2016). In some cantons, the regions also play an important role by representing the communes' interests through Regional Planning Associations (*Regionalplanungsverbände*), which date from the 1970 s (Schuler et al., 2005).

4.2. Formal spatial planning framework

Since 2012, the Spatial Concept for Switzerland (ARE, 2012) (*Raumkonzept Schweiz*), a non-legally-binding strategy at the federal level, has set the common spatial planning goals for the Confederation, cantons, and communes, while the sectoral plans (*Sachpläne*) have coordinated the various planning tasks (such as railway and motorway infrastructure and crop rotation areas). At the cantonal level, the

[3] The Federal Assembly elects the seven-member Swiss government, the Federal Council. Each Council member heads a federal department.

[4] For example, Division for Spatial Development (*Abteilung für Raumentwicklung, Kanton Aargau*), Office for Spatial Development (*Amt für Raumentwicklung, Kanton Zürich*), Office for Urbanism (*Office de l'urbanisme, Canton de Genève*).

[5] The principle states that every decision should be taken at the lowest possible governmental level, influencing the planning sovereignty of the communes, and increasing the responsibility of the Confederation and the cantons by the allocation of planning tasks.

Structural Plan (*Richtplan*) is the main instrument for spatial planning and coordination between the three administrative planning levels, and provides development guidance for the next 20–25 years. Amendments to the Spatial Planning Act adopted in 2014 (RPG SR700, 1979) mandated strategic planning, obliging each canton to integrate a spatial planning strategy in its structure plan. Each structure plan is revised every ten years and is approved by the Federal Council. In some cantons (such as Aargau), two more instruments enhance the management of regional and intercommunal planning issues: cantonal land use plans[6] (*kantonale Nutzungspläne*) and regional sectoral plans (*regionale Sachpläne*). The first is binding on landowners and enacted by the executive or legislature council (Füeg, 2016). The second is binding on communes and approved by the executive council (BauG Aargau 713.100, 1993). At the local level, the communes regulate spatial and urban development through the instruments of land use plans (*Bauzonenplan*) and building regulations (*Bau- und Nutzungsordnung – BNO*), which define building zones corresponding to the expected needs for the next 15 years (RPG, Art. 15). The zoning plan is binding on landowners and approved by each canton (RPG, Art. 26). Special land use plans (*Sondernutzungspläne*) define the development of specific land parcels and are binding on landowners. The simplified scheme (Fig. 4) outlines the main planning bodies at different territorial levels, the key documents and their legal standing, and the core principle ingrained in any planning activity.

Aimed at better coordination of spatial development, the 'countercurrent principle' (*Gegenstromprinzip*) (RPG, Art. 2, Art. 26) assumes that planning activities at the local, cantonal, and federal levels mutually influence each other. Spatial development at the local and cantonal levels is to be aligned with the requirements of the entire territory of the federal state and vice versa. Furthermore, participation happens vertically and horizontally in public consultations and information events (such as participation by the cantons in drafting federal law, public consultations for the approval of formal instruments, etc.). A prior weighing of interests happens mainly at the federal and cantonal levels and is decisive, in order to avoid further conflicts during the owner binding processes as well as to reduce inefficiency of the formal planning instruments (Blind and Perregaux, 2020).

4.3. Planning proactively beyond the administrative and regulatory borders: informal instruments

In addition to a strategic approach incorporated into the legally binding instruments, their regulatory capacity reaches a limitation in planning tasks that require cross-border and dynamic cooperation (Kiessling, Pütz, 2020). For instance, the revision of the cantonal structure plans every ten years or a revision of the building zones in communal land use plans follow inflexible and time-demanding processes (Füeg, 2016: 101), whilst the public consultations on formal plan revisions address predefined planning tasks in administratively defined spatial units. The value of functional spaces has been noticed since the 1990s, especially in the light of the economic transformation of territories (Füeg, 2016). Consequently, the scope of spatial planning has shifted from an administrative-oriented approach to a task-oriented one that inlcludes proposing interorganisational coordination of planning tasks (Gerber, 2016). The Confederation has moved away from its previous asymmetrical regional policy (which included the promotion of mountain regions) to a comprehensive regional economic policy that encompasses centres, agglomerations, metropolitan areas, and border regions. The Tripartite Agglomeration Conference has also been introduced as a novel tool for the Confederation to simultaneously cooperate with cantons, cities, and communes in addressing their unique spatial challenges (Frey, 2002:18).

Recently, intersectoral (interdisciplinary) and intergovernmental cooperation has been observed between the communes as a tool for the efficient fulfilment of their planning tasks, supported by financial incentives, such as Agglomeration Programmes (Füeg, 2016). In this respect, some cantons (such as Aargau) have even adopted the term 'functional spaces' in their structure plans or integrated the term 'governance' into supporting documents, such as the Planning Guide (Canton of Aargau, 2017), revealing a continuous effort for intergovernmental collaboration. However, a legally binding definition of these terms is missing, and they are not incorporated into formal documents. One deficiency of regional planning policies, which is due to the absence of 'region' as an intermediate level in the administrative structure, means communes and other actors share responsibility for functional spaces only on a voluntary basis (Lendi, 2018).

Being supplementary to formal planning, informal planning instruments and procedures permit proactive planning and improve governance of spatial development between the communal and cantonal levels. Prior to any planning revisions, Regional Development Concepts (*Regionale Entwicklungskonzepte*) or City and Commune Development Concepts (*Stadt- und Gemeindeentwicklungskonzepte*) formulate a strategic vision for spatial and urban development of the respective areas. Their binding status is only based on the 'self-binding' participation of the authorities. Informal non-binding instruments, such as competitions and expert-, dialogue-oriented, and cooperation procedures, enhance flexibility and transparency in decision-making and increase the inclusiveness of planning for key actors (public and private sector) and the public. These non-binding arrangements re based on the concurrence of ideas for developing problem- or potential-oriented solutions and delivering alternative scenarios for multifunctional concepts. In general, informal planning aims to achieve public consensus, providing self-organising actor networks based on role differentiations and ad hoc structures.

5. Case study: the Sisslerfeld area

After brief outlining history and the current challenges in the Sisslerfeld area, the remainder of the section provides a detailed overview of the various phases involved to the test planning procedure: its conception and elaboration, its implementation, and, finally, its impact on the strategic and regulatory formal planning procedures and instruments.

5.1. The Sisslerfeld area development: a brief history and current challenges

In the Canton Aargau, the largest land reserve of undeveloped industrial and business zones (comprising some 85 ha) is located in the Sisslerfeld area on the Swiss-German border along the Rhine River and spans the German city of Bad-Säckingen (with around 17,000 inhabitants) and four Swiss communes: Stein, Sisseln, Münchwilen, and Eiken – with the overall population of 7200. The 2010 Cantonal Structural Plan (Canton of Aargau, 2010) defined Sisslerfeld (Fig. 5) as a key development area of cantonal importance (*Entwicklungschwerpunkte*), thus setting the formal basis for further planning for the area.

The discussion about the future of the Sisslerfeld area began as early as 1988 with an initiative of the Canton of Aargau to develop an overall concept for the development of the industrial area in collaboration with the five communes (Eiken, Stein, Sisseln, Münchwilen, and Kaisten) and the Fricktal Regional Planning Association (RePla). The process, guided by an interdisciplinary working group of representatives from the cantonal departments, a chemical laboratory, the RePla, and the communes, and experts from a private spatial planning office, resulted in an integrated spatial concept (including land uses, infrastructure and transport, environment, etc.) (Bachmann, 1988). Nevertheless, due to the absence of a broader strategic direction for the future development and management of the area, the results were not implemented. In 2007, the four communes supported by the RePla and the cantonal authorities

[6] The legislation of the Cantonal Land Use Plans is different in each canton.

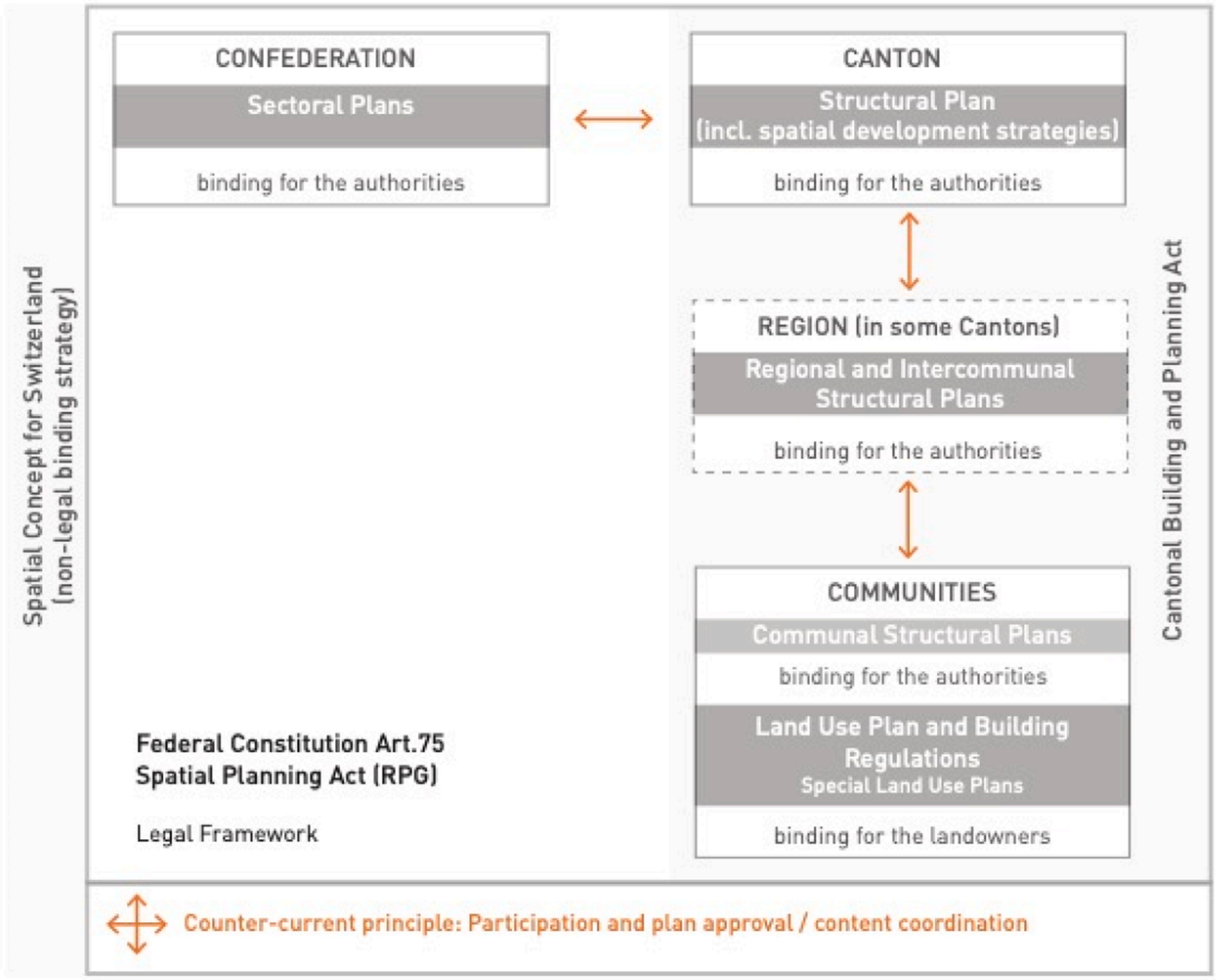

Fig. 4. Swiss spatial planning system.
Source: Authors based on multiple sources.

initiated the idea of the Sisslerfeld development again, debating through several meetings until 2011 and resulting in a spatial concept with a land use plan, a joint agreement on land use regulations, a transport report, and the inter-communal land use plan requirements for mobility management. In 2012, the Sisslerfeld project was incorporated into Hightech-Aargau, the cantonal promotion and development programme (2009–2018), aimed at strengthening the sectors of economy, science and education, followed by an economic study (2013) and a mobility plan (2015). However, due to the massive credit cuts, the Legislature Council of the Canton Aargau rejected the Hightech-Aargau programme in 2017, suspending all the existing plans. In addition, collaboration issues also emerged during that phase, including the limited involvement and influence of the RePla and the concerns by the communes regarding the potential loss of their autonomy in the decision-making process (Fact Sheets, 2010, 2011).

5.2. *The joint action plan for the Sisslerfeld area*

In 2018, the Department of Spatial Development of the Canton Aargau decided to apply the informal method of test planning as a preliminary and supplementary phase to the phase of formal plan making. Both phases compose the process of the so-called joint action plan making for the Sisslerfeld area. The main idea behind introducing informal tools was to find out how to ensure the plan is attractive to potential investors and how the envisaged development can be feasibly constructed as part of Sisslerfeld's future development (2040 +) (Gerber and Van Puyenbroeck, 2021). In contrast to the previous, more streamlined but less innovative planning proposals including the discussion about alternative scenarios of the area development were necessary in order to simultaneously handle all the planning issues, deliver suitable building plots for the market, and present the risks of an uncontrolled development. Initially, the initiative faced an environment of mistrust due to the previous backdrop of cantonal support. However, the political and financial engagement of the canton reversed the situation and made its cooperation with the communes and the Regional Planning Association (Fricktal RePla) possible.

The overall idea for the future of the Sisslerfeld area ensured the basis for an open and transparent dialogue by anchoring the results of the test planning process (TPP) in formal planning instruments through the following phases (Fig. 6): informal phase – preparation and conduction of the TPP; formal phase – creation of the Regional Sectoral Plan (binding for authorities); preparation of regulations (binding for landowners); and implementation. These phases were envisioned to create an environment suitable for substantial knowledge transfer and trust

Fig. 5. Aerial view of the Sisslerfeld area.
Source: Gerry Thönen.

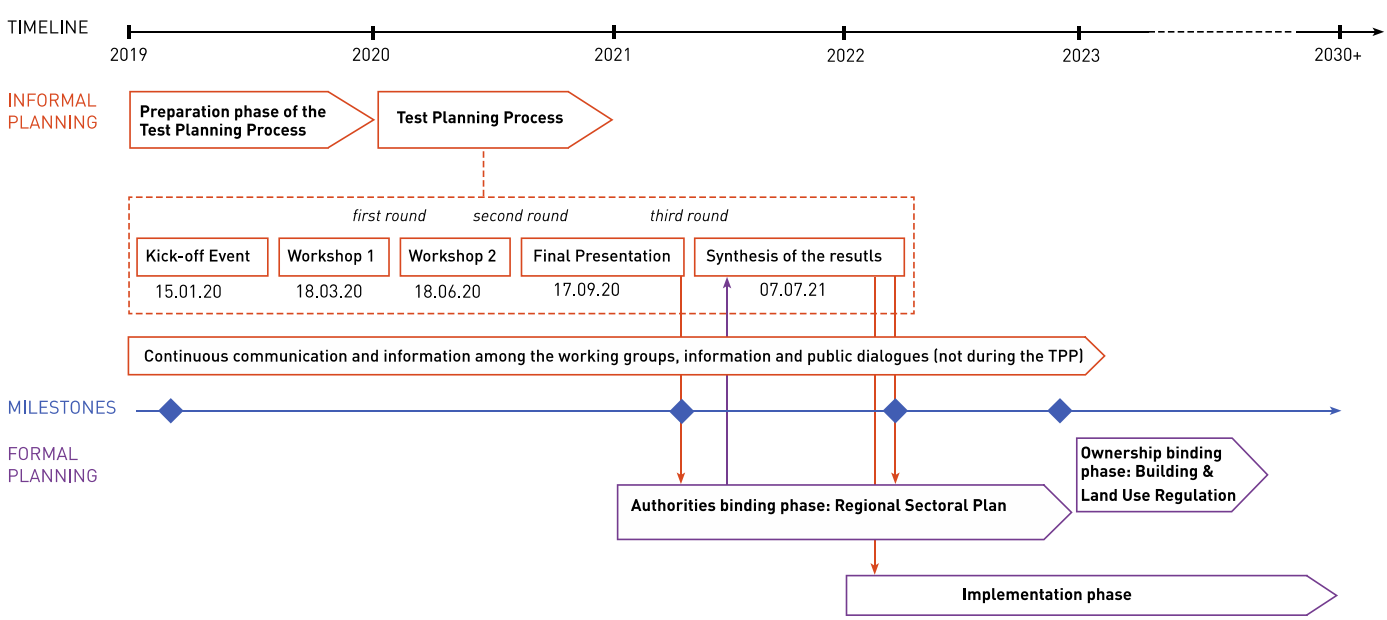

Fig. 6. Timeline of the Sisslerfeld project.
Source: Authors.

building among all the involved actors.

The TPP comprised various stages – initiation of the process, preliminary assessment of the problem at hand, interim solutions, joint discussion of the development proposals, synthesis, and monitoring and feedback – which, together with the preparatory phase, took one and half years. Its ad hoc organisational structure at both strategic and operational levels is illustrated in Fig. 7. At the strategic level, the project was coordinated by cantonal representatives, four communes, and the Fricktal RePla, in collaboration with the commune of Bad Säckingen and the Regional Planning Association Hochrein-Bodensee.

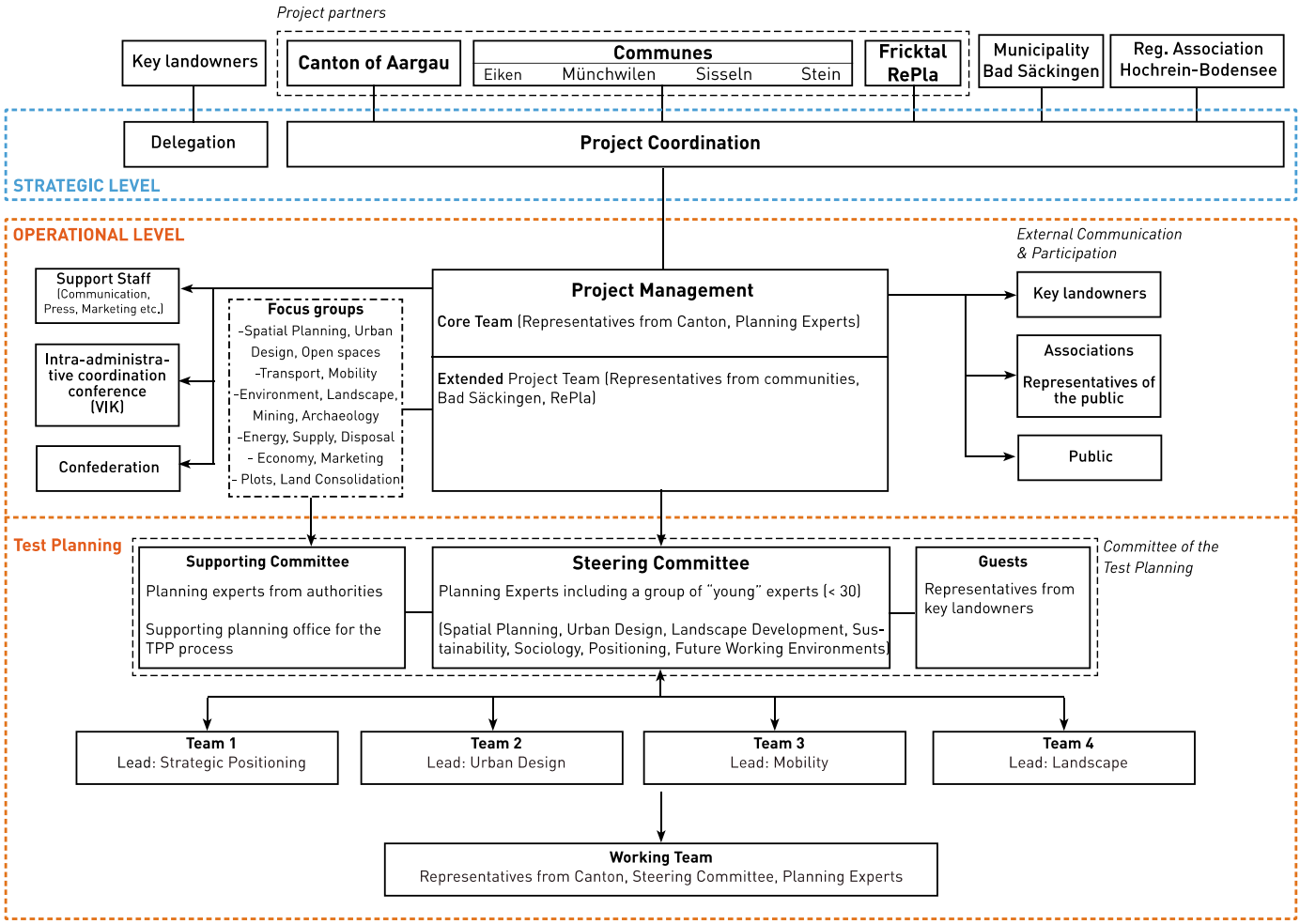

Fig. 7. The organisational structure behind the Sisslerfeld project.
Source: Authors.

At the same level, a delegation of the landowners (including Novartis, Sygenta, DSM, and ERNE) was responsible for communicating the future plans and requirements of the companies. The stakeholders at this level were in charge of providing the general vision for the development of the area, also acknowledging the current legal and regulatory framework (e.g., the currently valid spatial plans and strategies) and defining the financial window for conducting TPP. At the operational level, the project was managed by a core project team, i.e., experts from the federal departments (Department for Spatial Development (ARE), Department for Transport (AVK), and Department for Promotion Services) and cantonal planning experts, in coordination with an extended team (planning experts from the communes, the city of Bad Säckingen, and the RePla). Such multidisciplinary team of experts from various administrative bodies (federal, cantonal, communal) had the central role: to be in direct communication with both private and civil sector (landowners and the general public), higher-tier government and expert bodies (e.g., the internal administrative conference of the Canton of Aargau and the Swiss Confederation), and inform the Steering Committee as a key management body in the TPP itself. The following subsections provide more details on the nature of TPP and its effect on the phase of creating the formal planning instruments (Regional Sectoral Plan and ownership-binding planning regulations).

5.2.1. The preparation phase of the test planning process (2019–2020)

The main preliminary steps in the TPP were a forum with the public, a workshop with the key landowners, and internal coordination meetings between the project coordination and management teams to agree upon the TPP guidelines. During the forum with the public in June 2019, the local population and the communes shared their fears (such as heavy traffic) and wishes (for instance, more cycling connections) with the planning experts, articulating the opportunities and challenges on a variety of topics (including land use, landscape, transport, etc.) related to the future development of the area (Gerber et al., 2021). The workshop with the key landowners (ca. 30 representatives of large companies) in July 2019 for the first time provided an opportunity for constructive discussion regarding various development topics (e.g., goals of the area development, including a stepwise approach, communication, and transport). Some stakeholders were cautious, as there was still no concrete development plan, so it was difficult to assess the nature of the future development of the area and its effect on the companies. To promote a coordinated development, bilateral discussions with the landowners were agreed to be introduced as a regular practice during TPP as a control instrument. Moreover, landowners were recognised as one of the three core groups of the so-called Committee of Test Planning (Fig. 7). Feedback from both events – with the public and landowners – was integrated into the TPP guidelines, while the preparatory phase ended with an agreement between all the participants on the primary organisational structure and division of roles for the future TPP.

5.2.2. Test planning process (2020–2021)

The Steering Committee, as the core management body in charge of conducting TPP, was composed as an interdisciplinary team (spatial planners, transport engineers, landscape architects, etc.) with the

experts from private planning offices, with a distinct innovation: ARE proposed to incorporate a group of young experts under 30 who could contribute fresh and innovative ideas. The idea of including the private planning offices was to "secure independency in developing the vision" (cantonal planner 2, July 2022). However, not to overcome the "local knowledge and experience of the communal planning experts" (cantonal planner 2, July 2022), the Supporting Committee (consisting of planning experts from different departments of the cantonal authority, the communes, and the RePla) was created to be in charge of a direct exchange with the Steering Committee on different planning issues. The last important component in TPP included the four expert teams consisting of private planning offices' representatives specialised in different disciplines, with each team focusing on a specific field (such as strategic planning, urban design, mobility, and landscape). Aimed at enhancing the interdisciplinary approach, these teams were selected by the TPP project management team.

The main task of the invited expert teams was to provide a development vision for the Sisslerfeld area, with each team highlighting the specific development aspects. The results were debated in two interim rounds between each team and two committees (Steering and Support Committee). In contrast, the final, in-person presentation of each team's development visions was organised with the cantonal and communal representatives, RePla, and critical landowners. The key findings of the team proposals pointed out various aspects: the landscape as a quality indicator, the coordination between settlement and public transport development (for instance, two of the four teams proposed a new direct connection of Sisslerfeld with Bad Säckingen), new urban centralities, and opportunities in a variety of industries/sectors (life sciences), etc. This debate also provided argumentation on counterproductive elements, such as the new motorway crossing over the Rhine. The final synthesis of the teams' results, which took almost one year (since September 2020 until July 2021), was the responsibility of a smaller working team composed of the representatives from the canton, the project management team, and the Steering and Supporting Committees. Several workshops were needed to achieve a concrete and feasible plan fulfilling both political and expert norms of the participants involved. The joint development vision was presented in the form of the synthesis plan based on several guidelines for an integrated vision for Sisslerfeld 2040 + , including landscape scaffolding, unique positioning, anchor points and hubs, outstanding location and international appeal for innovative production and research, especially in the life sciences sector, well-connected areas, improved transport network and services, enhancement measures in the villages, cooperation, dialogue, and area management (Gerber and Van Puyenbroeck, 2021). The synthesised schematic vision of the future development of the Sisslerfeld area is given in Fig. 8(a more detailed version is provided in the Appendix).

During discussions of the synthesis plan, parallel information meetings for the main directions of the synthesis plan between the working team and the rest of the project partners triggered a debate on the plan's feasibility. For example, the Stein Communal Council was critical about

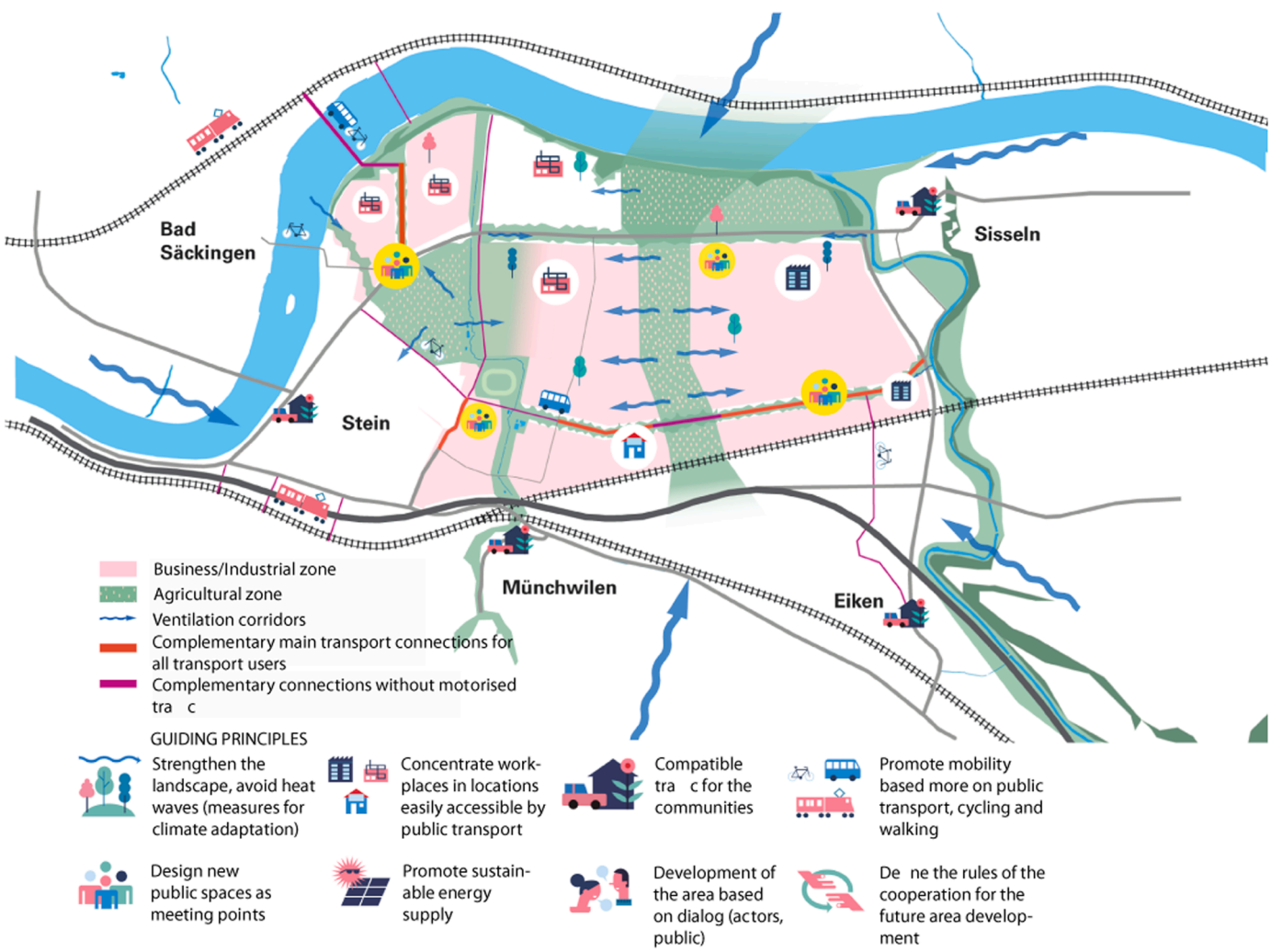

Fig. 8. The guiding principles for the development of the Sisslerfeld area.
Source: Authors based on the results of the test planning process.

the contributions of the TPP results, since the commune's growth was not set as a goal. Additionally, there was strong opposition to creating a central park area in the location of agricultural fields. As the Stein Commune played an essential role in the further development of the area, the remaining project partners acknowledged all the relevant concerns and adjusted the synthesis plan accordingly to allow a broader land use flexibility that could be defined stepwise in responding to future needs. Further concerns, e.g., from the Commune of Münchwilen, were raised around how a small-size commune could control such a massive scale of the development vision and secure infrastructure construction. This pointed to the need for "additional financial support and rebalance of the cantonal budget" (cantonal planner 1, June 2022) to encourage the active commitment of the communes to future development.

Another crucial topic that required three-level planning coordination (among the federal, cantonal and communal authorities) was transport development: the Confederation was concerned with the cross-border regional traffic across the Rhine River; the Canton Aargau was in charge of the overall transport concept of the Region Fricktal; the communes focused on specific mobility measures in the Sisslerfeld area. The federal bodies found the allies in both German politicians and experts: the mayor of the City of Bad Säckingen and the Regional Association of Hochrein-Bodensee highlighted the importance of securing the cross-border connections between the Sisslerfeld area and Germany. The four communes, however, focused more on the solutions for local transport issues, such as the connection of the communes to the railway stations, the motorised traffic load and the allocation of logistics infrastructure. The desired coordination among the three levels of mobility measures was achieved through the collaborative setting of the guidelines on mobility development in the TPP and through bilateral discussions with the communes.

The cantonal authorities further pointed out that the proposals by four expert teams showed an approach to possible development while more concrete proposals and the appropriate organisation structure were to be negotiated with the communes to find a win-win solution. Regarding the organisation structure, proposals for a fusion of the four communes or establishing a joint communal association were rejected by the four communes, as they preferred an ad hoc organisation. Challenges for handling the expectations of the communes was their lack of experience and expertise with a TPP. On the contrary, communication with the key landowners offered more pragmatic and streamlined feedback, for instance, regarding land acquisition needed for future development. Despite the initial opposition, a landowner in the Münchwilen Commune, through dialogue with cantonal and communal authorities, finally acknowledged the potential for the area development and agreed on possible compensation measures (e.g., land exchange).

As part of the TPP, a communication and participation concept for the public was developed to inform and mobilise the local residents for future development of Sisslerfeld after the TPP results were announced. The communication concept comprised the announcements of the results on a website, a brochure focusing on the main guidelines based on the TPP's results, media releases for the participatory processes with residents, and videos of discussions with the communes. An online public consultation also allowed the public to express their opinions on the guidelines for future development. The desire to include the local population led to the creation of a public advisory group (see Fig. 7, "Representatives of the public") with approximately four residents from each commune. Additional public consultations were held through four forums in each commune in the autumn of 2021.

5.2.3. *Towards formal planning: the Regional Sectoral Plan (2021–2023)*

During the preparation and the implementation of the TPP, a key question concerned how the results could be anchored to a formal planning instrument that was suitable for intercommunal planning tasks. All the project partners agreed to implement a Regional Sectoral Plan (RSP). One major issue was to decide which organisational structure was better suited to binding the communes to develop the plan. The commune presidents were critical of an initial discussion on this common organisation, due to the tight collaboration foreseen among the communal representatives and with cantonal experts, which would possibly diminish their local autonomy. However, the awareness of "giving little power to gain more benefits" (cantonal planner 2, July 2022) resulted in the jointly adopted voluntary organisational structure, as depicted in Fig. 9. The core team in charge of the RSP preparation was composed by different working groups (Working Groups RSP) engaged to 1) coordinate the common project, i.e., the preparation of the RSP, and 2) prepare the revision of the Cantonal Structure Plan. The Working Groups included the cantonal units (e.g., ARE – Unit for Spatial Planning, AVK – Unit of Transport), the RePla and representatives of the communes. Since the RSP was binding on the communes, the role of the cantonal authorities in this phase remained advisory.

5.2.4. *Ownership binding and implementation phases (2022–2030 +)*

The phase of the process resulting in the decisions binding on landowners seems to follow the same concept of working groups as applied in the process of the revision of land use plans and the special land use plans, as well as for the parcelling and land consolidation, whilst another group will work on the management of the area. Moreover, the TPP results permit the area to the south of the DSM to be developed, including new uses such as logistic facilities or a new communal and industrial fire service and rescue centre, whilst also triggering the interest of the local companies to make additional investments there. The future planning process for additional concrete projects is still to be decided, whilst another challenge concerns the cost distribution of projects and funding options, since, for instance, the Basel Agglomeration Programme includes only two of the four communes. The implementation phase for cantonal projects based on the existing Structure Plan could begin in 2022 or, for communal projects based on the RSP, in 2023. Further projects are to be implemented after the revision of the land use plans in a time frame of almost next ten years.

6. Discussion: TPP as a tool for advancement of regional governance in Switzerland?

The action plan for Sisslerfeld provided an ad hoc organisational structure combining both informal and formal elements for a variety of government bodies, private stakeholders, and the public. To understand the nature of the informal phase (TPP), i.e., to identify the extent to which the TPP in Sisslerfeld was inspired by the essential features of action-oriented planning (Scholl, 2017; Papamichail, 2019), and to assess the influence of TPP on the formal planning process, against the premises of regional governance as previously introduced (Savitch and Vogel, 2000; Fürst, 2003; Benz and Kilper, 2018), below is a critical overview of the Sisslerfeld case revolving around different variables as analysed in the previous sections.

Observed through the lens of the action planning approach, the Sisslerfeld TPP fulfilled several criteria needed for a structured, transparent and solution-oriented planning procedure. Some shortcomings are noted, as well.

- The organisation and conduct of the TPP were, to a great extent, done *inclusively* and *transparently*, considering various groups of stakeholders during the process and involving these since the initial phase (e.g., the TPP kick-off event gathered a variety of actors with conflicting interests and visions). However, some groups experienced greater engagement and, hence, greater responsibility than others. For example, the core project management team at the operational scale was composed of politicians and experts solely from the cantonal bodies. Such a constellation may be seen as an act of imposing priorities on other actors, particularly the communal authorities, which were engaged as part of the extended project team. Landowners secured the representation of their interests as being

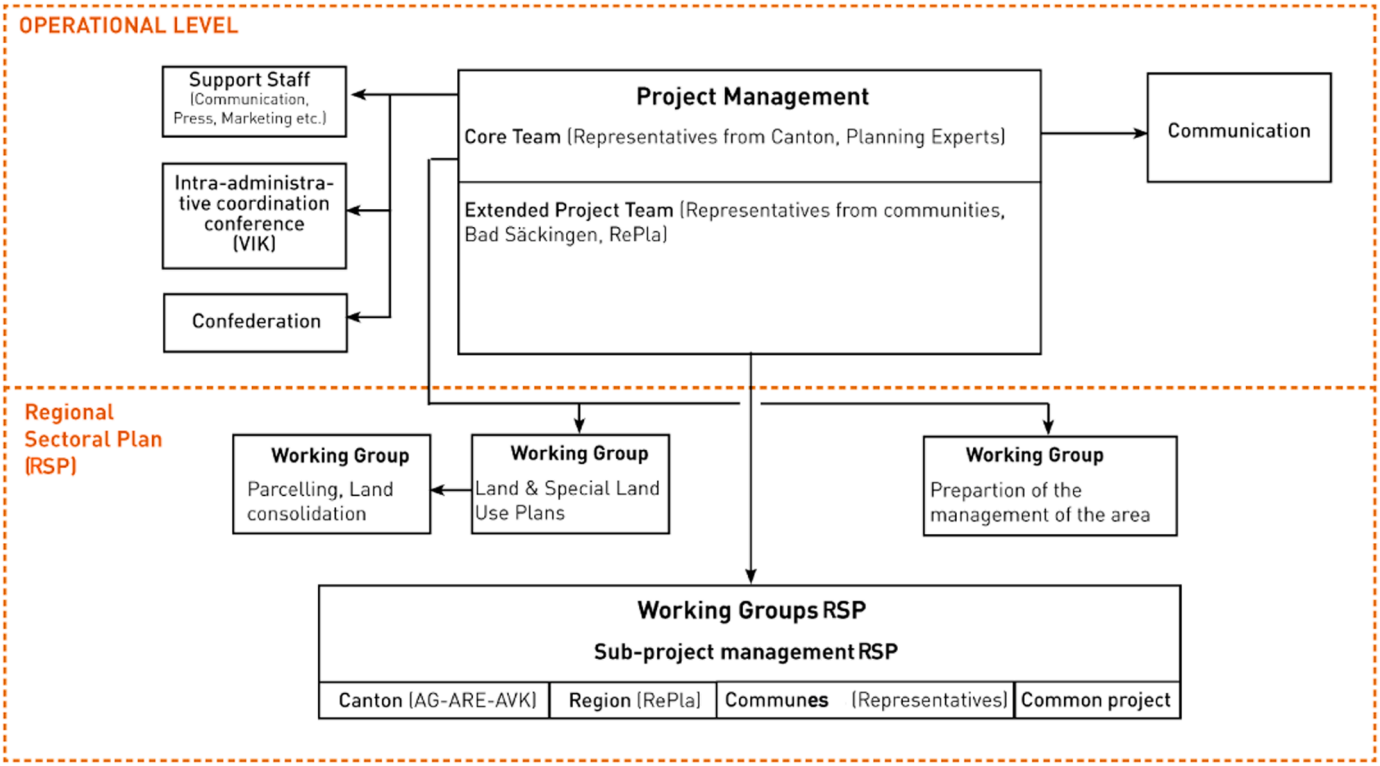

Fig. 9. The organisational structure for drafting the Regional Sectoral Plan.
Source: Authors.

part of one of the three core groups of the Committee of Test Planning (Fig. 7). This starkly differed from the general public's position: the residents were included through forums before the TPP started and at the end, when the synthesis development plan was publicly released, marking the finalisation of the TPP.

- TPP in Sisslerfeld was organised as an *iterative process* through multiple rounds of bilateral and group discussions among various stakeholders, mainly the TPP teams and Steering and Supporting Committees. The perseverance of the project partners to keep such an approach was noted even in exceptional circumstances when interim presentations were held online during the peak of Covid-19.
- *Negotiation oriented towards consensus-building* was ingrained in the essence of the TPP as a collaborative process. However, the issues such as (in)equity of stakeholders and their integrity can be traced in certain phases of the process. For example, although it was intended to compose an independent Steering Committee by involving only the planners from the private offices and not the cantonal or communal authorities, the possible influence of landowners on the development visions seemed not to have been initially considered. Nevertheless, the Supporting Committee (composed of both cantonal and communal authorities), as a counterpart to the Steering Committee (expert body), could be regarded as a control mechanism for possible power imposition. The power imbalance was most evident between the landowners, who could influence the preliminary development proposals by participating in the critical TPP workshops, and the public, who got informed about the TPP results just after the adoption of the synthesis plan.
- The Sisslerfeld TPP, through its multi-layered structure of strategic and operational levels, focused on achieving a *comprehensive solution*, combined both the reactive approach (addressing the current problems detected at the communal territorial level) and the proactive approach (focused on the long-term development visions aimed at releasing the potential of the area in the broader context, e.g., cross-border region).
- As the essence of any TPP lies in its *well-structured actor-networks*, the case of Sisslerfeld proved a successful example in this regard. The numerous and fragmented network of various stakeholders over a sizeable territorial scale covering various authorities even across the Swiss border was successfully managed due to precise and clear role differentiation. It is exactly such a transparent structure of the organisational network that convinced, sometimes reluctant, parties to pursue the common goal. For example, traditionally unwilling to participate in the intercommunal networks, the four communal authorities decided to actively contribute to the joint solution as their positions were secured in the crucial bodies: at the TPP operational level, the communal representatives were part of the extended management team, while at the TPP strategic level, they composed the project coordination team.

Looking through the lens of the regional governance approach, i.e., explaining the impact of the TPP on formulating the formal planning instruments, the following conclusions are drawn:

- The joint action plan – encompassing both the informal TPP and the formal planning phase – established a *strategic, interdependent, and flexible coordination process focusing on problem-solving* where the TPP's results were anchored into existing formal planning instruments in anticipation of the implementation phase. The preparation of the TPP and the TPP itself supported the identification of problems and potentials and delivered robust guidelines on substantial planning issues. For instance, they resulted in a feasible and coherent strategic plan for 2040 + focusing on land use, transportation, landscape, energy, and socioeconomic development, and quick wins of short-term implementation projects in specific areas (such as to the south of the DSM) and also ensured sustainable development for the adjacent communes. In addition, influenced by the nature of TPP, the transparent communication, mainly between the communal authorities and cantonal politicians and experts, was a

tool to ensure smooth cooperation of various interests and coordination of existing plans also in the phase of the TPP's results implementation.

- Similarly to the TPP's extensive cooperation among various stakeholders with precisely defined roles, the formal planning phase of the Sisslerfeld project also provided *interorganisational networks based on functional differentiation* (between government levels and sectors). Through a self-organising and self-governing form, the networks encouraged communal and cantonal representatives, the regional planning associations, and the key landowners to coordinate their actions in reaching a common solution. Despite some critical arguments addressing mainly the communal autonomy, the inclusive representation of all government levels illustrated how intergovernmental networks transform existing relationships or create new ones at the strategic level. For example, even though the communes were initially opposed to the cantonal initiative, they ultimately agreed to participate as partners on the project. The group of project partners also ensured coordination not only between the Canton and the communes, but also between the Fricktal RePla and the Hochrein-Bodensee regional association and, for the first time, the City of Bad Säckingen. Moreover, a delegation of key landowners communicated their wishes and future plans, so bridging the gap between the private and the public sector. At the operational level, plan-making through common meetings and events brought planning experts and representatives of the communal councils, representatives of the cantons, the two regional planning associations and the City of Bad Säckingen together to systematically discuss the planning content. For instance, planning experts from those authorities joined the extended project management team during the whole project (as they did with the Supporting Committee during the TPP). Networking between different governmental tiers at both the strategic and the operational level ensured a better transfer of knowledge and harmonised existing and emerging conflicting interests, paving the way to proceed with implementation plans.
- The joint action plan provided *multidisciplinary (social and organisational) networks focusing on trust-based communication relationships.* Although the roles of different stakeholders were not equally important in all the TPP phases, the interests, voices and needs of all have been heard. Securing such an approach was particularly important for residents, which had limited access to the flow of the TPP and its interim results. Hence, the legacy of the TPP in establishing the public advisory group (composed of at least four residents of each commune) was considered a spillover to the formal planning phase as it reinforced a long-term civic mobilisation and diminished misunderstandings between the citizens and other parties.
- The project included a *mix of steering modes*, hence improving the efficiency of dealing with conflicts through combining regulation, incentives, competition, and negotiation mechanisms. Informal planning process (TPP) offered more room for manoeuvring complex tasks through a competition of ideas later supported by binding plans (such as the RSP). However, even the joint responsibility of the communes through the creation of the RSP does not ensure the transfer of the TPP results, since RSP is a commune binding instrument which does not exceed the jurisdiction of the communes in land use planning. The successful distribution and implementation of projects through cooperation modes is based on the voluntary participation of authorities, which necessitates additional funding incentives and solutions at the regional level (such as the extension of the Basel Agglomeration Programme). Communes agreed on the process, but agreement on the content remains elusive.

When summarising the effects of the informal planning tools on the practice of collaborative efforts in formal plan-making at the regional scale, the early identified possible obstacles for the effective implementation of the action plan – mainly addressing the autonomy of the local authorities – seem to prevail as a bottleneck towards effective regional spatial governance. Firstly, the communes perceived the ideas and possibilities of development as final decisions and not as general guidelines for future development, making the TPP results as the basis for RSP not automatically accepted by the communes. Furthermore, representatives of the communes were intentionally excluded from the working group devoted to formulating the synthesis report due to their lack of expertise (e.g., lack of knowledge on the spatial planning issues or the unavailability of planning experts from the communes). Hence, including non-planning experts in phases that demand substantial planning expertise and time efficiency could have probably contributed to a greater acceptance content-wise, finally influencing the efficient and deliberative production of plans. As a remedy to such an obstacle, the possible inclusion of experts in cognate fields to spatial planning could be used.

Secondly, different governmental tiers do not share the same perception of integrated development in concrete socio-spatial settings. The desired autonomy of communes, their limited political horizon (four to five years), or their will not to enter into ambitious developments are often critical for the realisation and implementation of strategic plans when it comes to land use planning tasks. Compared to other spatial development projects, Sisslerfeld also presented two specific issues. There was no single 'urgent' problem to solve, but, rather, the joint action plan focused on the development of a long-term vision to prevent the negative consequences of an uncontrolled future development. This demonstrated the challenge of developing the communes' potential for acting proactively. Moreover, Sisslerfeld was a large-scale project, in contrast to the small-scale developments of the surrounding communes. However, a stable socioeconomic and administrative structure provided room for negotiations, together with coordinating role of the regional government to afford a long-term planning phase and experience new forms and methods of functional cooperation.

7. Conclusions

The Sisslerfeld project illustrates how responsibility shared between formal and informal planning bodies and instruments helped to organise various networks aimed at finding a common solution. The different phases re-opened room for discussion, allowed the sharing of multidisciplinary knowledge, and supported trust-building through ad-hoc organisation structures involving administrative planning bodies at different levels and various sectors (public, private and civil). The entire process highlighted the importance of a proactive planning approach, repositioning Sisslerfeld as a location of national and international importance in the field of life sciences. The results of the TPP offered a robust and concrete basis towards pursuing the regional plan-making phase, and, later on, the implementation phase, to, finally, achieve market and construction feasibility. Besides the positive aspects, the TPP revealed the challenge of how to gain experiential knowledge in planning issues from non-experts during demanding planning phases in terms of time efficiency and expertise: TPP is not a magic formula that ensures trust-based networks and an uncomplicated cooperation process (Papamichail, 2019), as building trust between communal and cantonal authorities takes time and depends on who takes the initiative, the extent to which communes' responsibilities are merged, and the shared interests and socioeconomic backgrounds, since communal autonomy varies by canton (Scholl, 2017). Moreover, it highlighted the difficulty and need for an additional process and time resources to engage the actors after an informal planning process to agree on the content (synthesis plan).

The influence of TPP as an informal planning method on both (regional) planning and governance is summarised as follows. Considering the organisational perspective and particularly the outcomes of invited teams responsible for providing development scenarios, collecting various inputs through each team's contribution to creating a joint vision seems to add an essential quality to the final developmental

proposal. Nevertheless, the quest for joint solutions is not that popular among the participating teams, as their solutions are not considered final but just an input provider to the synthesis solution, which lessens the authenticity of the original solution.

Looking through the lens of the planning process, despite the complex organisational network, precise roles assigned to each participant in the process, and highly structured process timewise, the TPP is still far from genuinely balanced and 'undistorted' collaboration among numerous stakeholders. Firstly, citizens stay only partially involved – at the beginning of the process (kick-off event) and then at the very end – when all the solutions have been determined and discussed with other stakeholders (e.g., landowners). The exclusion of experiential knowledge makes the entire process belong to the domain of declarative participation, while the dominant role of planning experts, compared to other professionals, resembles a robust technocratic approach aligned to the post-political narrative (Swyngedouw, 2011). Secondly, communal authorities do not attend to the trends of transboundary cooperation and territorial cohesion, as ingrained into European spatial policies (EU Ministers, 2020), hence, the decisive role of the commune prevails: communes are not willing to sacrifice their autonomy and become part of the large regional entity, though such a supralocal organisation can yield numerous benefits. Finally, TPP has been dominated by the cantonal inputs. In other words, cantons play a key role – they initiate the process and provide financial and expert resources for its conduct. Although this may work for some (rich) cantonal authorities, keeping such a dominant position appears challenging within the pro-development framework that enters the Swiss spatial planning playing field influenced by global factors (Solly, 2018). With the growing market forces in the spatial development domain, the repositioning of the public bodies to give away their dominant position is expected, as already perceived in other contemporary Swiss examples of spatial development not necessarily relying upon the TPP (Perić et al., 2023).

Finally, related to the nature of the TPP and the resources invested in bringing about the desired results, the TPP is a demanding procedure both timewise and moneywise – not all the cantons can afford such a procedure to trigger the most suitable vision for its future development. In addition, the great expert resources and engagement of a large number of participants over more extended periods contribute to the complexity of the procedure, which can be applied only in socio-spatial settings with advanced professional outlooks and stable political and economic contexts. In countries with a culture of cooperation and decentralised decision-making (such as Germany), different modes of regional governance can support problem-solving. In countries where planning is constrained by bureaucracy and political clientelism (for instance, Greece), action-oriented planning approaches combining formal and informal elements are exceptional (Papamichail and Perić, 2018). Ultimately, as a dynamic pattern of formal and informal elements, regional governance can influence and shift the mentality of planners and politicians in plan-making (Loepfe and Eisinger, 2016). Changing the mentality and, in turn, the planning culture, is a time- and resource-intensive process, requiring a socioeconomic and politically stable environment. Support for governance networks involving formal and informal planning strategies requires institutional capacity of the formal planning framework as well as the external relations of the institutions involved. A further empirical assessment in concrete contexts can offer deeper insight for practitioners to deal with complex planning tasks in particular regions.

CRediT authorship contribution statement

Papamichail Theodora: Formal analysis, Investigation, Data curation, Writing – Original Draft, Visualization. **Peric Ana:** Conceptualization, Methodology, Writing – Review & Editing.

Declaration of Competing Interest

No conflict of interest.

Data Availability

The authors do not have permission to share data.

Appendix

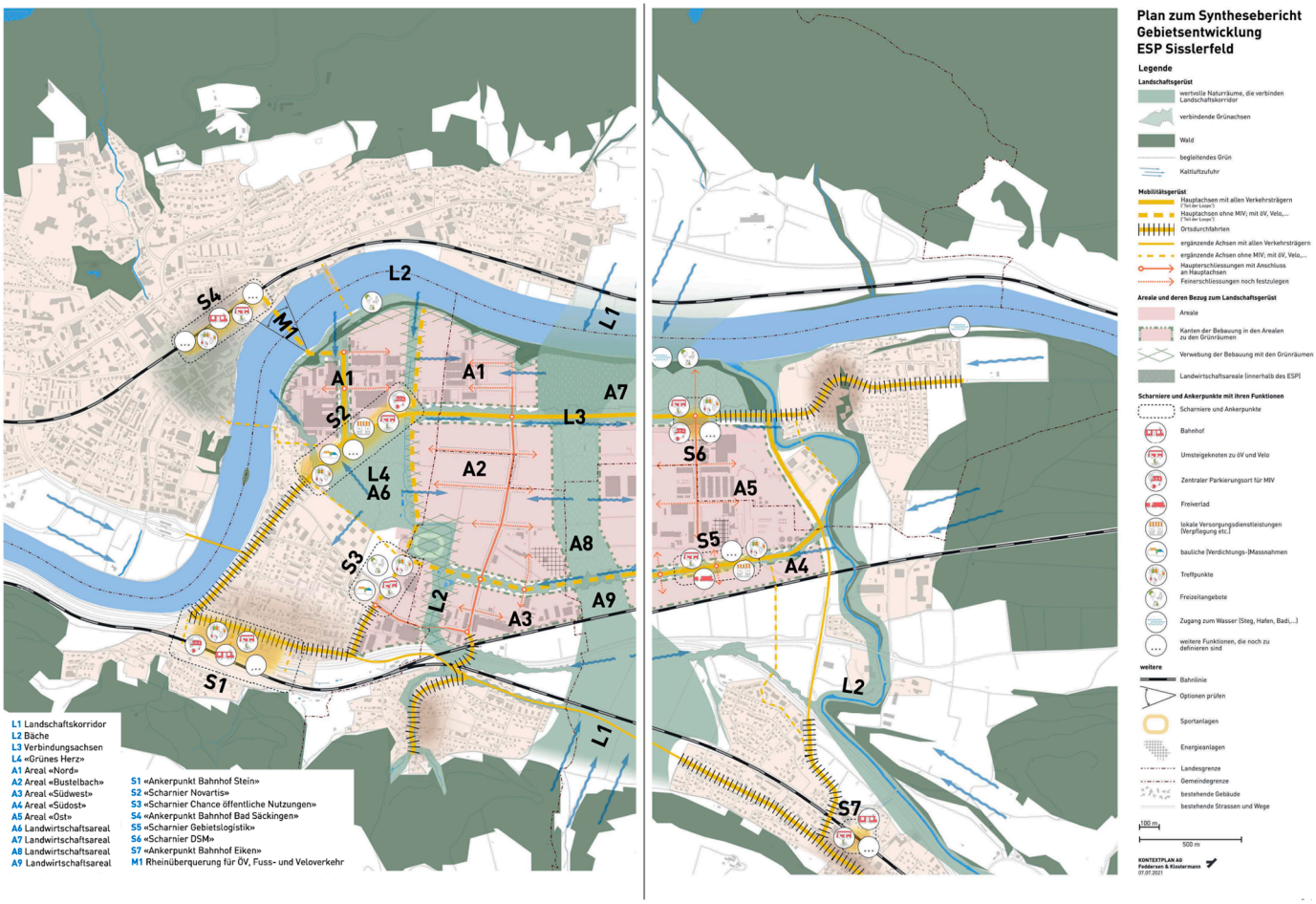

Fig. A1Development vision for the Sisslerfeld, resulting from the synthesis report. Source: Kontextplan AG.

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