

The Influence of Spatial and Temporal Dimensions on the Success of Participation in Czech-Bavarian Interreg Projects

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ABSTRACT

The aims of Interreg projects include strengthening cross-border cooperation between regions in Europe, contributing to sustainable regional development, facilitating knowledge exchange and innovation, and promoting social and cultural integration. Participation of citizens and key stakeholders plays a central role in this process. The article presents the results of an evaluation of participatory events in two Interreg projects in the Bavarian-Czech border region. The evaluation focuses primarily on the influence of the spatial and temporal dimensions of events taking place within funded Interreg projects. Our findings highlight the importance of tailoring participation event formats in Interreg projects to regional characteristics, including rural settings, cross-border dynamics, and current developments in citizen participation. The study concludes with recommendations for optimizing spatial and temporal parameters in participatory formats.

KEYWORDS

Interreg, participation, spatio-temporal dimension

1. Introduction

While the importance of public participation is widely accepted in European society, regardless of current political upheavals, the methods of its effective implementation leave room for discussion (Lovric & Lovric 2018). On the one hand, manuals for participation such as the ones by Nanz & Fritsche (2024) or Patze-Diordiychuk et al. (2017a & 2017b) are of great importance for practice, but often remain at the level of method description, while empirically grounded evaluations of participation outcomes remain limited. On the other hand, analytical approaches that aggregate participation formats, such as in Marzouki et al. (2017), are rare and often do not address the questions of how participation events can be designed to maximize engagement, recruitment success, and meaningful outcomes. Despite intensive efforts and goodwill to participate, the result is often not substantial. Consequently, a critical research gap remains in understanding which parameters influence the success of participation events and how this can be systematically assessed.

This study addresses this gap by examining the role of spatial and temporal organization in the success of participation events in regional research projects funded by Interreg – an EU funding scheme that seeks to foster (cross-border) regional cooperation. Specifically, the study seeks to answer the following research question:

How is the spatial and temporal organization of stakeholder events relevant for successful participation in Interreg projects?

By focusing on when and where participation takes place, as well as how events are structured in space and time, this research contributes to a more nuanced understanding of how participatory formats can be improved to achieve stronger engagement and more effective outcomes. We narrow this research gap regarding spatial and temporal dimensions by evaluating in a case study-based approach two Interreg projects in which a set of participation events is analyzed concerning its temporal and spatial dimensions and the success of the events. This approach is supported by Shirk et al. (2012), who suggest that irrespective of the research context, project results are influenced by (1) the degree of public participation in the research process and (2) the quality of public participation negotiated during the design of the project. Mapping the spatio-temporal dimensions of participatory practice involves understanding how different contexts influence the evaluation of participatory initiatives (Chouinard & Milley 2016). Key factors considered in this study include physical and virtual spaces, as well as temporal scheduling.

In the two Interreg projects presented, different forms of participation formats and events were implemented, which are self-critically evaluated. The formats used differ in their length, location, the extent of the region in which participation takes place or individual events are advertised, whether the events take place offline, online, or in hybrid form, and the method used to invite potential participants. Both research projects strongly focused on creating networks and cooperation among regional (cross-border) stakeholders and finding and bringing together an audience that has interest in the projects' topics. In addition, the goal of both projects was to collect information and geodata (Volunteered Geographic Information, VGI; Goodchild 2007) on the respective topics, which is why both projects also used people-centered approaches, which in turn are used for various participatory spatial planning processes (Hachmann et al. 2018; Flacke et al. 2025). Therefore, participation itself and the recruitment of participants in the presented projects are not considered for the purpose of joint decision-making. Instead, this study derives recommendations on how spatial and temporal dimensions should be optimized to improve participation in Interreg projects, through which project outcomes are optimized.

Due to the location of the two Interreg projects located in the Bavarian-Czech border region, our analysis specifically focuses on participation events in rural areas. While there is a need for research on participation and its effective design for valuable outputs, in general, the geographic and socio-cultural context of participation remains underexplored. As already mentioned, regional culture, available resources, and general participation of citizens are important drivers that are decisive in understanding

participation and its effectiveness. Although our two case studies work on a local and regional level, they also cover regions in both Germany and the Czech Republic. The participation events took place both uni- and bilaterally. The study areas of the two case studies are also interesting because both regions were politically separated for a long time and therefore different traditions of civic participation can be expected. In our case, there may also be barriers to participation created by the bilateral project region, even if the events take place unilaterally. This could be due to lack of awareness or cultural and social barriers, but also financial restrictions that could prevent participants from participating (Lengerer et al. 2022). Our case study approach focuses on two projects in the same study region along the southern Bavarian-Czech border, with the same regional factors, but with two different stakeholder groups and project topics. Thereby we can identify which participation events worked better or worse, according to different target groups and two different project topics. This comparative design allows us to identify how different target groups and thematic contexts influence participation success under similar spatial and temporal conditions.

2. Literature-Based Conceptual Framework

2.1 Related Research in the Czech-German Border Region

In general, research on cross-border cooperation in an EU and institutional context is well developed for the Czech-German border region (e.g. Bertram et al. 2023; Bloßfeldt 2023; Böhm 2023; Chilla and Lambracht 2023; Novotný 2025). The importance of explicitly communicating the needs of border regions in policy-making became especially evident during the COVID-19 pandemic and the related border closures. In this respect, the Czech-German border region was no exception (Böhm 2023). One of the central aims of Interreg funding is to foster cross-border cooperation through the involvement of regional stakeholders (Novotný 2025). Strengthening such cross-border cooperation can increase the visibility of border regions in policy-making processes (Böhm 2023), with the applied character of Interreg funding playing a crucial role in this regard (Chilla and Lambracht 2023).

While project ideas are typically developed directly within and for the border region, existing research also points to several critical aspects of the funding scheme. These include relatively rigid thematic priorities within individual funding periods and evaluation criteria that may be informal and dependent on the respective decision-making committees (Chilla and Lambracht 2023; Novotný 2025). Interreg has existed as a funding instrument since 1990, and the current funding period (2021–2027) is gradually coming to an end. Against this background, analyzing critical aspects of how projects are designed and implemented can contribute to improving the outcomes of future Interreg-funded projects. First insights into such challenges are already available for the Czech-German border region.

Recent literature highlights the need to restructure and update the Interreg framework in the Czech-German border region in order to address concerns raised by regional stakeholders (Novotný 2025). Similar to Novotný (2025), our study aims to contribute to improving the conditions for more successful Interreg project outcomes. However, while Novotný (2025) focuses on the overall orientation of the funding scheme, our study shifts the focus to funded and ongoing projects and examines how the spatial and temporal design and implementation of events within project can be improved.

2.2 Research on Evaluation of Interreg Projects

The evaluation of already funded Interreg projects has been researched in different ways. Knippschild & Cock (2017) analyzed aspects of conformance and performance in their study and state that it is not only important to evaluate whether the project objectives were met, but also whether a learning process took place during the project and among the project partners. Especially region-specific contexts should be taken into account when evaluating the success of a funded Interreg project.

Haarich et al. (2019) describe that evaluation of Interreg projects is difficult, because the definitions of impacts of the project results on the region vary. On the one side, there are “direct contributions

to socioeconomic change in the region”, on the other side there are “contributions to the building of relevant capacities in institutions” (Haarich et al. 2019, p.12). The authors further add that the lessons learned during the funding period they investigated are beneficial for the following funding period. The importance of the process of learning among actors within the project is also supported by earlier research by Thierstein et al. (1998). Interreg projects and the produced outcomes of those projects are “subject to extensive monitoring and evaluation processes”. However, project outputs and results are often hard to measure tangibly, therefore, a unified approach called “results orientation” was introduced in the funding period 2014–2020, the aim of which was to provide “measurable milestones and targets to ensure progress is made” (McMaster et al. 2019, p. 2–3).

Research on the evaluation of Interreg projects and ways to improve them has so far mainly focused on the project level rather than on individual events within projects. Evaluating different types of events, their outputs, and developing recommendations for how these events can be improved can therefore contribute to the existing literature outlined above. Since the participation of regional stakeholders is a key component of Interreg projects, successfully recruiting participants for events and achieving the intended project outputs are crucial.

2.3 Formats and Impacts of Participation

Traditionally, research on citizen participation has distinguished between various levels of involvement and the extent to which individuals can influence the development of programs or projects (e.g. Arnstein 1969; Wiedemann & Femers 1993; Pretty 1995), even if these are not used further in the empirical analysis. The primary objective of intensive public participation is to ensure that individuals take part in decision-making (Heller 1984). Participation occurs when individuals are affected by the outcomes of decisions and are granted the opportunity to influence those outcomes (Farazmand 2018). Therefore, participation should be understood as a process rather than a singular event.

Citizen participation yields mutual benefits for both governments and citizens. Citizens gain insights into governmental processes and acquire the skills necessary for active engagement in decision-making. Conversely, governments benefit from citizen input, fostering trust and legitimacy. However, participation is inherently time-consuming for both sides, may reduce the budget available for policy implementation, and can lead to adverse outcomes if decisions are influenced by non-representative (Marzouki et al. 2017) or oppositional groups. Irvin & Stansbury (2004) provide a list of characteristics of effective citizen participation frequently cited in the literature: careful selection of participants, transparency in decision-making to build trust, clear communication of decision-making authority, regular meetings, and adequate funding throughout the process. However, they caution that even when these conditions are met, the success of participatory initiatives in achieving meaningful outcomes – such as more effective community decisions and public acceptance of new policies – may depend heavily on the local context (Irvin & Stansbury 2004). The physical proximity of decision-making venues to potential participants is particularly critical, especially for stakeholders essential to the participatory process.

The literature outlines various methods for implementing participation, for example informal or structured approaches (Farazmand 2018), or offline, online, or hybrid formats. The adoption of digital methods accelerated significantly during the COVID-19 pandemic (Pantić et al. 2021). E-Participation – described as citizen participation through information and communication technologies – introduced new electronic forms such as social media, blogs, and forums (Marzouki et al. 2017). At the same time, numerous platforms specifically designed for public participation emerged, offering diverse functionalities (Schmuderer et al. 2019). The rapid evolution of digital technologies continues to expand communication possibilities, profoundly influencing citizen participation and citizen science initiatives (Pantić et al. 2021; Hovik & Giannoumis 2022; Grigoletto et al. 2023). Despite these advancements, the societal adaptation to digital tools, their competent use, and their actual effectiveness often remain vague. This problem is addressed, arguing that public communication is frequently driven by technological considerations (“how”) rather than by the topic (“what”), the target group (“who”), or the intended

purpose (“why”) (Bock 2013). Although the pandemic has improved the means of digital participation, the use of a combined approach – integrating both offline and online methods – is suggested to enhance inclusivity and diversity, thereby ensuring a more representative group of participants.

Marzouki et al. (2017) derived a typology of public participation challenges based on the e-participation literature, identifying six categories, including citizen issues. These emphasize the importance of involving citizens early in the decision-making process to ensure successful participation. Drawing on the citizens’ issues category, Marzouki et al. (2017) proposed a novel participatory approach combining three main concepts: 1) context-based reasoning, 2) spatio-temporal representation and 3) visual analytics. Context-based reasoning suggests that participatory technologies should align with the social conditions and capacities of the involved citizens. Spatio-temporal representation posits that an opinion refers also to a location and a time. The visual analytics concept says that visual analytics should be included in the e-participation process to allow participants to get real-time insight into the participation and decision-making results and create transparency. Scherer et al. (2012) elaborate on inter-regional participation formats but do not mention the duration or location of participation.

Our study mainly builds upon Meschede & Mainka (2020) by using a similar case study-based approach. Their research examined citizen participation in a pilot project on sustainable global municipalities in Germany. The study focuses on the decision-making part of the project but also includes the phases before the decision-making takes place. They discuss a phase that they call “*analysis and drafting phase*”, which involves the use of various formats of citizen participation. This approach is particularly effective during the initial stages of assessing existing conditions and developing a mission statement for a sustainable development strategy. Within the project, different event formats, such as scenario conferences and workshops are used during which participating citizens share their ideas on the topic while they are also provided information. After the first phase, the project team developed a model for citizen participation in sustainable development strategies. It suggests formats for each phase, showing how different approaches suit specific goals. For instance, the team found that “open formats” are most suitable during the early stages of participation and emphasized that such formats should avoid “predefined outcomes”. However, the study did not account for factors such as event duration or other logistical considerations. Additional constraints included limited budgets and the availability of personnel to organize participatory events.

The presented literature mainly targets citizen participation in decision-making, mostly in the context of implementing new policies. But citizen participation can also be used in generating research output; here, decision-making is not the primary output, but successful participation in project events is necessary for data generation.

We built the conceptual framework of our study by combining the insight in citizen participation literature and in Czech-German cross-border cooperation and more recent research contributions on Interreg.

3. Methodology and Interreg Project Region

Building on the work of Marzouki et al. (2017) and their formulated spatiotemporal representation, this study examines the impact of spatial and temporal dimensions on the effectiveness of participation. We generate one data set from two Interreg projects, taking place in the same study region. This investigation is conducted as a case study detailed in subsection 3.1. Furthermore, subsection 3.2 outlines the evaluation process employed to identify these spatial and temporal dimensions.

3.1 Interreg Project Region

The analysis is based on two Interreg research projects with comparable structures, focusing on the Bavarian-Czech border region of Lower Bavaria and South Bohemia. This region is predominantly rural, with limited infrastructure and significant language barriers. During the time of the Iron Curtain,

the border was an insurmountable obstacle. With the fall of the Iron Curtain in 1989, the border became passable. The Czech Republic joined the European Union in 2004, transforming the former external border of the EU into a joint border region. The region now benefits from access to funding programs aimed at fostering integration and strengthening border regions, such as Interreg projects. These funding schemes clearly define the regions where research must be conducted, and project objectives must be implemented (Figure 1). However, the funding schemes also address the specific needs of the border regions within the EU. Therefore both projects are aimed at connecting a group of citizens from two sides of a historically closed and only relatively recently opened border region. This makes the setting of our analysis unique in regard to how people at certain times and places react and answer to participation events (Marzouki et al. 2017).

Both projects aimed to initiate cross-border networks and collaboration to enhance stakeholders' visibility and communication in two sectors. *The Creative Borderland Project*¹ concentrated on uniting individuals from the cultural and creative sectors, analyzing, and strengthening their position in regional politics. *The Open Data Project*² targeted public administration, non-governmental organizations, and companies that use or produce open data, with the goal of informing and motivating network partners to collaborate and increase the use and production of open data. Both projects were implemented by Bavarian and Czech research institutes and concluded in December 2022. Public network managers were included as official project partners in organizing and promoting the projects' events and recruiting participants.

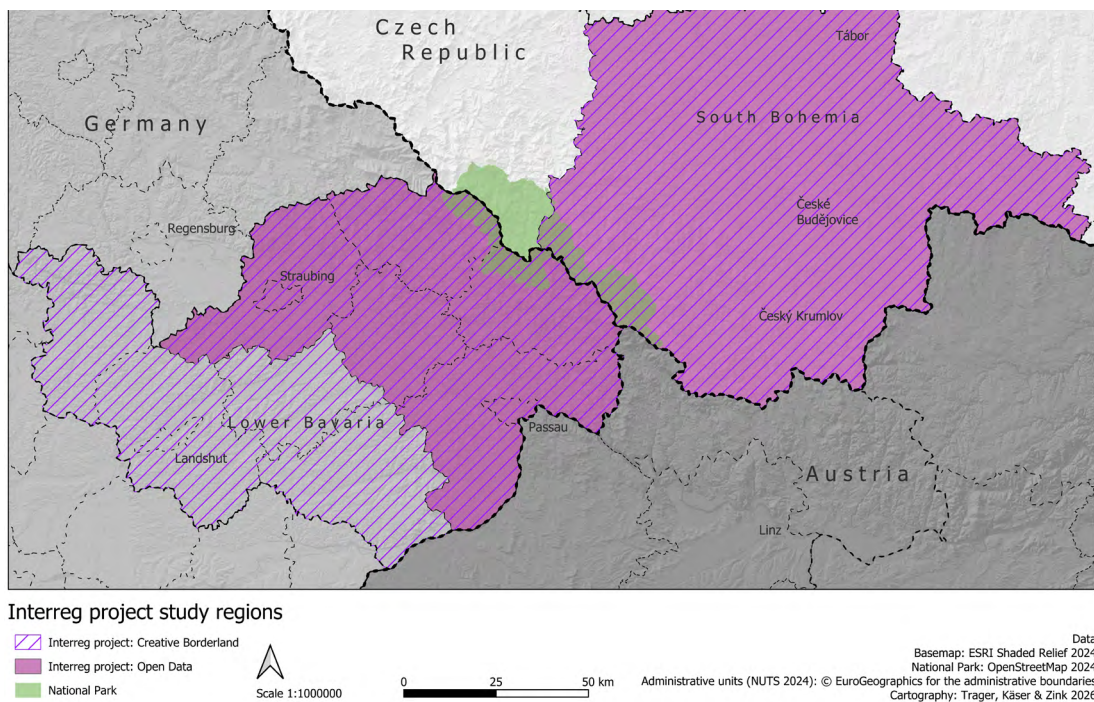


Figure 1: Project region of Lower Bavaria and South Bohemia.

The projects had mutually beneficial research and networking aims: gathering knowledge to analyze two distinct regional sectors (research aim) and connecting relevant stakeholders in these sectors to enhance cooperation (networking aim). These aims were achieved by organizing events that required the participation of relevant stakeholders and the interested public. The roles of the research institute and other project team members differed in the projects. While in the Creative Borderland Project the research institute organized and observed the events (output observing role), in the Open Data Project, it also provided input to the participants (input providing role).

¹ funded under Interreg V, 2014–2020, Project Number 336

² funded under Interreg V, 2014–2020, Project Number 340

3.2 Evaluation Method

In the first step, we group all events held within the two Interreg projects into event formats according to the type of participation used within the events (see Figure 2). Only events involving Bavarian stakeholders were included in the analysis, regardless of whether they took place in Bavaria or Czechia. Events aimed solely at Czech stakeholders were excluded. These events can be categorized similarly to the approach of Meschede & Mainka (2020). Our classification is based on the three formats of events: (1) informative, (2) networking, and (3) data creation events. Building on this, we analyze the spatial and temporal dimensions that influence the success of participation within each event format. In the third step, we define what constitutes successful participation and interpret the dimensions that contribute to it. Based on the results, we formulate recommendations for improving the implementation of participation events for each format. Figure 2 depicts the whole evaluation process.

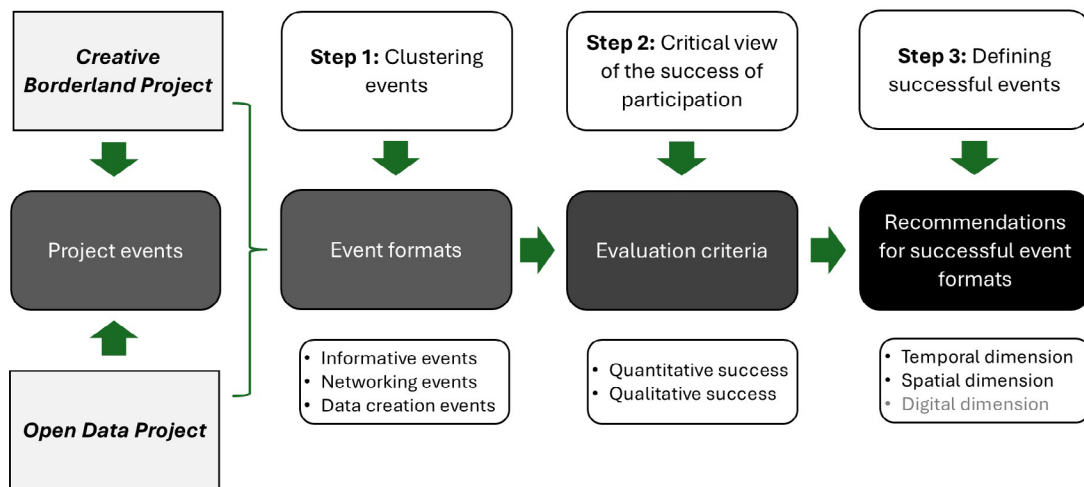


Figure 2: Data generation and evaluation process.

3.3 Role of the Research Team

All events held within the projects were initiated by the research team, which therefore can be described as the enabler of participation in the events. As detailed in the Case Study description, this role varied between projects. In the Creative Borderland Project, the team primarily observed and benefited from the participants’ output, whereas in the Open Data Project, the team also provided input to guide participants. Interestingly, the Creative Borderland Project, where the team took a more observational role, appears to have achieved higher levels of quantitative participation of the participants. We interpret this finding to suggest that the project’s clear focus on networking was particularly appealing to local stakeholders.

4. Data Generation and Evaluation

4.1 Successful Participation Event

Funding projects within the framework of Interreg require a certain number of participants at the events, not least because of their network goal. At the same time, the bilateral project region is also determined by the funding program. In order to build comprehensive, area-wide regional networks, the quantitative objective at the start of the projects is to recruit as many participants as possible to achieve the research goals. However, due to the sheer size of the region with over 1,900,000 inhabitants (Lower Bavaria [NUTS 2] plus Budweis [NUTS 3]), it is difficult to define a manageable target group and to quantify it. The results of the projects show that fewer people participated in all participation formats than initially hoped, but the research and project goals were still achieved. The surveys are an exception to this. The two Interreg projects with the aim of cross-border networking make it clear that qualitative aspects must

be considered when recruiting participants by addressing the right stakeholders, experts, key persons, and multipliers. A focus on purely quantitative targets appears to be of secondary importance, without denying that a certain minimum number must be met. Therefore, we have used qualitative standards for the evaluation of our results, which are defined by the content-related objectives of the projects. If small but productive groups can be formed, valuable human and financial resources can be reallocated to other parts of the project, or the quality can be increased in terms of multiple participation events. This is particularly important for networking objectives in a cross-border context, as it can lead to better implementation and sustainability of the results. Regarding the network goal, it should be noted that the interest of the participants in creating a comprehensive network in both projects is low, especially when cross-border connections are to be created. As a result, micro-networks with a small number of participants were formed, but they work together productively beyond the project period. Although the broad network was not realized, the success of these locally operating micro-networks underlines the impetus provided by the two projects. At the same time, the knowledge gained also serves as valuable feedback for future project designs and transnational financing programs.

4.2 Categorization of the Events Held

A total of 15 participation events were held in the two Interreg projects. We evaluated these 15 events and assigned each event to one of three categories (see Figure 3): (1) informative events, (2) networking events, and (3) data creation events. The core aspects of these events, which generate the data used in this evaluation, are introduced in the following chapters. The evaluated events varied in duration, location, implementation, whether they were held offline, online, or in hybrid form, and the manner of participant involvement. Furthermore, they differ in how and whether data is created, whether they focus on the research or networking aim of the projects, and how participation takes place. Our evaluation specifically focuses on the projects' events, excluding other project-related content. The following method builds on the similarities and differences between the projects' events.

Figure 3 also highlights two insights from the two projects evaluated. First, the networking events play a central role for both projects, as they address almost all the projects' objectives. Second, it shows that the aim of data gathering and the research aim are strongly linked. This connection is inherent in the event formats Mapathon and Survey, as input from participants is mandatory.

	Event	Number during Case Studies	Research aim	Networking aim	Informative aim	Aim of data gathering
Data creation	Mapathon	2	X			X
	Hackathon	1		X		X
	Survey	3	X			X
Networking	Workshop	3	X	X	X	X
	Round Table	2	X	X		X
Informative	Opening Event	2			X	
	Closing Event	2			X	

Figure 3: Categorization results.

4.2.1 Informative Events

Opening and *Closing* events are classified as informative events. Their primary objectives are to introduce the projects to the public and present the results without focusing on the research or networking purpose. During these events, no interaction between participants was conceptually planned.

Both projects events were held offline and lasted half a day. Recruitment was limited, particularly for events held at more distant locations. Since the purpose of these informative events is to spread information widely, the small number of participants was inadequate to reach a broad audience. It could be beneficial to hold informative events in a hybrid format, offering online streaming options to facilitate a wider sharing of the project, communicate results effectively, and reach people both within and beyond the project region.

4.2.2 Networking Events

All (offline) events generally provide networking opportunities for participants, such as coffee and lunch breaks, open-ended sessions, and time slots to present individual work in the sector. These events are marketed as networking opportunities to attract participants. However, the emphasis on networking varies between events. An event is only categorized as a networking event if networking is defined as a core component. This applies to *Workshops and Round Tables*. The events focused on both research and networking objectives (see Figure 3). During these events, the research team initiated and observed discussions between participants on predefined questions and topics. Although the insights gained from these discussions contributed to the research aim, the networking aspect was clearly emphasized, especially compared to the other events. The round table events were conducted offline and lasted half a day each. The location significantly influenced participant recruitment, resulting in attendance primarily from individuals in the immediate surrounding region.

The workshops were held in part online and in part offline. They were constructed similar to the round tables but only lasted about 2 hours each. In the offline events also mostly individuals from the immediate surroundings attended, in the online events participants took place from further away but were still part of the project region. The output of content production and new insights into the topic of open data were successfully collected in both online and offline workshops. However, the number of participants was much higher in the offline events than in the online events.

Generally, fewer participants than expected were recruited for the networking events, especially in the online workshops. However, this did not affect the overall output of the events. A sufficient amount of information was collected to meet the research aim. Although the networking objective was met as well, it occurred in a somewhat different manner than initially anticipated. The events helped the creation of micro-networks that persist beyond the projects' duration. Throughout the project, new networks formed, and a core group of participants emerged, who consistently attended almost all events. Both these newly established networks and the core group were predominantly regionally connected to the locations of the main events.

4.2.3 Data Creation Events

Mapathon, Hackathon and Survey are classified as data creation events. The primary goal of these events is to generate datasets based on the knowledge of stakeholders. The success of these events is measured by the extent of the datasets created; the more comprehensive the datasets, the better. The events focus on achieving the research aim of the projects. An event is considered successful if a sufficiently large dataset is created.

The surveys in both Interreg projects refer to questionnaires which are not events in the classical sense. However, as surveys are one of the classic but also most effective tools for gathering low-key feedback, they are an essential part of data creation or – gathering in terms of participation. All surveys and a Mapathon were conducted exclusively online. We encountered difficulties recruiting the desired number

of participants for these online participation concepts. Specifically, while a representative sample was essential for the surveys, it was not achieved. In contrast, the Mapathons and the Hackathon did not require a representative sample, and their results were beneficial regardless of the number of participants.

Among the three types of events, only a limited number of participants were recruited, fewer than anticipated during the planning stages. In particular, there were differences in the extent of the data sets produced. An offline Mapathon, which included on-site online mapping and lasted one day, generated a larger dataset compared to an online Mapathon that spanned several weeks. Purely online events yielded minimal output. Furthermore, the location of the event played a crucial role in participant recruitment; most participants came from the immediate area, despite efforts to advertise throughout the project area.

4.3 Results

Based on the experience from the projects and the presented evaluation, we define two leverage dimensions that should be considered when conducting events in Interreg projects anticipating participation: The temporal dimension and the spatial dimension. Depending on the chosen event format, time and space must be carefully considered to successfully recruit participants.

1. **Temporal dimension:** Interreg projects usually have a duration ranging between 12 and 36 months, depending on the specific objectives and complexity of the project. The time frame is often determined by the planned activities and in our case the participatory process. Therefore, two aspects are important. Firstly, the time management for the entire project, and secondly, the scheduling of the individual participation events. Hence, the temporal dimension includes different scales, with event formats ranging from a few hours to several weeks (e.g. online surveys). The role of the participation enabler can be analyzed for each specific event format with the same temporal dimensions, as well as across the entire project during which these events occur.
2. **Spatial dimension:** The regions funded by Interreg projects vary in size, as they encompass cross-border areas. The funding regions are often designed to form functional geographic units that are relevant for collaboration in specific thematic areas, such as economic development, environmental protection, or social integration. Therefore, the size can range from small local communities to larger regional entities, depending on the specific objectives and requirements of the respective project. Accordingly, the spatial dimension ranges from a highly localized (within the project region), concentrated focus on events and projects to an interregional approach (beyond the project region), even when the project area is predefined. Some event formats are more effective when applied in a concentrated, local context, while others perform best across a broader region.

Figure 4 provides recommendations on how to adjust the temporal and spatial dimension in the three event formats used in the evaluated Interreg projects.

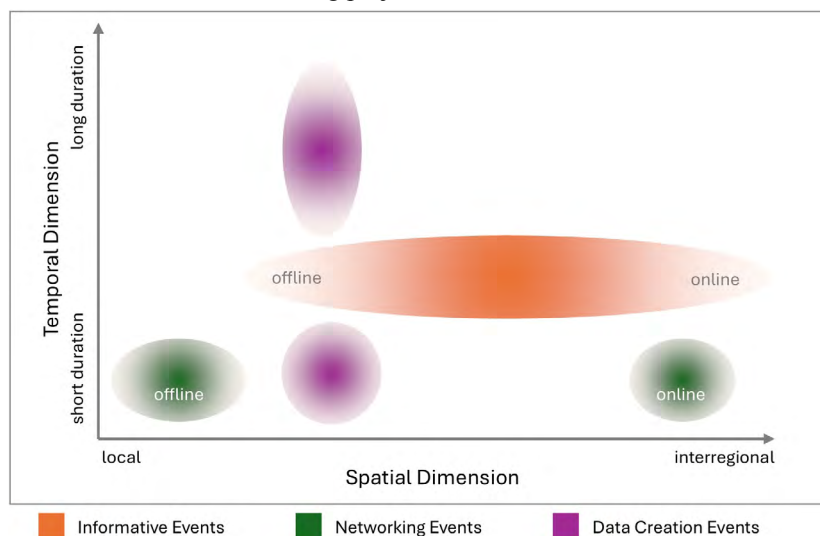


Figure 4: Temporal and spatial dimension of the events.

Informative events should be kept relatively short — typically, half a day is sufficient based on the case studies. These events should be conducted on a regional scale and can be held in a hybrid format, where participants stream online but cannot participate actively. Given their informative nature, which does not focus on research or networking, hybrid or online formats may offer greater convenience for both, participation and organization. This approach is based on the premise that the effectiveness of information dissemination improves with a larger number of participants.

Networking events should be brief, on a local level, and offline. The Interreg projects demonstrated that such events effectively achieved their networking and research objectives with a small number of participants. Offline networking events proved to be the most successful, drawing attendees primarily from the immediate area surrounding the event location. Although hybrid and online formats can address geographical challenges, particularly in sparsely populated regions, the two projects revealed that these formats had limited impact. Online participation was minimal and did not attract people from outside the local area. Consequently, the best results were achieved through purely offline events.

Data creation events should last a full working day and be conducted on a local to regional level, incorporating both offline and online participation. Purely online events were less successful, while hybrid formats in the sense that people met on-site but worked with digital tools proved effective, producing substantial output with adequate participant involvement. Hybrid data creation events demonstrated qualitative success, offering a balanced approach that leveraged the strengths of both in-person and virtual engagement. Using digital tools in offline data creation events has proven beneficial, enhancing the overall success of the event.

The participation process in the evaluated Interreg projects spanned a long period of time relative to the project duration. In our two cases it took at least several months to accommodate multiple participation events. This can be attributed to the projects' objectives. This approach ensures sufficient time for engagement and interaction across various stages of the whole project. While the process can operate on a regional scale, it is important to maintain a local focus to avoid overextending. Additionally, given the diverse nature of event formats – whether online, offline, or in hybrid form – the participation process should incorporate all these dimensions to maximize the flexibility and effectiveness of all events.

The participation enabler, in this study represented by the research and project team, should be available for a duration that exceeds the length of the participation process itself. This extended availability is crucial for effective preparation, follow-up, and for fostering trust within participants. The participation enabler should operate at a regional to inter-regional level to effectively oversee the integration of the participation events and the project's progress. The participation enabler should be accessible in both offline and online formats, attending offline events in person and providing online support and consultation as needed.

In conclusion, networking events are most effective when conducted offline, while data creation activities benefit from a hybrid approach. Informative events are best suited to modern, hybrid, and online formats to maximize information dissemination. Although online and hybrid participation options offer valuable flexibility, their impact on event success remains limited, as indicated by the literature. Therefore, while digital participation methods are useful, they do not always guarantee enhanced outcomes.

5. Discussion

Novotný (2025) concludes that achieving cross-border innovation – one of the main objectives of Interreg – requires the establishment of project and local stakeholders, as well as policymakers and appropriate policy tools. Our results add that the way in which different types of stakeholders – whether citizens in the project region, policymakers, or enterprises – are included and participate in Interreg project events is equally important.

So far, the region of an Interreg project is defined before the start of the project, and activities such as event advertising, dissemination of information and results, as well as efforts to build project networks during the project, are typically carried out at the level of this predefined project region. Our results suggest that the spatial dimension should be adjusted to the specific aim of each event rather than being held constant throughout the project.

Networking activities and data creation events should be conducted locally or regionally, therefore in a much smaller spatial dimension than the project region. In contrast, information about the project, the results of events, and more general processes in border regions can be disseminated across a wider area than the region targeted when holding on-site events and inviting participants. This allows for bigger visibility of the border regions and their specific needs (Böhm 2023). However, when a broader target group is intended, particularly for networking purposes, online formats should be preferred over inviting participants to attend on site.

Yet, not only the spatial, but also the temporal dimension varies across event types and further influences the discussion on online versus offline formats. Our results suggest a rather brief event duration, especially when combined with online formats, to keep participation attractive. Hybrid participation appears to be feasible and meaningful only for informative events, namely those in which participants are largely passive.

As participation is time- and budget-consuming for both sides and can lead to adverse outcomes if decisions are influenced by non-representatives, the fitting organization of events is very important (Marzouki et al. 2017). This is where our results support organizers: they provide a baseline to decide which time and space should be used for which participation event. This also positively influences project results due to a more adequate degree of public participation in the research process and design of the project (Shirk et al. 2012).

This study is subject to several limitations. First, it is based on only two projects conducted within a very similar regional context, therefore social and cultural differences and their impacts on participation events could not be included, however region-specific context might matter (Knippschild & Vock 2017). Both projects were funded within the same funding period and by the same regional funding scheme. As a result, the findings may not be fully transferable to other regions or funding contexts, where levels of regional interest and patterns of event participation may differ. This also aligns with the findings von Marzouki et al. (2017), as results should always be set in context to the social conditions and capacities of the citizens one wants to involve in the participation process. Second, both projects were implemented in the immediate post-COVID phase. During this period, an exceptionally high number of events were organized, which may have led to lower participation rates due to competition between simultaneous or overlapping events. Third, while the two projects addressed different thematic areas, the analysis is limited to only these two topics. It is therefore possible that other project topics would have generated higher levels of regional interest and participation. Fourth, this study focuses exclusively on event participation on the German side of the border, despite the projects being explicitly cross-border in nature. The core project activities were designed to be implemented across borders, which may have limited participation among individuals in the region who have little interest in cross-border cooperation. Some individuals who may have had a general interest in the project topics, but have personal constraints, such as limited English or Czech language skills, might have chosen not to participate.

While our results are based on only two Interreg projects, the idea of approaching event planning in Interreg projects more flexibly in spatial and temporal terms can be transferred to other projects using similar project event formats. Further, the findings can support the general outline of Interreg projects and also project calls regarding how the success of events is measured. While currently event participation (the number of participants) is used to prove an event's success and a regional interest in the topic, the event-based outcome and reaching the events' goals independent from the number of participants can also be used to measure the success of such participation events.

6. Conclusion

In this article, we consider different types of events to foster participation in terms of knowledge gathering and networking among different stakeholder groups in two Interreg projects. We compared the outputs of different event formats that took place in two cross-border projects that spanned the same time and region frame. The findings are important both for the authors of proposals for Interreg projects and for the funding institutions. Participation events should take place close to (potential) participants. This shows the need to adjust the regional scope of projects and funding to match these findings. The region should reflect the interests of the stakeholders. Spatiotemporal factors, especially in rural areas with longer distances, must be considered in funding options. Calls for proposals and funding should not only focus on large and geographically wide regions or prioritize participatory quantity. Instead, they should also support smaller regions and high-quality participation that promote meaningful engagement. Networking events, for instance, should be short, not last longer than 2 hours and only invite the core stakeholders of a network or the region under investigation. The participation process as a whole, similar to the participation enabler, should be already well known in the region to be perceived as trustworthy and reliable to the participants. According to the project aims, the overall process must span a long enough time horizon for the relevant stakeholders to be aware of and take part in the process. Another factor that gained a lot of importance during the COVID-19 pandemic very quickly is the use of digital participation tools. Although fully online events were as successful as offline events, the use of digital tools during on-site events gives them a hybrid character that cannot be overlooked. Reaching a wide audience solely through online advertising and online event implementation worked during COVID-19, but its effectiveness has declined since the last lockdown has largely faded from memory. Using digital tools to collect data and information from stakeholders to make informed decisions or generate an overview of a sector to enable individual networking helps to generate a long-lasting output of projects. It makes participants more willing to take part in events and enables them to gain easy overview of all inputs provided on a given topic by everyone involved.

Also due to the COVID-19 pandemic, some of the evaluated events took place online only. However, there were also offline events and hybrid events. The use of online event formats, e.g. using video conferencing tools, impacts both the temporal and spatial dimensions. Online events easily reach a broader spatial scope than offline events. When travel to the event site becomes unnecessary, more events can be held as a result. We found, however, that online participation did not create the necessary output in terms of quality and that purely offline events worked best. In general, allowing for online or hybrid participation can alter the spatial and temporal context of an event. Offline events can integrate on-site digital tools to enhance participant engagement, an approach that worked well within both projects.

While our results are based on only two Interreg projects in one region, the idea of approaching event planning more flexibly in spatial and temporal terms can be transferred to similar projects and regions. Since both projects were implemented during and shortly after the last COVID-19 lockdown, the question remains as to how future, specifically online events will be accepted by potential participants. In addition to interest in the topic, regional culture can also influence whether public participation can take place and in what form. This aspect was not explicitly addressed in our study.

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