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# The Multilevel Governance of State Aid for Broadband Diffusion: Evidence from Three European Countries

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## ABSTRACT

This paper explores multilevel governance (MLG) in the context of state aid programmes for the diffusion of broadband in the European Union. By comparing three EU Member States (Italy, Spain and the UK), the qualitative analysis illustrates how MLG affects both the implementation of public interventions and the reduction of regional inequalities in the access to broadband. The analysis suggests that a distributed and shared governance is potentially beneficial for the implementation of state aid programmes, but its application is constrained by idiosyncrasies in the structure of the public and private sector.

## KEYWORDS

Multilevel governance; state aid; broadband policy

## Introduction

Over the past twenty years national and local governments have significantly invested in the deployment of broadband networks, seen as essential inputs to reap the socio-economic benefits deriving from digital technologies (ITU, 2013). The performance of public interventions in broadband markets has, however, been questioned by various commentators, as neither public operators nor public-private partnerships have managed to enhance the efficiency of broadband supply and reduce inequalities in the access to connectivity (Author et al., 2020; Valle De Souza et al., 2018).

Previous research has widely explored the complex and conflictual relationships existing between public and private actors in broadband markets, leading public interventions to fail or underperform (Author et al., 2020; Po-An Hsieh et al., 2012). More recently, scholars have also emphasised the tensions emerging across different levels of government involved in the policymaking of broadband markets (Author et al., 2019; Matteucci, 2020).

This paper aims to shed further light on the intricate set of horizontal and vertical relations underlying the design and implementation of public interventions in broadband markets, adopting the perspective of multilevel governance (MLG). The latter has been often used to describe the policymaking process in the EU (Marks, 1993) and has lately emerged as a framework to analyse complex policy issues, such as environmental sustainability and territorial cohesion (Chardas, 2014; Homsy et al., 2019).

Consistent with Homsy et al. (2019), MLG is conceived in this paper as the combination of multiple factors that allow the coordination and integration of decentralised decisions (Touati et al., 2019). These dimensions are applied to study the state aid programmes for broadband diffusion undertaken in three EU Member States (Italy, Spain and the UK). This comparison aims to expand the extant literature assessing MLG in broadband markets (Matteucci, 2020) but also provides further insights on the components of MLG conceptualised by Homsy et al. (2019).

With this in mind, the remainder of this paper is structured as follows. Section 2 reviews the literature on MLG, focusing on its application in the context of broadband policy. Following a detailed description of the methodology in Section 3, the three case studies are presented and analysed in Section 4. The findings are discussed in Section 5, and conclusions drawn in Section 6.

## Multilevel governance: a review of the literature

MLG refers to systems of governance where authority is dispersed between various levels of government and across different sectors with responsibilities and powers being shared both horizontally (between actors at the same territorial levels) and vertically (between actors at different territorial levels) (Touati et al., 2019). The concept was first introduced by Marks (1993) to describe

the plurality of state and non-state actors involved in the decision-making processes within the EU and has been successively employed to explore policymaking processes in various sectorial and geographic contexts (Chardas, 2014; Homsy et al., 2019; Potluka & Liddle, 2014).

Researchers agree that MLG combine the benefits of a decentralised policymaking process, which ensures a better consideration of local instances, with the advantages of a centralised coordination, enhancing the efficiency of public interventions (Green & Orton, 2012; Touati et al., 2019). However, MLG also entails additional transaction costs that may eventually undermine the efficiency of the policy-making process (Matteucci, 2020). In particular, such inefficiencies emerge from administrative issues and institutional tensions, reflecting shortcomings in the institutional contexts and political landscape wherein MLG is implemented (Del Pino & Pavolini, 2015; Milio, 2014).

The policymaking of telecommunications and broadband markets in the EU has often been described as an example of MLG, involving supranational, national and local actors (Simpson, 2011). In fact, the regulatory framework designed and adopted by the EU institutions is enforced within Member States by various players at different geographic levels, such as the national regulatory authorities (NRAs) overseeing the relationship between the former monopolists and their competitors, the national and regional agencies investing in broadband networks, the municipal councils granting permissions for the installation of telecommunications infrastructures (Falch & Henten, 2018).

Although previous research emphasised the plurality of public actors involved in broadband policymaking (Gómez-Barroso & Feijóo, 2010), little has been said so far on the interaction among them and its implications for the development of broadband markets. Scholars primarily debated the optimal degree of decentralisation with regard to sectoral regulation (Montolio & Trillas, 2013; Simpson, 2011). Others have explored the conflictual relationship between NRAs and EU institutions, emphasising the need for supranational coordination through regulatory networks (Mathieu, 2016).

The majority of previous studies maintained a dichotomic approach (supranational vs. national, centralised vs. decentralised), which does not capture the heterogeneity of public interventions in broadband markets. In reality the relationship between local, national and supranational authorities is more complex and dynamic. Despite the common regulatory framework, the role of public actors has varied significantly across the EU Member States and over time, with the EU institutions supporting both national and local initiatives (Author et al., 2019, 2020).

This paper aims to explore and clarify the intricate interplay between supranational, national and local authorities as well as public, private and third-sector organisations involved in broadband markets, using MLG as a framework to analyse their relationships. Consistent with Homsy et al. (2019), MLG is conceptualised as the combination of multiple components (co-production of knowledge, framing of co-benefits, capacity provision, engagement of civil society, coordinating and sanctioning role of the central authority).

These components reflect the horizontal and vertical relations that characterise MLG. The co-production of knowledge and the provision of capacity place emphasis on the exchange of information and resources among different levels of government to develop the necessary technical know-how and managerial expertise (Touati et al., 2019). The engagement of the civil society and framing of co-benefits are, instead, functional to motivate public interventions and build consensus around them (Homsy et al., 2019). Finally, the sanctioning and coordinating authority is needed to define a common framework and ensure consistency among local interventions (Green & Orton, 2012).

## Methodology

A multiple case study analysis was employed to explore the MLG of broadband state aid across three EU Member States. The cross-country comparison was designed to enhance the external validity of this research, by highlighting regularities across the EU broadband markets and contextual factors that affect the outcomes of MLG in each Member States (Yin, 2009).

To further enhance the validity and reliability of the analysis, multiple qualitative methods were employed (Jonsen & Jehn, 2009). As shown in Tables 1, 51 interviews were conducted between June 2016 and January 2019 with multiple stakeholders from public, private and third sector at national, supranational and subnational level. Purposive sampling was utilised to identify the most qualified and representative stakeholders in each sector and country (Kovalainen & Eriksson, 2016). Participant observation (Kawulich, 2005) was also employed to further explore the interaction between these stakeholders. The primary data was integrated with secondary sources: policy documents, trade and local press, reports from consultancies, regulatory and audit authorities.

Both primary and secondary data were analysed with NVIVO, a software widely utilised to explore and organise the themes emerging from qualitative data (Welsh, 2002). Recurring themes were identified for each case

**Table 1.** Summary of primary data collection.

	Italy	Spain	UK	Total
Interviews	18	8	25	51
National administration	4	1	2	7
Local administration	3	3	4	10
Broadband providers	5	2	8	15
Representatives of residential and business end-users	6	2	11	19
Ethnography	1	1	2	4
Meetings between local authorities and local communities	-	-	2	2
Meetings between local, national and EU authorities	1	1	-	2

study and then compared across the countries to map similarities and differences across the EU broadband market (Jonsen & Jehn, 2009).

### State aid for broadband diffusion in the EU

The existence of market failures has motivated public intervention in EU broadband markets since the late 1990s (Gómez-Barroso & Feijóo, 2010). Whereas early initiatives were autonomously led by local authorities (Author et al., 2018), in 2009 the EU adopted specific guidelines for state aid in broadband markets to ensure consistency among Member States (CERRE, 2018).

Based on the latest version of the guidelines (Communication 2013/C 332/01), state aid is only authorised in those areas where private suppliers have not invested within three years. These areas are identified through open consultations where private operators report their current and planned investment in broadband networks. Subsidies are then allocated through competitive tenders, managed by either local authorities or national agencies. Once completed, the subsidised networks are subject to regulation by NRAs.

The EU guidelines do not include specific indications on the governance of state aid, that “can be used at the national, regional or local level” (para. 10). However, paragraph 43 suggests that Member States could “set up national competence centres to help small, local authorities to design adequate State aid measures and ensure consistency in the application of the State aid rules”. The importance of “ensur[ing] a high level of transparency” is also stressed to “ensure consistency and coordination of the local interventions” (para. 40).

All state aid programmes are subject to the scrutiny of DG-COMP, which validates the compliance of such interventions with the EU legislation on state aid. Between 2003 and 2018, DG-COMP analysed 162 cases of state aid, raising objections in only three of them (EC, 2019a). Despite the common framework, the implementation of state aid in broadband markets has varied significantly across the EU with a plurality of ownership

and funding models being employed over the years (CERRE, 2018). The following subsections provide a detailed analysis of how state aid has been implemented in the case study countries.

### UK

Public interventions in support of broadband diffusion have been ongoing across the UK since the early 2000s. Initially were the Regional Development Agencies (RDAs) to subsidise the rollout of ADSL in rural areas (EC, 2019a). A nationwide strategy was only adopted in 2010 (BIS, 2010), when Broadband Delivery UK (BDUK), an agency of the (now) Department for Digital, Culture Media & Sport (DDCMS), was created to lead public interventions in the superfast broadband<sup>1</sup> market.

The latter have been implemented by regional public-private partnerships (PPPs) between the local County Councils and private suppliers selected through competitive tenders (National Audit Office, 2012). These PPPs have been funded by a mix of public and private resources, with some also utilising subsidies from the European Regional Development Fund (ERDF) (BDUK, 2019; Gerli & Whalley, 2018).

The government established BDUK as a national competence centre (NCC), in charge of managing the notifications to DG-COMP, overseeing the allocation of subsidies across the PPPs and monitoring the execution of their projects (EC, 2016). Interviewees agreed on the advantages of having a central authority coordinating the local partnerships, as “the standardisation that [BDUK] gives around the projects” made regional interventions “much more efficient than if the local bodies were free to pursue these projects in the way that they believed it was the right way” (Interview UK11)

However, efficiency of BDUK framework has been questioned by other stakeholders. In particular, the National Audit Office (2012) concluded that the value-for-money of BDUK has been compromised by the lack of competition among private suppliers. In fact, all subsidies in the first phase of BDUK programme were awarded to British

Telecom (BT), the former monopolist in the UK telecommunications market. Overall, the ability of BDUK and EU institutions to safeguard and promote competition for state aid was questioned. The former was accused of “*chang[ing] the rules very quickly on BT’s request*” (Interview UK3), while EU institutions were perceived as passive and distant as they “*should do something but there is nobody in Europe that can be asked for anything . . .*” (Interview UK 1).

Furthermore, BDUK was accused of neglecting the differences existing between the counties. The comparison of local projects highlighted how their objectives and resources varied significantly with some councils expected to achieve, at the end of the programme, a final coverage way below the national target. As highlighted by the public manager of a regional PPP, the relationship between local authorities and BDUK was sometimes conflictual, since the priorities of the latter were not always aligned with the needs of the former:

We fight our corner - and this sometimes is the right description with BDUK, so that they understand the needs of County B rather than just understanding the needs of the national programme. I spend a lot of time with BDUK explaining why we need to do something in County B that may be a bit different to the normal (Interview UK10)

Local authorities were also expected to liaise with local stakeholders and keep them informed about the broadband projects (BDUK, 2011). The board of most regional PPPs included elected representatives of local communities (district and parish councillors) and members of various interest groups (local charities, chambers of commerce, local enterprise partnerships, etc.). Nevertheless, the ability of these actors to effectively communicate and engage with local communities was questioned by, among others, the public manager of a regional PPP:

We keep oiling the process (. . .) this meeting this morning was a regular quarterly meeting and we’ve representatives of the District Councils and representatives of the Parish Councils, National Parks, the police, Health authority . . . but what we don’t know is whether they go back and tell their people (Interview UK10)

Interviews and ethnographic analysis highlighted the activism of local communities, lobbying for faster broadband and exerting pressure on BDUK and regional PPPs to have their villages included in their projects. Secondary data also confirmed that many residents and businesses directly took part in the open consultations run by regional authorities for the definition of white areas (Welsh Government, 2017). Based on the interviews, the interaction between broadband campaigners and local authorities varied significantly even within the same area. For example, in County A, some interviewees described their County Council as “*very*

*supportive*” (Interview UK12), while others complained that “*they don’t seem to do anything to help the communities*” (Interview UK18).

However, the detractors of regional PPPs admitted that County Councils “*have had all the criticism for poor delivery, but actually it isn’t their fault, it’s about the contract*” (Interview UK20). The framework designed by BDUK was criticised for the confidentiality clause which limited the ability of local authorities to “*tell you when you’re getting the service*” (Interview UK20) and “*to look at their BT’s invoice and compare it with another local authority’s invoice*” (Interview UK19). The ability of local councils to manage the PPPs was further compromised by the fact that “*they didn’t have the resources to manage the projects effectively*” (Interview UK19).

Interviewees stressed that the knowledge of broadband technology “*was not homogenous*” across local authorities (Interview UK16). Whereas some had gained experience through the management of local networks, others “*did not have enough expertise to be able to take on the weight of deal with BT, which is a huge business and who effectively holds all the cards*” (Interview UK9). More generally the ability of local authorities to manage the partnerships was constrained by the lack of qualified employees resulting from the adoption of austerity policies, as admitted by the IT manager of a regional authority:

Austerity has kicked in . . . (. . .) if I look at my ICT budget, for example, I would have about 60% less money that I started with 5 years ago . . . (Interview UK2)

## Spain

Since the late 1990s, both regional and national interventions have coexisted in the Spanish broadband markets. Regional authorities have often built public broadband networks, managed by either public operators or PPPs (CERRE, 2018). The national government has, instead, subsidised private deployments in rural areas through multiple nationwide plans, the latest of which (launched in 2012) is known as Plan Extension Banda Ancha (PEBA) (EC, 2010, 2013).

PEBA has been entirely managed by the State Secretary for Telecommunications and the Information Society (SESIAD), acting as the NCC. After identifying the areas eligible for public intervention through annual public consultations, SESIAD allocates subsidies and loans (financed from both national and ERDF funding) on a municipal basis through competitive tenders. The whole process is nationally led, without the involvement of municipalities or regions, as lamented by the representative of a regional administration:



The role of the regional government in this programme has been, especially since 2011, limited to reading the plans: its participation has not been required for the definition of the programme, or the analysis of the needs or the ex-post evaluations (Interview ES8)

Not only were local authorities excluded from the governance of PEBA: the latter also did not include any mechanism to engage with local stakeholders, apart from the open consultations mandated by the EU guidelines. The participation in the latter was limited to private suppliers and public authorities, with only ten responses received from other actors (primarily businesses). The engagement of local authorities was also heterogeneous over the years: in 2013 only seven regions and four municipalities submitted responses, but four years later 14 regions and 42 municipalities participated in the consultation (Mincotur, 2013, 2017).

In 2014, the Spanish Parliament approved a new Telecommunications Law that defined broadband policy as an exclusive competence of the national government. This was followed by the Royal Decree 462/2015 that gave SESIAD the powers to coordinate and supervise the interventions of local authorities. The need for such coordination was agreed by many interviewees, who criticised municipal and regional initiatives as *“some kind of showcase”* (Interview ES1) pursuing *“more a political goal than a real goal of improving competition”* (Interview ES3).

Nevertheless, the recent measures adopted by the national government do not automatically exclude local authorities from the Spanish broadband market. Being consulted on the legitimacy of region-wide public networks, the NRA concluded that local authorities can maintain their infrastructure as long as the latter are managed by separate entities (CNMC, 2014). Despite the push towards the centralisation of the public intervention, regional authorities have recently launched new initiatives, employing ERDF funding directly obtained from the EC (Observation ES1). This may exacerbate tensions existing within the market:

The EC gives funds directly to the Regions (...) it's complicated because the Regions have funds to do something that they don't have full competences for. So there are also a lot of tensions now, not only regional-national but national-DG Connect (Interview ES1)

Furthermore, the increasing centralisation has not affected the powers of local authorities with regard to the administration of civil engineering works. Whereas the collaboration between public operators and municipalities has historically been *“smooth and beneficial”* (ES0EPb), because *“we're public, they're public and*

*(...) there's no problem to agree with these municipalities to use their ducts”* (ES0EPa), commercial operators still struggled to cooperate with local administrators even when they were deploying broadband networks as part of PEBA. As reported by a manager of the Spanish incumbent:

You've to deal with a lot of Local Councils ... with different regulations, there's some kind of harmonisation that the Ministry made through the Telecom Bill (...) but in the end you've to deal with them, go there, explain the project. (...) sometimes it's difficult to explain, because the people 'ou're talking to have not detailed knowledge (Interview ES3)

## Italy

The Italian broadband market was initially characterised by the intervention of local utilities who have, since the late 1990s, deployed public networks in many cities and provinces, especially in the northern regions. These initiatives preceded the adoption of state aid rules specific to broadband markets and were often accused of *“creating imbalances and harming the market”* (Interview IT3) because they were unfairly competing with private providers. Their development has, however, stopped since the late 2000s, when *“a progressive reduction of the resources available to local authorities has led to a drop, even drastic, of their investments, especially in infrastructures”* (Interview IT5).

The Italian government adopted its first national broadband plan in 2009 (EC, 2009), but its implementation was delegated to the regional authorities, despite in 2003 the Ministry of Economic Development (MISE) had established Infratel, a public company in charge of executing and coordinating public interventions in support of broadband diffusion (Infratel, 2018). The situation has changed since 2011, when MISE launched a new plan for the diffusion of superfast broadband (Piano Banda Ultralarga, hereinafter 'Piano BUL'), followed by Strategia Banda Ultralarga' (hereinafter 'Strategia BUL') in March 2015. Both programmes have been primarily managed by Infratel, with limited involvement of the regional authorities, as clarified by a representative of the Italian government:

The control is substantially centralised (...) The role of the Regions has been absolutely marginal, limited to that of facilitator, meaning that they arranged meetings at local level to explain what was happening, to favour the collaboration with the company who is going to intervene ... (Interview IT15)

Such centralisation was positively perceived by representatives of both national and local administrations. A spokesperson of MISE commented that *“the previous fragmentation impeded a uniform development across the country”* (Interview IT16), while a member of the Research Council for rural economy concluded that national coordination was necessary to avoid a *“proliferation of red tape and decisional centres”* (Interview IT14). The oversight of Infratel was also praised for reducing the burden of *“bureaucracy, especially with the EU”*, described by a regional administrator as *“the biggest obstacle for the execution of the regional project”* (Interview IT1).

On the other hand, representatives of local authorities lamented the limited engagement in the management of public interventions as they were not consulted before the implementation of broadband projects within their administrative area (Observation IT1, Interview IT6). The mechanisms normally put in place to engage with external stakeholders also proved ineffective. The public consultations run by Infratel (2015, 2017) only involved private suppliers. Likewise, the participation of local actors in the *“conferenze dei servizi”* (multi-stakeholder meetings mandated by the Italian administrative law) was not homogeneous, as clarified by a manager of Infratel:

There were regions where all the municipalities took part and immediately gave all the authorisations. In other regions, instead, the participation to the ‘conferenze dei servizi’ was very limited, hence they have been unsuccessful, and we had to go and negotiate with every single municipality (Interview IT9)

This affected the relationship between private suppliers and local authorities, which emerged as a major constraint on the prompt execution of broadband projects across Italy. Private providers involved in public initiatives experienced *“significant inefficiencies in terms of costs and time”* due to the *“limited collaboration of local authorities in the release of permits for civil engineering works”* (Interview IT11). Despite the rules adopted at EU and national level to streamline the roll-out of broadband networks, municipalities and other public entities kept applying their own conditions, as explained by a representative of a regional authority:

Telecommunications are ruled by an ad hoc law (...) do you know it? Unfortunately nobody does. This law says that you cannot ask for bank guarantees, that you must release the permits within 30 days, even that you must make available the existing infrastructures at no cost... but nobody applies the law, they follow their own regulation. (Interview IT1)

Interviewees agreed that such misconduct was justified by the fact that local administrators *“were not adequately informed on the plan and its goals”* (Interview IT11) but

also did not *“understand the importance of broadband projects for their community and (...) were more concerned with the conditions of the roads”* (Interview IT9). Nevertheless, the conflictual relationship with local authorities also emanated from idiosyncrasies in the Italian administrative system, as emphasised by the national association of local councils:

Municipalities have autonomy in all the issues regarding the governance of the territory. For example, if a municipality says that, for any excavation (...) regardless of its size, the entire road has to be renovated, the municipality has the ability of doing it. (Interview IT5)

## Discussion

Despite the variety of approaches adopted across the case studies, the comparison showed a common trend towards the centralisation of broadband policymaking, combined with an increasing reliance on public-private partnerships. In all countries, NCCs were established as the coordinating and sanctioning authorities in charge of nationwide state aid programmes replacing the autonomous initiatives of regional and municipal authorities that characterised the first decade of 2000s.

The role of local authorities in the nationwide programmes changed across the countries but, their overall contribution to broadband policymaking has significantly reduced. Even when formally involved in the execution of state aid programmes, local authorities struggled to direct and monitor the local projects, because austerity policies and political parties adverse to the devolution of powers had compromised the provision of capacity at a local level. As a result, commercial suppliers were de facto able to take advantage of their market power (reflecting structural failures in broadband markets) and control the allocation of public subsidies.

Nevertheless, the analysis highlighted how local administrators could influence the implementation of broadband projects regardless of their formal involvement in the governance of these initiatives, because of idiosyncrasies in the administrative system. In Italy and Spain, the powers assigned by administrative and constitutional laws to local authorities allowed them to engage in opportunistic behaviours that forced NCCs and commercial suppliers to change their plans and revise their budgets.

A clear tension emerged between national and local actors, as well as between public and private partners. NCCs and commercial suppliers lamented the limited support of local stakeholders, while the latter accused the others of neglecting the instances of local communities and pursuing commercial goals rather than the public interest. Whereas these issues are well

documented in the literature on MLG and PPPs – see, for example, Po-An Hsieh et al. (2021) and Green and Orton (2012), p. – our analysis also highlighted that such constraints were mitigated when the key components of MLG identified by Homsy et al. (2019) were adequately implemented.

In particular, the comparison emphasised how the engagement of the civic society (when effectively enforced) helped to boost the efficiency and effectiveness of state aid programmes, by enabling the co-production of knowledge and the framing of co-benefits. For example, making local stakeholders aware of broadband benefits contributed to raise consensus among local administrators in Italy and reduce their opposition to broadband deployments. Likewise in the UK, the collaboration with the civic society allowed local authorities to gain in-depth knowledge on the local territory and its potential demand.

However, the involvement of third-sector organisations and other stakeholders was inconsistent across the case study countries. This demonstrates the ineffectiveness of the mechanisms currently mandated by national and supranational regulations to consult and engage with external stakeholders. Furthermore, this variance is consistent with the different level of citizenship activism observed in the case study countries (Hoskins et al., 2006), but also reflects different attitudes in the political landscape at national and local level.

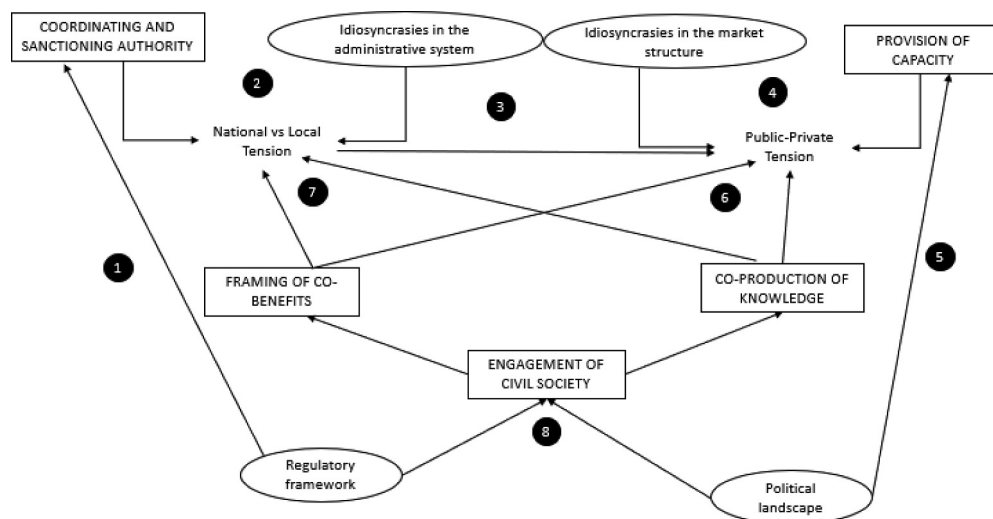
In particular, the active participation of local stakeholders in the governance of broadband projects depended on the political commitment of both national and local actors to cooperate and support the execution of broadband projects. Such cooperation was affected by

the views of local autonomy that dominated the political landscape: across the case countries, the collaboration between local and national authorities decreased immediately after the electoral success of parties historically adverse to the devolution of powers (Del Pino & Pavolini, 2015).

These findings have a number of theoretical implications. First, they contributed to clarify the relationships existing among the different components of MLG. Secondly, they highlighted those factors affecting the effective enforcement of MLG. Both are represented in [Figure 1](#).

The establishment of coordinating and sanctioning authorities is embedded in national and supranational regulations (Figure 1, point 1) that determines the governance structure of public interventions. However, administrative entities have powers assigned to them by pre-existing national laws. This may generate a tension between national and local actors, with the latter exerting their functions to influence the local implementation of centrally coordinated and designed programmes (Figure 1, point 2).

This conflictual relationship between local and national authorities strengthens the position of private partners (Figure 1, point 3), which is also affected by idiosyncrasies in the market structure, such as the level of market competition. The latter determines to what extent private suppliers have market power and can leverage information asymmetries to influence the governance of PPPs. A tension between public and private actors can, therefore, emerge, when private suppliers have excessive powers while the provision of capacity in the public sector (especially at a local level) is limited (Figure 1, point 4).



**Figure 1.** Factors affecting the components of MLG and their relationship. Source: developed by the authors, based on the findings and Homsi et al. (2019).



The provision of capacity is affected by the political landscape wherein public interventions are conceived and implemented (Figure, point 5). The governance of the latter can be shared among different administrative levels, but the actual contribution of each public actor depends on whether they have the human and financial resources to manage the projects. Therefore, if the ruling parties are against the devolution of powers or adopt austerity measures, this is likely to compromise the effective participation of local authorities to MLG.

These tensions emerging between actors at different geographic levels and from different sectors can be mitigated when the other dimensions of MLG are effectively enforced. As shown in Figure 1 (point 6), the co-production of knowledge help to enhance the collaboration of public and private partners, by integrating the capacity of local actors. Sharing knowledge also helps to create trust among national and local partners and prevent the emergence of conflicts between different vertical levels (Figure 1, point 7).

The framing of co-benefits also contributed to generate consensus around nationwide programmes, by making local actors aware of the benefits that such interventions have for the local communities (Figure 1, point 7). Furthermore, translating co-benefits in common objectives reinforces the collaboration between public and private actors (Figure 1, point 6).

Both the co-production of knowledge and the framing of co-benefits largely depend on the level of civic society engagement (Figure 1, point 8), which in turn is affected by the frameworks governing public interventions and the political landscape where the latter take place. National and supranational regulations can mandate the consultation of external stakeholders through calls for inputs or formal meetings. The effectiveness of these mechanisms, is however, compromised if the levels of active citizenship are limited and the political system is close to the input of external stakeholders.

Overall, our analysis suggested that MLG is just a political promise if specific measures are not put in place to effectively enforce the five components identified by Homsy et al. (2019). The engagement of the civic society is key to enable the framing of co-benefits and the co-production of knowledge (Figure 1, point 8), which are fundamental to mitigate those tensions potentially emerging among actors from different administrative levels and sectors (Figure 1, points 6 and 7). The provision of capacity at a local level is also necessary to ensure a balanced governance and allow local authorities to effectively collaborate with other partners and comply with the indications of the sanctioning and coordinating authority (Figure 1, point 4).

The comparison also reinforced the view that MLG is the only approach possible for complex policy interventions that involve market and non-market actors at different

geographic levels. In fact, local actors can still influence the implementation of such programmes, regardless of whether they are formally involved or not, due to idiosyncrasies in the administrative system that cannot be easily changed by supranational or national regulations (Figure 1, point 2). Our analysis, however, demonstrated that the framing of co-benefits and the co-production of knowledge can mitigate the conflicts emerging between national and local actors (Figure 1, point 7).

Furthermore, the combination of a coordinating and sanctioning authority with the input of local actors, including the civil society, ensures a better balance between public and private partners, especially when the latter have significant market power because of idiosyncrasies in the market structure (Figure 1, point 4). However, this requires an adequate provision of capacity at a local level that can only be achieved if the political landscape support MLG and the involvement of civil society and local authorities in the governance of public programmes (Figure 1, point 5).

## Conclusion

By comparing the governance of state aid for broadband diffusion across three European countries, this paper has contributed to the debate on the efficiency and effectiveness of the MLG. The analysis has suggested that a distributed and shared governance is beneficial for the implementation of public policies. Centralised coordination can generate economies in the administration of public interventions as well as ensure their homogeneous distribution within the Member States, while the involvement of local stakeholders is crucial to design and implement place-based policies that better address the needs of local communities (Green & Orton, 2012).

Across the case study countries, the effective application of MLG principles was constrained by countervailing forces: the push towards the centralisation of public interventions – favoured by austerity policies and the victory of political parties hostile towards local autonomy – and the risks of opportunistic behaviours locally – facilitated by idiosyncrasies in the administrative system (Del Pino & Pavolini, 2015; Milio, 2014). In this scenario, private partners could de facto control the design and implementation of public policy, especially when market competition and active citizenship are limited. This latter aspect has been largely overlooked by the extant literature on MLG and needs to be further researched to clarify its relevance across different policy areas and industrial sectors.

Further research is also needed to explore new ways to enforce stakeholder engagement as our analysis showed the ineffectiveness of the formal mechanisms currently mandated by EU and national regulations. Particular attention should be paid to idiosyncrasies in the institutional

frameworks and the level of active citizenship within the Member States, as both factors were found to shape the effective participation of local stakeholders to the policy-making process.

As the application of MLG has been recently advocated in many policy areas, from climate change to smart cities (Anand & Navío-Marco, 2018), a number of recommendations for policymakers and practitioners can also be derived from our paper. First, the principles of MLG should be embedded in future interventions to promote digitisation, as the participation of multiple stakeholders to the design and implementation of these policies is likely to enhance the effectiveness of these initiatives and counterbalance the power of private partners.

Secondly, the role of EU institutions in MLG should be revised to maximise the benefits of its supervisory role and promote best practices for the implementation of public policies. In the context of the EU broadband market, the existence of an EU oversight neither prevented nor halted distortive behaviours emerging during the implementation of state aid, as the control exerted by DG-COMP solely focused on the adherence of the proposed initiatives to the EU regulatory framework. There was no evidence that the evaluation of these projects took into account the lessons learnt from previous initiatives. Consequently, the potential benefits of a supranational coordination never materialised, thereby questioning the effective contribution of the EU institutions to the MLG of state aid programmes.

A greater involvement of regulatory authorities in MLG is also desirable to ensure consistency between state aid programmes and sectoral regulation. Based on EC guidelines, NRAs were expected to supervise the implementation of state aid programmes. Although the projects notified to DG-COMP generally emphasises the involvement of NRAs in the monitoring and regulation of public programmes, the comparison revealed that only the Italian NRA has exercised these functions. Additional research is, therefore, needed to clarify those structural and contextual factors affecting the participation of regulatory authorities to the MLG of public interventions in the EU.

## Note

1. Superfast broadband refer to broadband networks delivering a minimum download speed of 30 Mbit/s (EC, 2019a). This implies the (at least partial) replacement of existing copper loops with newly-installed optic fibre.

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