

Analysing e-Government through the Multi-Level Governance Lens - An Exploratory Study in Belgium

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Abstract: Today's administrations need to exchange an increasing amount of information in order to pursue their policies and to deliver better services. This study aims to understand the impact of Multi-level Governance (MLG) on the e-government policies of public administrations. It is argued that MLG helps to understand the administration's e-government. In Europe, public administrations are influenced by each other, and by the European Union in particular. This paper depicts a case study, executed via a triangulation of a document analysis and interviews, of the Inter-organisational Information Sharing (IIS) at the Belgian federal level. The results show that MLG is a highly useful concept to understand the policy developments in the e-government domain and that IIS is only partially impacted and stimulated by MLG.

Keywords: E-government analysis; Multi-Level Governance; Inter-organisational information sharing; European Union.

Acknowledgement: The research pertaining to these results received financial aid from the Belgian Federal Science Policy according to the agreement of subsidy no. [BR/ 154/A4/FLEXPUB].

1. Introduction

Today's governments need to take the requirements of other actors in society into account. Not only citizens and businesses, but also other administrations have an important effect on the functioning and policies pursued by an administration (Stephenson, 2013). Administrations are impacted by actions and decisions of other administrations, and this affects the administrations' internal relations and the service delivery to citizens and businesses. What appears to be partially missing in the e-government literature, however, is attention devoted to the impact of other public administrations and a theoretical approach to analyse e-government from this perspective (Scholl et al., 2012).

Administrations are no longer self-standing bodies, but actors influenced by each other and by the European Union (EU). Since the end of the 1990s, when different administrative levels started to develop e-government policies, it became clear that supranational actors were going to play a role in this (Chantillon, Crompvoets, et al., 2020). To theoretically conceptualize this relationship between supranational institutions and a national government, the concept of Multi-level Governance (MLG) is highly useful. Paying attention to the impact that MLG has on the e-government policy of an administrations allows to improve the service delivery towards citizens and business and other public administrations.

We investigate the impact of MLG on the e-government policies of a national administration via a single case study of the Inter-organisational Information Sharing (IIS) policy and thereby ask ourselves the following question: "What is the impact of Multi-Level Governance on the e-government policies of a public administration?". IIS is one of the policies constituting the backbone of the current e-government developments. On the basis of a content analysis of the Ministerial Policy Notes on the Belgian federal e-government policy of the last five years and of the work of Scholl et al. (2012), the IIS policy area was selected as a case study. The relation between the EU and the Belgian federal administration is studied, as this is also the original focus of the MLG concept. The interaction among the various Belgian administrative layers is not in the scope of this paper. The focus lies on e-government as a stand-alone policy area, and not on e-government actions taken in other policy areas, such as education or taxation policy. An e-government policy is defined as "the use of ICT in order to design new or to redesign existing information processing and communication practices in order to achieve a better government" (Meijer & Bekkers, 2015). We hypothesize that the concept of MLG is highly important to understand the e-government policies of a public administration.

2. Multi-level Governance and e-Government

MLG is defined as "a system of continuous negotiation among nested governments at several territorial tiers – supranational, national, regional and local – as the result of a broad process of institutional creation and decisional reallocation that had pulled some previously centralised functions of the state up and down" (Marks, 1993). It is necessary to underline that the sovereignty of the state is not directly challenged: "states [...] are being melded into a multi-level policy by their leaders and the actions of numerous subnational and supranational actors" (Gualini, 2003). It leads to a situation where "[t]he nature of the state [...] is redefined according to the institutional compromises that contently result from such interactions" (Gualini, 2003). MLG has its foundation in federalism. The main difference with federalism lies in the nation-state focus: there is a central government and a number of sub-national governments. MLG adds another layer, namely a supra-national actor. Central governments are challenged both from within and outside the nation state, by supranational, regional and local state actors. This refers to the 'multi-level' aspect of the concept: there is a movement from centralised national authority towards multiple centres of authority (Stephenson, 2013). Our research question aims to understand the impact of MLG on a public administration's e-government policies. Bache & Flinders (2004) defined a number of criteria that can be used to test if a central government is indeed being impacted by MLG. Those criteria, referred

to in Table 1, are used in this work to assess the impact of MLG on the e-government policy of the Belgian federal administration. Although the use of those criteria leads to a potential simplification of the understanding of the impact of MLG, they ensure a systematic approach in understanding its impact on the e-government policy, and in particular the IIS.

Table 1: Multi-level Governance Criteria

The identification of discrete or nested territorial levels of decision making is becoming more difficult in the context of complex overlapping networks.
The role of the state is being transformed as state actors develop new strategies of coordination, steering and networking to protect and, in some cases, enhance state autonomy.
The nature of democratic accountability has been challenged and needs to be rethought or at least reviewed.
Decision-making at various territorial levels is characterized by the increased participation of non-state actors.

It has to be recognized that MLG has also been criticized, especially for its lack of explanatory value. This appears to be correct. MLG cannot provide a causal explanation, but provides a theoretical conceptualization to analyse a context (Fairbrass & Jordan, 2004). That is in line with our approach. Our aim is to understand the impact of MLG on the e-government policies of public administrations. Via this research perspective, we aim to deepen the understanding of the complexity of the field and point to the need to take a broader perspective when analysing and developing e-government policies. Whereas the original MLG concept has initially only been used to analyse EU political integration processes, and was only developed in the context of EU cohesion policy, its use has been widened to analyse various policy fields that could benefit from an understanding based on the MLG concept (Piattoni, 2010).

3. Methodology

The research was executed by making use of a single case study. The e-government policy of the Belgian federal administration was selected for this single case study research. Belgium, a founding member of the EU, is considered to be a representative case for MLG (Hooghe, 2012). The single case study is qualitative and interpretative in nature, and was executed by combining a document analysis and interviews (Lieberman, 2005). A methodological triangulation took place to ensure "a confluence of evidence that breeds credibility" (Bowen, 2009). The document analysis allowed understanding how the activities of one public administration have influenced those of another public administration. The triangulation with the interviews allowed gaining a deeper understanding of the motivations of public administrations and of their behaviour towards each other. The documents and interview material were collected during the FLEXPUB Research Project (2016-2020). The main source of information has been the document data, supported by the interview data. The document analysis focused on the retrieval and analysis of the legally binding documents from the EU Institutions and the Belgian administrations. Furthermore, non-binding EU policy documents and the Belgian Ministerial Declarations on e-government were analysed. The documents cover the period 1995-2019 with two exceptions, i.e. a Belgian Law of 1983 and one of 1990 that both had a crucial importance for the set-up of an information sharing system in the social

security sector. As some information was not available via documents, websites of the European Commission related to IIS were also analysed. An overview of the analysed documents can be found in (Chantillon, Simonofski, et al., 2020). A combination of the 'interview guide approach' and the 'standardised open-ended interview' was used (Patton, 2015). Questions focused on the Belgian federal e-government policy developments over the last two decades, as well as on the challenges and requirements concerning e-government in the Belgian federal context. The respondents were selected on the basis of their knowledge and experience with e-government, e-services and/or data use in e-services. In total, 61 interviews were conducted between July 2016 and November 2019. The respondents were: (1) civil servants of the Belgian federal administration (n=27), (2) civil servants from the European, regional and local level (n=27), and (3) actors from the private sector (n=7). The long spanning interview period allowed to gain a complete overview of the IIS in Belgium. The interview data was analysed with NVivo. More detailed information on the interviews can be found in (Chantillon et al., 2017).

4. Results

4.1. Inter-organisational Information Sharing at the European Level

The EU Institutions took actions to improve the IIS within the Member States' (MS) administrations as well as between the different MS. Both legally and non-legally binding actions were taken by the EU concerning information sharing, and the topic has been on the agenda since the mid-1990's, when the first 'IDA' (Interchange of Data between Administrations) program was launched in 1995. It was the start of a subsequent number of Decisions, which focus on interoperability and aim to lead towards an increased information sharing between public administrations (1999, 2002, 2004, 2009 and 2015). Besides those Decisions, the Ministers of the MS have also agreed on several Ministerial Declarations, such as the 2017 Tallinn Ministerial Declaration, which includes several references to the importance of the "once-only" principle. Specific European Commission actions, which intended to influence the IIS, were outlined in the EU Action Plan 2010-2015 and EU Action Plan 2016-2020 and the Toolbox for Practitioners on the Quality of Public Administration (2015, 2017), which devotes attention to Service Delivery and Digitalisation, interoperability and the "once-only" principle. The most important element on which the European Commission, in collaboration with the MS, has been working for the last two decades is the European Interoperability Framework. Interoperability has been defined as "the ability of disparate and diverse organisations to interact towards mutually beneficial and agreed common goals, involving the sharing of information and knowledge between the organisations, through the business processes they support, by means of the exchange of data between their respective ICT systems". What is clear from the above-described action is, firstly, that the different actors at EU level have long been focused on the need for interoperability. Secondly, information sharing is only a smaller part of a much broader policy striving towards the need for interoperability and the delivery of pan-European e-services for administrations, businesses and citizens.

4.2. Inter-organisational Information Sharing Policy in the Belgian Federal Administration

A number of activities show that the Belgian federal administration has already stimulated IIS since the 1980's. This has further continued in the 21st century. Over the years, several actions were taken to improve IIS, and the focus was originally put on two key elements: service integrators, i.e. the mechanisms to exchange data from authentic sources, and authentic sources, i.e. "data bases in which unique and original data is stored". Already in 1983, the first factual authentic source was set-up, the State Registry of Natural Persons, aiming to create a single registry including all natural persons in Belgium. In 1990, this was followed by the creation of the Crossroads Bank for Social Security, which aimed to ensure that data of social security organisations would run smoothly from one organisation to another. No further actions were taken until 2003, when the Crossroads Bank for Undertakings was set-up by the federal administration. This was followed in 2008 by the creation of the eHealth Service Integrator and in 2012 by the set-up of the Federal Service Integrator. Regarding authentic sources, it has to be underlined that the federal administration already committed in 2001 to develop a framework for the development and maintenance of those sources. This commitment was renewed in 2006 and 2013. In 2014, a federal law affirmed the "once-only" principle obliging all federal actors to first check within the federal administration if the required data was internally available. The condition was however that the required data was recognised as authentic source. Until now, the criteria and procedure to recognise an authentic source have not been defined, which makes the effectiveness of the 2014 "once-only" law questionable. Besides the importance of service integrators and authentic sources, interoperability also constitutes a central element in the achievement of IIS, as it is expected to lead to improved information sharing. The first references to the need for interoperability can be traced back to 2006. The described interoperability levels are those agreed in the European Commission's 2004 European Interoperability Framework. According to one of the respondents, the European Commission took the on-going Belgian interoperability work as an example for the European Interoperability Framework. No official document could however be found to support this statement.

4.3. Analysing the Multi-level Governance Criteria

The four criteria will now be tested on the basis of the above collected information. The first criterion refers to the "identification of discrete or nested territorial levels of decision making" (Bache & Flinders, 2004). In a MLG context, this identification becomes more difficult as a result of the complex overlapping networks. This criterion is fulfilled. Actions taken in different overlapping networks, although not always legally binding, do influence the decisions that are taken at other levels. Whereas the Belgian federal administration was independent in its decision-making for the creation of the State Registry of Natural Persons (1983) and the set-up of the Crossroads Bank for Social Security (1990), this changed afterwards. The Belgian federal administration gradually became more part of a network in which the EU, but also the regional actors, influenced the decision-making process of the federal administration.

Secondly, it is assumed in a MLG context that "the role of the state is being transformed as state actors develop new strategies of coordination, steering and networking to protect and, in some cases, enhance state autonomy" (Bache & Flinders, 2004). The document analysis and the interviews

revealed, as described above, that the Belgian federal administration was already, for a longer period of time, working on improving the IIS. What is interesting, however, is the fact that the EU actions on information sharing, both legally and non-legally binding, appear to have influenced the need to take measures, especially concerning the "once-only" principle, the need for interoperability and the further development of the network of service integrators. Indeed, after the set-up of the State Registry of Natural Persons in 1983 and the creation of the Crossroads Bank for Social Security in 1990, no further actions were taken. It was only after the European Commission has put the topic of information sharing on the agenda that the Belgian federal, regional and language community administrations re-launched their common and individual actions. Therefore, it can be argued that state actors have developed new strategies for their coordination, steering and networking. However, those actions are not taken to protect or enhance their state autonomy, but rather to follow the advocated policies at EU level. This criterion has therefore only partially been met.

The third criterion refers to the nature of democratic accountability. This accountability "has been challenged and needs to be rethought or at least reviewed" (Bache & Flinders, 2004). Accountability can be defined as "the need to control misuses of power for those who might not be able to directly participate in decision-making" (Gualini, 2003). In a MLG context, there are different actors involved in the policy-making process, making it hard for the accountability holder to understand how the different actors are handling the policy-making process. The accountability holder is the citizen. It is hard to argue that the accountability concerning IIS has been challenged. Although the EU has taken legally binding Decisions, and suggested a European Interoperability Framework, thereby requiring the MS to develop a National Interoperability Framework, it is clear that the decisions concerning IIS remain to a large extent in MS' hands. In Belgium, it is the federal administration that decided to set-up service integrators and to affirm the authentic source principle as well as the "once-only" principle in the law. Thus, this criterion appears not to be met.

The final criterion is the participation of non-state actors, and in particular whether or not the decision making at various territorial levels is characterized by their increased participation (Bache & Flinders, 2004). Concerning this final criterion, there was no information found on the role of non-state actors in the decision-making process. Private sector actors are involved in the set-up of technical solutions to increase IIS, but no evidence could be found on the private sector influencing the decision-making process itself. However, there is a clear intention from the different public administration actors to work on IIS to improve the service delivery for citizens, businesses and other actors. This motivation is not created because of the involvement of the EU. Already before the EU took any action in the field of information sharing, the Belgian federal administration took specific measures in this respect. The EU actions nevertheless further stimulated the aims of improving the service delivery towards citizens, businesses and other actors. The respondents also confirmed this conclusion. None of them referred to the impact of non-state actors in any assessment activity related to information sharing. Thus, this criterion appears not to be met.

Table 2: MLG – IIS

Criteria	Status
Complexified identification of discrete or nested territorial levels of decision-making	Fulfilled
Transformed role of the state	Partially fulfilled
Nature of democratic accountability	Not fulfilled
Increased participation of non-state actors	Not fulfilled

On the basis of the criteria, and with the knowledge that only the first criterion can be considered as fulfilled and the second criterion only partially, it can be concluded that IIS is only partially impacted by MLG. It can be deduced that the Belgian federal administration was already actively working on this topic, long before the EU took actions. Nevertheless, the EU activities stimulated the administration to move forward, and this does indeed seem to have impacted the activities. Without the EU, it seems unlikely that the federal government, as well as other administrations in Belgium, would have taken those actions. It can, as such, be argued that the EU stimulated the federal administration to move forward with the IIS policies.

This leads to the question of how this situation can be theorised. The concept of Europeanisation is highly useful for this theorisation. Olsen (2002) argues that the concept "may help us give better accounts of the emergence, development and impacts of a European, institutionally-ordered system of governance". One of the specific Europeanisation forms that (Olsen, 2002) describes refers to the adaptation of domestic policies to actions undertaken by EU Institutions. This does indeed appear to be the case for IIS. The domestic policy was already in development, and has been further influenced by actions of EU Institutions.

5. Conclusion

Through this work, we aimed to understand the impact of MLG on the e-government policy of a central government, and especially its administration, within the EU. It was hypothesised that the concept of MLG is highly important to understand the e-government policies of a public administration. Although the impact of administrations on each other seems to be partially neglected in the e-government academic literature, it is highly important to conceptualise this influence in order to create improved e-government policies for citizens, businesses and other public administrations. In order to conceptualise this relationship, the concept of MLG was applied, and in particular the IIS of the Belgian federal administration was studied. The results show that IIS is only partially impacted by MLG. From the analysis, it can be deduced that the Belgian federal administration was already actively working on this topic, long before the EU undertook actions. Nevertheless, EU actions stimulated the federal administration to move forward on this topic. Without the EU, it seems unlikely that the federal government would have taken those actions. Other policy areas of national administrations might also be impacted by the EU, and, here as well, the concept of MLG can be relevant to gain a better understanding of the relationship between a national administration and the EU.

References

- Bache, I., & Flinders, M. (2004). Themes and Issues in Multi-level Governance. In I. Bache & M. Flinders (Eds.), *Multi-level Governance* (pp. 1-12). Oxford: Oxford University Press.
- Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), 27-40.
- Chantillon, M., Crompvoets, J., & Peristeras, V. (2020). Prioritizing public values in e-government policies : A document analysis. *Information Polity*, Pre-press(Pre-press), 1-26.
- Chantillon, M., Simonofski, A., Tombal, T., Kruk, R., Crompvoets, J., de Terwangne, C., Habra, N., Snoeck, M., & Vanderose, B. (2017). *FLEXPUB Public e-Service Strategy - Report WP2. FLEXPUB - Work package 2 - Baseline Measurement*. Leuven: KU Leuven
- Chantillon, M., Simonofski, A., Tombal, T., Kruk, R., Crompvoets, J., de Terwangne, C., Habra, N., Snoeck, M., & Vanderose, B. (2020). *FLEXPUB Public e-Service Strategy - Report WP4. FLEXPUB - Work package 4 - Enablers* (forthcoming). Leuven: KU Leuven
- Fairbrass, J., & Jordan, A. (2004). Multi-level Governance and Environmental Policy. In I. Bache & M. Flinders (Eds.), *Multi-level Governance* (pp. 147-164). Oxford: Oxford University Press.
- Gualini, E. (2003). Challenges to multi-level governance: Contradictions and conflicts in the Europeanization of Italian regional policy. *Journal of European Public Policy*, 10(4), 616-636.
- Hooghe, M. (2012). Does multi-level governance reduce the need for national government. *European Political Science*, 11(1), 90-95.
- Lieberman, E. S. (2005). Nested Analysis as a Mixed-Method Strategy for Comparative Research. *American Political Science Review*, 99(3), 435-452.
- Marks, G. (1993). Structural Policy and Multilevel Governance in the EC. In A. W. Cafruny & G. G. Rosenthal (Eds.), *The State of the European Community. Vol. 2: The Maastricht Debates and Beyond*. (pp. 391-410). Boulder: Rienner.
- Meijer, A., & Bekkers, V. (2015). A metatheory of e-government: Creating some order in a fragmented research field. *Government Information Quarterly*, 32, 237-245.
- Olsen, J. P. (2002). The Many Faces of Europeanization. *Journal of Common Market Studies*, 40(5), 921-952.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods*. Los Angeles: Sage.
- Piattoni, S. (2010). *The Theory of Multi-level Governance: Conceptual, Empirical, and Normative Challenges*. Oxford: Oxford University Press.
- Scholl, H. J., Kubicek, H., Cimander, R., & Klischewski, R. (2012). Process integration, information sharing, and system interoperation in government: A comparative case analysis. *Government Information Quarterly*, 29(3), 313-323.
- Stephenson, P. (2013). Twenty years of multi-level governance: "Where Does It Come From? What Is It? Where Is It Going?" *Journal of European Public Policy*, 20(6), 817-837.

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