A transformative change through a coordination process and a steering agency. The case of the financial information system of the French central state

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Abstract: Recent scholarship focused on how coordination mechanisms are implemented by public sector organizations, thereby paying attention to coordination as a process. Continuing in this vein, we study a case of coordination process in action to advance our understanding of the role of the actors involved and type of change it may result in to contribute to the literature on coordination in public administrations. For this purpose, this article studies the coordination process that resulted in the implementation of the interministerial financial information system of the French central state – named Chorus. Chorus is a case of an unlikely coordination process rolled out in the non-conducive context of the French Napoleonic Administration. Chorus aimed at connect all ministries' administrative services to a shared information system, while all ministries were previously using their own systems and applications. Based on the literature on the coordination mechanisms, and focusing on the role of existing institutions and the actors involved in the coordination process, the analysis draws two main results. First, AIFE – the agency in charge of the implementation of Chorus – steered the process by developing a stepwise network-based interministerial strategy. Second, the coordination steered by AIFE resulted in a transformative change of the French state's financial and accounting structures through a layering process of change. Thereby, the article contributes to the empirical analysis of public administrations' recent changes toward increased coordination at the central level by studying recent reforms in France and their outcomes.

Keywords: Information system, France, Central administration, ICT, Public management, Coordination, Interministerial coordination, Coordination process, public sector reform

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Introduction

Coordination in the public sector is certainly amongst the most vexing issues that public administrations themselves, and public administration scholars alike, have had to tackle. From a scholarly perspective, post-new management reforms have urged to think

anew this basic question (Christensen and Laegreid, 2007; Bouckaert et al., 2010). Discussions of the drivers of coordination reforms have arisen (for a recent assessment, see Trein and Ansell, 2020); and both the mechanisms of coordination and the combination of hierarchy, network and market, as well as the (sometimes) resulting hybrid mixes, have also been thoroughly studied (Verhoest and Bouckaert, 2005; Bouckaert et al., 2010; Laegreid et al., 2014; Laegreid et al., 2015).

More recently, research has focused on how coordination mechanisms are implemented by public sector organizations. It thereby pays attention to coordination as a process, that is, "the strategies and instruments governments use to coordinate organizations or programmes within the public sector" (Bouckaert et al, 2010, p. 16). Traditionally, studies of coordination have zeroed in on its outcomes (on this distinction, see Alexander, 1995), that can be analyzed based on several levels of coordination (Metcalfe, 1994). However, as existing research brings to light cases of failed or difficult implementation (Christensen et al., 2015), where the intended level of coordination is not reached, the issue of coordination in action, or the process of coordination, comes front-stage. This scholarship on coordination as a process also illuminates how in the course of coordination, the mix of hierarchy, network and market may evolve (Randma-Liiv et al., 2015), sometimes due to public organizations resisting and challenging central state coordination (Overman et al., 2014). Examining the coordination process is thereby integral to a discussion of the changes it brings about, specifically in terms of their incremental or transformative nature (Streeck and Thelen, 2005a; Baumgartner and Jones, 2009), and the change process at stake (Christensen et al., 2015). Ultimately, the investigation of coordination processes contributes to the analysis of the extent to which central states achieve better coordination. In this article, the leading question is therefore that of the process through which coordination is brought about and the type of change it results in.

To do so, the article builds on the insights of earlier works regarding the role of existing institutions, both formal and informal (Christensen et al., 2015) and that of the actors involved in the process of coordination (Overman et al., 2014; Randma-Liiv et al., 2015). Specifically, it elaborates on how change actors steer the process of coordination in siloed public administrations. First, it expects that change actors mostly rely on network-based coordination while occasionally resorting to hierarchical steering. Drawing from Thelen's seminal work, the article's second expectation is that this process

of coordination results in a transformative change in the form of layering (2004, see also Mahoney and Thelen, 2010).

In this article, we study the process of coordination that took place between 2006 and 2011 and resulted in the interministerial financial information system (FIS) of the central state administrations in France – named Chorus. Chorus aims to collect, trace, store, and interpret all financial data managed by the French State (Diyani, 2017). It covers different functions such as the management of resources allocation (based on the state's budget), state's expenditures, state's assets and non-tax revenues; and integrates three accounting systems (i.e. general accounting, budget accounting and cost accounting). This shared FIS is an instrument inducing changes that ultimately aims at "creating procedures to avoid negative spill overs and improving cooperation between administrative organizations" (Trein and Maggetti, 2020: 200) in the fields of finance and accounting. In essence, Chorus allows French policy-makers to know exactly and in real time the financial situation of the central state, a ministry or a given policy program.

The decision to introduce a joint FIS in the French central state' public administrations followed a politically consensual decision to reform the budget and the budgeting process of the central state in 2001 – the so-called LOLF (Corbett, 2010). A dedicated organization, the Agency for State Financial Information Technology (hereafter AIFE for 'Agence pour l'informatique financière de l'État'), was tasked with the design, the implementation, the development and the maintenance of that FIS. In Bouckaert et al. terms, AIFE is thereby a "coordinating entity" (2010: 57). Based on previous failed attempts of similar projects and its broad-ranging focus, namely the set-up of the entire financial information system of the French central state, it was unlikely that the coordination process initiated by the decision to introduce a shared FIS would be successful. And yet, it was: Chorus is now running in each of the French central state administrations. The study of this unlikely case is instrumental to illuminate how change actors steer coordination processes in siloed public administrations.

This article has two main results. First, AIFE steered the process of coordination by developing a stepwise network-based interministerial coordination. The network-based feature of this process of coordination was built in the governance of Chorus. At the same time, the process of coordination itself was supported by the technical characteristics of the ERP (Enterprise Resource Planning software) that was selected to implement the shared FIS: as the ERP limited the range of possible diverging options,

once engaged in the coordination process, the ministerial administrations had to give up on their own information system and little to no other choice than to work on a shared FIS. Last, due to its institutional set-up and the initial uncertainty regarding the features of the shared FIS, the coordination process could not resort to hierarchical steering. While there was no shadow of hierarchy on this process, political authority was occasionally resorted to in order to get reluctant ministries involved in the coordination process in the first place.

Second, the process of coordination steered by AIFE resulted in a transformative change of the French state's financial and accounting structures, namely the introduction of a cross-ministerial shared FIS, through a layering process of change. Chorus was layered on each ministry's own financial applications and information systems. From there, Chorus and related applications progressively outgrew them, and eventually replaced them. These transformations were also accompanied by other structural changes led by AIFE, notably a new e-invoicing platform named Chorus Pro.

The remainder of the article is structured as follows: the first section discusses the state of the art. The second section then introduces our case selection and methods. The third section presents our empirical analysis, which is discussed in the fourth and concluding section.

Theoretical framework

Studies of coordination in public sector organizations have made significant progress in the past decade following, or alongside, the adoption of policy integration and administration coordination reforms, the latter being the specific focus of this article, in many established and more recent democracies. Administrative coordination reforms can be defined as "the changes in the administrative hardware with the intention of improving coordination between ministries and agencies" (Trein and Ansell, 2020: 3; see also Christensen and Laegreid, 2007; Perri 6, 2004; Trein and Maggetti, 2020). It has been established that new public management reforms and the paradigm's preference for agencification have later on driven counter-acting reforms aiming at vertical and horizontal coordination (Bouckaert et al., 2010; Christensen and Laegreid, 2007) in view of avoiding policy failures and offering better solutions to wicked problems.

Yet, these reforms raise the significant issue of whether or not they achieve their goals. Following Alexander (1995), Bouckaert and colleagues suggest to study

coordination as a process, that is, to focus on the "process through which decisions are brought together" (2010, p. 15). This approach is by no means antithetical to a study of coordination as an outcome, which focuses on levels of coordination classically ordered on a scale from independent decision-making (virtually very little to no coordination) to a general, interministerial governmental strategy ((Metcalfe, 1994; see also Bouckaert et al., 2010, p. 16). Rather, researching coordination as a process contributes to illuminating the level of coordination achieved, that is, coordination as an outcome. In that respect, coordination as a process is conceptualized as "the instruments and mechanisms that aim to enhance the voluntary or forced alignment of tasks and efforts of organizations with the public sector" (Bouckaert et al., 2010, p. 16). This approach thereby sheds a new light on the mechanisms of coordination to study how they interact how actors manipulate them. Developments on the three main modes of coordination have contributed to the analysis of how different types of instruments incorporate these basic logics of coordination. The debates have focused on when and how hierarchy has been supplemented by market-based coordination (in the 1980s) and network-based coordination (in the 1990s); as well as how they combine in hybrid mix (Bouckaert et al., 2010; Klijn and Koppenjan, 2000). Part of the discussion has dealt with how coordination based on network incorporates elements of hierarchy, sometimes as part of a "shadow of hierarchy" argument (Scharpf, 1997; Scharpf, 1994; Christensen and Laegreid, 2008; Diefenbach and Sillince, 2011; Keast et al., 2006; Koffijberg et al., 2012; Randma-Liiv et al., 2015; Laegreid et al., 2015).

Yet, as recently stressed by Randma-Liiv and her colleagues, "there is a shortage of empirical studies outlining the actual functioning of such hybrids of coordination mechanisms and exploring and explaining their dynamics over time" (2015: 378). In other words, the existing scholarship falls short of accounting for the actual process of coordination. This gap is to be addressed, we suggest, to improve our collective analysis of coordination in the public sector, and within central states specifically (Christensen et al., 2015; Dahlström et al., 2011), and further elaborate on the changes resulting from reforms and formal decisions introducing coordination (Bouckaert et al., 2010; Bezès and Le Lidec, 2011).

Following an emerging strand of research, this article intends to narrow this gap by focusing on the role of key actors in the process of coordination, and specifically actors who steer this process. First, the literature points at both their institutional resources and

the type of coordination mechanism they resort to in order to account for coordination processes. In their study of internal security crisis management in Norway, Tom Christensen and colleagues demonstrate that the process of coordination is dependent on major actors' institutional resources (budget and personnel), leadership, culture and receptive attitudes towards change, as well as on the perceived urgency of the problem (2015). They conclude that "even in the face of major crises, significant changes are difficult to carry out" (Christensen et al., 2015: 367) when major actors' are not active participants to the coordination process. This is related to whether the expected actors engage in coordination processes. In fact, they may resist and challenge the central state attempts at coordinating their tasks. Overman and colleagues study how semi-autonomous agencies in the Netherlands and France have partly only engaged in the coordination processes set by the central state, in the fields of immigration and scientific research (2014). These agencies were able to manipulate and amend the rules of coordination based on their institutional resources. As a result, neither central states in both countries were able to achieve coordination to the extent they expected.

In addition, elaborating on the literature on the three coordination mechanisms, recent research has illuminated how their mix may evolve over time during the process of coordination because of key actors' strategic choices. In their work on the Estonian civil service, Randma-Liiv et al. demonstrate that network-based coordination is instrumental to bypass hurdles existing in fragmented administration systems. As such, this mechanism of coordination relies on participating actors and institutions being partly interdependent and reciprocity- and cooperation-oriented, as well as sharing values (Bouckaert et al., 2010). Yet, Randma-Liiv and colleagues' dynamic analysis of coordination documents how hierarchical measures have been added to network-based coordination (2015). Taken together with Christensen et al. (2015) and Overman et al. (2014) who report that hierarchical steering does not necessarily prompts actors to participate in coordination processes, these results bring questions about the role of hierarchy in coordination processes, either as a coordination mechanism as such or as operating in the shadow of other mechanisms (Scharpf, 1994). This line of scholarship thereby reports that a decisive issue of coordination processes is whether the expected participating actors actually engage in coordination or not, and what mechanisms of coordination actors steering coordination processes resort to. Based on this line of research, we expect that actors steering coordination processes in siloed administrations

will resort to network-based coordination to have expected participating administrations engage in coordination, while occasionally resorting to hierarchy.

Second, turning to the issue of the change brought about by coordination processes, research adopting a power-distributional approach suggests that the institutional context and the resources, and constraints they provide key actors with, are to be considered. Mahoney and Thelen have made significant advances in the analysis of how what type of actors may promote change in what type of institutional context (2010). They suggest that in institutional context where key actors have veto powers, actors promoting change are likely to pursue change by adding new elements on top of existing ones, as they are not in a position to remove the latter. A transformative change may result from this incremental process of change, even in non-conducive context, when the new elements eventually outgrow or even replace older ones. The emphasis on hierarchical direction, pervasive siloed structures and reluctance to change – characteristics that are particularly present in the French administration (Bezès et al., 2013; Bezès and Parrado, 2013; Jones and Cole, 2009) – are not likely to be conducive to punctuated institutional change. Rather, layering as a type of change is more likely to operate in such contexts as it allows to bypass veto-players and make siloed structures work together by gradually adding new elements onto an otherwise stable institutional framework (Thelen, 2004: 32). In siloed public administrations, we therefore expect that coordination processes result in transformative change through layering (van der Heijden, 2011).

Case selection and methods

In this article, we study an unlikely coordination process aimed at implementing a shared FIS in the central administrations of the French state. First, France, as a Napoleonic administrative system, is characterized by the centralization of decision-making, the prevalence of ministerial compartmentalization and a resistance to change (Bartoli, 2008; Bezes & Parrado, 2013; Bezes et al., 2013; Jones and Cole, 2009). Second, Chorus was unlikely to result from a successful coordination process in view of earlier similar major initiatives that failed. The ONP (National Pay Operator) is a case in point (de Saint Pulgent, 2019: 170). This project of an interministerial information system in the field of HR management was launched in 2009 and was stopped in 2014 following a governmental evaluation pointing, among other explanations, at the over costs incurred by the project.

Our analysis is based on a qualitative analysis of interviews with government officials. Data was collected through semi-structured interviews with three main groups of actors: officials from AIFE, the organization steering the coordination process; officials from the directorates of financial affairs in several ministries, namely the Armed Forces, Education, and Ecological transition, who were involved in the coordination process on the shared FIS; and, last, an official from the Ministry of Public Accounts in charge of financial planning and execution. The rationale for this sample was to collect information from multiple actors who were involved in the coordination process, as well as to reflect the diversity of sectoral ministries' perspective on the shared FIS. We selected three ministries based on their share of public spending and public investment as they were likely to shape ministries' preferences regarding the coordination process on the shared FIS: namely, the Ministry of Armed Forces (13,8% of the state budget but with the highest share of investment spending); the Ministry of Education (largest share of the central state budget – 30,3% – mostly due to staff costs, but limited investment) and the Ministry for the Ecological and Inclusive Transition (a limited share of the State budget – 8,8% – but with leverage for investment spending in public infrastructure).

Empirical analysis

AIFE as the resourceful steering actor of a coordination process

We start our empirical investigation with how AIFE was established and has acted as the steering actor of the coordination process that resulted in a shared financial information system in French public administrations. We present in turn its tasks, the political context in which it was established, as well as its institutional resources.

AIFE was established in 2005 for the specific purpose of developing a shared interministerial FIS named Chorus. AIFE thus became Chorus project's supervisor and delegated project owner[1] and, as such, was tasked with the design, implementation, development and maintenance of the new FIS. AIFE was in charge of all the issues related to Chorus, but practically delegated many tasks to IT and business consulting firms, notably through calls for tenders. In fact, AIFE's very existence depended on Chorus and

[1] The Ministry of Public Accounts is Chorus project owner, and as such is in charge of the overall financial planning and execution.

the related coordination process. Interministerial coordination in view of building a shared FIS has been crucial to its organizational survival.

In the early 2000s, the French government decided to provide central state administrations with an interministerial FIS, through the introduction of an ERP. This decision was made in the context of the adoption of the managerial and budgetary reform of the 2001 Budget Act, the so-called LOLF (Corbett, 2010; Bezès and Parrado, 2013). The LOLF was not politically contentious. Parliamentary work resulting in the vote of LOLF was bipartisan. Similarly, the related decision to reshape the FIS of central state administrations and subnational state authorities was not divisive in party political terms. As such thereby, the coordination process that would result in a shared interministerial FIS has benefited from the political support of successive governments from its introduction up until now. While Chorus did not constitute a high priority on the political agendas, this political context nonetheless provided AIFE with a first set of resources: continuous political support. An AIFE senior staff member mentioned arbitration meetings at the level of the presidency of the Republic and with the prime minister services to have the project of a shared FIS make substantial progress. Interviewees reported that governmental support allowed the agency to occasionally resort to political authority to get reluctant partners involved in the coordination process.

The institutional context of AIFE's origins provided a second crucial set of resources: organizational resources. Once the decision to introduce a new shared FIS in the French state's central administrations was made, one obvious option was to have the Ministry of Public Accounts, and specifically the General Directorate of Public Finance, steer the coordination process that would result in Chorus. Yet, the French government did not pursue this avenue and, instead, established an agency formally autonomous from the Ministry of Public Accounts. As highlighted by several interviewees, AIFE's formal autonomy allowed the project of a shared FIS not to be perceived by other sectoral ministries as headed by "Bercy", a term coined to refer to all ministries and state secretariats in charge of Finance and Public Accounts. This taps into a widely spread representation among French civil servants that "Bercy" may have excessive power and attempts to use financial regulations as Trojan horses to infringe on sectoral policies (Bezes et al., 2019). An AIFE senior staff member reported that the French government was aware of this issue and thought of AIFE's autonomy from the Ministry of Public Accounts as a requirement for any later process of interministerial coordination.

> [There was] a willingness to give a real interministerial dimension to the Chorus project, and therefore to have an entity which is seen a little less as being "Bercyan" [referring to the Ministry of Public Accounts], if I can put it that way, and more interministerial. [...] But I think that is an issue the ministries were aware of and very careful at the time, and they still are today… (Staff member of AIFE)

AIFE's initial autonomy from the Ministry of Public accounts, as well as from sectoral ministries, was enshrined in its specific administrative status. AIFE was established as an office with national competence (labelled hereafter as an SCN, *service à compétence nationale*). SCNs are autonomous from ministries and their administrative services and, as such, are not part of a central state administration, whether at the national or subnational level. They are still hierarchically under the supervision of a minister's cabinet, currently the Minister of Public Accounts in the case of AIFE. In addition, AIFE benefits from budgetary autonomy and its status as SCN provides the agency with a larger flexibility for human resources management than central state services. It may sub-contract with private companies without infringing administrative rules. It is also allowed to recruit staff with private-sector-like contracts and did so:

> The status of SNC also made it possible to give a certain flexibility in terms of operation, including with regard to the recruitment of profiles able to lead the Chorus project. This status has in fact made it possible to build teams at AIFE which are in fact mixed teams with some of the staff who are public officials […] who have in-depth knowledge of the administrative processes, and know the right moves to coordinate and make work together a fairly complex set of actors. And then mixed with a group of staff from the private sector with an expertise in consulting or integration of information systems, in particular with an expertise in SAP. (Staff member of AIFE)

How AIFE steered the coordination process that resulted in an interministerial shared FIS

AIFE started the coordination process in view of a shared FIS in a context where a few steps had already been taken, but where strong veto players – specific sectoral ministries – could block the initial steps. In 2006, as part of its first mission, AIFE updated the previous accounting system ACCORD, introduced in the 1990s, into ACCORD LOLF. ACCORD was the first attempt to integrate the many finance and accounting

applications of central administrations into a single information system. But it was restricted to process expenditures information only. Next to the implementation of the LOLF, all ministries and the General Directorate of Public Finance and the Directorate of Budget collaborated to devise joint expenses and accounting regulatory frameworks. They were referred to as 'macro processes'. Based on these initial steps, AIFE was set to start the interministerial coordination in view of a shared FIS that was to include all financial information of national and subnational state administrations.

But strong veto players within the central state administrations could block the coordination process from the early stages. Two ministries have notably acted as veto players, benevolent ones as it turned out: the Ministry of the Armed Forces and the Ministry of the Interior (home affairs). The latter has been traditionally a prime broker of any attempts at reforming the French state and its public administrations. It is due to its territorial reach and its leadership and control over a large range of subnational state administrations (Bezès and Le Lidec, 2011; Bezes, 2009; Bezès and Le Lidec, 2016):

> The Ministry of the Interior has an important weight in the whole system, and on each major reform, or each major development. It is good form to have at least the support of this Ministry. (Staff member of the Ministry of Public Accounts)

The change to a common FIS also implied very sensitive issues for another potential veto player, the Ministry of the Armed Forces. This Ministry manages the vast majority of French State's supply and administers long-term contracts that are difficult to transfer from one FIS to another. Moreover, besides the staff and operating expenditures that are equally important for all ministries, the Ministry of the Armed Forces manages a very high share of State's capital expenditure. A change to a common FIS was thereby a costly move. In general, the Ministry of the Armed Forces is a heavy weight when it comes to interministerial projects and is usually not eager to participate to these projects due to the sensitive information it manages regarding investments for military equipment, intelligence services and infrastructures – as indicated by interviewees from both AIFE and the Ministry of Public Accounts.

> Let's say that the Ministry of the Armed Forces is both very jealous of its own organization and sometimes not very receptive to the development of new organizational models that it certainly considers too impregnated with the influence of the Ministry of Public Accounts. [...] In the Ministry of the Armed Forces, they

> are quite sensitive about their organizational specificities, but they also have the capacity to invest and finance Chorus information system developments for their specific needs. [...] They have very specific needs that other ministries do not have and which has led the Ministry of the Armed Forces to fund changes to the Chorus information system for its own needs. [...] And which finally have been shared [and adopted by other ministries]. (Staff member of the Ministry of Public Accounts)

In this context, the coordination process started with preliminary consultations of all ministries and an upstream work of persuasion. At this stage, the Ministry of the Armed forces was granted a leading position in the development of the new FIS, allowing the Ministry to tailor some of its components to its own needs. For instance, the Ministry was a privileged AIFE's partner to develop several Chorus-related projects such as the development of a ChatBot or a cost accounting tool, which is particularly useful for managing capital expenditures. Interviewees also indicated that getting the support from veto players was key to get the other ministries on board, either because they acted as followers or did not have the leverage to oppose the project.

In the early stages thereby, AIFE's steering of the coordination process was based on a network-type of coordination. In a setting were actors pursued distinct interests, AIFE managed to involve the many ministerial partners through preparatory steps. To avoid the veto powers of stronger ministries, AIFE gave them a "primus inter pares" position so that they could directly benefit from the shared FIS – this proved to be instrumental to secure the success of the coordination process (Klijn and Koppenjan, 2000: 146).

In later stages as well, network-based coordination was key. Between 2008 and 2011, the implementation of Chorus was organized in six waves which targeted different ministries and their central and subnational services. Through this process, AIFE intended to consider the different concerns of each ministries while developing the new FIS. From a technical point of view, the stepwise process also aimed at warranting that the budget and accounting information of the state were properly handled by the new FIS. By 1st of January 2011, all ministries used Chorus and had implemented the shared FIS. However, a number of financial applications specific to each ministry were (and are) still running outside of Chorus' scope of operation. AIFE has negotiated biennial contracts with each ministry to ensure that these applications would either be connected to Chorus, or substituted by a shared application provided by AIFE or simply discarded (Diyani, 2017),

thereby pursuing a layering process of change. By doing so, AIFE succeeded in redefining Ministries' diverging and conflicting interests into a common interest (Klijn and Koppenjan, 2000: 146), namely the development of shared and up-to-date tools that were set to align the French state with the best practices from the private sector. By the same token, AIFE has also developed additional accounting and finance-related projects along the way, while the coordination process around the shared FIS was already rolled-out. Chorus Pro is a case in point. It is a digital platform through which providers of goods and services to public sector organizations submit their dematerialized invoices. AIFE developed and launched this e-invoicing system in 2016. It targets each and every public sector organizations, and not only central state administrations. AIFE thereby has extended its original perimeter and addresses now its "products" to many more "clients", which was initially viewed with distrust by some ministries, and particularly the Ministry of Public Accounts.

Relatedly, once each ministry was engaged in the process of coordination, a key issue was to ensure their participation to the process as such. Their participation was secured based on the governance of Chorus in a network style of coordination. Chorus has been steered by an interministerial committee (the Strategic Orientation Committee) composed of representatives of all ministries (from their directorate of financial affairs), the General Directorate of Public Finance, the Directorate of Budget and AIFE. Committee's members discuss possible evolutions of financial and accounting issues. Moreover, AIFE has introduced a system of Chorus users' feedback to shape the evolution of the information system and its related applications. Groups of experts from different ministries convene periodically to devise solutions based on users' feedbacks. AIFE then assesses the proposed solutions in terms of feasibility and cost and selects some of them, which are further discussed during interministerial seminars. The most consensual propositions are adopted and, last, implemented by AIFE. This network-based coordination method warrants that changes to the FIS are accepted by the participating ministries. It also builds consensus around the further evolutions of Chorus and, thereby, contributes to a common understanding of problems and solutions, and the way to handle them, by all network's partners (Klijn and Koppenjan, 2000: 146). As noted by a senior staff member of AIFE, this method insures the viability of the shared FIS on the long term by fostering collaboration between ministries.

Finally, AIFE also made a strategic choice regarding which IT solution to select in order to secure a smooth coordination process on the shared FIS of the French central state. The very reason for selecting SAP ERP was its technical relative rigidity. AIFE purposively selected the software to avoid haggling in the development phase in the name of ministerial peculiarities.

> The idea was to take a private management tool that would force us to go into it. It was actually constraining everything, forcing all state processes into a constraining structure. […] But we did it on purpose, it was a deliberate choice. (Staff member of AIFE)

AIFE harnessed the software's rigidity to the benefit of the coordination process and to strengthen its own autonomy vis-à-vis sectoral ministries. Also, this choice was instrumental for AIFE to design applications connected to Chorus that could easily be used by each ministerial administration, thus facilitating the layering of the new FIS that outgrown former ministry-specific tools. In this regard, the choice of a 'constraining ERP' was conducive to interministerial coordination based on standardized financial and budgetary tools and practices.

Discussion and conclusion

In the empirical analysis, we presented the context of AIFE's origins and the political and organizational resources (i.e. HR and budgetary autonomy and perceived independence from "Bercy" by other ministries) the agency relied on to steer the interministerial coordination process that resulted in a shared FIS of the French central state. We also described how AIFE steered this coordination process based on a network-based coordination style.

AIFE's network-based coordination displays three main features. First, the horizontal process of coordination was gradual in terms of the range of financial and budgetary activities covered by the ultimately shared FIS. Once all ministries were engaged in the process of coordination, the network-based process of coordination was most visible in the governance of Chorus where all decisions reflected a horizontal decision-making process. Second, the selection of the ICT tool – SAP ERP – proved to be a consequential choice to warrant that ministries would not keep their own financial and accounting peculiarities. In that respect, this technical choice provided support to the

very existence of the coordination process as such, while leaving its operation and outcome up to AIFE and participating ministries. AIFE's steering in a network-based coordination style accounts for the features of the coordination process, as discussed below. Both features align with our first expectation that in siloed administrations, a network-based coordination steered by a resourceful actor would prevail. The third, and final, feature of Chorus related coordination process yet departs partly from our expectation. We expected that the coordinating entity would occasionally resort to hierarchy. Our study shows that AIFE could count on political authority in the early stages to get reluctant ministries on board and have them engage in the coordination process. Yet, it is not the case that either hierarchical steering was at times in place or that network-based coordination operated in the shadow of hierarchy (Scharpf, 1994, 1997). On the one hand, while political support to a shared FIS was strong, the project was partly undefined and an uncertainty regarding the specific characteristics of Chorus prevailed until the coordination process steered by AIFE eventually ended. In that sense, a hierarchical steering would have been empty. On the other hand, AIFE has had no authority on participating ministries as it is organizationally independent and autonomous. In other words, there was no set up of clear authority structure.

This network-based interministerial coordination steered by AIFE resulted in a transformative change. When AIFE was first established in the wake of the LOLF reform, French central administrations relied on their own specific FIS and applications. Ten years later, they all shared the same system, namely Chorus, and financial information exchange are coordinated by a single structure. Also, remaining ministerial applications have progressively been streamlined into the new FIS or are discarded. Through the coordination process that resulted in Chorus, the French central state' financial information system has experienced a complete overhaul. This transformative change brought about by a coordination process in a non-conducive context occurred through layering (Thelen, 2003; Thelen, 2004; Streeck and Thelen, 2005b; van der Heijden, 2011). Specifically, the implementation of Chorus results from AIFE's strategy, first, to give prominent ministries leeway to shape some features of the new FIS to their own needs and, second, to organize interministerial coordination from the beginning of the project up to its implementation and maintenance. AIFE's design of Chorus' governance was instrumental to bringing every ministry onboard, even the reluctant ones: specifically, users' feedbacks and the set-up of interministerial steering bodies. Through

this coordination process, while Chorus has incrementally been introduced alongside existing ministerial FISs, AIFE has managed to streamline or discard them, having thereby Chorus outgrow and replace the many systems and applications that existed prior to Chorus' introduction. Our second expectation is thereby confirmed. Also, by developing other projects (i.e. Chorus Pro) that went beyond its initial prerogatives, the AIFE added another layer to its perimeter of action by addressing accounting and finance-related solutions to other public organizations, and not only that of its primary "clients", namely the central administrations.

Overall, we studied in this article a coordination process and the changes it brings about in order to illuminate how change actors can steer transformative processes in siloed administrations. This article makes three contributions to the public administration scholarship. First, it contributes to the empirical analysis of the case of the French public administrations' recent changes toward increased coordination at the central level (Bouckaert et al., 2010: see chapter 9 on France; Bezes et al., 2013; Bezès and Le Lidec, 2011; Bezès and Le Lidec, 2016) by studying most recent reforms and their outcomes. Second, the article supplements studies of coordination in times of crisis or when wicked issues are prevalent (Laegreid, 2015; Christensen et al., 2015) by studying coordination in a core function of a central state, namely financial information and accounting. It pays also attention to the role of digital tools in coordination in the public sector. In the case of Chorus, they have played a specific role in fostering interministerial collaboration by framing the adaptation of actors with different interest and needs to a common instrument. By constraining the scope of possible choices, the SAP ERP steered ministerial departments in the very direction set by the agency in charge of the coordination process. Last, the article develops the analysis of coordination processes in public sector organizations and provides an empirical study of the functioning of network-based coordination in the absence of hierarchy (Randma-Liiv et al., 2015).

To conclude, the empirical study of the unlikely roll-out of Chorus enhances our understanding of coordination processes in public administrations, and particularly in administrative contexts that are non-conductive to change (e.g. siloed structures, presence of strong veto players). Our analysis suggests that in such contexts, the set-up of agile, resourceful and autonomous change actors is key for the success of coordination processes inducing change. The article provides support for pushing forward the analysis

of change actors' ressources, status and strategy by public administration scholars working on similar issues. This research thus paves the way for comparisons or case studies in other administrative systems where interministerial coordination projects were implemented. Further research may build on or compare the French case to other cases in similar (Bezès and Parrado, 2013) or different contexts (Bezes et al., 2013).

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Appendix

Appendix 1. List of interviews

- Interview 1, Staff member of AIFE, Noisy-le-Grand, November 2018
- Interview 2, Staff member of AIFE, Noisy-le-Grand, November 2018
- Interview 3, Staff member of the Ministry of the Armed Forces (directorate of financial affairs), Paris, December 2018
- Interview 4, Staff member of the Ministry of Inclusive and Ecological Transition (directorate of financial affairs), Puteaux, December 2018
- Interview 5, Staff member of the Ministry of Education (directorate of financial affairs), Paris, January 2019
- Interview 6, Staff member of AIFE, Noisy-le-Grand, January 2019
- Interview 7, Staff member of AIFE, Noisy-le-Grand, February 2019
- Interview 8, Staff member of the Ministry of Public Accounts (general directorate of public finance), Paris, February 2019