Connecting EU Jurisdictions: Exploring How to Open Justice Across Member States Through ICT

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Abstract

This article explores the concept of open justice in the context of European Union (EU) cross-border litigation and focusing on the e-justice dimension. It does it looking both at the open justice principle coming from the legal tradition and at the new ideas coming from the open government discourse. More in detail, the article investigates the attempt to create an open area of justice in Europe through the development and implementation of an European Justice Digital Service Infrastructure and the opening of such infrastructure to users and service providers. It is a development and implementation effort, which builds on the EU's multilevel legal frameworks, which uses available technological innovations, which responds to the economic needs and challenges of an EU without internal borders, and which result should be capable of being embedded in the existing cultural communities. EU Member States (MSs) have developed such infrastructure and tested it successfully. Currently, EU institutions are faced with the serious and unavoidable challenge to open up such infrastructure and to ensure its use. In a dynamic environment in which EU and MSs laws, technologies, economies, and cultures coevolve, this is not an easy task.

Keywords

open justice, e-justice, e-CODEX, justice digital service infrastructure, justice service provision

Introduction

"In a genuine European area of justice, individuals should not be prevented or discouraged from exercising their rights. The incompatibility and complexity of legal or administrative systems in EU countries should not be a barrier" (retrieved October 30, 2017 from http://ec.europa.eu/justice/civil/

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index_en.htm). This article investigates the attempt that is being made to create an open area of justice in Europe through the development and implementation of a European Justice Digital Service Infrastructure (DSI) and the opening of such infrastructure to users and service providers. It is a development and implementation effort, which builds on the European Union (EU)'s multilevel legal frameworks, which uses available technological innovations, which responds to the economic needs and challenges of an EU without internal borders, and which should be capable of being embedded in the existing cultural communities. EU Member States (MSs) have developed such infrastructure and tested it successfully. Currently, EU institutions are faced with the serious and unavoidable challenge to open up such infrastructure and to ensure its use. However, in a dynamic environment in which EU and MSs laws, technologies, economies, and cultures coevolve, this is not an easy task.

The EU has been putting significant effort into harmonizing and facilitating judicial cooperation in civil and criminal matters. A number of directives and regulations have been adopted to simplify access to justice in cross-border litigation. These range from regulations facilitating the coordination between national rules to a number of harmonized procedures that provide an automatic recognition and enforcement of the judgment issued for certain types of civil and commercial matters. Even in the simplified procedures such as the European Order for Payment and the European Small Claim Procedure, legal communication requires the involvement of professional intermediaries and the capability to perform apparently simple national specific actions such as the payment of fees or the service of documents to the defendant. Despite the actions that were undertaken by the European legislative bodies, cross-border legal procedures are still far from being uniform and transparent. Just to be able to orient oneself is a time-consuming activity, while the process as a whole lacks transparency and linguistic interoperability (Mellone, 2014; Ng, 2014).

Information provision on EU cross-border judicial procedures involves multiple actors from different jurisdictions. Credibility and transparency can be decreased by the number of intermediaries, as it is difficult to identify who is responsible for which piece of information. Also, critical information is often missing or in many cases conflicting. Furthermore, access to justice can be very much hindered due to complex and time-consuming data exchange procedures, which are carried out through paperwork and involve multiple intermediaries. Lastly, another challenge to legal communication between MSs is the linguistic diversity within the EU that requires coherent and aligned approach to interpretation of concepts. In this perspective, semantic interoperability is a vital component to ensure meaningful exchange of the jurisdiction-dependent concepts. At the same time, as of now, even EU-level directives and regulations are not semantically interoperable.

Academics and public managers initially believed that single-medium platforms for government-to-citizen and government-to-business interaction could and would replace all other public channels (Wirtz & Langer, 2016). From that perspective, the European e-justice portal is an attempt to provide initially digital information and then digital access to a number of cross-border legal procedures. The recent e-Justice Communication via Online Data Exchange (e-CODEX) project is a result of this long-term effort. It has developed an e-justice DSI connecting an increasing number of national e-justice infrastructures through "generic" services. The idea is to support litigants (and also public authorities) to engage in cross-border legal procedures through the digital means available in their countries. The project set out in 2010 and reached its formal end in 2016, while transforming into Maintenance of e-CODEX (Me-CODEX).

e-CODEX is considered a success, as its infrastructure has been successfully deployed and piloted in a number of live cases. At the same time, the set up and testing with real cases seem not to be enough for creating an open area of justice. The infrastructure and the service provided are still too difficult to use, too impractical, and too many techno-legal barriers exist. So, what does opening such an infrastructure and its services entail? Can it be achieved with the involvement of third-party service providers? What can happen if such an attempt is done?

The availability of digital platforms for the legal domain and the example of leading judiciaries such as Austria (ERV) and Italy (PCT) has already given rise to the idea that it is wise to leave the development and maintenance of technological interfaces for external users to third parties (i.e., private companies) in order to reduce the complexity to be faced by the public administration to a manageable level. More challenging even, one can imagine leaving it to third parties to provide justice services that are capable of off-loading the procedural complexity from the end user.

In this article, we try to explore the changes in justice and justice service provision, looking at the e-justice dimension, but making a theoretical link between e-justice and open justice, which goes behind the classical open justice principle coming from the legal tradition (Reinhardt, 1995; Spigelman, 2006), combining it with the new ideas coming from the open government discourse (Harrison et al., 2012; Jiménez-Gómez & Gascó-Hernández, 2017; Lathrop & Ruma, 2010; McDermott, 2010).

Open government ideas, applied to justice, suggests that *cooperation* between public bodies and justice stakeholders, the *involvement* of internal and external actor in the design, delivery and evaluation of justice services, and the *engagement* of the public in the definition of justice policies may have a positive impact in supporting justice and justice initiatives designed to simplify access to justice and improve the quality of justice service provision. At the same time, the traditional open justice principle suggests that this opening should be done carefully, ensuring transparency but also independence and impartiality of the justice service (and its appearance in the eye of the public), given the great reconfiguration potential of this kind of initiatives.

Our approach is an inclusive one (Schmidt, 2007) and one that is sensitive to changes in the environment and to the different forces that are working the domains of the judiciaries. We have stumbled upon what in 2016 proved to be good practices for e-CODEX's survival and what a few months later established itself as fitting into the tenets of complexity theories (Velicogna & Steigenga, 2016). And we have had to face the need (and to polish the mechanisms required) to combine contrary forces. In the current article, we consolidate the experience in theory and thus turn it into knowledge about open justice and its multiple facets.

Literature Review

Open Government and Open Justice

Following the uptake of New Public Management ideas in the 1990s, concepts such as transparency and accountability have risen in the agenda of public administration (Pollitt & Bouckaert, 2006), as public opinion increasingly asked initiatives consistent with "the idea that not only should [...a public] organization be able to fulfil its tasks in an efficient and effective manner, but it should also be customer or client-oriented" (Ng, 2007, p. 11–12). In light of these new ideas, it was argued that "judicial system should learn its legitimacy not only by sound juridical judgments but also by providing adequate services" (Fabri & Langbroek, 2000, pp. 8–9) and that concrete actions should be "taken to increase the legitimacy and accountability of the system by providing the public with a broader access to information concerning the courts activities" (Velicogna & Ng, 2006).

President Obama memorandum on transparency and open government suggested the need for a further step, raising the attention of public administrations around the world to the opportunity to embark on open government initiatives (Jiménez-Gómez & Gascó-Hernández, 2017). Obama (2009) memorandum identifies three principles for "creating an unprecedented level of openness in Government" transparency, public participation, and collaboration. *Transparency* concerns the use information and communication technologies (ICT) to put information about the public administration and agencies operations and decisions online and available to the general public, *public participation* is the engagement of the public in the governance of the public sector, benefiting from

this source of dispersed knowledge, while *collaboration* refers to the use of innovative tools, methods, and systems to increase cooperation within the public administration but also with non-profit organizations, business organizations, and individuals in the private sector (Obama, 2009).

As part of the public sector but independent from the government, judiciaries have been indirectly but increasingly affected by these new open government concepts and initiatives. At the same time, it should be reminded that the principle of openness is part of the legal tradition and one of the pillars of justice action. Lord Hewart—in Rex v Sussex Justices; Ex parte McCarthy—provided the source for the often quoted aphorism, which convey the traditional meaning of open justice in the legal discourse:

It is said, and, no doubt, truly, that when that gentleman retired in the usual way with the justices, taking with him the notes of the evidence in case the justices might desire to consult him, the justices came to a conclusion without consulting him, and that he scrupulously abstained from referring to the case in any way. But while that is so, a long line of cases shows that it is not merely of some importance but is of fundamental importance that justice should not only be done, but should manifestly and undoubtedly be seen to be done.¹

According to Spigelman (2006), "The principle of open justice is one of the most pervasive axioms of the administration of justice in common law systems. It was from such origins that it became enshrined in the United States Bill of Rights where the Sixth Amendment guarantees a criminal accused the right to a 'speedy and public trial'" (p. 150). The principle is present in Article 6.1 of the European Convention on Human Rights where "In the determination of his civil rights and obligations or of any criminal charge against him, everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law" (retrieved October 30, 2017 from http://www.echr.coe.int/Documents/Convention_ENG.pdf).

While the focus has been initially on openness in the sense of people right to see and therefore to ascertain what is happening inside the courtroom, it has extended over time to include "whether judges should speak outside the courtroom and, if so, what limits should apply" (Reinhardt, 1995, p. 805), the opportunity (or lack of thereof) for judges to reveal "any of their beliefs or fundamental values to the public" (Reinhardt, 1995, p. 805), and the broader public right to access information concerning the functioning of justice and its organization (Lourenço, Fernando, & Gomes, 2017). It has been argued that this opening of the judiciary and of the judicial decision-making process exposes the judges nature of "human beings, with weaknesses and biases, struggling to do [their...] best to interpret and apply the law as [they...] see it" (Reinhardt, 1995, p. 810) but that the gaze of the public, the debate, and open exchange of information between judges and the public play a central role in contemporary democracies and in granting the legitimacy of judicial systems (Reinhardt, 1995, p. 811).

Another "way to guarantee the openness of courts is through the direct involvement of the people in decision making" (Contini & Mohr, 2008, p. 69). Lay judges and jurors have been introduced in a broadly varying manner in the different justice systems to improve the capacity of the court system to decide cases in specific matters or to improve the legitimacy of court decisions, especially in serious crimes (Contini & Mohr, 2008, p. 70).

More recently, as a spill over of the open government debate, the concept of openness has further broadened in the scholars and practitioners discourse to include the need for the public to participate in its governance (Jiménez-Gómez & Gascó-Hernández, 2017). Scarce resources, increasing demand for justice services, for better quality and for more efficiency have resulted in increasing cooperation practices involving courts, bar association, and other stakeholders. Efforts to involve the public and include its expectations in the assessment of the justice performance and in the improvement of quality of the justice service have been carried out in various countries through multiple

methods (Contini & Carnevali, 2010), ranging form the implementation of tools such as the Trial Court Performance Standards (National Center for State Courts, 2001; Ostrom & Hanson, 2007) and the simpler Courtools (Ostrom, Hall, Schauffler, & Kauder, 2005), developed by the National Center for State Courts and which include survey measures of court users fairness, equality, and respect satisfaction, to the use of the CEPEJ (2016) Handbook for conducting satisfaction surveys aimed at court users in the Council of Europe's MSs and of CEPEJ checklist for promoting the quality of justice and the courts (CEPEJ, 2008), to the often cited Finnish quality project in the courts in the jurisdiction of the court of appeal in Rovaniemi, which has the objective to generate "systematic discussions among the judges and the between judges and the stakeholders" (Mäkinen, 1999, p. 1) and is based on thematic working groups whose task is mapping relevant problems, identify existing best practices, define mutually accepted procedures, and promote their implementation also through the definition of follow-up measurement (Mäkinen, 1999). In the Netherlands, a quality system called RechtspraaQ, which includes peer review, staff satisfaction survey, users' survey, and visits of external observers, has been introduced to counterbalance the drive for efficiency generated by the implementation of a workload-measurement system for judges and administrative personnel, the Lamicie system, to be used to assess the courts productivity for the budget allocation (Dijkstra, Langbroek, Bozorg Zadeh, & Türk, 2017; Langbroek, 2010).

In many cases, the ICT introduction in the courts has provided a powerful drive to collaboration initiatives between courts and the other actors involved in the justice service provision. This has been particularly true in case of information systems allowing the exchange of data and documents across the court borders. The organizational reconfiguration that have characterized the justice service provision in the process of digitization of judicial procedures has made the judicial service provision increasingly dependent on the cooperation between traditional actors (judges, court clerks, lawyers, public prosecutors, and police officers) and new ones (professional software providers and network providers). This is needed not only to organize and manage the change in practices linked to the introduction of the new technologies but because the introduction of technologies results in the need to manage and negotiate the new rules that technology, given its regulative nature (Kallinikos, 2005), imposes. As an example of cooperation on technical matters, in Austria, the Ministry of Justice, its IT service provider (the Federal Computing Centre), and the commercial clearing houses (transmission providers) responsible for verifying the correctness of the electronic files sent by the external court users through the Austrian e-justice system cooperate in the planning of the system updates (Koch et al., 2017). Examples range from the French experience allowing local courts and bar associations to sign a protocol to start the use of e-Filing infrastructure in the ordinary jurisdiction,2 to the tables of discussion organized by Italian courts to develop protocols between courts and bar associations on the new practices related to the introduction of the Italian Civil Trial On-Line, which in some cases extended to initiatives to involve stakeholders in the financing of the justice service provisions (Carnevali & Resca, 2014).

Building on the open government and open justice ideas and research, the next paragraphs explore the phenomenon form the EU cross-border justice service provision.

Opening Cross-Border Litigation in the EU: The Legal Dimension

As the focus of the article is on the opening of cross-border justice proceedings through the use of technology, it makes sense to introduce briefly the more general cross-border judicial framework in which technology is introduced, the off-line initiatives that have been undertaken and the limits so far discovered.

As a general note, cross-border litigation presents a number of additional complexities to the national one due to a number of factors, which includes

the diversity of applicable rules, lengthy proceedings, and significant costs that can easily reach disproportionate levels. [...In cross-border judicial proceedings, the] complexity of a national procedural system, the lack of transparency of applicable national procedural rules, the limited familiarity with other justice systems, and slow and ineffective enforcement mechanisms can be a serious disincentive for creditors to take action and defend their rights. The diversity of procedural rules in cross-border litigation places litigants in an unequal position, having to accept diverse handling and varying costs for the same type of claim in different Member States. (Ontanu, 2017, p. 1)

Following the Amsterdam Treaty, the EU acquired the legal grounds to address the problem of harmonization of cross-border judicial procedures (Storskrubb, 2008). "The harmonisation of procedural rules in cross-border litigation can reduce differences, encourage convergence in civil law, and promote the compatibility of procedural legislation applicable in the Member States" (Ontanu, 2017, p. 3).

During the years, the EU has adopted a number of legal instruments in the attempt to "simplify, speed up, and reduce the costs of cross-border litigation" (Ontanu & Pannebakker, 2012). These instruments range from regulations facilitating the coordination between national rules harmonizing specific steps of cross-border procedures such as determining the jurisdiction (Regulation [EU] No. 1215/2012) or the service of documents (Regulation European Commission [EC] No. 1393/2007) to harmonized procedures that provide an automatic recognition and enforcement of the judgment issued for certain types of civil and commercial matters, such as the European Order for Payment (Regulation [EC] No. 1896/2006), the European Small Claims Procedure (Regulation [EC] No. 861/2007) or the European Account Preservation Order (Regulation [EU] No. 655/2014; Kramer, 2015; Kramer & van Rhee, 2012; Storskrubb, 2008).

In addition to be an effort toward harmonization of procedural rules regulating cross-border commercial or civil disputes, these legal instruments are clearly an attempt to open up cross-border litigation to represented and self-represented claimants (Kramer, 2015; Mellone, 2014). This attempt is carried out introducing a number of simplification and standardization elements including the effort to structure the communication through the use of standard forms, limit as much as possible free text, support translation through the availability of the form in all EU languages also reduces translation complexity.

At the same time, the empirical research and the debate among European scholars and practitioners on the implementation of the regulations that have been implemented for the longer period (the European Order for Payment and the European Small Claims Procedure) has unveiled many blocking elements (Kramer, 2015, 2010; Ng, 2013, 2014; Mellone, 2013), resulting in a very limited use of these instrument in practice (Ontanu, 2017).

To counteract this situation, and in line with the idea that ICT is a tool to increase the efficiency of procedures and therefore to make them more appealing to the potential users, several actions have been carried out and sustained in particular by the EU Commission. These actions include constant work to improve online access to procedural information and the dynamic forms provided through the e-justice portal, but the main initiative can be seen in the attempt to develop and deploy, in cooperation with the MSs, a digital services infrastructure, which support cross-border judicial procedures.

Method

The development and implementation of the e-CODEX European Justice DSI and the opening of such infrastructure to users and service providers have been studied through a longitudinal case study (Yin, 2003). Such case study is based on multiple sources of evidences and pursued a corroborative strategy with the use of different types of triangulation—data triangulation,

investigator triangulation, theory triangulation, and methodological triangulation (Patton, 1987; Yin, 2003). Two of the paper authors have been actively involved in the development, implementation, maintenance, and long-term sustainability effort of the e-justice DSI (e-CODEX) and of the project exploring how to open up such infrastructure to users and service providers (Application Programming Interface [API] for justice). This has allowed the participant observation and tracking of events in real time, including management board meetings, general assemblies, technical meetings, conference calls, and key e-mail exchanges and events over the 66 months of e-CODEX project and the 18 months of the API for Justice project. This has allowed gaining access to events, people, and privileged communications that would otherwise be inaccessible to scientific investigation. It has also allowed the possibility "to perceive reality from the viewpoint of someone 'inside' the case study rather than external to it" (Yin, 2003, p. 94). It has also provided the opportunity to discuss the key findings emerging from the observation with the people involved. This has allowed to test data interpretations but also to influence further actions driven by such interpretations. The problem of bias, which are potentially produced by the use of participant observation technique (Becker, 1958; Yin, 2003), has been addressed in a triangulation process combining the use of other sources of evidence for the same events or facts (Sieber, 1973; Yin, 1982, 2003), including the analysis of open and restricted documentation (deliverables, e-mails, meeting agendas and minutes, administrative documents, formal studies, etc.), informal interviews and group discussions with the key participants, and direct observation of the technological artefacts and of their use. The inclusion of two "external" authors has allowed for an investigators triangulation, but also, given the different background and area of expertise of the four authors (covering legal, social science, and political science fields coupled with more theoretical or practical stances) for having multiple perspectives on the same data set (theory triangulation) and multiple methods (methodological triangulation).

Case Description and Findings

e-CODEX: EU Digital Services Infrastructure for Cross-Border Justice Procedures

Building on the idea that ICT can be used to simplify access to cross-border legal procedures, a large-scale project called e-CODEX project was launched in 2010 with the technical objective

to achieve interoperability between existing national judicial systems (i.e. for the cross border transmission of judicial documents, decisions, information, etc.), addressing mainly the horizontal issues on the interoperability between Member States' activities, such as a secure network for the judiciary and e-Id management of the different stakeholders (e.g. judges, courts, lawyers, etc.). This will help to rationalize and simplify judicial procedures (reduction of procedural deadlines and operating costs to the benefit of citizens, undertakings, legal practitioners and the administration of justice). (CIP ICT PSP work programme of 2010, p. 30)

Expected results included (CIP ICT PSP work programme of 2010, p. 32):

- 1. Enabling all MSs to work together toward a more effective judicial system in Europe, avoiding the development of noninteroperable e-justice solutions.
- 2. Contributing to a safer environment inside the EU for citizens.
- 3. Contributing to a more trustworthy environment for businesses development and in particular for SMEs to benefit more from the internal market.

Based on these aims and objectives, a large consortium including 22 Ministries of Justice or their representatives and co-funded by the EU between December 2010 and May 2016 developed and piloted a decentralized digital services infrastructure. The infrastructure was designed as an

interoperability solution based on a gateway architecture to make existing national and EU solutions interoperable through national access points. The use of a decentralized network of gateways interlinking national and European IT systems to one another (European Commission, 2017) allows the respect of the principles of independence of the judiciary and of subsidiarity (Hix et al., 2011, p. 8). It supports secure transportation, electronic identification, signature, and semantic interoperability. To allow access to justice in all cases where national systems do not have available solutions, the EC agreed to work on the possibility to use the EU e-justice portal as central entry point.

e-CODEX technical solution was consolidated in a follow-up multidomain (project called Electronic Simple European Networked Services [e-SENS]; retrieved October 30, 2017 from https://www.esens.eu/), "to provide the foundation for a platform of 'core services' for the eGovernment cross-border digital infrastructure foreseen in the regulation for implementing the Connecting Europe Facility (CEF)" (retrieved October 30, 2017 from https://www.esens.eu/content/about-project).

The e-CODEX network is made up of a series of physical gateways located in the national administrations. On the European side, each gateway is interconnected with the other ones through a common communication protocol and is made secure using well-proven authentication and cryptographic algorithms. On the national side, each gateway communicates with the national systems through an adapter, called connector. The connector is customized by each country to fit its specific needs (Pangalos, Salmatzidis, & Pagkalos, 2014) and maps "the (proprietary) national formats to the widely used ebMS-based standard transport format used between the gateways" (Velicogna & Steigenga, 2016 p. 16). The solution therefore supports the mutual equal interpretation of legal semantic information.

Problems faced by the e-CODEX team, though, were not just of technical nature. The communication in judicial legal proceedings must not just take place in a secure and reliable manner, it must also be legally valid. In national legal procedures, procedural rules authorize and regulate the use of technological means to carry out legally valid actions. In the cross-border context, the legal validity of the acts carried out

depends on a combination of the EU legal framework and of the legal framework of the Member State of the court deciding on the case, which is typically different from that from which the communication of at least one of the parties originates. This was found to be particularly problematic in the case of a key component of legally valid judicial communications: the signature of the documents. (Velicogna, 2018)

In fact, while e-CODEX high-level architecture was developed starting from 2011 and the system went live in August 2013, the Regulation (EU) No. 910/2014 on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation),³ which "lays down the conditions under which Member States recognise electronic identification means of natural and legal persons falling under a notified electronic identification scheme of another Member State" (Art.1.(a)) and "establishes a legal framework for electronic signatures, electronic seals, electronic time stamps, electronic documents, electronic registered delivery services and certificate services for website authentication" (Art.1.(c)), entered into force only in July 2014 and key parts applied only from July 1, 2016.

A temporary solution was found through an agreement between the e-CODEX project partners (called Circle of Trust Agreement) so that the verification of the electronic signature or equivalent is carried out by the MS where it originates from, and it can then be trusted by the receiving MS.⁴ As a

result of this process, which included on the one hand, the exploration and selection of existing technological components (e.g. e-delivery solutions developed in other projects, Holodeck open-software, potential piloting countries national ICT systems etc.), but also the legal components (e.g. Directive 1999/93/EC on a Community framework for electronic signatures, national regulations on e-signature

and e-Filing, cross border judicial procedure regulations, etc.), the development of missing technical and legal components (e.g. the circle of trust, the system for the creation of a Trust-OK-Token, etc.) the [prototype of the] e-CODEX Digital Service Infrastructure was assembled. (Velicogna, 2018)

Once the prototype components of the e-CODEX DSI were assembled, the project began implementing it in piloting countries and tested with real cases in the actual functioning of the system. The services tested were

based on judicial procedures regulated by EU Regulations and Decisions (e.g. European Order for Payment, European Small Claim etc.). While these norms provide a certain level of standardization, their functioning relies on national organizations (e.g. courts), procedures (e.g. notification, payment of fees) as well as technologies and specific frameworks (e.g. e-identification, e-signature etc.). (Lupo & Velicogna, 2017)

By the end of the project in May 2016, 13 MSs were actively involved in the piloting five cross-border procedures (Hvillum et al., 2016 p. 17; Velicogna, 2018; Velicogna & Lupo, 2017).

A number of issues

emerged in the deployment and testing of the infrastructure at national level, ranging from installation of the e-CODEX gateway, the migration from one version to the following one, configuration of firewalls to allow the communication, the mapping of national schemas with the e-CODEX ones, the testing of communication with the other partners of the network. (Velicogna & Steigenga, 2016)

At the same time, the project managed to confront such issues with the result that a sustainable solution for the maintenance and further development of e-CODEX is being explored by the MSs in cooperation with the EU Commission. Furthermore, the infrastructure will be used as the tool for the interconnection of national business registers (BRIS) and for the support of the European investigation order and the exchange of electronic evidence by all MSs (European Commission, 2017).

While these positive results have been achieved by the e-CODEX project, a great limit can be seen in its inability to support and simplify enough cross-border litigation. The number of cases and transactions remain quite limited. In open justice terms, e-CODEX participants had managed to increased cooperation between national authorities and to develop an ICT infrastructure to streamline the service delivery, making services more accessible, and overcoming off-line cross-border judicial procedures barriers.

At the same time, it had so far failed to "fundamentally redesign how governments operates" (Tapscott, 2010, p. XVI). It has been argued that this is linked to the top-down approach for the selection of services to be provided, the procedure instead of user-centric approach, and the limited possibilities and incentives for third parties such as legal professional vendors to adapt their systems to allow them to communicate through the e-CODEX infrastructure and services. The following paragraph focuses on the attempt to change this situation.

Opening the European e-Justice DSI

The attempt to open up the e-CODEX infrastructure and boost its use has been and is currently being carried out through several initiatives. Me-CODEX project, co-funded by DG justice, in addition to the Me-CODEX justice domain components, is investigating new judicial procedures or procedural steps, which may attract users such as the service of documents in cross-border procedures. Pro-CODEX project, also co-funded by DG justice, objective is to investigate the possibilities and create conditions to support the development of the technological components required to make interoperable e-CODEX and the applications used by legal professionals (lawyers and notaries) at national

level. The project empirical research of feasible options to ease the use of e-CODEX infrastructure and to increase the number of users among the different legal professions makes the project dependent on e-CODEX infrastructure technical development, management, and governance.

Another initiative, on which we explore more in detail given its important contribution to explore the possibilities for a fundamental redesign of the e-justice service provision along open justice ideas, is the "API for Justice" EU co-funded project. Coordinated by the Dutch Ministry of Justice, it aims to investigate the challenges entailed in opening up the e-justice DSI for cross-border legal services, provided by e-CODEX and the European e-justice portal, by means of APIs.

Given the limited number of cross-border civil justice cases managed by the system and the complexity of connecting a new service provider, e-CODEX partners realized that it was going to be very difficult and that there were no clear economic incentives for third parties to build applications and develop cross-border legal services building on the existing features of the European e-justice DSI. At least some of them believed that this situation could be changed through the use of APIs, which could help opening up of the European e-justice DSI to applications developed by (private or public) third parties with a more user-oriented approach, and capable of off-loading the complexity from the end user, transferring it to the application and service providers and investigated its feasibility through the API for Justice project. This project is considered a key step to support the EC multichannels strategy in the digital justice domain. The e-justice Action Plan 2014-2018 identified the use of multiple channels as a means to support easier access to cross-border procedures. The basic idea of the multichannels strategy is the use of "multiple electronic and nonelectronic channels to support the delivery of one or multiple services" (Steigenga & Velicogna, 2017). It can be thought as an end user-oriented service delivery where much of the complexity such as the selection of the procedure or the steps needed to carry it out is solved by the channel available, delegated to the service provider or automatically carried out by the system, instead of being imposed on the typically inexperienced nonrepetitive users, which are the target of EU cross-border electronic judicial procedures in the civil domain (Steigenga et al., 2017, p. 11).

But what is an API? Wikipedia definition of API is

a set of subroutine definitions, protocols, and tools for building application software. [...] Just as a graphical user interface makes it easier for people to use programs, application programming interfaces make it easier for developers to use certain technologies in building applications. By abstracting the underlying implementation and only exposing objects or actions the developer needs, an API simplifies programming. (retrieved October 30, 2017 from https://en.wikipedia.org/wiki/Application_programming_interface)

For the API for Justice,

An Application Programming Interface (API) is a technical contract that information systems use to encapsulate functionality that can be used in an automated fashion by another system. APIs are widely used when engineering information systems of any type. APIs enable the 'using system' to be unaware of the actual implementation of the system that offers the API. In this sense, APIs allow both systems to change and evolve more or less independently, as long as both respect the technical contract. (Steigenga et al., 2017, p. 15)

From a technical perspective, the API for Justice team identified the following steps in a communication carried out through a third-party service provider application, an e-CODEX API and e-CODEX infrastructure (Steigenga et al., 2017, p. 92):

- 1. The third-party application sets up a technical connection to the API.
- The API authenticates the system that sets up the connection, based on its TLS certificate. The API only allows the connection if the system is authentic and registered (known to the API).
- The API receives the technical input message and validates it. Part of this validation is a validation of the electronic signature. This must be the signature of a registered third-party service provider.
- 4. The API constructs a message conforming to the e-CODEX specifications. This message contains the signed user form.
- The API sends this message to the competent authority using the e-CODEX gateway to which it is connected.
- 6. The API generates a unique "Transaction ID" and keeps this in its internal state table, together with the "Competent Authority ID".
- 7. The API returns the "Transaction ID" to the calling application.

An example of the kind of services that can be enabled is provided by Velicogna (2017). In his hypothetical example, justice services functionalities are added to an APP providing nonjudicial services to the end user (search for best car rental opportunities). The justice services functionalities may be prompted to the user and legal solutions suggested as a possibility only in case the situation may require it. According to the example, a

'Rent-a-car' APP developed by a third party may include a support functionality in case the end user has a problem with a renting agency. This solution may include access to Online Dispute Resolution but also support the user in identifying the legal means available and in some cases in the filing and managing the claim. The APP could, for example, on the basis of the information already available on the user and on the renting, suggest that a European Small Claims Procedure could be started and through an API that allows access to the European Court Database (which is currently available only through the e-Justice portal using a user interface), find the competent court and prefill a European Small Claims Procedure Claim Form (Form A) in one of the languages accepted by the competent court. Once completed and electronically signed, the APP could then submit the Claim Form through an API [...] to the e-CODEX infrastructure and to the competent court, receive formal communications from the court and allow queries on the status of the procedure. (Velicogna, 2017, pp. 10–11)

While the example provides a clear idea of the advantages that a third-party applications enabled justice services may provide, the API for Justice project team perceived the need for a more systematic approach to investigate and evaluate the potential to develop APIs and to support existing cross-border judicial procedures. As a consequence, they attempted to develop a methodological approach, which builds on the e-CODEX project experience

for the identification and selection of use cases and further explores the processes and procedures involved not only through the use case oriented business process analysis, but also by taking the user perspective in relation to the justice service provision. The approach exploits user stories emerging from the empirical analysis of the selected procedures and describing present, and potential future uses, highlighting problems and potential solutions, which may be addressed through ICT tools. (Steigenga et al., 2017, p. 9)

From Opening the e-Justice Service Provision to Opening the e-Justice DSI Governance

While investigating the technical feasibility and exploring possible methods to represent the services from the user perspective and allow the discussion on possible e-services, the API project team began also pondering on the limits of the existing e-justice DSI governance

(Steigenga et al., 2017, p. 31). This led to realize that "existing mechanisms for the establishment of trust relations that enable the provision of e-CODEX services may not be adequate to support the new ones needed to allow third parties service providers to connect to and leverage on the e-CODEX infrastructure in order to act as a usage multiplier" (Velicogna, 2018, p. 20).

In the closed e-CODEX system, the main actors involved in the EU cross-border justice service provision were institutional players, such as Ministries of Justice, courts, and so on. Their interactions and behavior take place within the framework of judicial cooperation between EU MSs and EU Judiciaries. They were represented in the governance bodies of e-CODEX project and, after its establishment, in the e-CODEX permanent expert group of the Council of the EU. No place for the engagement of the new actors in the governance of the e-justice service provision or for the discussion of policies existed.

At the same time, opening up the existing infrastructure to third-party justice service providers can lead to "issues such as liability, intellectual property, intermediation and malpractice in the digital mediated services need to be considered. Additional requirements may be imposed on the basis of the opportunity to protect court users in the electronic environment" (Steigenga et al., 2017, p. 31).

As a consequence, existing trust relationships and governance mechanisms needed to be discussed and new trust relationships and a more open governance framework need be established. To this end, the API for justice project developed a governance model intended to "ensure that the trust established between the current parties involved in the provision of cross-border e-Justice services, i.e., the [... European Commission and the EU Member States] is maintained through appropriate extensions when access to the e-Justice infrastructure is provided through alternative channels" (Steigenga et al., 2017, p. 31).

In line with the complexity of the system, the API for justice project proposed a multilevel governance structure defining roles, competences, and relations between the key actors and stakeholders. The governance structure was designed following CEF definitions⁷ not only to be organizationally functional but also to include the requirements of the eIDAS Regulation. The work carried out within the e-SENS project concerning the European ICT governance structure was also taken into consideration in the process (Alcaide et al., 2015; Kingstedt et al., 2014; Verhoosel et al., 2016). The model should "ensure that the trust established between the current parties involved in the provision of cross-border e-Justice services, i.e., the European Commission and Member States is maintained through appropriate extensions when access to the e-Justice infrastructure is provided through alternative channels" (Steigenga et al., 2017, p. 33).

According to the API for justice project

The APIs opening up the e-CODEX infrastructure should be developed and updated under the supervision of the e-CODEX infrastructure policy owners (identified as the Member States—Ministries of Justice, and the Commission—DG Justice), and made available to the institution maintaining the infrastructural components (i.e. e-CODEX Gateways and Connectors). Through the institution maintaining the infrastructural components, the APIs services should than be made available to external service providers. This would allow the service providers to connect their applications to the e-CODEX Infrastructure. (Velicogna, 2018, p. 20)

The API for justice project underlined how legal and technical obligations for API providers and service providers need to be set up in Interoperability Agreements based on the principles set by the e-CODEX infrastructure policy owners. "Such Agreements will be necessary to detail **obligations**, **responsibilities** in relation to the service provision and **accountability** of the parties" (Steigenga et al., 2017, p. 36). Legal obligations do not depend just on the parties and on the principles set by the e-CODEX infrastructure policy owners but have to comply with the EU and national legal

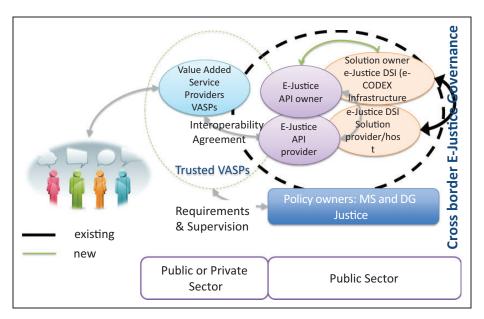


Figure 1. Existing and new trust relationships that need to be established to support for Application Programming Interface for Justice (adapted from Steigenga et al., 2017, p. 36).

frameworks. The General Data Protection Regulation, for example, when becoming applicable on May 25, 2018, will provide a uniform regulatory framework for all MSs in relation to security, privacy, and data protection.

Figure 1 provides a representation of the governance structure suggested by the API for justice project, including key actors and existing and new trust relationships that need to be established to support API for justice. On the right, the e-justice DSI governance components, which includes the e-justice DSI owners and the e-justice DSI service provider. The solution provider of the e-justice DSI is the organization taking care of the maintenance and update of the generic components of the infrastructure. The process of designating the e-justice DSI solution provider is still not completed. This task is presently being handed over from the e-CODEX partners to the European Agency (EU-LISA) through a project called Me-CODEX. The owners of the e-justice DSI are the MSs and the EC according to their area of responsibility. They are accountable for the policy side of the DSI—through the EU-level e-justice policy bodies—and the functional side of the DSI. National implementations of the generic components of the infrastructure (e-CODEX gateways between national infrastructures to the core service platforms and connectors that link the gateways to the national e-justice infrastructure) are managed at national level. This part of a DSI is managed, implemented, and operated by the MSs. A trust relation (represented by the blue arrow) supported by an interoperability agreement (which regulates the obligations of the parties involved in the maintenance and update of the generic components of the infrastructure and the national authorities implementing them).

Near to the e-justice DSI governance components, are the APIs governance ones. According to the API for justice team, "The API-for-Justice Provider is expected to be the same as or closely associated to the DSI solution provider, as the API will need to follow closely the updates and change management if the DSI. Therefore, the API is regarded as an extension of the DSI infrastructure itself to accommodate additional access channels" (Steigenga et al., 2017, p. 37). Furthermore, "it is envisaged that the API-for-Justice would be an extension of the e-Justice DSI reference

implementation and will be updated accordingly. As such, the API and its updates [...could] be made available by the DSI solution provider to the DSI owners" (Steigenga et al., 2017, p. 37).

The third parties digital service providers (private and public), which develop APPs to provide services to the end users, are defined as value-added service providers. Interoperability agreements need to be set up between third parties digital service providers, the API for justice Providers, and the API for justice owners, based on the principles set by the DSI owners. In this perspective, there is therefore a need

to define Guidelines, derived from the common principles and agreements in the e-Justice domain at EU level, for Member States to apply when deciding on providing access to their national cross-border e-Justice Infrastructure to parties outside their immediate supervision, as well as for a certification framework of such parties and apps. (Steigenga et al., 2017, p. 38)

Underpinning the governance structure of the operational components of the e-justice DSI, APIs and third parties digital service provision is the policy layer, which falls under the coordinated competence of MSs (Ministries of Justice) and of the EC (DG justice). The policy layer should allow third parties digital service providers to input their requirements and at the same time to provide supervision over the impact that opening up the service provision to third parties has on the justice service.

Within this governance model, API implementations can be deployed by a centralized API provider (EU), by a decentralized API provider, or by both. The deployment of APIs at centralized or decentralized level, or at a combination of both has clear implications for the complexity of this part of the governance model (Steigenga et al., 2017, p. 40). At the same time, the choice between one of the three possibilities is not only organizational but also political.

- At centralized level (EU): A central authority, such as DG justice, deploys a single instance of an API and this instance accesses the trust network through a dedicated interface at EU level. DG justice could manage the central deployment (connecting to the EU e-justice portal or the e-CODEX infrastructure), but another central authority could take care of it (e.g., one assigned MS). One important condition is the possibility for the authority to access the e-CODEX trust network. Third-party digital service providers should only access the central instance of the API. This model supports a uniform governance of the API. All service providers and implementations are done once, centrally, instead of multiple times in several MSs. This also means that the e-justice API owner(s), DSI solution provider, and DSI solution owner(s) have to establish and maintain trust relations only with a single API provider.
- At decentralized level (MS): MSs deploy their own instance of an API, and each one of these instances accesses the trust network through the national connector. Third-party digital service providers access API-instance(s) in one or more MSs. This model can allow more flexibility, for instance, when certain MSs are deploying specific bilateral use cases for a procedure for which they would like an additional channel. It may allow MSs that decided to adopt earlier such APIs to influence the pace of adoption of specific procedures. Therefore, it is more complex to govern: namely, to enforce uniform terms and conditions for third-party service providers and to enforce uniform supervision of these service providers. In this case, trust relations must be established and maintained within a complex network of national e-justice API providers and API owners, national and EU DSI solution owners, and the EU DSI solution provider.
- At both levels: If this choice is made, API instances could be deployed both at EU and MS level, leaving more flexibility but also further increasing the complexity of the network and

the difficulty to coordinate initiatives and of establishing and maintaining trust relations between all actors.

The research carried out within the API for justice project demonstrated that "that the realisation of an API-for-Justice is both useful and feasible in the longer term; however, a number of open issues must be addressed" (Steigenga et al., 2017, p. 48). Recognizing the socio-technical, legal, and governance complexity of the initiative, the project team suggested to follow an incremental approach:

A stepwise approach for the implementation, with intermittent piloting activities, is recommended. For example, the API may focus in the first instance on guidance and user support in carrying out electronic procedures, then functionality may be extended to support the electronic legal processes and communication [... as a] pilot application of the API will allow for an in-depth understanding of the governance, legal and implementation challenges. (Steigenga et al., 2017, p. 48)

Furthermore, when opening up the existing infrastructure, a clear definition of roles for ownership, provision, implementation and maintenance, and client relationship management become much more critical than when the system is still closed. Mechanisms to ensure trust, accountability, and governance in the much broader network of organization and technological components need to be established. While the existing legal framework may provide both some guidance and identify necessary requirements, this is not sufficient. In some cases, soft law solutions may be found. As an example,

Guidelines should be derived from the common principles and agreements in the e-Justice domain at EU level, for MS [Member States] to apply when deciding on providing access to their national cross-border e-Justice Infrastructure to parties outside their immediate supervision, as well as for a certification framework for such parties and Apps. (Steigenga et al., 2017, p. 49)

At the same time, given the fragmented nature of the legal framework, a legal analysis to determine the legal basis for the services to be enabled and their delivery needs to be carried out on a case-by-case basis.

Third parties wishing to develop e-services need to be engaged to have their support in the establishment and evolution of the governance structure and their collaboration in the exploration, design, and evaluation of new cross-border justice services. At the same time, given the limited predictability of the reconfiguration potential of third parties service providers' initiatives on the core justice values, an ongoing monitoring and assessment need to take place, under the supervision of national and EU competent authorities and with the support and involvement of key stakeholders, including the general public, end users, NGOs, and the academy.

Conclusions

This article explored the concept of open justice looking both at the open justice principle coming from the legal tradition (Reinhardt, 1995; Spigelman, 2006) and the new ideas coming from the open government discourse (Jiménez-Gómez & Gascó-Hernández, 2017). In doing this, we provide a comprehensive framework and contribute to the strengthening of the open justice discussion, which so far has typically focused on one or the other concept. Open government suggests the need for public agencies to undertake an opening process, to welcome stakeholders "influences, discourses, and exchanges" (Janssen, Charalabidis, & Zuiderwijk, 2012) and to give up at least part of the control over data. The government should act as an open system and interact with its environment,

actively seeking feedback to improve its functioning. Political, social, economic, operational, and technical benefits can thus be gained (Janssen et al., 2012).

The right to see justice being done of the juridical tradition combines with a stronger requirement for transparency introduced by open government theory (Lourenço et al., 2017) but, more revolutionizing, to the possibility of public participation to the justice service provision (Contini & Mohr, 2008) and to the idea that innovative tools, and in particular ICT, can be used improve collaboration between judicial authorities and administrations but also between them and private organizations to provide better and more efficient services (Steigenga et al., 2017). In this perspective, the focus moves form an open government in the sense of open access and use of data to open services to open processes, where stakeholders and third parties become part of a more collaborative form of service provision.

Given the delicate balance between constitutional values which characterizes justice service provision, the attempt to open justice and judicial procedure in such fashion requires a strong attentions, from academics, practitioners, and policy makers, toward possible occurrences which may negatively affect the legitimacy, trust, and the perception of independence of the judiciary.

The article investigated this emerging concept in the context of EU cross-border litigation. In the quest of opening cross-border justice to individuals, businesses, and public authorities, a digital service infrastructure called e-CODEX has been developed and is being deployed in Europe. The development of such an infrastructure has thought important lessons in the development of technologies to support the opening of justice service provision on such a scale. e-Justice technologies needed to open cross-border judicial procedures need to ensure technical and legal interoperability between national systems. As a consequence, they cannot be off the shelf, plug, and play systems. They also need to ensure the level of security and trust, which is required by judicial procedures. The description of e-CODEX experience has shown how this makes them complex systems both to develop and maintain.

The development of the infrastructure is considered a technical and political success, but the final objective of making cross-border justice accessible seems far ahead. The e-CODEX DSI supports cross-border legally valid electronic communications between EU MSs different legal systems. It supports the principle of subsidiarity and preserves the investments done on national e-justice solutions. It provides a methodology for the mutual equal interpretation of legal semantic information. Its software core components can be reused even outside of the justice domain. An evolving governance network has been established, helping EU Ministries of Justice, other relevant national authorities, and the EU Commission to coordinate their efforts to maintain, evolve, and extend the infrastructure and its services. Nevertheless, this process did not radically change the way public authorities operate or the nature of the service provision in the ways proposed by open government literature (e.g., Lathrop & Ruma, 2010). In this perspective, the case described shows how setting up an infrastructure and providing services may not be enough to open justice. It dispels the myth that often accompanies open government initiatives that the availability of ICT tools and services may automatically lead to full, immediate, and widespread adoption of the procedures by the public. The actual capability of e-justice systems to streamline the service delivery, making services more accessible, and overcoming off-line cross-border judicial procedures barriers should be assessed not only in technical terms but from the end user perspective.

The digital procedures enabled by the e-CODEX infrastructure still pose the end user in front of an unmanageable complexity. To reduce such complexity, and this time more in line with the most advanced principles introduced by open government, the EC is pursuing the idea of adopting a multichannel strategy, which would allow to move away from a procedure-driven service provision and toward a user-centered one. The exploration of how to implement concretely this strategy, and how to develop user-centered services, has brought about the awareness that justice and governmental institutions by themselves lack the resources and capabilities to do it by themselves.

Reflecting on how to solve this problem, came the idea of opening e-justice service provision to third parties.

The problem of how to attract service providers and involve them in the co-creation of services is being addressed in several initiatives. For example, Pro-CODEX project is studying the problem of involving legal professionals software vendors. The API for justice project investigated the possibility to open it to a much more general group of service providers. The technical opening has been assessed as feasible by the project and will be pursued in future initiatives.

The e-justice infrastructure enabling cross-border technical, legal, and semantic interoperability provides the possibility to open up EU justice to external actors for the (re-)design, coproduction, and management of judicial services. At the same time, this opening is linked to the need for the creation of governance mechanisms capable of engaging and regulating the participation of these new actors. This is considered paramount in order to tap into this new and much needed resource of competences and possibilities but also in order to guarantee the level of trust and legitimacy that justice service provision requires, as also in the e-justice service provision "it is not merely of some importance but is of fundamental importance that justice should not only be done, but should manifestly and undoubtedly be seen to be done."

To sum up, EU e-justice DSI and the use of APIs can be used to open justice in ways that goes behind what could be imagined just few years ago. At the same time, this opening requires the development of a governance system, which will not only ensure the co-creation of justice services but also the safeguard of legal rights and of the legitimacy and trust in the justice institutions. We think that our theoretical discussion on the concept of open justice, and the case study presented, provide a valuable contribution to the open justice academic discourse but also help practitioners in implementing open justice initiatives in the digital domain.

From the authors perspective, the next steps will be oriented toward the study and at the same time support of the implementation of the new governance framework required by the improved openness of the e-CODEX infrastructure and service provision. Further initiatives to raise academic, practitioners, and policy makers attention to the topic are in progress, also in order to increase theoretical and practical contributions and to ensure careful monitoring of the change, early discovery of problems and the possibility of quick intervention where necessary.

Authors' Note

The contents of this article are the sole responsibility of the authors and can in no way be taken to reflect the views of the European Commission. The data used in this study are available by e-mailing the corresponding author at marco.velicogna@irsig.cnr.it. Various reports are available online.

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Notes

1. Lord Hewart from R v Sussex Justices; Ex parte McCarthy (1924) 1 KB 256 at 259.

- 2. See retrieved from January 18, 2018 https://blogavocat.fr/sites/default/files/fichiers/CON VENTION%20DE%20BASE%20CHANCELLERIE%20-%20CNB%20.pdf and retrieved from January 18, 2018 http://proxy.siteo.com.s3.amazonaws.com/www.droitetprocedure.com/file/convention16062010 cnbchancellerie.pdf. As an example of agreement see the "Convention entre le Tribunal De Grande Instance de Nice et l'Ordre des Avocats de Nice concernant le Protocole De Communication Electronique entre le Tribunal de Grande Instance et les Avocats" available at http://www.presse.justice.gouv.fr/art_pix/1_Con ventionCOMCI.doc (retrieved from January 18, 2018).
- Regulation (EU) No. 910/2014 of the European Parliament and of the Council of July 23, 2014, on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.
- 4. It should be noted that even at the beginning of 2018, the Circle of Trust is still relevant to ensure the legal validity of the communication exchange, as specific aspects are still not covered by e-IDAS Regulation.
- 5. Regulation (EC) No. 1896/2006 of the European Parliament and of the Council of December 12, 2006 creating a European order for payment procedure, in OJ L 399, December 12, 2006, p. 1–32. Regulation (EC) No. 861/2007 of the European Parliament and of the Council of July 11, 2007 establishing a European Small Claims Procedure, in OJ L 199, July, 31, 2007, p. 1–22.
- 6. A previous version of this paragraph has been published in Velicogna (2016).
- 7. That is, definitions developed by the Connecting Europe Facility (CEF) of the European Commission.
- 8. See Note 1.

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