Building Interoperability for European Civil Proceedings Online

Research Conference - Bologna, 15-16 June 2012

BUILDING INTEROPERABILITY IN EUROPEAN CIVIL PROCEDURES ONLINE: Outline of the Research Method

Francesco Contini, Andrea Resca

IRSIG_CNR, Bologna, Italy

Giovan Francesco Lanzara

Department of Political Science, University of Bologna, Italy

IRSiG-CNR
Istituto di Ricerca sui Sistemi Giudiziari
Consiglio Nazionale delle Ricerche

Building interoperability in European Civil Procedures Online:
outline of the research method

Second draft, Bologna, May 23 2011

F. Contini, G.F. Lanzara, A. Resca

Summary

Introduction

This document is an outline of the method proposed for the case study analysis. A previous draft (of Nov. 2, 2010) has been discussed in the informal meeting held in Bologna (Nov. 5) and with a conference call with the project partners that not attended at that meeting. A second draft (of February 18, 2011) has been discussed during the research meeting held the 24-25 of February 2011. This final draft takes advantage of the discussion we had in the meeting and of the inputs we have received from the evaluators.

Main changes: greater focus on the concept of infrastructure (looking at the entire system and not just to the components)

1.   The case study analysis

The goal of the case study is to produce a **thick description of the strategies adopted to develop the system under examination, of the development history, the architectural configuration, and the current functioning of the system, as well as of future prospective developments**. The development and the deployment of the related applications entail an institutional reconfiguration taking place during quite a long time frame (often over years).
It is extremely important for our project to be able to understand how the system was assembled out of available and new components, in other words, how it came about, and the major transformations it underwent[1].

Making a thick description of the case requires the systematic collection of data in the technological, organisational, and regulative (legal) domains.
Therefore the case study analysis should be developed along three lines:
- •longitudinal (history and strategy): how it came about (major critical events)
- •architecture at present (configuration of the system), how it is made;
- •functioning: how it works now

Also, the case study should highlight the main interoperability problems that have been met in dealing with the development of national systems, together with the design solutions that have been tentatively adopted and implemented.

---

1   To make an example, while MCOL has been developed taking advantage of a number of pre-existing technological systems and components, TOL required the development, from scratch, of a high number of technological and legal components required for identification, signature, data interchange etc. Such different choices have deeply affected the development dynamics.

1.1. Institutional background

We think useful to open the case study (and the report) providing a broad picture of the judicial system. We are not looking at a systematic, analytical discussion, but at the identification of the key institutional features relevant when analyzing the case study, such as the role and functions of the Ministry of Justice, of the Judicial Council, of the Supreme Court, of the courts affected by the innovation.

1.2. The project background and the installed base

In this section, case studies should provide a picture of the installed base, in terms of the technological, institutional, and legal configuration of the civil justice system before the implementation of the ICT project. The components of the installed base can be technological (standards, pre existing software applications, networks, hardware, etc.); organisational (organisational routines, structures, roles, skills); and legal (formal regulations concerning the research object and domain).

The approach we wish to develop and use to deal with the "**complexities of e-justice**" in general - and of small claims in particular - describes the making of e-justice systems not in terms of 'services digitization' but rather in terms of **institutional and organizational reconfiguration**. The project should focus on the process of innovation at a more comprehensive level that is generally found in the extant experiences and literatures: it should deal with critical aspects and problems of e-justice development, which are essentially institutional and organizational rather than simply technological; they originate most of the times from the complex interplay between technologies with institutional and legal frameworks. Such aspects and problems tend to be highly context-dependent and context-sensitive and cannot be easily dealt within a formalized model of the "business process" or through structured ICT development methods.

Therefore, case studies will focus not only on structural (static) complexity (differentiation of system components and need to keep them interoperable through shared standards) but on dynamic and interactive complexity, that is, produced by the transformations and unexpected interactions in the processes of system design, deployment and evolution.

The four case studies of the national projects are intended to produce highly relevant knowledge about the strategies that Member Countries have pursued in developing their own e-justice systems. They focus on the complex relations between legal, organizational/institutional, and technological issues, and on the challenges involved in developing national e-justice systems.

The two case studies at the European level will assess strategies and solutions that, so far, have characterized the development of pan-European systems in the area of justice. Although the challenges at the European level are certainly more demanding, the national case studies should give us useful hints about effective (and ineffective) strategies to develop European trans-border e-Justice solutions and systems. Particularly, knowledge of the national systems and strategies will be a valuable background for pan-European (re)design.

1.3. The development strategy and the history of the project

From a **longitudinal perspective**, the case study should collect data about the history and evolution of the system, including the pre-existing components (installed base) and the planned development of the system already described in section 1.2.

We think important to highlight how such installed base has affected the development of the system.

We also think it is important to highlight the most critical choices made in building the system. Indeed, based on the data collected so far, such large scale applications have been developed considering specific goals (security, access to justice, large number of users, just to make some examples), potential users (citizens, or professionals) and following strategies stating what to develop first, how to involve stakeholders, software developers companies etc. In such developments we could also observe various types of games (cooperative, non-cooperative and mixed) between the subjects involved, and how this affected development and deployment.

Relevant issues
- Features of the pre existing technological, institutional, and legal components upon which the system has been developed and deployed
- The evolution of technology, rules and organisation and of their interplay
- Role played by pre-existing and available technology in system design and development
- Role played by pre-existing legal framework (if and how it has been amended to accommodate the new e-Justice application)
- Strategies, choices, games, and conflicts: what has been developed first, why?
- Strategies and role played by central authorities (Ministry of Justice, Supreme Court, National ICT Authority, Judicial Council etc.)
- Strategies and role played by local Courts, local bar associations, other local public bodies involved
- Strategies and role played by user's comments and opinions on system's functionality (through survey, reports or other means)
- Strategy and role played by IT experts, IS designers and companies involved in the development
- Level and type of involvement of the market

Basic questions
- Which strategy was adopted in order to develop the ICT-based system and to (re)design the organizational/institutional framework of the national system?
- What was done first and what was done later? Why?

- Which legal, institutional and technological components have been selected to provide to final users a "complete" working solution? Which benefits such solution was (is) supposed to provide to final users?
- Was there a strategy to attract users?
- Which was the role of the installed base? Enhancing or hindering design and innovation?
- Which normative changes have been implemented?
- For which reasons did the judiciary decide to develop such system/application?
- Defined objectives at the outset or learned/changed in the process?
- Who ruled the development process?
- Which is the cost of the system?
- Discontinuties? Bottlenecks? Conflicts in jurisdiction and authority?
- Multiple development paths explored?

The evolution of the system

	Before (installed base)	Changes implemented for the development of the project	Changes to be implemented in the future
Legal framework			
Organisational framework			
Technological framework			

Role and Strategies

Role /strategies of	During the design and development stage	When the system went live	More recently
Central authorities (Parliament, Min of Justice, Judicial Council, Supreme Curt, Nat. ICT authority etc.)			
Local players (Courts, local bar association, other local public bodies involved)			
Private companies (market)			
Other actors			
Additional stakeholders			
Role played by users			

1.4. The configuration of the system

The case study should provide also a detailed view of the configuration and architecture of the system including technological, organisational and normative infrastructures, as well as the relationships between the various components at different stages of development. The analysis of the configuration should provide a picture of the ways in which public bodies, private companies and other organisations are involved in the design and management of the new systems. Also, from the map of the systems' architecture it should be comprehensible how the system is assembled by connecting pre-existing and new components, what is the character of the linkages, and how they change over time. In this section it is also important to discuss the **legal infrastructure/framework** supporting and enabling the innovation, and how such framework has been modified to facilitate the adoption of the new ICT enabled application. This entails issues like the requirement for signature and how it has been transposed into the ICT enabled application (digital, electronic, etc.), the demand for original document (or digital copies), the possibility to use a secure/certified email for summons or official communications or serving courts documents, the need of the signature (digital, electronic) on the court decision.

Last but not least, the development of ICT enabled judicial procedure, at national as well as at EU level, poses **semantic problems**.

On the one side there can be issues related to the possibility or need of using different languages during the procedure. This is especially true in EU wide projects, but the problem can exist also in country in which citizens are entitled to use different languages during judicial proceedings (Italy: German in South Tirol, Fin, Suomi, etc.)

On the other side, semantic problems can be associated with the proper understanding of the actions to be taken at the various stages of ICT enabled procedure. MCOL, for instance, provides guidance, a FAQ and various information about the use of the system, as well as an helpdesk experiencing a high volume of calls.

But can be discussed as semantic issues also the question of how to communicate to professional and above all to non professional users how to use properly the system, the legal and practical implications of the technology mediated procedural actions…

Relevant issues

Technological components

- Courts' Case Management Systems
- Lawyers applications and Case Management System
- Document repositories
- Document management systems
- Ministry of Justice central systems
- Network infrastructures
- Access points

- Identity certifier system
- Web servers
- Technological standards
- Authorization and authentication procedures and security level

Organisational components
- Court, lawyers, law firms, bar association, citizens, other users ...
- Relevant sub-units of the organisations involved
- Public bodies involved in the management of the systems
- Private companies involved in the management or maintenance of the various systems
- Forms of collaboration among actors, both public and private, involved
- Leadership styles both at central and local level

Regulative components
- General regulations (code of procedures, laws)
- Specific technical regulations
- Regulations about signature, digital copies and electronic transmission of documents, electronic repositories of case related documents, etc.
- e-government national guidelines
- EU regulations

Semantic components
- FAQ, guidance, semantic web technologies
- Help desk
- Users training

Roles
- of the central authorities (Ministry level, National Agency for the development of ICT, Legislative level)
- of the local authorities and agencies (Judicial districts, Courts, Municipalities and other kinds of local government)
- of the lawyers/bar
- of private companies (IT vendors, IT aftermarket services, IT Support services, Training centres, electronic banking)

Basic questions:
- In which ways technology has been made legal by the law?
- Which specific technical regulations have been introduced in order to deal with the technology?
- Why a given technology was chosen? Was it a choice among alternatives or did it result from pre-commitment to a solution?

- Is there room for the use of alternative technological standards?
- Did new forms of collaboration take place to implement – use the system (e.g. Ministry/tribunals, tribunals/bar associations, National Agency for the development of ICT/ IT vendors, lawyers/IT support services, judges and chancellors of different tribunals)?
- Have been task forces, users' groups, special committees etc. established both at central and local level?
- Who use these systems in the everyday practices (e.g. administrative staff, prosecutors, lawyers, both)?

1.5. The functioning of the system

The case study should also describe the functioning of the system. The description should be drawn by looking at the role (activities, tasks etc.) played by the parties (plaintiff and defendant) as well as by the court (administrative staff and judges). In addition, it should be considered also the role of other actors (private companies, other public bodies etc.) involved in the handling of the procedures. A comparison between conventional and digital procedures should be provided, as well as the switches that allow plaintiffs and defendant to shift from conventional to digital and vice versa. It should be also clarified the procedural steps that can be carried out just in a conventional way, those that can be carried out in both conventional and digital ways, and those that can be carried out exclusively in digital.

In comparing the procedures it is important to identify the advantages/disadvantages and the incentives in using the digital or the conventional procedures.

Statistical data describing the number of cases dealt with by conventional and digital procedures should be provided also to identify the number of users (and potential users).

The claiming process

Main steps	Conventional procedure	Switches (from Conv. to Digital and vice versa)	Digital procedure
Getting ready to file a case			
Identification and access			
Preparation of the claim			
Filing of the claim			
Court activity			
Receiving the claim			
Preparing a reply			
Filing the reply			
Notification of documents (by post or officials).			
Sentence			
...			
Enforcement			

Relevant issues
- Map the procedural flow from Court's point of view and from users' point of view
- Map the roles of the various actors in the system
- Identify and discuss the degrees of procedural complexity
- Users' satisfaction for the system. Users' satisfaction for Civil Courts' improvement/decrease.

Basic questions:
- Is there any incentive to parties such as the reduction of court fees, faster procedures etc.
- What kind of conventional agency is delegated to the software applications?
- How does agency become transformed in the migration to the digital?
- Are digital procedures functionally simplified in order to be handled by the technology?

1.6. Discussion, and evaluation

The case study analysis should include also a final discussion. It should be addressed to identifying and summarising general issues relevant for the research: the relationships between technological, legal, organisational institutional components of the new ICT enabled system; how such heterogeneous components shape the entire infrastructure enabling the ICT based judicial procedures; and how the overall system is evolving over time.

Finally, the case study analysis should provide an evaluation of the effects and consequences of the deployment of the ICT enabled judicial procedures. On one side, we can expect some consequences on the effectiveness and efficiency of court proceedings, but not less important is to check the consequences of such ICT enabled judicial procedures on other key values like access to justice, fair trial, and accountability. Just to make an example, ICT enabled procedure may require the involvement in the delivery of the service of a number of private companies, and this may have some impact in identifying who is accountable and for what?

Relevant issues
- Effects of the deployment of the ICT enabled procedure on key judicial values like fairness, access to justice, efficiency and effectiveness of judicial procedures, fair trial
- Level of dependency of court system from private partners in the delivery of the service.
- Effects on professional and non professional users
- Level of adoption: the use rate of the technology

Basic questions:
- Which are the effects of the deployment of the application on key judicial values?
- The deployment of the application has increased the access to justice?
- Based on the case study experience, what can be suggested to implement a working solution for building interoperability in European civil proceedings?

2. Method

2.1. Collection of relevant documentation about the project (at legal, technological and organisational level)

The first step is the collection of the available documentation about the system, including sources such as

- Literature
- Previous researches on the case study
- Statistical data and surveys
- Official project documentation
- Legal framework
- Descriptions and evaluations on the functioning of the system
- Any other document related to the projects

Note: These documents should be uploaded in the intranet repository www.irsig.cnr.it/jam

2.2. Preliminary report on case studies

A short report should be drafted for each case study based on the first preliminary collection of documentation. The report should simply introduce the key issues of each case in order to have a first illustration of architecture, history and functioning of the systems. The preliminary reports will be uploaded in the intranet repository and discussed during the first research meeting (February 25-26 2011).

2.3. Guidelines for the case studies analysis

Based on the findings and discussion held during the research meeting a final outline of the research method including case studies guidelines will be drafted and uploaded in the intranet repository.

2.4. Definition of the questionnaire and identification of the persons to be interviewed

The documents collected in the previous stage should provide the first source of information to draft the semi structured questionnaire (i.e. identify issues and topics to be investigated) and define the first list of persons to be interviewed. The questionnaire should be considered just as an introductory list of topics to be discussed with interviewees. Indeed during the interviews there must be room for emerging questions, and discuss new issues emerging from the information collected during the research. The draft of the questionnaire can be discussed with the research team.

2.5. Interviews

Interviews will offer the opportunity to check the reliability of the information provided by the documentation (that sometimes offers just an "official truth"). They are therefore the entry point for a more precise mapping and a better understanding of the case study. Each interview offers also the opportunity to identifying new subjects that should provide useful reliable information.

Who: It depends from the complexity of the architecture (simple MCOL, COVL, eCuria, or more complex CITIUS,TOL, EAW). Basically, interviews should allow collecting data from the different actors involved in the development and current use of the architecture. Examples of persons to be interviewed: Project managers (of the Ministry of Justice and/or judicial council), Judges and staff of the courts adopting the system, users (lawyers, citizens), Systems developers (private companies or technical users within the MJ), etc..

Number of interviews: It depends from the reliability of the information collected and from the complexity of the architecture of the system. Greater architectural complexity entails a higher number of interviews.

Record the interviews when possible, but just if audio recording does not create "embarrassment" in the interviewees.

Transcript of the interviews can be taken in an abridged form, but the most important parts should be unabridged.

2.6. Direct observations of the use of the system

The direct observation of the functioning and the current use of the system from the different perspective of judges and staff, users and eventually maintainers of systems have to be carried out.
Observations should be documented also through screens snapshots and, if available through system demos. Also pictures or video of the contexts in which the systems are used can help to craft the thick description.

2.7. Circularity and feedback

We expect some circularity/feedback between the different stages above mentioned, so that old understandings can be tested in the light of new incoming data and the progression of knowledge about the specific case study.

Other inputs for method and analysis of the case study should come **from the analysis of the interoperability.** For this reason we agreed to have preliminary reports about interoperability so

as to provide a shared reference framework that can then be enriched and adjusted by each team according to the needs of the specific case study.

On its turn, the findings emerging from the analysis of the different case studies should provide inputs to the interoperability analysis.

2.8. Case study report structure

We think important to follow a common report structure to ease the comparability between the various case studies. The guidelines provided above represents also the basic structure of the report that will be integrated by a methodological note in which the research activity carried out is accounted, and by a statistical annex providing key data about the use of the system.

Section 1 Institutional background

Section 2 The project background and the installed base

Section 3 The development strategy and the history of the project

Section 4 The configuration of the system

Section 5 The functioning of the system

Section 5 Discussion and evaluation

Section 6 Method

Section 7 Statistical annex

3. Key readings

See the intranet of the project:
http://acqua.irsig.cnr.it/JAM/studio/Interoperability/JAM/studio/Interoperability/resources/