

eGovernment - Case Study Presentation

Diana Marosin^{1,2}, Marc van Zee³, Sepideh Ghanavati²

¹ Luxembourg Institute of Science and Technology (LIST), Luxembourg

² Radboud University Nijmegen, the Netherlands

³ University of Luxembourg, Luxembourg

diana.marosini@list.lu, marc.vanzee@uni.lu

1 Introduction

eGovernment (original name in English: “The Tax and Customs Administration”) is part of the Minister of Finance of an European Country. It is in charge of the tax collection and customs service of the government, and also responsible for supervising the import, export and transit of goods, detecting fiscal, economic and financial fraud, levying and collecting taxes, and paying out income-related benefits for childcare, rent and health care.

This case study (including the resulted models and the analysis) is based on a set of supporting documents provided by the organization. Due confidentiality and anonymity, we can not share the full documents, but we can summarize and share translated transcripts from the original set. In Figure 1 we present the supporting documents and their content.

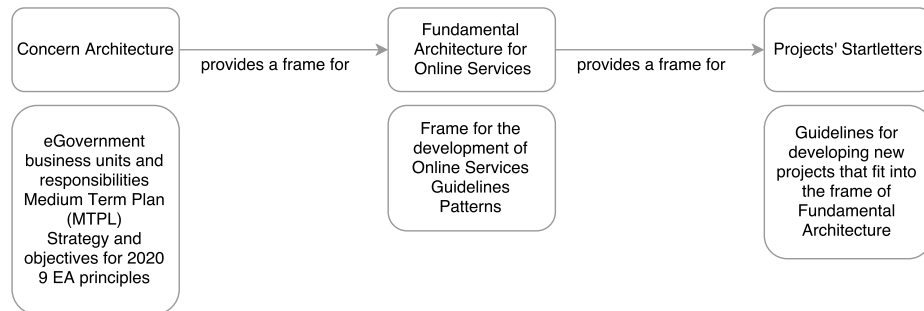


Fig. 1: Documents for the case study

The *Concern Architecture* is a support tool for business units to act as a whole towards citizens and business. It contains the strategic views of the organization and the medium term plan (MTPL) for 2020. The Concern Architecture

provides a frame against which future changes are tested and includes nine high level Enterprise Architecture (EA) principles. The principles are derived from the strategic objectives and are a result of discussions between management and architecture board. We present these principles in Section 2. We did not investigate the process of creating the principles, rather we are interested on how they are used and what is their impact on the architecture.

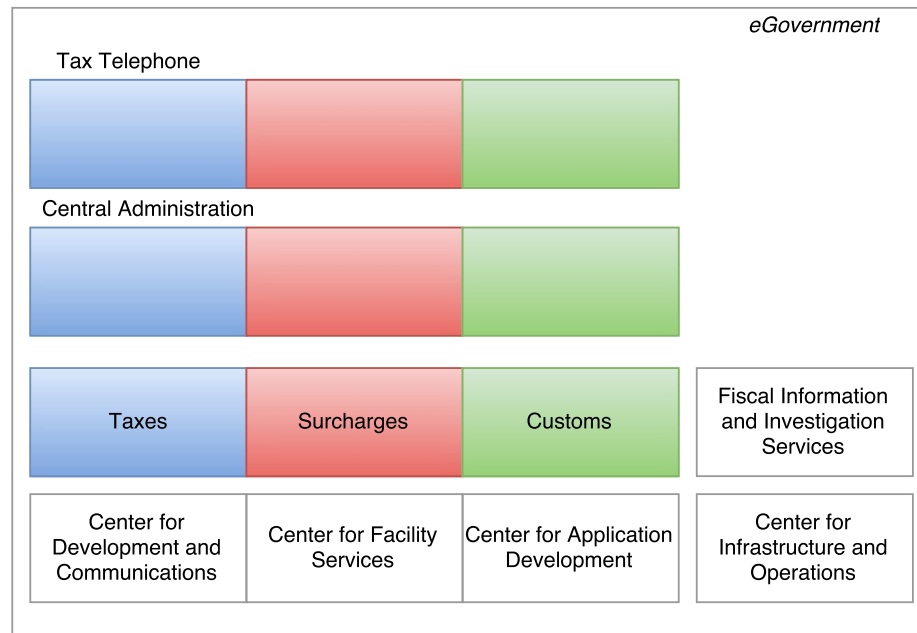


Fig. 2: *eGovernment*'s organization of business units

In the MTPL the administration of *eGovernment* discussed the question of how the organization would look like in 2020. Motivated by the fact that their actions affect citizens and companies directly, and constrained by a new law about digitalization, *eGovernment* undertook a reorganization process that was in line with their strategic vision and the new way of working. The new organization is formed by a set of specialized, juxtaposed business units. Each business unit is responsible to communicate with citizens and business and chooses its own establishments. All business units can arrange with other business units to take over certain tasks, but this does not alter the division of responsibilities as presented here.

The organization of business units and their duties are presented in Figure 2. The *Central Administration* specializes in the execution of work that is objective and most of the work is done automatically. On the contrary, *Taxes*, *Surcharges* and *Customs* are specialized on activities that require interpretation of data and legislations. The *Tax Telephone* is specialized in dealing with telephone queries

and simple recurrent tasks. *Fiscal Information and Investigation Services* is the enforcement agency against tax, financial and economic fraud. The last four business units (i.e. *Center of Development and Communications*, *Center of Facility Services*, *Center for Application Development and Maintenance*, *Center for Infrastructure and Operations*) provide shared services in the area of education, housing, information and communication.

2 EA principles

We focus our analysis on the use and impact of technology and information related EA principles, presented in this section. We removed all references to specific technology or internet portals that could break the anonymity.

The EA principles formulated by *eGovernment* are in line with the structure advised by TOGAF. The principles contain the name (boldfaced), a statement (that follows the name and summarizes the essence of the EA principle), the added value (first set of bullet points, that presents the goals that are tackled by applying the EA principle) and a set of key actions (the bullet points following the statement “This means that”, presenting actionable measures for satisfying the EA principle and the goals).

Principle 4:

We prefer to communicate digitally with citizens and businesses. We prefer to communicate digitally with citizens and companies. Supplementary possibilities to contact us are only offered when these have additional values in the communication. If that is too much of the case, then we ensure that citizens and companies receive consistent information despite the channel from which they are served.

- Digital communication is fast and efficient for both parties.
- Since we aim for compliant behavior and due to the fact that digital communication does not contribute to that in all cases, we offer supplementary possibilities to contact us.
- Since we are a governmental organization, we are obliged to make our services accessible to everybody, digitally experienced or not.

This means that:

- We persuade citizens and companies to use Internet, the preferred medium.
- We realize consistency in policy and execution over the different channels.
- Information and transactions of citizens and companies is processed via different channels into a clear view of the customer.
- We offer all electronic transaction services via two channels: a basic service via a portal and a system-to-system matching (as much as possible using *TechnologyX* via *Portal*) for the fiscal employees and entrepreneurs who use commercial software packages.

Principle 5:

We have an exclusively digital administration. The information that come forth out of our interactions with citizens and companies and other chain partners are recorded exclusively in a digital administration. A digital administration is designed based on specific laws and legislation and also contains standardized processing.

- Digitalization contributes to fast processes
- The mass processes are maximally efficient standardized and automatized
- Digitalization of administration makes room for human work, that we use where human insight is necessary
- Digital administrations support the digitalization of customer processes and in this way decrease the use of paper

This means that:

- The information in digital administrations are fast and trustworthy accessible where and when necessary for the work
- We make applications either specific for mass, automatized administrative processes or specific for activities that are focused on human interaction
- Where we administer digitally we also archive digitally
- We take measures so that the safety of our information is ensured.

Principles 6:

Digital workspaces offer customized information. Employees, but also citizens and companies, use digital workspaces to execute their activities. These workspaces offer always and everywhere access to administrations and offer tools that support the activities that have to be executed.

- Stakeholders have the same access to information which leads to a consistent image
- We allow citizens, companies and intermediaries to supervise the quality of information themselves
- Using a variety of workspaces we offer identified target groups the support that connects with the activities

This means that:

- Digital workspaces are developed and managed separately from digital administrations, with special attention to user friendliness
- Digital administrations offer services for the retrieval and modification of information
- Standards are necessary for the way in which workspaces use digital administrations
- We have to work for a realization of a digital customer image for the digital workspace for citizens and companies, of which the customer history with all customer contacts is part of.
- Employees experience as little limitations as possible in their contacts with customers when decided where and when to work. We take measures to ensure their safety.

- The infrastructure provides in the corresponding communication-workspace-security facilities.

3 GRL models

We include in an online repository (<https://github.com/marcvanzee/eGovernment-GRL>) the files containing the GRL models of *eGovernment*'s EA principles, together with OCL rules constraining and checking the correctness of the before-mentioned models. In the repository there are instructions for installing an Eclipse-based tool for GRL models (jUCMNav) and instructions for importing and running the OCL rules in the Eclipse project.