Chapter II
A Service-Oriented Reference Architecture for E-Government

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ABSTRACT

This chapter describes the development and future directions of a service-oriented reference architecture for the Dutch government. For several years now, the Dutch government has put a focus on improving the service level of public agencies. Electronic services play an important part in this, which requires a concerted effort across many organizations. A reference architecture has been created in order to guide the many different programmes and projects. In this chapter, we will describe the role of service orientation in e-government, and the creation, structure, and first results of this reference architecture for e-government. Furthermore, we will look ahead at future developments in integrated, demand-driven service provisioning in e-government.

INTRODUCTION

For several years now, the Dutch government has put a focus on improving the service level of public agencies. Electronic services play an important part in this. At the same time, the agencies involved had to be readied for electronic cooperation, to facilitate the cross-agency service delivery that is needed to provide seamless, demand-driven services to citizens. Sharing information between

agencies is needed to avoid asking citizens the same information over and over again, and to create greater efficiency and less duplication in back-office processes and systems.

This requires a concerted effort across many organizations. Service orientation is an important new paradigm that can help to structure and coordinate this effort both at the level of business processes and at the level of the supporting technologies. A service-oriented reference architecture for Dutch governmental institutions has been created in order to guide the many different programmes and projects. This reference architecture comprises the overall structure of the Dutch e-government landscape, and provides a series of construction principles for e-government.

A reference architecture comprises a set of general construction principles and explanatory models to help architects in various positions to create dedicated architectures for specific business solutions. Thus, it provides a common ground for the many architects that are working on the development of the e-government targets. It is used in auditing project progress and in setting standards for the results that have to be gained.

In this chapter, we will describe the role of service orientation in e-government, and the creation, structure, and first results of this reference architecture for e-government. Furthermore, we will look ahead at future developments in integrated, demand-driven service provisioning in e-government. As such, the Dutch situation may serve as an example for others of applying the principles of service-orientation in an e-government context, and of the benefits and impact of service thinking in this situation.

BACKGROUND

Over the last decade, the pressure on public agencies to improve their services has increased sharply. Citizens and enterprises nowadays expect governmental services to be delivered in the same manner that, for example, insurance companies offer theirs. People do not want to stand in line in front of a service desk of public agencies, like municipalities, customs or social security agencies. They want to interact quickly, via modern communication channels, and obtain a high and transparent service level. And enterprises would like to develop a more sophisticated way of cooperation and interaction with public institutions than the traditional paper-based bureaucracy.

These demands and expectations did have a modest effect on Dutch governmental institutions. During the second half of the nineties, public bodies were challenged to create their own Websites. Less visible was an initiative of several big agencies in the public domain to set up a shared network for data exchange. In spite of these developments, generally speaking, real electronic services from public institutions did not appear yet.

Based on an enquiry among 1500 people, the Dutch citizen panel Citizen@Government ("Burger@Overheid" in Dutch) has drawn up a code of conduct for service to citizens (Burger@Overheid, 2005) to which public institutions should adhere in providing e-government services. This charter consists of quality standards that define the digital relation between citizen and government (in the fields of information exchange, service delivery, and political participation). These standards are formulated as rights citizens are entitled to, and matching obligations by government bodies. They are in the interest of both citizen and government and they allow citizens to call their government to account for the quality of online contacts. Conversely, public institutions can use the charter to examine the external quality of their e-government services. Thus, the charter is an instrument to stimulate the further development of e-government from the citizen's perspective.

This code of conduct lists ten basic principles for Dutch public services: