Chapter 42
National Interoperability Approach for Social Services Information Management in Finland

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ABSTRACT

In this chapter, the authors introduce and discuss the approach for defining IT interoperability solutions on national level for social services in Finland. Goals and phases of the national initiative are presented, and various projects related to the transformation and unification of various aspects of supporting social services via interoperability solutions are illustrated. In addition, the path from general e-Government requirements through the definition of domain-specific information and documentation down to the development of technology solutions and dissemination plan is presented. The authors highlight several success factors and issues for the organization of multipartite collaboration, the specification of architectural and information management approach, the selection and definition of technology standards to support the domain-specific information needs and specifications and strategic alternatives for central information repositories.

INTRODUCTION

The lack of interoperability between ICT applications has been recognised as hindering collaboration between enterprises, the usability of the systems, and the flexibility of IT solutions (Kosanke, 2006). Semantic interoperability is particularly important when public authorities need to exchange information (Tambouris et al., 2007). Current challenges in e-Government interoperability include various aspects related to the organisational, semantic and technical levels of interoperability (EC, 2004). Successful interoperability solutions on large scale require a multidisciplinary approach that acknowledges these different levels as well as requirements from various stakeholder groups including citizens, service providers and policy makers. These efforts are complicated by the heterogeneous processes and technologies whose unification and renovation are among the goals of the initiatives to some degree.

Interoperability solutions require agreements on various levels for any given connection between two or more applications and organizations (Ray et al., 2007, Herzum & Sims, 2000). On semantic level, the goal is to ensure the correct interpretation of exchanged information (EC, 2004). On technology level, the syntax of messages and data communications of technical interfaces as well as security contexts may each contain one or more protocols to be integrated. On one hand, formal models that provide dynamic collaboration and negotiation capabilities and productivity features to the solution development are needed. On the other hand, the scope, effects and principles of interoperability solutions have to be clearly communicated to various technical and non-technical stakeholder groups in large-scale initiatives. This requires careful planning in addition to multilateral collaboration.

Interoperability frameworks, in general, are built on a set of standards and guidelines that describe the way in which organisations agree to interact with each other (EC, 2004). In this chapter,

we provide an overview to the interoperability approach that has been developed and used in Finland for national-level solutions to support the needs of various social services. As in many large-scale developments, standards can be seen as important building blocks of infrastructures (Guijarro, 2007; Fomin, 2004) to support an integrated whole - thus both the utilization of standards and the creation of normative models and references are within the scope of this work. This includes both the organisation of a national collaborative development effort and the specified solutions on organisational, semantic and technology levels.

The IT Project for Social Services in Finland: Tikesos

Finland has usually been described as a Scandinavian welfare state (Greve, 2007). Social welfare is widely capitalised by taxes and it provides citizens different social services and income security. Municipal and other social services employ about 165 000 people which is about 8% of the employed working force. The Finnish government strictly regulates the social services production. It includes both general and special services which municipal authorities are required to provide. General services are directed to all citizens and special services to special groups or special situations. Social services include domains such as day care and income support as well as parts of income security such as granting credit on social grounds.

Shared electronic social care records can be observed in early stage for example in some parts of the UK, the Netherlands, and in Sweden (Rigby et al., 2009). IT has been a key focus area for Scandinavian governments for many years (Andersen et al., 2005). In 1995, the Finnish government published a national information society strategy, and the next year Ministry of Social Affairs and Health published a corresponding strategy for the social and health care sector. A hierarchical project from government to regional organisations was

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