

## White Paper

# Using EA Modeling to Support Shared Services Between Government Agencies

WP0024 | February 2012



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Peter Harrad is the regional manager for North America, based in Orbus' Washington DC office. He has worked with modeling standards and techniques throughout his 20 years in IT, in a career that has covered software development, solutions architecture and international consulting.

Peter's particular areas of interest are opportunities arising from interdisciplinary touchpoints, how to balance practicality and rigor when modeling, and the importance of viewpoints in addressing different stakeholder perspectives.

**In recent years, governmental agencies have come to face a number of difficult challenges. Reduced revenues, increasing pension commitments and heightened demands on services have all contributed to a squeeze on budgets. Whether they are state or local governments in the USA, county councils in the UK or similar organizations elsewhere in the world, government agencies are being challenged to do more, with less.**

One initiative that such bodies have adopted is to move to a shared services model. This can be where different governmental bodies agree to share backend systems to provide the same business or IT service in the two different jurisdictions; alternatively, a higher-level body such as a US state may offer their infrastructure and/or systems to more local bodies (such as a US county).

Achieving such a shared services model requires a strong understanding of boundaries and impact to ensure a successful implementation. In this paper, we examine how using Enterprise Architecture modeling techniques can be essential in ensuring a success rollout of such a model.

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## Identifying the Shared Services

The first step in implementing shared services between organizations is to identify which services exist and which can be shared. The starting point for this is to create a reference model of the services that an organization relies on. Some organizations may have such a model; others will find it necessary to create one. Fortunately, a basis exists for identifying governmental and technical services.

For many years now, Federal agencies in the USA have been required to engage in EA modeling and report on their IT investments each year. The CIO Council provides guidance on techniques to follow in accomplishing this, and one of their guidance documents outlines a reference model – the FEA Consolidated Reference Model (CRM), which defines a catalogue of services at the business, service component and technical level (see figures 1 to 3). These provide a perfect starting point for defining and aligning your services within the organization.

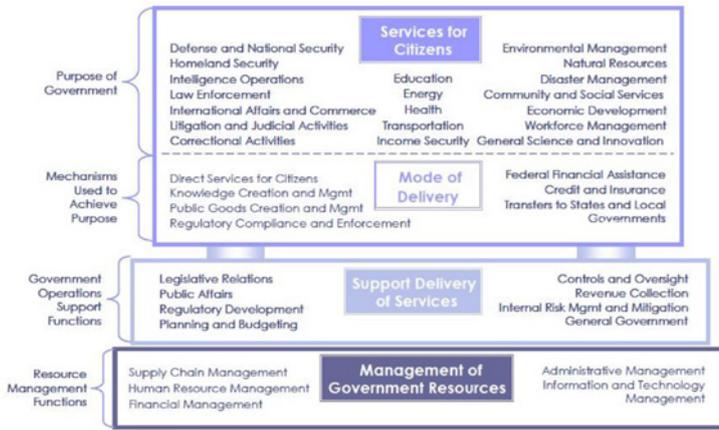


Figure 1: Overview of the Business Reference Model (Source: FEA Consolidated Reference Model) Visio Template

Service Domains	Service Types
<b>Customer Services</b>	<ul style="list-style-type: none"> <li>Customer Relationship Management</li> <li>Customer Preferences</li> <li>Customer Initiated Assistance</li> </ul>
<b>Process Automation Services</b>	<ul style="list-style-type: none"> <li>Tracking and Workflow</li> <li>Routing and Scheduling</li> </ul>
<b>Business Management Services</b>	<ul style="list-style-type: none"> <li>Management of Process</li> <li>Organizational Management</li> <li>Investment Management</li> <li>Supply Chain Management</li> </ul>
<b>Digital Asset Services</b>	<ul style="list-style-type: none"> <li>Content Management</li> <li>Document Management</li> <li>Knowledge Management</li> <li>Records Management</li> </ul>
<b>Business Analytical Services</b>	<ul style="list-style-type: none"> <li>Analysis and Statistics</li> <li>Visualization</li> <li>Knowledge Discovery</li> <li>Business Intelligence</li> <li>Reporting</li> </ul>
<b>Back Office Services</b>	<ul style="list-style-type: none"> <li>Data Management</li> <li>Human Resources</li> <li>Financial Management</li> <li>Asset / Materials Management</li> <li>Development and Integration</li> <li>Human Capital / Workforce Management</li> </ul>
<b>Support Services</b>	<ul style="list-style-type: none"> <li>Security Management</li> <li>Collaboration</li> <li>Search</li> <li>Communication</li> <li>Systems Management</li> <li>Forms Management</li> </ul>

Figure 2: Overview of the Service Component Reference Model (Source: FEA Consolidated Reference Model)

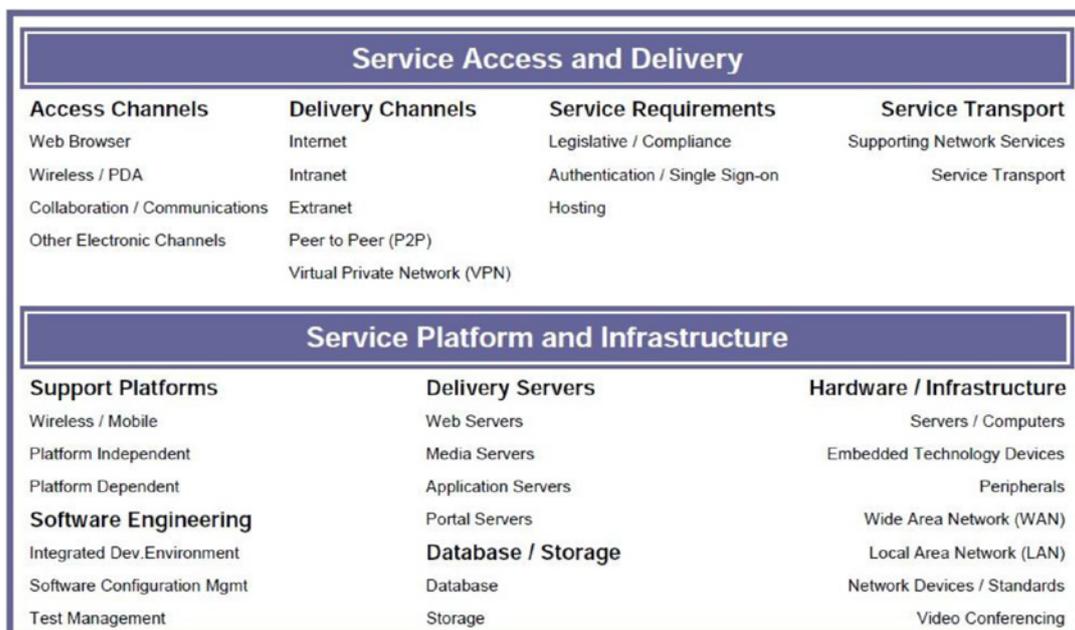


Figure 3: Overview of Technical Reference Model (Source: FEA Consolidated Reference Model)

## Identifying the Technical Implementation

Once the potential candidates for shared services have been identified, there is still a question of which candidates merit adoption. If budgets were infinite then all candidates for shared services could be implemented. Alas, in the real world, agencies need to prioritize their capital expenditures, and moving to a shared service model is no exception.

So agencies will need to identify the services where sharing will deliver the greatest benefit. In this there are two factors – how much will we save by the move? How much will it cost to implement a move?

There is no easy way to answer such questions without an understanding of which systems support which initiative, and how much is spent on each system. Fortunately, by following standard techniques for mapping systems to services they deliver, and combining this with an analysis of annual costs, it becomes possible to identify cost against service, both current costs and the costs of moving to a shared service model.

## Co-ordinating Between Involved Parties

So far we have only looked at the technical aspect of implementing shared services. But in IT, the human and organizational factors are always at least as important. Especially where the agencies involved are geographically separated, there needs to be an efficient mechanism for all involved parties to inspect, understand and provide feedback on a proposed implementation.

Two techniques from Enterprise Architecture modeling come to the fore here. First of all, the idea of viewpoints. In Enterprise Architecture modeling, viewpoints are a way to show different aspects of a system to the different stakeholders involved in a system. This enables

### MTT - GOS Diagram

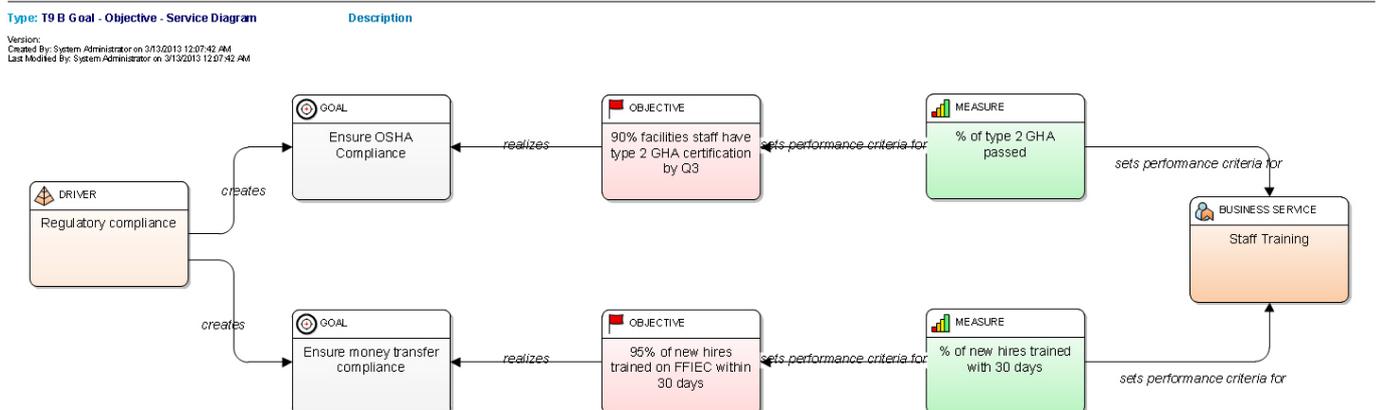
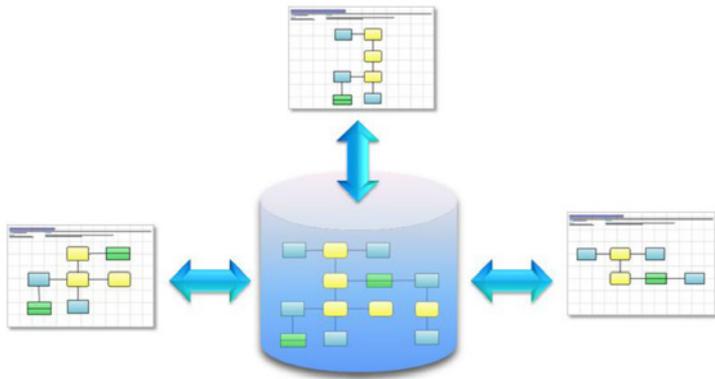


Figure 4: Example of an EA viewpoint: a Goal/Objective/ Service Model diagram



**Figure 5: A Central Enterprise Architecture Repository with the ability to extract**

implementers to give important stakeholders and views of the suggested changes that they can understand (for a detailed account of this see our white paper 'TOGAF 9 Stakeholder Management: Selecting the Right Views for C-Level Buy In to EA', available at [www.orbussoftware.com/community](http://www.orbussoftware.com/community) ).

The second technique is that of an architecture repository. A key aspect of any architecture modeling effort is to centralize and manage modeling artefacts in a central repository. This enables all stakeholders to have a common

single source of truth for the current understanding of the initiative. Some modeling tools provide a web-based portal to enable stakeholders in a modeling effort to access models online, inspect underlying information and comment. Such a facility is highly recommended when trying to coordinate between different agencies.

## Defining a Communications Plan

This paper has already considered the human issues in selecting and planning for shared services. But there is an equally critical human aspect to consider in implementing shared services – how the system gets rolled out. Who will need training? Who will need awareness of the new systems? Most modern system implementations involve a communications plan, and moving to a shared service model should be no exception.

But to define a communications plan, you need to first identify the actors involved in implementing and in using the system. And here, again, the techniques of mapping actors and roles to processes and services become invaluable. By identifying which constituency of which users use which system, you can clearly identify which users need to be trained and involved in a rollout.

## Conclusion

In this paper, we have touched on some of the ways that using Enterprise Architecture modeling techniques can be an invaluable resource in implementing shared services for governmental agencies.

Creating and comparing reference models is a first step in identifying candidates for services that be shared; but these candidates must then be assessed for feasibility at the technical level in order to prioritise which services can be shared most easily for the most benefit. An understanding of which systems and which data entities support a given service is necessary to enable this, and mapping such support is a standard task of EA modeling.

Even once the best candidates for sharing have been identified, EA modeling still plays a part. A repository of EA models to communicate proposed designs, elicit feedback and iterate towards agreement is an invaluable time-saving resource when dealing with geographically disparate parties.

Last of all, mapping the shared services to the actors who consume them is vital for deriving a proper communications plan to roll out the shared services.

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