

Chapter II

Electronic Government: Overview and Issues for National Security Interests

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ABSTRACT

In this chapter we provide an overview of electronic government as it pertains to national security and defense within the Department of Defense (DoD) and Department of Homeland Security (DHS). We discuss the adoption of web services and service oriented architectures to aid in information sharing and reduction of Information Technology (IT) costs. We also discuss the networks on which services and resources are being deployed and explain the efforts being made to manage the infrastructure of available services. This chapter provides an overview of e-government for national security and defense and provides insight to current initiatives and future directions.

INTRODUCTION

With the growth of the Internet, electronic commerce has become prevalent for the exchange of information, goods and services. Electronic government or e-government refers to the government's utilization of the tools of electronic commerce in order to accomplish its mission. Typical e-government services include online driver's license renewal, federal income disbursement, and

even filing federal or state income tax returns. In this chapter we provide an overview of electronic government as it pertains to national security and defense within the Department of Defense (DoD) and Department of Homeland Security (DHS). The DoD is the lead federal agency for homeland defense and includes military departments such as the Navy, Air Force and Army as well as defense agencies such as Defense Information Systems Agency (DISA) and the Defense Threat Reduction

Agency. (Department of Defense, 2000) The DHS is the lead federal agency for homeland security and includes the US Coast Guard, Customs & Border Protection, US Secret Service, Federal Emergency Management Agency, Transportation Security Administration, etc. (Department of Homeland Security History, 2006) (O'Rourke, 2005) We describe how the capabilities available through electronic government are changing the way these agencies provide homeland defense and homeland security.

This chapter is organized as follows. We begin with a general description of electronic government. We then describe the functional components of web services. Following this we show how service oriented computing is being adopted for homeland security and defense. We describe the Global Information Grid (GIG) and other networks on which services and resources are being deployed and explain the efforts being made to manage the infrastructure of available services. We conclude with a description of the Integrated Web Services Broker (IWB) being developed by the Naval Research Laboratory as an example of how web services can be efficiently identified, selected and used in service oriented environments such as the GIG.

E-GOVERNMENT OVERVIEW

Electronic government or e-government is also known as e-gov, digital government, and online government. E-government deals mostly with Internet applications to assist in government functionality. Although not a focus of this chapter, the term has also been applied to some non-Internet applications such as citizen tracking systems that deal with omnipresent surveillance and biometric identification (What is e-Government, 2007).

The overall objective of e-government may be characterized as streamlining government operations in some form. This can take a number of forms, including those listed in a 2002 e-gov-

ernment implementation strategy (United States Office of Management and Business[OMB], 2002, p.4), as:

- “Eliminating layers of government management.”
- “Making it possible for citizens, businesses, other levels of government and federal employees to easily find information and get service from the federal government.”
- “Simplifying agencies' business processes and reducing costs through integrating and eliminating redundant systems.”
- “Enabling achievement of the other elements of the President's Management Agenda.”
- “Streamlining government operations to guarantee rapid response to citizen needs.”

In the course of achieving e-government, delivery of services may follow a number of models similar to those found in electronic commerce; namely, Government-to-Citizen, Government-to-Business, Government-to-Government and Intra-governmental: Internal Efficiency and Effectiveness (IEE) (OMB, 2002).

The E-Government Handbook (InfoDev and The Center for Democracy and Technology, 2002) organizes the functions of e-Government into three categories: publish, interact and transact.

Publish

Publish web sites are structured to make widely available information both about government and compiled by government. The idea of providing such information can be greatly effective in developing nations which would otherwise often require travel to government offices, tedious waits and even bribery. Some specific recommendations and guidelines include among others:

- “Post information of value to people in their daily lives...”

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