

Strategic Infrastructure and The Secure Channel Projects
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Reported by Dave Edmunds

Mr. Turner opened his presentation by stating that Canadians are among the most connected in the World. In Canadian households more than 98% have a telephone, 74% have cable, 71% have a computer, and 60% have Internet access. Overall, the country is completely covered by satellite. There is public access in 15,000 schools, libraries, rural communities and 8,800 Community Access Program sites. Almost every large enterprise uses the Internet, as do more than 83% of small and medium enterprises. On the above basis, he said that the Government On-Line (GOL) service vision is to use information and communication technology to enhance Canadians' access to improved citizen-centred, integrated services, anytime, anywhere and in the official language of their choice. The GOL targets are to deliver the most frequently used services on-line by 2005, and at the same time improve customer service satisfaction by 10%. GOL improvements are driven by the need to provide accessibility, authenticated and protected, in a single seamless view capable of rapid response to clients' expectations; all at reduced delivery cost and quality. The GOL operates under the guidance of Treasury Board and Public Works and Government Services to serve in three dimensions: Technology, People, and Business.

Canada's "Whole-of-Government" Agenda combines policy, resources and technology to provide an electronic service platform that enables integrated services and supports secure internet, telephone, kiosk, mobile and in-person access. When this is built to meet the requirements of Departments, it is referred to as the "Strategic Infrastructure Initiative." A common IM/IT infrastructure avoids costly duplication, allows cheaper inter-operation, provides an opportunity to "Build Once / Use Many," enables a common approach to authentication and authorization with a "single sign on," and gives a common infrastructure for "citizen centric" services. There is a price of admission on a case-by-case basis for such matters as Public Key Infrastructure (PKI) certificate service, and for small/medium departments to integrate their networks. The challenge is to reconcile these factors cost-effectively and evolve a "service-ready," adaptive infrastructure.

Mr. Turner stated that Secure Channel is the term used to refer to a comprehensive set of network infrastructure, operations services, authentication, security products, and software tools, all supporting GOL and Electronic Service Delivery objectives. It will facilitate service transformation for enhanced program delivery federally and across jurisdictions. Common infrastructure and common authentication will move us from a spider web of duplicated infrastructure and user registration by each client of GoC services working with separate sets of Government departments to a common, extensible, scalable infrastructure. This will enable shared services while maintaining departmental accountability. This Secure Channel vision is being built by a consortium of leading companies, with Bell Nexxia as the prime contractor. He stated that the proposal was not chosen on the basis of cost. In many countries, citizen and business confidence is a core issue due to high profile fraud and hacking cases as well as privacy concerns.

He then described Secure Channel features. E-Pass is an important tool which uses PKI to provide authentication, data confidentiality, data integrity, and non-repudiation. Secure Service Delivery is designed to respect departmental stewardship of information holdings, to leverage investments in existing departmental infrastructures, and to provide common services critical to client-centric service delivery. Distributed Architecture funnels all input from clients into a Secure Channel Domain, where the traffic is serviced centrally before it is routed into departmental domains which repeat similar processes, then forward it to the appropriate particular system and data. Other features include a national Multiprotocol Label Switching (MPLS) network; many security features; a virtual “all-of-government” directory; transaction management; session management; service integration; logging; presentation services; profile management; and interface services. All Secure Channel Services are being developed in accordance with a “Roadmap” tied to department plans. The Secure Channel characteristics for creating an environment in which Canadians will want to engage with government must be intelligent, robust and secure. Benefits to departments include insulation of departments from service provider technologies and processes, replaceable servicing modules with common interfaces, and an online capability to update policy rules. To date, major steps have been taken in networking and in implementing important transaction security features. The entire system is now slated to become operational in 2005.

Mr. Turner concluded by describing the Canada Site and Gateways (www.canada.gc.ca) and cited surveys and studies which report that Canadians approve of the direction taken by the Government, believe that services are improving, use the Internet more, are aware of government online services, and 71% have found what they were looking for. For the third year in a row, Canada has maintained its position in first place internationally in e-government maturity.

[More information may be found at the GOL Information Site www.gol-ged.gc.ca . Mr. Turner’s presentation slides, giving additional site listings, can be found at www.afcea.ca .]