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REPORT

Informatics Professional Services
Pre-Consultation Report

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Prepared for:

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Section A – Overview

Procurement change is an important initiative for the Government of Canada. Plans for change to federal procurement processes began to be developed several years ago, under the previous government. The current government's stated goals for change are to achieve significant cost savings by reducing the cost of purchases and streamlining procurement processes, and to enhance the quality of goods and services procured. The Government of Canada believes that modernizing its procurement practices is one of the most significant changes in public administration in the last twenty-five years.

Procurement transformation is about more than saving money and getting better prices. It is about getting the best possible value for Canadians. Success will mean savings averaging in the order of more than $500 million annually. (Some of these gains have already been achieved). Success will also mean significant improvements in procurement times and greater satisfaction among client departments and agencies of government. At the same time, government seeks to achieve these gains while minimizing negative impacts on suppliers and helping SMEs, Aboriginal businesses and others to succeed in the new environment.

The big picture of government-wide benefits and the strategic value of the changes to the government's performance is not the primary focus of suppliers who are understandably more concerned about the success of their own operations, and the potential risks they themselves face as a result of procurement change.

Suppliers' views are important to government which recognizes its suppliers' collective importance to its supply system and the future success of procurement. Supplier engagement and cooperation is also important to government, as the basis for building effective and efficient procurement to achieve government performance goals while supporting business success.

To gain an enhanced understanding of suppliers' current views, and to deepen shared understanding, PWGSC has engaged The Conference Board of Canada to host and facilitate a series of ten dialogue sessions with industry associations and supplier communities in three procurement categories: Informatics Professional Services, Temporary Help Services, and Office Furniture.

The objective of these sessions is to obtain industry and supplier perspectives and ideas on the procurement changes, the change process itself, and how the federal government can realize efficiency gains while minimizing disruptions to the supplier network.[1]

The Conference Board is an independent, non-partisan, not-for-profit organization recognized for its research and its expertise in meeting design and facilitation. During this project, the Conference Board has:

- Analyzed the nature of market share and market power of the federal government as a purchaser of goods and services.
- Analyzed the nature of market dependence of individual suppliers on government procurement.

[1] The three procurement categories (IPS, THS and Furniture) accounted for nearly 10 per cent of government procurement spending in the last fiscal year.

- Organized consultations to engage suppliers in open dialogue around the government's procurement change process, policy and strategies and record their issues, concerns and insights.

About The Conference Board of Canada

- A not-for-profit Canadian organization that takes a business-like approach to its operations.
- Objective and non-partisan. We do not lobby for specific interests.
- Experts in running conferences but also at conducting, publishing and disseminating research, helping people network, developing individual leadership skills and building organizational capacity.
- Specialists in economic trends, as well as organizational performance and public policy issues.
- Not a government department or agency, although we are often hired to provide services for all levels of government.
- Independent from, but affiliated with, The Conference Board, Inc. of New York, which serves some 2,500 companies in 60 nations and has offices in Brussels and Hong Kong.

After the ten consultations are complete, The Conference Board of Canada will prepare three independent reports summarizing the session discussions for each of the procurement categories and present them to PWGSC.

Purpose

This paper provides suppliers, industry associations and government officials with a common base of knowledge and understanding within the Informatics Professional Services procurement category necessary for fruitful discussion. It includes a macro and micro market analysis of the category in order to understand the adjustment risks facing suppliers; an overview of the government's current and intended procurement policy, practices and strategy; and a summary of supplier and government perspectives, issues and challenges.

Procurement

Procurement is the process of acquiring goods, services and construction from third parties. It typically follows four phases:[2]

1. The *pre-contractual* phase—including activities related to requirement definition and procurement planning (e.g., the spend analysis; business requirements; supply market analysis; commodity sourcing strategy; and transition/change management and human resource planning).
2. The *contracting* phase—including all activities from bid solicitation to contract award.
3. The *contract administration and management* phase—including activities such as issuing contract amendments, monitoring progress, following up on delivery, payment action, etc.
4. The post-contractual phase—including final action activities (e.g., client satisfaction, contractor agreement to final claim, final contract amendment, completion of financial

[2] The definition for procurement was taken from a survey developed on behalf of the Honourable Walt Lastewka, Parliamentary Secretary to the Minister of Public Works and Government Services Canada published in September, 2004. The survey was used to gather information from government departments and agencies on areas for improvement in federal government procurement. *Procurement and Contracting* [online]. Ottawa: Treasury Board of Canada Secretariat. From: www.tbs-sct.gc.ca/emis-sigd/procurement_contracting_e.asp

audits, proof of delivery, return on performance bonds) and close-out activities (e.g., completeness and accuracy of file documentation and adherence to file presentation standards).

Federal Government Procurement

The Government of Canada buys approximately $20 billion worth of goods and services every year.[3] For PWGSC, in 2005, active government suppliers numbered 16,399, the majority of which (84 per cent) were Canadian or Canadian-based firms. Of these government supplier firms 11,695 (85 per cent) were classified as either self-employed suppliers or small suppliers; 1,283 of them (9 per cent) were medium-sized suppliers; and 1,438 (6 per cent) were large-sized suppliers.[4] The number of suppliers currently doing business with the federal government is much higher than the total for PWGSC. Departments may contact directly with suppliers – about 90 per cent of the 400,000 annual procurement transactions of the federal government are done by departments themselves.[5] Clearly, the federal government is a significant buyer of goods and services and plays a part in shaping the Canadian supplier business landscape.

The federal government's procurement and contracting policies, established by the Treasury Board, are designed and intended to result in best value to the Canadian government and to the Canadian public. Specifically, government policy requires that contracting be conducted in a manner that will enhance access, encourage competition, reflect fairness, and comply with Canada's trade obligations.[6]

Public Works and Government Services Canada

PWGSC supports the daily operations of nearly 140 federal departments and agencies by providing a range of services, including:[7]

- purchasing goods and services on behalf of the government;
- providing office accommodations for public servants across Canada;
- managing national heritage properties; and
- offering services such as information technology, telecommunications, banking, translation, and auditing to the government.

PWGSC is the central acquisition department of the Government of Canada, and is its largest purchasing organization, buying over $20 billion in goods and services—incorporating over 17,000 types of products and upwards of 60,000 contractual transactions—from thousands of suppliers each year.[8] Many purchases, however, are currently done on a department by

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[4] From: PWGSC, 2006. Figures represent all suppliers, regardless of Standing Offer. Small firms: <100; Medium-sized firms: 100 - <499; Large firms: >500.
[5] The government is enhancing the capability to capture data on the numbers and composition of its suppliers based.
[6] Trade obligations include: North American Free Trade Agreement (NAFTA), the World Trade Organization Agreement on Government Procurement (WTO-AGP), and the Agreement on Internal Trade (AIT). From: www.pwgsc.gc.ca/acquisitions/text/sm/chapter04-e.html
[7] From: www.tpsgc-pwgsc.gc.ca/text/generic/about-e.html
[8] From: www.tpsgc-pwgsc.gc.ca/text/factsheets/goverment_buys-e.html and www.tpsgc-pwgsc.gc.ca/prtf/text/concept_doc-e.html

department basis, and from the standpoint of government, opportunities to leverage its purchasing power to obtain better prices is either mitigated or lost.

Procurement Reform at PWGSC

PWGSC has a strong interest in providing Canadian citizens with excellent services at the lowest feasible cost. Currently, PWGSC is looking at ways to improve its efficiency and effectiveness by reforming its procurement processes and practices, and by securing optimal value from suppliers through the products and services purchased.[9] Bringing better value to government and taxpayers is at the stated heart of PWGSC's procurement reform efforts.

For an overview of the Informatics Professional Services category, from the perspective of the Government of Canada, prepared by PWGSC, please see Section C, below.

The Way Forward

PWGSC wants to deliver services smarter, faster and at a reduced cost. *The Way Forward*, which includes a new approach to procurement, is a government-wide system based on principles of accountability, integrity, and transparency.[10] Its goal is to assist federal governments departments, crown corporations and agencies make their procurement activities more efficient and effective. To that end, it will provide government with a series of tools to use in selecting suppliers and choosing products and services in a more transparent and accountable manner.[11] Key points of focus include:

- Emphasize both price and value.
- Provide flexibility to federal government departments, crown corporations and agencies.
- Take into account the circumstances of SMEs and other special supplier groups.
- Incorporate a 'customer satisfaction' component in the evaluation of supplier performance as the basis for continued supplier standing.

Expectations of Improved Efficiencies and Effectiveness

By streamlining the procurement process, using tools to make purchasing easier and quicker, being more disciplined in the way procurement is managed, consolidating what the government buys, and leveraging the government's purchasing power, PWGSC expects to achieve three major milestones:[12]

1. Save $2.5 billion over five years—while maintaining full and fair access to government business by small, medium and large suppliers across Canada, and without

[9] In June of 2005, Bill C-43 came into effect giving the Minister of PWGSC responsibility for procurement of goods and services for the federal government, to enter into contracts on behalf of the government, and to guarantee volume purchases.

[10] *The Way Forward* is a wide-ranging strategy, led by PWGSC, and focuses on increasing efficiencies in three key areas: procurement, property management, and information technology.

[11] In April 2006 the government introduced the Federal Accountability Act and Action Plan in the House of Commons. The legislation is intended to bring forward measures to help strengthen accountability and increase transparency and oversight in government operations, including procurement. From: www.pwgsc.gc.ca/text/transparency-e.html

[12] From: www.pwgsc.gc.ca/transformation/text/faq-e.html

compromising the government's commitments to sustainable development and aboriginal economic development.[13]

2. Cut the time it takes to conduct procurement by up to 50 per cent.
3. Reduce internal procurement costs by 10 per cent.

PWGSC is working with departments and agencies to improve the way they plan, how they buy, who is authorized to buy and when they buy goods and services. Implementing a more balanced and strategic approach to buying, having better mechanisms and tools in place to monitor departmental and government-wide procurement and to better understand and track the nature of procurement is central to the reform process.

Implications for Suppliers

Overall, government is guided by its stated primary obligation to obtain benefits for the Canadian taxpayer by such means as improving efficiency and effectiveness of its procurement system.

Changes in the way government purchases goods and services may affect suppliers, including:

- Changes in the processes through which suppliers compete for federal government business.
- Changes to the structure and organization of supplier bidding (e.g., through mergers, consortia, etc.).
- Changes to the number of suppliers who choose to, or who are able to compete for government business.

The impact on suppliers is likely to be mixed: some suppliers may be positively affected while others may be adversely affected. In the end, the actual impact will be a product of specific changes in procurement policy and practices, and the ability and willingness of suppliers to adjust.

Broad Policy and Socio-Economic Implications

PWGSC is focusing its effort and attention on government procurement policy and reform. However, adjustments to the procurement system may have implications on other government initiatives and strategies (for example, industrial policy, SMEs, sustainable development). In an effort to address these related initiatives PWGSC has created:

- The Office of Greening Government Operations to advise the government on issues such as green procurement.
- The Office of Small and Medium Enterprises (OSME) to address the need for open and transparent access for small and medium enterprises. OSME works within the government to ensure the procurement system recognizes and addresses the needs of small and medium enterprises, Aboriginal businesses, and the supplier base in the regions where government procures goods and services.
- Tools such as standing offers to facilitate various government departments achieve their targets and commitments. The Aboriginal Business Set-Aside Program, for example, is an

[13] From: www.pwgsc.gc.ca/transformation/text/nfo-fct/fs-2-e.html

Indian and Northern Affairs Canada (INAC) program designed to address Aboriginal business participation through a program of mandatory and selective set-asides and supplier development activities.

Developments During the Procurement Transformation Process

While the planned procurement changes are important, the procurement reform process has resulted in a mix of *positive* and *negative reactions* within the supplier community and among some government departments.

- Industry associations representing suppliers in several procurement categories have called for new consultations.
- Groups of suppliers have registered strong concerns with the approach now being taken to reform procurement and have focused their attention on the potential negative impact on individual suppliers.

Since January, 2005, PWGSC has involved suppliers, industry associations, and government departments in the government-wide review of procurement including through: interviews and consultation meetings with suppliers and industry associations; receiving letters from suppliers and industry associations; issuing Requests for Standing Offers (RFSOs) and Requests for Information (RFSIs); and holding bidders' conferences to seek industry input and feedback.

In response to suppliers' and industry associations' continued expressions of concern, PWGSC has now implemented a new series of consultation meetings, hosted by The Conference Board of Canada. These consultation meetings are another step in the process to obtain feedback and better understand the impact of the proposed procurement changes on businesses within the Informatics Professional Services industry where there are potential major impacts on Canadian businesses. Continuation of the consultative process is necessary because suppliers have strong ideas about efficiencies and ways to achieve them; as well as insights around how they and the government can and should adjust to new practices and rules of engagement.

The Nature of Goods and Services Markets

Two factors have an important influence on the nature of change to government procurement: market power and market dependence. Both factors are relevant to understanding how procurement changes may affect or influence suppliers. These factors are defined below in relation to the context of the federal government.

Market power is the ability of the government to alter the market price of a good or service and other market conditions. It is an indication of how important government procurement is in the overall market for each category (i.e. the demand side).

Market dependence considers the issue of market structure from the suppliers' view (i.e. the supply side). In this context, it can be simply represented by the percent of a firm's sales attributable to the Government of Canada.

Change Management

Many firms today, operating in the procurement categories of temporary help services, informatics professional services, and furniture, count on the federal government for a high percentage of their sales. Firms that make a high proportion of their sales to the federal government are likely to be disproportionately affected, *regardless of their size,* as dependence on one large customer is ultimately reflected in the way a firm is organized (geographically, in its business processes etc.). As a result, they face an important change management challenge as the government changes its procurement policies and practices.

The government, too, faces a change management challenge since it seeks to significantly alter its procurement system while substantially maintaining its supplier base and ensuring that the well-being of SMEs and Aboriginal businesses are taken into account in the refinement of the particulars of change.

A Model of Change Management

The proposed changes to the way the federal government procures goods and services are designed to improve the efficiency and effectiveness of those expenditures, not eliminate them. It may be able to achieve its goals through several mechanisms:

- Using its market power and the market dependence of some suppliers to engineer price reductions.
- Improving economies of scale in purchases. This may save on procurement administration costs and create situations of discounting for volume.
- Changing the market structure through its purchasing practices to change economies of scale (through, for instance, consortia).
- Streamlining the purchasing process and thereby reduce transaction costs.

These savings have different effects on the overall market and the individual firms. It is possible to categorize some of the effects as follows:

- *Changes in market structure* that lead to a different structure of suppliers (in terms of size) and organization of suppliers. The risk here is that some suppliers will no longer be competitive within the new structure, especially in areas where market power and market dependence are high.
- *Changes in sales processes*. This may require that firms approach bidding with the government in new ways. This may involve restructuring sales processes, making greater use of consortia etc. The risk here is that bidding firms may incur costs to change their sales processes that they cannot afford or that act as a barrier to their future participation in the procurement system.
- *Lower profitability from individual sales*: To the extent that firms are induced to reduce prices for the same quality of sale, firms may find that the profit margin on their government business is reduced.

Recognizing these market dynamics, and the fact that the government is changing the way it procures goods and services, the federal government has essentially three options to act on:

1. *Let the marketplace manage the transformation*: make changes and let the marketplace sort through the implications. No firm is required to bid on government business. After the change in policies, the market will eventually find a new equilibrium. But the search for this equilibrium may impose costs on individual suppliers which hope to continue to sell into the federal government market.

2. *Actively manage the transformation*: in this approach, the federal government would explicitly put in place mechanisms to limit the impact of change on parts of the supplier community that are at greatest risk.

3. *Help the marketplace manage the transformation*: by virtue of entering into a dialogue with suppliers, the federal government is currently taking this route. If suppliers have enough advanced warning, and if their concerns about the efficiency of the bidding process is taken into consideration, it may be possible to achieve most of the savings through efficiency gains with a fairly minimal impact on individual firms.

Section B – Principles and Processes of Procurement Transformation at PWGSC

PWGSC's main goals for procurement change are to standardize what they buy and how they buy it, get better value for money, and simplify the way the federal government buys goods and services. The adjustments being implemented to achieve these goals will affect virtually all aspects of PWGSC's procurement process. These adjustments will also affect the way PWGSC's client departments do business with goods and services suppliers, and the way suppliers do business with departments throughout the government.

PWGSC is very clear in its intentions. It is going to be a more demanding customer. It wants better value and prices for the goods and services it acquires. Currently, the government spends in excess of $1 billion a month on goods and services needed for its day-to-day operations.

A Purchaser of Goods and Services

As a central arm of the government, PWGSC is mandated to assist departments in the purchase of goods and services. PWGSC is not in a position, on its own, to invest in or support any particular group, sector or segment of the economy. Industrial policy and competitiveness strategies, for example, are overseen by other government departments and agencies with defined mandates in these areas. Thus, when the Government decides to take action (e.g., Aboriginal economic development), it chooses a department (such as Indian and Northern Affairs Canada (INAC)) to develop policy and run programs to help reach particular economic and social objectives. PWGSC then supports these departmentally-created policies and programs in its role as the Government's major purchaser of goods and services. Specifically, PWGSC:

- Helps client departments define their requirements and select effective procurement approaches. The Aboriginal Business Set-Aside Program is an example of such an approach.
- Manages the bidding process to find the best possible solution for sourcing client departmental needs to meet its policy and program goals.
- Supports client departments by overseeing supplier relationships after a contract is awarded to ensure accountability until close-out of the contract.[14]

PWGSC's Procurement Goals

Through its procurement changes, PWGSC plans to:

1. Achieve better value by improving the way government buys goods and services.
2. Offer fair, simple and open access to businesses interested in providing goods and services to government.

[14] The Acquisitions Branch at PWGSC also provides other services, including: market research to identify what products are available from suppliers; product planning; method-of-supply studies; the maintenance of a statistical data base and reporting capability; policy framework development; policy review and promulgation; and the technological infrastructure to support electronic procurement.

The Procurement Practices of PWGSC

To achieve these goals, PWGSC has established a set of twelve procurement practices that it will adhere to throughout the procurement change process:

1. ***Functionality Focus***. A focus on functionality (technical and supplier-based specifications) rather than brand specification for goods and services. This will allow suppliers to propose innovative products and solutions that meet the functional needs described

2. ***Fewer Models and Configurations***. Reduce the range of goods purchased—fewer models and configurations—while maintaining a reasonable amount of choice. For example, the choice in chairs will be reduced from approximately 2000 configurations to fewer than 100; and, temporary help services will no longer use hundreds of job codes but will align with standard government job codes.

3. ***More Bidding Opportunities***. Give suppliers more opportunities to bid on Standing Offers by establishing sub-groups of goods and services within each procurement category. This will give interested suppliers an opportunity to compete for business in their area of expertise.

4. ***Value Factored into Evaluations***. Integrate quality-based criteria into the evaluation process and customer satisfaction reports into the bid-evaluation process (e.g., in professional services it is proposed that attributes such as a suppliers' experience, capabilities, and customer satisfaction scores will account for 70 per cent of total points awarded, whereas price will count for only 30 per cent).

5. ***More Active and Systematic Price Competitions***. Take a more active and systematic approach to price competitions, tailored to the specific nature of goods or services (e.g., price competitions for notebooks will continue on a quarterly basis).

6. ***Ensure Supply Continuity***. To insure that an appropriate and adequate supply of qualified suppliers is available, the government will always seek to select an optimal number of suppliers. For example, informatics professional services business will be awarded to several firms on a regional basis.

7. ***Local and Operational Support Requirements***. A mandatory provision to ensure government operations in every region have access to adequate local support networks, tailored to each good or service. For example, temporary help services and informatics professional services business will be awarded by region, with multiple firms in each region.

8. ***Open and Fair Competitions***. A more open and fair competition system that makes it easier and less costly for suppliers to bid will ensure a more level playing field. For example, simplified language in bid documents and contracts will make it easier to bid; and testing of furniture will be performed after successful award of business rather than as a requirement to bid.

9. ***Easier Access to Government Business***. To make it easier to compete and conduct business with the Government, small firms will be given tools and advice to help them

construct consortia to make joint bids. Bids from these consortia of small firms will be treated equally to bids from large firms.

10. ***Higher Probability of Business to Winners of Competitions***. Suppliers who win competitions will be guaranteed business. The Government will channel purchases and business to qualified suppliers and ensure that they benefit from their successful Standing Offer bids. For example, currently there are more than 40 furniture suppliers holding standing offers, yet nearly half of the government's furniture purchases are made outside of the Standing Offers.

11. ***Faster Execution of Orders***. Using standing offers will result in procurements being done in 1-4 days rather than the current 30-60 days.

12. ***More Informed Decisions***. Using electronic tools to give detailed information on who buys what, when, at what price, and from whom will assist the government in understanding how it procures better and help it negotiate better value for Canadians.

Strategies for Promoting Open and Transparent Access for SMEs

PWGSC intends to give SMEs equal opportunity to compete for government business, and has taken a number of steps to address this:[15]

- Where small businesses are too small to bid on government business on their own, PWGSC has made it easier for them to form partnerships and joint ventures.
- Where appropriate, within each category of goods and services, PWGSC has divided the total requirement into a number of sub-categories, allowing firms to bid on these individual categories rather than on the whole requirement. Where appropriate, PWGSC has divided the requirement into regional categories giving regionally-based firms an opportunity to bid on smaller portions of business.
- Where practicable, PWGSC insists that local installation and support be provided. This ensures that a national supplier will provide adequate levels of service to meet the full range of needs of clients in a timely fashion. It also helps to ensure that small local businesses that provide local distribution and support are able to win their share of contracts.

Office of Small and Medium Enterprise (OSME)

Created in 2005, the OSME held consultations across the country to hear the concerns of SMEs. Directors have been appointed across the country to help SMEs access government business. To date, the OSME has already had an impact in how new procurement contracts are worded and how requirements are stated.

Regional Impacts

PWGSC is competing approximately 30 separate standing offers, the majority of which have sub-categories, thereby multiplying the number of opportunities for suppliers to compete. PWGSC is also ensuring that government operations in every region have access to proper support networks—tailored to each good and service. For example, printer manufacturers must have local service and installation offices (usually performed by local SME resellers and service firms) within 100 kilometers of every urban centre having a population of more than 30,000 people.

Focus on Industry Sectors

Procurement teams are now organized into industry sectors giving them a better understanding of the sector from which they are buying (e.g., who the major suppliers are, and the role of distributors and sub-contractors—typically SMEs—within the supply chain network).

[15] To date, this approach has produced a number of positive results. For example: as part of a relocation services contract with a major real estate agent, some $57 million was spent on small and medium enterprises (SMEs) who provided specific relocation services under the contract. From: PWGSC – Way Forward Procurement: Strategies for promoting open transparent access for Small and Medium Enterprises.

Strategies for Promoting Open and Transparent Access for Small and Medium Enterprises (SMEs) (continued)

Specification of Needs

By adopting an outcome-based or functional-based specification approach to what it needs, SMEs are given the opportunity to propose new and innovative products that may not have been tried before.

Simple Language

PWGSC is working on a major language simplification program that will simplify the clauses required to understand what the government is looking for. This will be of particular benefit to many SMEs.

Easier Access

PWSGC is working with the Treasury Board Secretariat to overhaul the policies governing procurement. In the meantime, it is free for SMEs to access MERX—the government's on-line system for publishing bids. Small professional service providers can also register on an on-line system and gain access to client department assignments.

Making Standing Offers Meaningful

Standing Offers have been made mandatory to use for the ten most commonly purchased goods and services. This ensures that a firm that wins a Standing Offer can expect to get business.

Industrial strategy

PWGSC serves Canadians within the limits of its mandate. PWGSC does not have the mandate to act as a venture capital firm, an investment banker, or in picking and choosing which industries to invest in. The government as a whole has specialized departments that look after the health of the economy (e.g., Finance, Industry Canada, International Trade, and the Export Development Bank) and these departments have specific programs that help Canada reach its economic objectives.

Section C – Overview of Informatics Professional Services - Prepared by PWGSC

Overview

This section presents PWGSC'S proposed procurement strategy for Informatics Professional Services (IPS).

The Government of Canada is streamlining and transforming the way it hires informatics professional services. This will provide better value and accountability for Canadian taxpayers.

The Government of Canada currently does business with over 2,900 IPS suppliers across Canada.

The proposed procurement strategy was developed in close consultation with eight industry associations (AFCEA, ACSESS, PSABA, ITAC, CABiNET, CATA, NACCB, and CAMC) and representative client departments. The resulting strategy incorporates the valuable input provided by these groups.

Current Context

A range of procurement instruments is available to client departments to access IPS suppliers. Each instrument is designed to address particular needs. These instruments include:

- **Professional Services Online (PS Online)** – for requirements valued under the NAFTA threshold;
- **Request for Standing Offers (RFSOs)** – for routine IT services and materials;
- **Supply Arrangements** – for access to a wide spectrum of professional services and solutions
- **Request for Proposals (RFPs)** – for large IT requirements outside the scope of the above-mentioned instruments.

These procurement instruments can be government-wide or restricted to a particular department/region; however, currently IT work is not evenly distributed across the country, nor is there a consistent approach to procuring IPS. As a result, there is no consistency in price, which makes it difficult to judge if best value is achieved.

For suppliers, dealing with the government is a costly, lengthy process and a considerable administrative burden. For example, there are currently no standardized pre-defined personnel categories, submissions have to be very detailed, and there is no template to help standardize the procurement process.

The government is introducing the following improvements to the procurement process for IPS:

- ✓ Standardizing the categories of personnel and having pre-determined per diem rates will reduce procurement time for specific requirements (See Tables 1 and 2).
- ✓ Increasing bidding opportunities for qualified suppliers. For Task-Based, each supplier meeting the requirements, described in the Qualification process herein, and offering per diem rate(s) less than or equal to the median +25 per cent will be

awarded a Standing Offer. Furthermore, a department or agency needing task-based services must select from at least 3 standing offer holders, at least one of which offers the lowest per diem rate for the requirement. For Solution-Based, any supplier meeting the mandatory requirement will be issued a Supply Arrangement.[16]

- ✓ Focusing on value more than price by allocating more than 70 per cent of the overall technical score to criteria related to past experience.
- ✓ Lowering the process cost for suppliers to support competitive pricing, i.e. lower sales costs, lower administration costs, and reduces the cost for bidding, by providing template and standardizing.
- ✓ Lowering the process and procurement cost for departments and agencies to conduct and manage procurement by using pre-defined bid solicitation templates with standard terms and conditions.
- ✓ Developing an open and transparent automated procurement system that would provide the information required to make better decision.
- ✓ Complying with trade agreement provisions and including a Set Aside component for Aboriginal businesses.
- ✓ Measuring vendor performance through client satisfaction surveys
- ✓ Ensuring regional representation.
- ✓ Ensuring the government receives value for money for IPS.

Throughout this process, a lot of effort has been invested to ensure:

- ✓ Fair, simple and open access for suppliers across Canada; and
- ✓ Opportunities for small and medium enterprises (SMEs).

[16] Supply Arrangement is a procurement instrument that allows government departments to request the services of pre-qualified suppliers.

Table 1: Task-Based Categories of Personnel

Informatics Task-Based positions have been reviewed with Industry Associations and include 64 categories grouped into 9 domains

Application Services

Application Analyst/Programmer
Application/Software Architect
ERP Functional Analyst
ERP Programmer Analyst
ERP System Analyst
ERP Technical Analyst
Programmer/Software Developer
Programmer/Analyst
System Analyst
System Auditor
Technical Writer
Test Coordinator
Tester
WEB Architect
WEB Designer
WEB Developer
Web Graphics Designer
Web Multi-media Content Consultant
Webmaster

Business Services

Business Analyst
Business System Analyst
Business Architect
Business Consultant
BPR Consultant
Business Transformation Architect
Change Management Consultant
Enterprise Architect
HR Consultant
Organizational Development Consultant
Project Executive

Geospatial Informatics Services

GIS Programmer/Analyst
Mapping Technician

Information Management Services

Data Conversion Specialist
Database Administrator
Database Analyst
Database Modeler
IM Administrator
IM Architect
IM Modeler

Managed Services

Business Continuity/Disaster Recovery Specialist
Call Centre Consultant
Help Desk Specialist
Operations Support Specialist
Network Support Specialist

Project/Risk Management

Project Administrator
Project Coordinator
Project Leader
Project Manager
Project Scheduler
Quality Assurance Specialist/Analyst
Risk Management Specialist

Security Services

PKI Specialist
Privacy Specialist
Security Specialist
SSL Specialist

Technology Services

Database Analyst
Network Analyst
Platform Analyst
Storage Architect
System Administrator
Technical Architect
Technology Architect

Training/IT

Courseware Developer
Instructor, IT

Table 2: Solution-Based Domains

Informatics Solution-Based services are grouped into 11 domains
• BUSINESS TRANSFORMATION • ERP/ CRM • ELECTRONIC SERVICES DELIVERY • GEOSPATIAL INFORMATICS SERVICES • INFORMATION MANAGEMENT/BUSINESS INTELLIGENCE • IT SYSTEMS MANAGEMENT • LEGACY SUPPORT AND TRANSITION • MANAGED SERVICES • NETWORK SERVICES • SECURITY MANAGEMENT • SYSTEMS INTEGRATION

The New Procurement Approach for Informatics Professional Services

The new procurement strategy will involve standardizing services into **functional** streams:

- **Professional Services Online (PS Online)**. For requirements valued under the NAFTA threshold, PS Online allows companies to market their services directly to government and makes it easier for departments to find cost-effective, professional services.
- **Task-Based**. For requirements that have a specific number of human resources and a defined duration.
- **Solution-Based**. For complete solutions where the number of resources and duration required are unknown.

Each stream more accurately reflects government needs (e.g., additional resources versus complete solutions), and **increases bidding opportunities** for suppliers by inviting one of the three qualified suppliers offering the lowest per diem rates for each requirement.

Value will be factored into evaluation. For example, in the area of professional services, value attributes such as years of experience, history of successful work in a given field (either to government or the private sector) will account for substantially more in the total points awarded a bid than price. Final rankings will always be a combination of value and price.

In order to **ensure supply continuity** and to allow for **local and operational requirements**, IPS business will be awarded by region, with multiple firms in each region: Atlantic, Quebec, Ontario, National Capital Region, Western and Pacific.

In order to ensure **a level competitive playing field and open, fair competitions**, the requirement will be published on MERX inviting suppliers to participate in the sourcing process through a Request for Standing Offer (RFSO) for task-based requirements, and a Request for Supply Arrangements (RFSA) for solution-based requirements.

In order to accommodate the unique capabilities of small suppliers and to ensure a level playing field for SMEs, each stream will include 2 tiers:

- Tier 1 for projects of less than or equal to $2M (totals including all taxes); and,
- Tier 2 for projects exceeding $2M.

The government is taking steps to make it easier to compete. The introduction of the new RFSO/RFSA for IPS will provide an inclusive approach designed to ensure that SMEs have access to government procurement, regardless of size and location. It will also provide opportunities for suppliers to pool expertise and resources together in order to qualify and bid for more contracts and have access to larger ones.

The procurement process will reduce the cost and complexity of bidding for suppliers. Templates will simplify the bidding process and create an efficient, easy-to-use system. Under the Intellectual Property Policy, the contractor will maintain ownership of the intellectual property developed as a result of a contract with the Government of Canada.

Departments and agencies will benefit from this new approach as it will simplify the procurement process and tools, speed up the procurement process and provide clearer terms of reference.

Departments and agencies will also benefit from a **faster execution of orders** for specific requirements, as a result of predefined categories of personnel and per diem rates. This simpler and more efficient system will significantly streamline the call-up process, save departments and agencies' time, and will reduce administration costs.

1) Clients' access

Based on their requirements, departments and agencies will have access to suppliers through one of following procurement vehicles:

Professional Services Online (PS Online)	*New Method of Supply for IT Professional Services – Task-Based*	*New Method of Supply for IT Professional Services – Solution-Based*	*Standalone Request for Proposals posted on MERX*
✓ Requirements valued under the NAFTA threshold ✓ Makes it easier for departments to find cost-effective professional services, either IT or non-IT. ✓ Allows companies to market their services directly to government	Requirements for: ✓ a specific number of human resources ✓ a defined duration	✓ Requirements defined with Project objectives (e.g. system implementation) ✓ Where the number of resources and the duration required are unknown, i.e. solution/deliverable driven procurement	✓ Large system integration requirements outside the scope of the New Method of Supply, e.g. Canadian Firearms Program

Note: this document does not address stand-alone Request for Proposals.

2) Qualification process

Professional Services Online (PS Online)

Each supplier that complies with the established mandatory criteria is being registered on PS Online. The registration process and the mandatory criteria are described in Box 1, below.

Box 1: PS Online Registration Process and Mandatory Criteria

To register in Professional Services Online (PS Online), Suppliers must:

- ✓ Obtain a Procurement Business Number (PBN);
- ✓ Review the content of the Trading Partner Agreement (TPA);
- ✓ Complete the TPA signature;
- ✓ Respond to the following Mandatory Requirements:
    - o **Corporate Profile:** the supplier must provide its full legal name, a corporate résumé of the Firm, including a Web site link (if applicable). The résumé must include, as a minimum, the Firm's primary area(s) of business, number of years in business, key team members, number of employees and any other relevant information.
    - o **Number of years in business:** the supplier must have been in business for a minimum of one (1) year.
    - o **Human Resource Plan:** the supplier must describe its approach/plan for ensuring that the necessary resources are available at all times.
    - o **Supplier's relevant projects:** The supplier must have successfully completed at least three (3) relevant projects within the last three (3) years.
- ✓ Sign the applicable certifications.

For more information please visit the following website:
http://www.pwgsc.gc.ca/acquisitions/text/ps/suppliers/reg-e.html

Task-Based

Each supplier that complies with the established mandatory criteria (please refer to Table 3), achieves the minimum overall pass mark of 70% for the point rated requirements, and offers per diem rate(s) less than or equal to the median +25 per cent will be awarded a Standing Offer. Price will be assessed independently by Tier and for each of the 6 regions. The financial evaluation is described below. The Standing Offers will be awarded for each specific Category of Personnel and Level of Expertise in each Tier and Region. The Standing Offers will be valid for three years, with a possibility of two, one-year extensions (for a maximum of five years). Suppliers that did not qualify for a Standing Offer may have access to government business through PS Online or subcontracting agreements.

Diagram 1: Supplier Screening Process

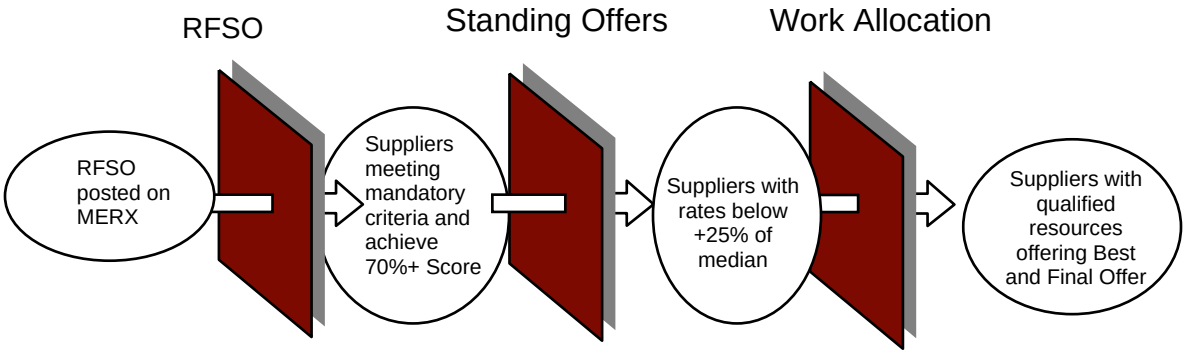

Table 3 Task-Based RFSO Evaluation Criteria

Item		Mandatory Requirement			Point Rated	
	Code	Tier 1	Tier 2	Code	Tier 1	Tier 2
Financial Strength & Stability / Annual Revenue	M1	Required within 10 days of request by GoC: ▪ Audited financial statements for last 3 fiscal years ▪ Certification from CFO that financial info is complete and accurate ▪ Confirmation letter from providers of short-term financing outlining total lines of credit granted and amount available		R1	Annual Revenue (For JV, annual revenue may be combined): ▪ <$2MM 10 points ▪ $2MM+ 20 points	Annual Revenue (For JV, annual revenue may be combined): ▪ <$20MM 10 points ▪ $20MM+ 20 points
Minimum Years in Business	M2	▪ 3 years ▪ All members of JV must meet this requirement		-	No point rating	No point rating
Insurance Requirements	M3	▪ General Liability limit $2MM ▪ Certification due at Call-up	▪ General Liability limit $5MM ▪ E&O limit of $500K	-	No point rating	No point rating
Experience – Value of Resources	M4(a)	▪ The Offeror must have provided Task Based Informatics Professional Services resources within the last three (3) years with a total billing value of $1.5MM or more ▪ JV members may combine billing values to meet the minimum requirement	▪ The Offeror must have provided Task Based Informatics Professional Services resources within the last three (3) years with a total billing value of $12MM or more ▪ JV members may combine billing values to meet the minimum requirement	R2	▪ >$1.5MM to <$1.75MM 5 pts ▪ $1.75MM to <$2.0MM 10 pts ▪ $2.0MM to <$2.25MM 15 pts ▪ $2.25MM to <$2.5MM 20 pts ▪ $2.5MM+ 25 pts	▪ >$12MM to <$12.75MM 5 pts ▪ $12.75MM to <$13.5MM 10 pts ▪ $13.5MM to <$14.25MM 15 pts ▪ $14.25MM to <$15MM 20 pts ▪ $15MM+ 25 pts
Experience - Categories of Personnel	M4(b)	▪ At least 20 of the 64 categories provided within last 3 years ▪ JV members may combine number of categories each has provided to meet minimum requirement	▪ At least 40 of the 64 categories provided within last 3 years ▪ JV members may combine number of categories each has provided to meet minimum requirement	R3	▪ 21 to 30 1 point ▪ 31 to 40 2 points ▪ 41 to 48 3 points ▪ 49 to 56 4 points ▪ 57+ 5 points	▪ 41 to 48 3 points ▪ 49 to 56 4 points ▪ 57+ 5 points
Security Clearance	M5	Supplier must hold valid DOS issued by CIISD		-	No point rating	No point rating
Proposed per diem rates	-	Rates must be provided	Rates must to be provided	R4	Average distance from median: ▪ Less than -10% 20 points ▪ -10% to <0% 15 points ▪ 0% to <+10% 10 points ▪ 10% to +25% 5 points ▪ Greater than +25% 0 points	

Solution-Based

The Solution-Based approach includes an RFSA and supplier will be qualified based on mandatory criteria only. Competition will occur at the RFP stage for identified projects. The suppliers will be evaluated based on non-price criteria. Supply Arrangements will be issued by region and areas of expertise to all suppliers meeting the mandatory criteria. When a specific project is identified, an RFP will be sent to a minimum number of qualified suppliers.

Any supplier meeting the mandatory requirement identified in Table 4, below, will be issued a Supply Arrangement.

Diagram 2: Supplier Screening Process

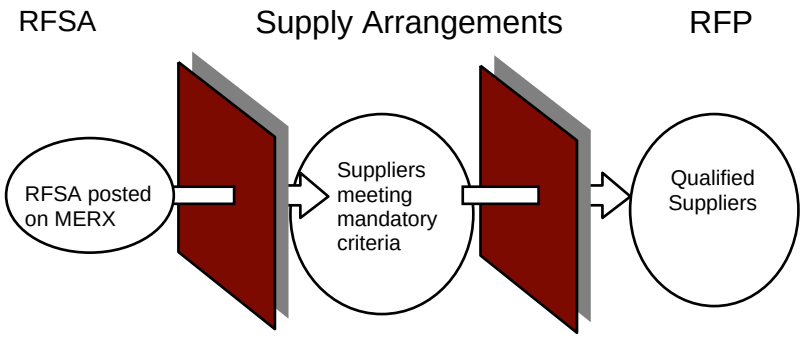

Table 4: Solution-Based RFSA Evaluation Criteria

Item		Mandatory Requirement	
	Code	Tier 1	Tier 2
Financial Strength & Stability / Annual Revenue	M1	Required within 10 days of request by GoC: ▪ Audited financial statements for last 3 fiscal years ▪ Certification from CFO that financial info is complete and accurate ▪ Confirmation letter from providers of short-term financing outlining total lines of credit granted and amount available	
Minimum Years in Business	M2	▪ 3 Years ▪ All members of JV must meet this requirement	
Insurance Requirements	M3	▪ General Liability limit $2MM ▪ Certification due at Contract	▪ General Liability limit $5MM ▪ E&O limit of $500K
Experience – Value of Projects	M4	**Per Domain of Expertise:** ▪ 3 IT projects within the last 3 years valued in total at $1.5MM or more ▪ Referenced project value must be entirely with Offeror ▪ Referenced project value must represent the Offeror's portion of the project which pertains solely to the specific Domain of Expertise ▪ Professional Services must represent at least 70% of the complete solution ▪ For JV, projects may be combined in order to meet this requirement	**Per Domain of Expertise:** ▪ 3 IT projects within last 3 years valued in total at $6MM or more ▪ Referenced project value must be entirely with Offeror ▪ Referenced project value must represent Offeror's portion of the project which pertains solely to Domain of Expertise ▪ Professional Services must represent at least 70% of the complete solution ▪ For JV, at least one member must meet the requirement
Security Clearance	M5	Offeror must hold valid DOS issued by CIISD	

3) Work Allocation

PS Online and Task-Based

Project Value	Work Allocation Process	Managed by
Up to NAFTA Threshold (Currently $84K)	A minimum of 3 suppliers qualified under PS Online must be invited to bid	Client via PS Online
Up to $250K – Direct to Supplier	✓ Client may direct its requirement if supplier with lowest firm per diem rate is selected. ✓ Otherwise, Tier 1 process is used	Client
Tier 1: Up to $1MM	✓ Only Standing Offer (SO) Holders may be requested to propose resources ✓ Work Allocation Process will involve a minimum 3 SO Holders, including one of 3 lowest firm rates and one at random ✓ SO Holders will be given a minimum of 5 days to respond	Client
Tier 1: more than $1MM and up to $2MM	✓ Only Standing Offer (SO) Holders may be requested to propose resources ✓ Work Allocation Process will involve a minimum 5 SO Holders, including 2 of 3 lowest firm rates and 2 at random ✓ SO Holders will be given a minimum of 20 days to respond	Client
Tier 2	✓ All SO Holders will be requested to propose resources ✓ SO Holders will be given a minimum 20 days to respond	PWGSC

For each specific requirement, all suppliers awarded a Standing Offer for the services covered by the requirement will be eligible for participation in the Work Allocation Process (WAP). A department or agency will provide the specific qualification requirements for the WAP, and the suppliers must propose resources meeting these requirements. The suppliers will be requested to submit a Best and Final Offer for the proposed resources, and offer a percentage discount from their Standing Offer Firm Per Diem Rates. Once the suppliers have proposed their resources, the department or agency will evaluate the proposals, determine the best value and issue a call-up on the Standing Offer. PWGSC will monitor the process to ensure work is allocated based on objective and transparent criteria.

A Customer Satisfaction scorecard will be used to measure supplier performance. Suppliers who repeatedly do not offer resources when requested will be subject to having their Standing Offer reviewed.

Solution-Based - RFP Process

Project Value	RFP Process	Managed by
Tier 1: Up to $1MM	✓ Only qualified Supply Arrangement (SA) Holders may be requested to respond to the RFP ✓ RFP Process will involve a minimum 5 SA Holders, two (2) at random ✓ SA Holders will be given a minimum of 10 days to respond	Client
Tier 1: more than $1MM and up to $2MM	✓ Only qualified SA Holders may be requested to respond to the RFP ✓ RFP Process will involve a minimum 7 SA Holders, four (4) at random ✓ SA Holders will be given a minimum of 10 days to respond	Client
Tier 2	✓ All qualified SA Holders will be requested to respond to the RFP ✓ SA Holders will be given a minimum 20 days to respond	PWGSC

For each specific requirement, all Supply Arrangement Holders qualified for the required domain(s) of expertise will be eligible for participation in the RFP. Departments or agencies will provide a Statement of Work and evaluation criteria to the selected S.A. Holders. The S.A. Holders must propose a solution meeting these requirements and may be required to submit a Firm Price for the proposed solution. Once the suppliers have proposed their solution, the department or agency will evaluate the proposals determine the best value and award contracts. PWGSC will monitor the process to ensure RFPs are conducted based on objective and transparent criteria.

A Customer Satisfaction scorecard will be used to measure supplier performance. Suppliers who repeatedly do not offer resources when requested will be subject to having their Standing Offer reviewed.

Financial Evaluation

The financial evaluation will conducted based on the methodology detailed below using the Firm Per Diem Rates proposed by the Supplier

(1) The Firm Per Diem Rates of those technically responsive offers will be assessed independently by Tier and Region.

(2) The following steps will be followed for <u>each specific Category of Personnel and Level of Expertise</u> in each Tier and Region:

Step 1 An “Original Median” will be calculated for every Category of Personnel and Level of Expertise Firm Per Diem Rate. Only Firm Per Diem Rates proposed for a specific Category of Personnel and Level of Expertise will be used to calculate the “Original Median” for that Category of Personnel and Level of Expertise;

Step 2 Any Supplier proposing Firm Per Diem Rates below the "Original Median" minus 80% for a specific Category of Personnel and Level of Expertise will be deemed non-compliant and will receive no further consideration for that Category of Personnel and Level of Expertise.

Step 3

(a) Any Supplier proposing Firm Per Diem Rates below the "Original Median" minus 40% for a specific Category of Personnel and Level of Expertise will be required to support its Firm Per Diem Rate.

(b) Should a Supplier be unable to support its price for that Category of Personnel and Level of Expertise, it will be deemed non-compliant and will receive no further consideration for that specific Category of Personnel and Level of Expertise.

Step 4

(a) Firm Per Diem Rates that fall outside the "Original Median" band of plus or minus 40% for a Category of Personnel and Level of Expertise will be removed from the Firm Per Diem Rate population in order to calculate an "Adjusted Median".

(b) The "Adjusted Median" will be based on those Firm Per Diem Rates falling within the "Original Median" band of plus or minus 40% for the Category of Personnel and Level of Expertise.

Step 5

(a) Any Supplier proposing Firm Per Diem Rates greater than the "Adjusted Median" plus 25% will be deemed non-compliant and will receive no further consideration for that specific Category of Personnel and Level of Expertise.

(b) Any Supplier proposing a Firm Per Diem Rate that is less than or equal to the "Adjusted Median" plus 25% will be recommended for award of a Standing Offer.

Feedback Sought

PWGSC seeks feedback on the proposed features of the new procurement instruments for IPS, more specifically:

- Structure of the proposed procurement instruments (RFSOs/RFSAs) for IPS, based on a Task-Based and Solution-Based Approach.
- Tiered approach and proposed evaluation criteria.
- Standardization of the proposed resource categories.
- Bidding opportunities for SMEs and Aboriginal businesses set aside.
- Vendor Performance Evaluation.
- Other ideas to reduce cost to suppliers and the Government of Canada.

Section D – Informatics Professional Services (IPS) Data Analysis

Macro Analysis of Market Power

Definition of Industry

Informatics professional services provide advice and support for information and communication technology systems. The service is produced as it is needed, although firms may sometimes "warehouse" employees during down times.

Some aspects of IPS make it desirable to locate close to the customer whereas others allow it to be situated away from the customer. In particular, the "high touch" service aspect of the business drives the service to locate close to the customer. This accounts for the presence of many suppliers close to the customer, especially those offering ongoing systems support. Yet the relatively high value and occasionally specialized nature of the service also means that it can make sense to transport the service from regional centres, especially for specific projects. This tendency for the service to locate away from the customer has been further encouraged by considerable improvements in information and communication technologies, which, not surprisingly, are intensively used by the profession.

The costs of computing power and communication technologies, which IPS uses intensively, have plummeted. This has greatly reduced the capital needed to enter the market as a temporary help services supplier, allowing many small operators to become established. The highly technical nature of the work has also led to a high degree of specialization among firms providing the basis for small niche businesses to operate successfully.

Defining an industry as dynamic as informatics is somewhat complicated. Our methodology was first to examine the list of the job types covered by the Government of Canada's standing offers, to gain an understanding of the "market" in question. By juxtaposing the job types identified to the NAICS codes we defined the informatics professional services market for purposes of analysis. Appendix A, below, provides a detailed description of the Data Analysis Methodology used.

Informatics professional services experts provide advice and support within the field of information and communications technology (ICT). According to PWGSC and Statistics Canada, informatics professional services falls under two industry categories: 1) Professional, Scientific and Technical Services (54); and 2) Information and Cultural Industries (51). Specifically, for PWGSC, this industry consists of establishments primarily engaged in: Computer Systems Design and Related Services (NAICS 541510) and Software Publishers (NAICS 511210). [17]

PWGSC also includes professions that would best fit into the NAICS category of Management, Scientific and Technical Consulting Services (5416). This industry group comprises establishments primarily engaged in providing expert advice and assistance to other organizations on management, environmental, scientific and technical issues.[18] Although

[17] PWGSC's definition does not include three other categories included in the Statistics Canada definition: Data Processing, Hosting and Related Services (NAICS 518210); Internet Service Providers (NAICS 518111); and Web Search Portals (NAICS 518112).

[18] http://stds.statcan.ca/english/naics/2002/naics02-class-search.asp?criteria=5416

PWGSC hires from Management, Scientific and Technical Consulting Services firms that provide management consulting services for its informatics needs, informatics services is only a small part of that industry. Including this entire industry in the data would likely create significant inaccuracies. As a result, Management, Scientific and Technical Consulting Services (5416) has been excluded from analysis.

The software publishing industry is relatively small in Canada. Although the Government periodically requires these services, they constitute only a very small fraction of the expenditures in the informatics procurement category. Therefore Software Publishing (NAICS 511210) data are also excluded from the analysis.

Thus the definition used in this analysis focuses on Computer Systems Design and Related Services (NAICS 541510). Although this category excludes some data elements, it is a large enough portion of the whole to support the analysis and generate reasonably accurate and valid results. Accordingly, the data analysis which follows, replaces the general term 'informatics' with the term 'computer systems design and related services'.

The computer systems design and related services industry comprises establishments engaged primarily in providing expertise in the field of information technology. Major activities include: the writing, modification or support of custom software; planning and designing computer systems; integrating hardware, software and communications technologies; on-site management of clients' computer and data facilities; and consulting services in the field of information technology and other computer-related services.[19]

Defining the Market I: Output and Sales

In recent years, the computer systems design and related services industry has been highly cyclical. The industry grew phenomenally during the late 1990s, with real demand rising an average of 19 per cent annually from 1997 to 2001. The industry, however, went from record profits to record losses in record time. In 1998, the industry realized nearly $800 million in profits. Just two years later, in 2000, that had been reversed to losses of over $600 million.[20]

Although the industry returned to profitability in 2002, the industry has been slow to rebound entirely. This slow rebound is because the two major structural changes that drove growth, namely integrating the Internet into business practices and outsourcing IT services, are maturing. In other words, most of the businesses that will adopt these practices have already done so. Market saturation and product maturity continue to hamper growth.

At present, purchasers of these services enjoy relatively low prices. In 2000, at the height of the boom, hourly rates for consultants in the United States were US $320. By 2005, the hourly rate in the United States had sunk to US $201.[21] Similar declines were observed in Canada.

Currently the computer systems design and related services market in Canada is estimated at $24.3 billion annually. In 2005, real production rose by only 0.9 per cent, while revenues were up 3.5 per cent. The resulting profit of $338 million was down from over $500 million in 2004. The 2005 profit margin was 1.4 per cent.[22]

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[19] http://stds.statcan.ca/english/naics/2002/naics02-class-search.asp?criteria=54151
[20] *Canada's Information Technology and Communications Industry* (Conference Board of Canada, 2006)
[21] Morphy, Erika, *IT Consulting Services on Track for Steady Growth* (CRM Buyer, April 2006).
[22] *Canada's Information Technology and Communications Industry* (Conference Board of Canada, 2006)

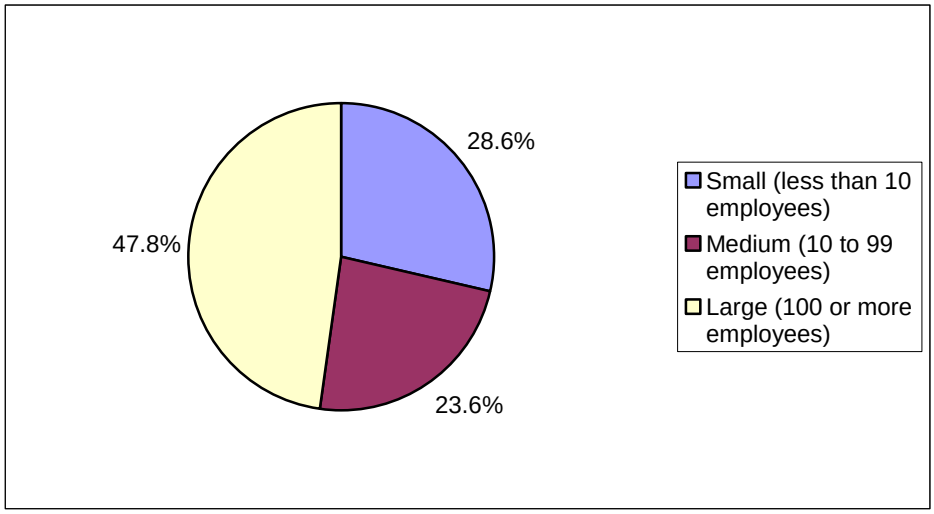
The outlook for the industry is somewhat more favourable, however, with exports being a major driver of growth. Production growth rates of 3.5 per cent and revenue growth rates of 6.2 per cent being expected between 2006 and 2010. Profits of over $600 million are expected by 2007 growing to over $900 million by 2010. The cost of purchasing computer system design and related services will increase during this period. The hourly rates for consultants are expected to increase at rates of around 6.2 per cent, for the foreseeable future.

Defining the Market II: Make-up of service providers

Currently over 250,000 Canadians are employed in computer systems design and related services. There are many small and medium-sized suppliers in the marketplace offering specialized services. Some middle-sized firms have been organized as consortia, pooling professional skills under a new company. At the other end of the spectrum, large firms with widely recognized brand names, like IBM, have honed their products into consulting markets. The result is a widely varied marketplace in terms of organization size and structure.

The industry has a very low level of concentration, with an average revenue per establishment of only $400,000, and is comprised primarily of small companies with fewer than 10 employees. In fact, half of all firms are owner operated and do not have any employees at all.[23] Large firms make up around one per cent of the total number of firms in this industry, yet they generate nearly 50 per cent of the revenues. (See Chart 1) Examples of large firms in this industry include CGI Group; Cognos; and MacDonald, Dettwiler and Associates (MDA).

Chart 1
Proportion of Computer System Design and Related Service Industry Revenue by Firm Size (2004)



Sources: The Conference Board of Canada; Statistics Canada.

Higher profit margins for the smaller firms have been observed in the past. For instance, data for 2001 shows a huge gap between small and larger firms. At that time, small firms showed a

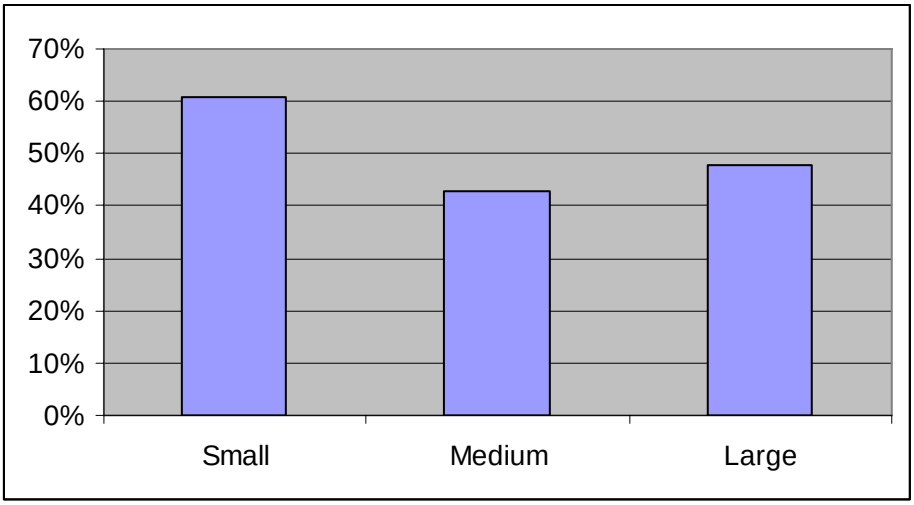
[23] Da Pont, Moreno, *Building the Perfect System: An Analysis of the Computer Systems Design and Related Services Industry* (Statistics Canada, 2003).

remarkable 14 per cent profit, while the larger firms showed 2 per cent.[24] Since then the difference between the two groups has converged somewhat, but, as of 2004 at least, small firms (those with revenues under $5 million) still had a significant advantage in profit margin.[25]

It is the structure of firms with no employees that helps to create this "somewhat artificial difference" when comparing profit margins. One major difference is that owners of firms without employees record their own income as profit in their income statements whereas owners of firms with employees typically record their salaries and wages as expenses, thus reducing their stated profit margins. In addition, there are real differences in cost structures. For example, firms with employees tend to have higher actual overhead costs for buildings, capital expenditures and more elaborate technology systems.[26]

Many of these firms are highly specialized and deliver only a very narrow scope of professional services. More than half of all firms operating in the industry offer only one or two services. This is not surprising due to the prevalence of very small firms. As recently as 2001, even among medium and large firms, a large proportion specialized in a specific service. (See Chart 2) There is some evidence showing that diversified firms attain more revenues than specialized ones. Therefore, some market pressures may have been at work since 2001. These pressures, along with the downturn, may have forced more firms to offer diversified services. As a result, they may be fewer specialized firms operating today than in the past.

Chart 2: Proportion of Specialized Firms by Size (2001)



Source: Da Pont, Moreno, Building the Perfect System: *An Analysis of the Computer Systems Design and Related Services Industry* (Statistics Canada, 2003).

[24] Da Pont, Moreno, *Building the Perfect System: An analysis of the computer systems design and related services industry* (Statistics Canada, 2003).
[25] Statistics Canada, *Financial Performance Indicators for Canadian Business 2004*, (cited by PWGSC).
[26] Da Pont, Moreno, *Building the Perfect System: An analysis of the computer systems design and related services industry* (Statistics Canada, 2003).

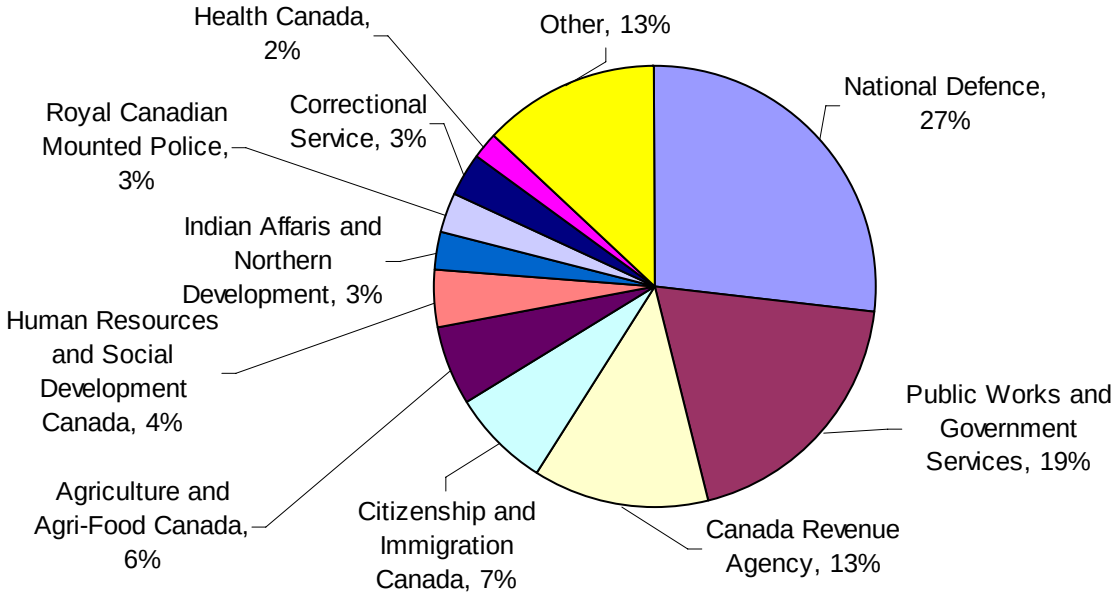
Market Power of the Government of Canada

Currently, the Government of Canada spends approximately $621 million annually on computer systems design and related services.[27] In an industry that produces over $24.3 billion annually, the Government of Canada purchases about 3.9 per cent of the national market. Although that is not a major market share, the Government is still likely to be one of the largest single purchasers of these services in Canada. Even so, with such a small proportion of the whole market, they lack the market power needed to set prices and conditions for the whole industry. As a result, changes in government procurement practices would have little effect to the computer system design and related services industry as a whole.

Micro Analysis of Market Dependence

With such a variety of firms in the industry, not all firms would be affected by procurement changes in the same way. It is clear that some would benefit from change, while others would be challenged or at risk. To understand just how and which firms may be affected by these changes, we have conducted an analysis of government purchases of computer system design and related services for fiscal year 2005-06. (See Chart 3)

Chart 3: Spending by Government Department (2004-2005)[28]



Source: *Informatics Professional* Services [slide show]. Presented by Sandra Labbé, Acting Manager, Public Works and Government Services Canada. Ottawa: August 24, 2006.

The Government of Canada has been a pioneer in utilizing new technologies to provide governmental services and has made major purchases of expert computer system design and

[27] Data obtained from PWGSC

[28] This assumes 90 per cent is addressable; a significant portion may include large projects managed by other Directorates. Addressable spend will be handled by the new procurement process. It is estimated that approximately 10 per cent of large projects might be done using an independent Request for Proposal due to their scope.

related services in recent years to support its innovations. The government continues to be an important purchaser of these expert services.

Many government departments and agencies purchased computer systems design and related services in 2005-06. However, a group of departments form the key purchasing block for the Government of Canada. The top three purchasers of computer system design and related services are National Defence, PWGSC, and Canada Revenue Agency. These three departments account for approximately 59 per cent of spending for computer system design and related services.

Number and Size of Suppliers

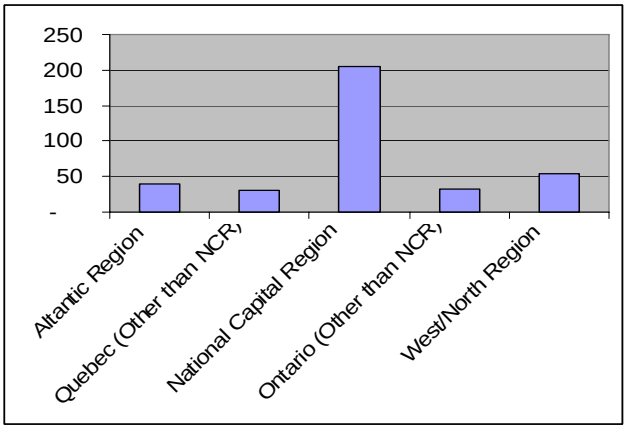
The Government of Canada has supplier relationships with nearly 3000 suppliers of computer systems design and related services.[29] There are a very large number of small suppliers currently providing computer system design and related services to the government.

The best data to evaluate the nature of these suppliers are for service providers to PWGSC who have had a contract awarded or amended in the calendar year.[30] In 2005, PWGSC dealt with 339 suppliers. Fully 275, or 81 per cent, of these firms who had a contract awarded or amended, were SME's.[31]

Location of Suppliers

Due to the focus of government spending in the National Capital Region (NCR), one would expect that the majority of computer systems design and related services are purchased from suppliers in the NCR. In fact, in 2005, 205 of the 339 active firms, or 60 per cent, were from the NCR. Contracts were awarded or amended, however, to a wide geographic dispersion across Canada. Suppliers in all ten provinces, plus the Yukon Territory and the North West Territories, received contracts or had existing contracts amended. (See Chart 4)

Chart 4: Number of Active Service Providers to Public Works by Region (2005)



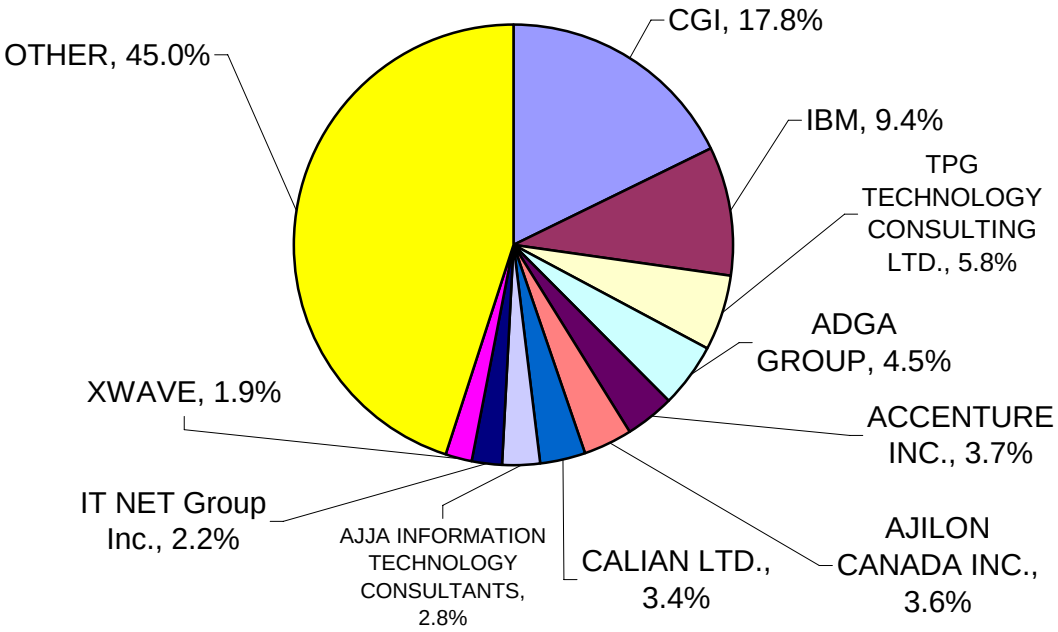
Source: The Conference Board of Canada using data obtained from PWGSC.
Note: Some manufacturers are active in multiple provinces and therefore are counted more than once.

[29] Informatics Professional Services [presentation]. Presented by Sandra Labbé, Acting Manager, Public Works and Government Services Canada. Ottawa: August 24, 2006.
[30] These were firms that PWGSC awarded a contract to, or amended a contract in the 2005 calendar year. This analysis excludes the contracts awarded or amended by other government departments.
[31] Data obtained from PWGSC

Top suppliers

Despite the large number of suppliers spread across the country, spending was heavily concentrated among the leading suppliers. The top three suppliers, i.e. CGI, IBM, and TPG Technology Consulting LTD, received approximately one-third of government expenditure. The top ten suppliers received approximately 55.1 per cent of the spending. (See Chart 5) Among the top ten suppliers, six are large suppliers measured by employee size, two others are medium sized, and two are of unknown size.[32] Thus despite a vast array of suppliers a large proportion of the expenditures go to a few large suppliers.

Chart 5: Amount Spent by Supplier (2004-2005)



Source: The Conference Board of Canada using data obtained from PWGSC.

In terms of the location of spending, the top suppliers are of two types. The first type comprises six large international companies, both Canadian (CGI, Calian, xwave) and American-headquartered (IBM, Accenture, Ajilon). Most of these suppliers have offices in many parts of the world, operate several branch companies, and have offices in multiple locations in Canada. The second type comprises companies based in the NCR, or focusing their business in the NCR. Of the top ten suppliers, four belong to this second group—ADGA Group, TPG Technology, Ajja, and IT Net Group. (See Table 5)

[32] Data obtained from PWGSC

Table 5: Top 10 Suppliers, by Size, HQ Location, and Geographic Range

Supplier By Rank Order, Revenues from Federal Government	Size, Location of HQ	Geographic Range of Operations
CGI	Large Canadian International	AB, SK, ON, PQ, PEI, NB, NB, NS + world-wide
IBM	Large American International	BC, AB, ON + world-wide
TPG Technology	Small Canadian (NCR only)	Ottawa
ADGA Group	Large Canadian (NCR focus)	ON, QC, AB
Accenture Inc.	Large American International	AB, ON, QC + world-wide
Ajilon	Large American International	BC, AB, MB, SK, ON, QC, NS, NF + world-wide
Calian	Large Canadian International	ON, QC, AB + world-wide
Ajja (acquired by Brainhunter Nov, 2005)	Medium Canadian (NCR focus)	ON, AB, BC
IT Net Group	SME Canadian (NCR focus)	ON
xwave	Large Canadian International	NF, NS, PEI, NB, ON + US, Ireland

Source: The Conference Board of Canada, using data from company websites.

Importance of Government of Canada Expenditures

From the above analysis, it is clear that the large international suppliers, on the whole, are not dependent on the Government of Canada's expenditures in the informatics professional services category. Based on PWGSC numbers, IBM earns $58 million for its dealings with the Government of Canada. IBM Canada posts revenues in the $9.1 billion range.[33] However, most large companies will have regional offices with profit and loss responsibility and $58 million is likely quite significant to these offices. In such cases, the local effects of changes could affect the local presence of larger firms.

Some of the local suppliers are very dependent on Government of Canada spending. For example, Calian states that it earned $177 million in revenues in 2005, 43 per cent (or $76

[33] Posted on their website < http://www.ibm.com/ca/en/>

million) of which was related to Government of Canada.[34] (It is not clear that this would all be on computer systems design and related services.)

Another example is IT Net. Its 2006 revenues are anticipated to be in the $24 million dollar range.[35] According to PWGSC, IT Net received 2.2 per cent of the $621 million in expenditures, which works out to almost $14 million. These numbers would suggest that 58 per cent of the company's revenues are from computer system design and related services with the Government of Canada.

If some of the large computer systems design and related services suppliers are quite dependent on the Government of Canada's spending, many smaller suppliers may be even more so. Although being a small service provider can be lucrative, it can also be risky. Some small providers in this category could be surviving one contract at a time. If so, any disruption to this spending would likely have consequences to many smaller suppliers. However, so far, the evidence is unclear as to how many firms would be adversely affected and to what extent.

[34] Calian 2005 Annual Report
[35] http://www.itnet.ca/CompanyProfile.aspx

Section E – Informatics Professional Services: Planned Changes, Issues and Perceptions

Suppliers' views have been sought in a variety of ways by PWGSC as it has been going through the process of developing its procurement reform plans. The department has attempted to incorporate some suggestions from individual suppliers and industry associations into its plans. As a result, alterations and refinements to the planned changes in procurement have already been made.

Supplier Consultations

Since January 2005, PWGSC has been consulting with companies, industry associations and government clients to inform them and to receive feedback on its plans for the new procurement strategy. Through both formal processes and ad hoc meetings, PWGSC has received important input from the industry in general and from several industry associations (ITAC, CATA, CABiNET, CAMC, PSABA, NACCB, and ACSESS)[36] into the development of the procurement strategy.

PWGSC has already substantially responded to two major concerns expressed by industry—the reverse auction ('eAuction') and the price competition. In response, PWGSC has revised its process to eliminate the reverse auction, and allow all suppliers during the work allocation process to provide their best and final offers in a confidential submission that eliminates iterative bidding. In addition, the Standing Offer process has been revised so that SOs will be issued to all suppliers who meet quality requirements and that have rates within +25 per cent of the median.[37]

Current Procurement Process

The IPS category currently has no single or centralized procurement process. Several bid methods are in use by government departments, including Request for Proposals (RFP) for large IT service requirements, Request for Standing Offers (RFSO) for routine and repetitive times and materials relating to IT service requirements, and Request for Supply Arrangements (RFSA) to access many professional service providers. The number of instruments and the number of recipients of standing offers and supply arrangements has grown markedly in recent years partly due to the proliferation of technology in use by government. For example, for one initiative alone, Government On-Line (GOL), the government has awarded 340 Supply Arrangements.

[36] The acronyms for the industry associations are: Information Technology Association of Canada (ITAC); Canadian Advanced Technology Association (CATA); Canadian Business Information Technology Network (CABiNET); Canadian Association of Management Consultants (CAMC); Public Sector Aboriginal Association (PSABA); National Association of Computer Consulting Businesses (NACCB); and the Association of Canadian Search, Employment and Staffing Services (ACSESS).

[37] *Informatics Professional Services* [slide show]. Presented by Sandra Labbé, Acting Manager, Public Works and Government Services Canada. Ottawa: August 24, 2006.

Procurement Instruments

Request for Proposal (RFP)
A Request for Proposal is often used for purchases where the selection of a supplier cannot be made solely on the basis of the lowest price. An RFP is generally used for requirements of $25,000 or more and it is used to procure the most cost-effective solution based upon evaluation criteria identified in the RFP.[38]

Request for Standing Offers (RFSO)
In a Request for Standing Offer, a potential supplier offers to provide goods and/or services at pre-arranged prices, under set terms and conditions, when and if required. No contract exists until the Government issues an order or "call-up" against the standing offer, and there is no actual obligation by the Government to purchase until that time. SOs are used to meet recurring needs such as common products (e.g., food, fuel, electronic data processing equipment) and common services (e.g., temporary help services). Standing offers are most suited to goods or services than can be clearly defined to allow supplier to offer firm pricing.[39]

Request for Supply Arrangement (RFSA)
A Request for Supply Arrangement is a method of solicitation from a pool of pre-screened suppliers. RFSA are typically used when goods or services are bought on a regular basis but a standing offer isn't suitable due to variations in the call-ups. For instance, the statement of work can't be clearly defined in advance. Government departments can use this list of qualified suppliers to obtain price quotes on specific requirements.[40]

Multiple procurement processes and instruments can have negative consequences. One result of the numerous procurement vehicles being used by government departments is that the government enjoys only limited centralized buying power. In addition, the IPS category has no set pricing standards for IPS positions such as web developers and systems analysts. Consequently, per diem bill rates for these positions vary substantially making it difficult to identify the most cost-effective supplier for a given role. This lack of standardization also means that each time a government work order is posted it is necessary first to determine fair and equitable market prices. When multiplied by the large number of work orders issued annually the time taken for each assessment represents a significant cost to government.

The Way Forward: Informatics Professional Services

The Government of Canada is implementing plans to make its current procurement process for IPS related products and services more efficient and effective. In essence, PWGSC is beginning to implement changes to bring about more centralized and standardized procurement processes for IPS. The proposed changes, outlined below, are estimated to achieve a savings of more than $60 million annually. PWGSC believes these changes will lead to a more open, fair and transparent competition.

The planned changes for obtaining resources relate to two work streams: task-based and solution-based. A task-based requirement is one in which a government department requires a specific number of human resources for a defined duration. PWGSC has identified 64 categories of personnel grouped under nine domains. For example, under the domain "Application Services" there are 19 categories of personnel such as system analyst, technical

[38] http://contractscanada.gc.ca/en/giddin-e.htm
[39] http://contractscanada.gc.ca/en/so-e.htm
[40] http://contractscanada.gc.ca/en/so-e.htm

writer and web developer. A solution-based requirement is one in which a government department requires a solution that is explicitly connected to a defined project objective, such as a system implementation; which may include human resources and technology (hardware or software); and where the quantity resources required and the duration of work are not precisely known. Solution-based requirement are categorized under 11 domains such as business transformation, IT systems management and systems integration.[41]

Task-Based Work Stream - RFSO

The key strategy for this stream is to issue a Request for Standing Offer (RFSO) for task-based work that gathers detailed technical and financial information (including bill rates) from all interested suppliers. The information will be organized into more than 2,000 separate Bid Units within the Standing Offer structure.

The Bid Units are constructed from data about categories of personnel, levels of experience, geographic regions and project tier (there are two tiers—up to and including $2 million, and over $2 million). Suppliers must meet mandatory requirements, achieve a minimum overall pass mark of 70 per cent and offer a price less than or equal to the median plus 25 per cent. Suppliers that meet these requirements will be awarded a Standing Offer for each Bid Unit. This qualifies them to participate in a later work allocation process.

During the work allocation process, clients (government departments) provide qualification requirements and suppliers propose resources and associated prices that meet these requirements. Suppliers will also be requested to provide their 'best and final offer'—this offer may be equal to or below their stated bill rates. Clients will evaluate the proposals, determine the best value and issue call-ups. PWGSC will monitor the work allocation process to ensure work is allocated based on objective and transparent criteria. They will also monitor how often suppliers respond during the work allocation process. Suppliers who repeatedly do not offer resources when requested may have their Standing Offer reviewed. In addition, a customer satisfaction survey will be used to measure supplier performance.

Solution-Based Work Stream - RFSA

The key strategy for this stream is to issue a Request for Supply Arrangement (RFSA) for solution-based work (also known as consulting-based work) that gathers technical information and financial information (excluding bill rates) from all interested suppliers. Two tiers of projects are considered—up to and including $2 million and over $2 million. The RFSA requires each supplier to pre-qualify by meeting mandatory requirements. Successful firms will be awarded a Supply Arrangement. Once the list of pre-qualified suppliers is determined, these suppliers will enter price competitions at the Request for Proposal stage.

SME Considerations

PWGSC offers various opportunities for small and medium-sized firms to bid for government contracts. One avenue is through Professional Services Online (PS Online), an online tool that assists federal departments in procuring professional services in the National Capital Region. Contracts awarded through PS Online are below the NAFTA threshold of $84,000.[42] The PS Online mandatory criteria are less stringent than the criteria proposed for the task-based and

[41] *Informatics Professional Services* [slide show]. Presented by Sandra Labbé, Acting Manager, Public Works and Government Services Canada. Ottawa: August 24, 2006.
[42] See: http://www.pwgsc.gc.ca/acquisitions/text/ps/online-e.html

solution-based streams. For instance, with PS Online a supplier needs to be in business for a minimum of one-year compared to three years for the proposed task-based and solution-based streams.

SMEs are also helped by differing conditions in the two tiers of contracts on offer in IPS for both the task-based and solution-based streams. In each stream, contracts priced at or below $2 million (Tier 1) are subject to less demanding mandatory requirements than Tier 2 projects valued at more than $2 million. For example, suppliers need a general liability of $2 million for Tier 1 compared to $5 million for Tier 2.

As a further opportunity, each stream also allows for small and medium-sized suppliers to partner with others SMEs or large businesses in joint ventures (JV). A JV approach enables SME suppliers to pool their expertise and resources in order to have access and qualify for more contracts, including large contracts.

Key Issues and Perceptions

Both government clients and suppliers expressed some concerns about the IPS procurement strategy and processes. The following summary of their issues has been developed using a variety of sources including PWGSC's consultation process documents; telephone interviews conducted by the Conference Board, and an environmental scan of documents available on-line and in the media.[43]

Caveat

The issues and perceptions presented below provide a snap shot of the views and perceptions of individual suppliers and/or individuals within client departments. They are not necessarily reflective of the industry or a government department as a whole. As well, in some instances, the supplier or individual within a client department may not be aware of the most current proposed procurement strategy. Consequently, their issues may have already been addressed by PWGSC through its procurement adjustment strategy. For instance, the government has recently announced that Reverse Auctions will no longer be part of its procurement strategy.

The planned changes for the IPS category and associated supplier issues are presented below.

1. **Volume Leverage**

   PWGSC would like to leverage volume by pooling across departments and regions to achieve volume discounts.

[43] For instance, CATA conducted a survey of the federal government's proposed procurement change with its members—advanced technology companies from across Canada. This survey highlighted supplier issues with respect to the current procurement process and proposed changes to the process. The survey received 387 responses: 67 per cent of respondents were small (less than 50 employees); 19 per cent of respondents were medium (50 to 250 employees); and the remaining respondents were large (more than 250 employees).

2. **Competitive Pricing** (two processes will be used)

a. **Categories of Personnel and Bill Rates**

Currently, it is challenging for government departments to determine fair market prices for IPS positions; quotes from suppliers can vary substantially. Developing a standard set of IPS positions and creating Rate Cards that set bill rates for each IPS position, will eliminate the need for price discovery—a method of determining the price for a specific commodity through basic supply and demand factors related to the market.

b. **Work Allocation**

Included in the task-based stream is a work allocation process. During this process, clients (government departments) provide qualification requirements and suppliers propose resources and associated 'best and final offer' to meet these requirements. This process is to encourage engagement of suppliers offering best value.

Supplier Issues and Perceptions

- The 64 categories of personnel and 11 domains for task-based work identified by PWGSC are too complex and confusing.
- Suppliers were not adequately consulted on the categories of personnel and domains of expertise.
- Proposed changes treat professional services as a simple "commodity" and focus too heavily on price.
- Government departments are good at identifying the terms and conditions of a contract, but they need to improve their understanding of value.
- The focus on price will result in an outflow of IPS talent, as experienced individuals will move to regions where their per diems are higher.
- Including price in the RFSA process will likely lead to suppliers undervaluing their per diems. Should only factor in price when there is a specific work requirement (e.g. RFP).

3. **Procurement Instruments**

Currently, the IPS category uses multiple procurement instruments Request for Proposals (RFP) for large IT service requirements, Request for Standing Offers (RFSO) for routine and repetitive times and materials relating to IT service requirements, and Request for Supply Arrangements (RFSA). These multiple procurement vehicles make it difficult to manage costs and monitor expenditures for informatics professional services. PWGSC would like to streamline the procurement process by introducing one procurement vehicle comprised of two streams—task-based and solution-based. For each stream, suppliers must meet mandatory requirements to become part of the supplier base.

Supplier Issues and Perceptions

- Firms are concerned about not meeting the RFSO (task-based) mandatory requirements
    - large organizations are concerned that they will not be price competitive since their per diem rates tend to be higher than SMEs, which may lead to being excluded from the Standing Offer;

    - small organizations are concerned that they will not meet the mandatory requirements, such as insurance, years of experience and revenue targets.

- Firms are concerned about losing business due to more stringent demands.
- SMEs feel the mandatory requirements favour large business.
- SMEs are worried about losses in revenue that could lead to eventual closure or relocation due to fewer or no government contracts.
- The process to become a qualified supplier seems to favour companies that have previously worked for the government.
- Firms are concerned that the government will have difficulties centralizing services which will lead to greater costs and less service.

4. **Long Term Agreements**

   The new process establishes long term agreements with suppliers. The Standing Offers and Supply Arrangements, under the task-based and solution-based streams, will have durations of three years, plus two one-year extensions.

5. **Supplier Accountability**

   PWGSC will develop restrictions and supplier performance clauses to ensure suppliers meet commitments.

6. **Joint Ventures**

   PWGSC is encouraging suppliers, particularly small and medium-sized companies, to partner together in joint ventures that will enable them to meet the mandatory requirements and to bid more successfully on Standing Offers.

7. **Low-Cost Region/Country Suppliers**

   The new process will identify and use suppliers from low cost regions and countries for skills and services that do not require a resource to be on-site locally.

8. **Monitor and Report**

   PWGSC will measure supplier performance through client satisfaction surveys. As well, they will monitor the work allocation process to ensure work is allocated based on objective and transparent criteria.

Appendix A – Data Analysis Methodology

Overview

This section presents a summary and analysis of data relating to one of the procurement categories in which the Government of Canada purchases goods and services: informatics professional services. It examines data that relates to government requirements and purchasing and to the large, medium and small suppliers who provide goods and services to the Government of Canada.

The methodological approach taken is to analyze the nature and impact of market power and market dependence within this procurement supply category. Market power and market dependence have a major influence on the *impact* of planned changes in procurement processes. Both factors are relevant to understanding how procurement changes may affect or influence suppliers and the Government itself.

The analysis draws attention, where relevant, to difference between actions of large business suppliers versus small and medium enterprise (SME) suppliers.

It is important to clarify the key terms in the context of the Government of Canada's involvement with markets.

> ***Market power*** is the ability of the government to alter the market price of a good or service and to alter other market conditions. It is an indication of how important government procurement is in the overall market for each procurement category (i.e. its importance on the demand side).
>
> The size of the federal government in the market, especially within the National Capital Region (NCR), raises the issue of whether the market is a monopsony, with the Government of Canada being a monopsonist. A monopsony is a market form with only one buyer (the monopsonist) facing many sellers.[44] In purely competitive markets there are many sellers and buyers and this restricts the ability of buyers to determine market clearing conditions (regarding both price and volume). A monopsonist's position allows it to determine market clearing prices and volumes that maximize its welfare at the expense of suppliers.
>
> ***Market dependence*** considers the issue of market structure from the suppliers' view (i.e. the supply side). In this context, it can be simply represented by the percent of a firm's sales attributable to the Government of Canada. Firms with a large percentage of sales to the Government of Canada are said to be dependent on the government market. Dependence on one large customer is ultimately reflected in the way a firm is organized (geographically, in its business processes etc.). Highly market dependent firms are more likely to be affected by changes in their dominant customer's policies and practices.

This section explores the statistical basis for an analysis of market power and market dependence. In the case of market power, it relies mainly on Statistics Canada's industry and output data. When looking at market dependence, it analyzes Government of Canada

[44] It is the reverse of monopoly where there is one seller to many buyers in a given market.

expenditure data, provided by Public Works and Government Services Canada (PWGSC). The analysis utilizes both a macro market analysis and a micro market analysis as key methodologies for understanding the change management issues at play as the government changes procurement policy and practices.

Methodology

The following methodology has been used:

Macro Analysis

- Define the overall market as accurately as possible based on Statistics Canada data.
- Reconcile the industry output with the procurement categories
- Review government expenditures with the industry.
- Provide an initial estimate of market power based on gross market share.
- Discuss other factors that may have a bearing on the effective market share.

Micro Analysis

- Discuss the industry structure which may have a bearing on market dependence, particularly the size of firms in the industry and their geographic location.
- Consider the current vendor basis and how expenditures relate to vendors.
- Assess the number of firms that may face adjustment risk because of high market dependence.

The Definitional Challenges

A key methodological challenge is to reconcile the various sources of data to construct a "market". The first challenge is to reconcile the PWGSC definitions of procurement categories with Statistics Canada's definitions of industries. It is difficult to do this with precision because PWGSC uses a government accounting framework whereas Statistics Canada uses a national accounting framework.

Statistics Canada assesses industry output from its business surveys. The main unit for analysis is the "establishment". According to Statistics Canada an establishment:

"…. is the level at which the accounting data required to measure production is available (principal inputs, revenues, salaries and wages). The establishment, as a statistical unit, is defined as the most homogeneous unit of production for which the business maintains accounting records from which it is possible to assemble all the data elements required to compile the full structure of the gross value of production (total sales or shipments, and inventories), the cost of materials and services, and labour and capital used in production."[45]

[45] See: http://www.statcan.ca/english/concepts/stat-unit-def.htm

Based on business surveys, Statistics Canada organizes the reporting establishments into industries. Respondents to these surveys first report back by identifying themselves as belonging to one particular industry. Using these reports, Statistics Canada organizes its industry output statistics into an industrial classification system called the North American Industrial Classification System (NAICS).

Two types of statistical issues may arise when attempting to align commodities to specific industries. First, an establishment may not be totally “homogenous”, in which case its output may spill over into other industries. Second, government purchases for a single procurement category may cut across more than one industry.

These are some of the definitional challenges in reconciling the procurement categories (the demand side) with industry output (the supply side). These challenges are further complicated when one considers geography. Statistics Canada provides very good data at a national and provincial level for incorporated businesses. But the availability and quality of business data is less reliable at the regional or local level. If the geography of the marketplace is such that local firms play a relatively large role, then market shares that are calculated based on national or provincial shares may not be portraying an accurate picture of the effective market.

The analysis addresses statistical shortcomings in the following ways:

- It takes a “whole industry/best fit” approach to reconciling procurement categories with industry sectors. We do not attempt to massage the industry data but report those areas where, in our view, there is the greatest fit between the industry and the procurement category.
- It is transparent in reconciling procurement categories with industries.
- It provides cautionary notes on the interpretation of the subsequent market share.
- It considers mitigating factors including the role of geography, its impact on the effective market and the role of exports.
- It undertakes supplemental analyses, specifically on market dependence, to provide a fuller picture than that portrayed only through market shares.

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