

# National Survey of Information Technology Occupations, 2002: Employer Survey (Public sector)

## INITIAL CONTACT

**Hello this is (interviewer) from Statistics Canada. We're conducting a survey on occupations specializing in information technology on behalf of the Software Human Resource Council.**

### **NOTE TO PROGRAMMER:**

Create a new variable called INITIAL as follows:

If NAME = blank, then INITIAL = "May I please speak with the manager or supervisor of the information technology staff in your area?"

Else INITIAL = "May I please speak with (NAME)?"

## (INITIAL)

## INTRODUCTION

**[Hello this is (interviewer) from Statistics Canada. We're conducting a survey on occupations specializing in information technology.]**

**Your answers will be kept strictly confidential and used only for statistical purposes. My supervisor may listen in to evaluate the survey.**

## SECTION A – Screening Questions

**IA Throughout this interview we will be asking questions relating to the occupations you employ in your area.**

### **NOTE TO PROGRAMMER:**

Read the complete address of this location to the interviewee to avoid possible errors

### NOTE:

Whenever the notation (\_\_\_\_\_) is used, it means that the space should be filled with the variable in the ( ).

**NOTE TO PROGRAMMER:**

Please put the following definition on the same screen as QA1.

**Information technology occupations:** For the purpose of this survey, information technology occupations are those whose primary functions are the management, design, development, analysis, implementation or maintenance of computer and telecommunications hardware, software, networks or information systems.

**Contract workers (workers hired on contract):** are either employed by another company or are self-employed and a lump sum of money is paid for their services for a specified project or period of time.

**QA1 How many employees work in information technology occupations, excluding contract workers and volunteers?**

- <0> None .....go to IA2
- <1-999995> Number .....go to IA2
- <999998> Refused .....go to Contact Screen
- <999999> Don't Know .....go to Contact Screen

**IA2For our purposes, workers hired on contract are either employed by another company or are self-employed and a lump sum of money is paid for their services for a specified project or period of time.**

**QA2 Do you hire workers ON CONTRACT in information technology occupations?**

- <1> Yes .....go to QA2a
- <3> No.....go to QA3
- <8> Refused .....go to QA3
- <9> Don't Know .....go to QA3

**QA2a How many information technology workers are CURRENTLY working ON CONTRACT for you?**

- <0> None .....go to QA3
- <1-999995> Number .....go to QA2b
- <999998> Refused .....go to QA3
- <999999> Don't Know .....go to QA3

**QA2b How many of the information technology workers CURRENTLY working ON CONTRACT with you would you like to hire as employees?**

- <1> All .....go to QA3
- <2> More than half .....go to QA3
- <3> Half .....go to QA3
- <4> Less than half .....go to QA3
- <5> None .....go to QA3
- <8> Refused .....go to QA3
- <9> Don't Know .....go to QA3

**QA3 In total, how many people do you CURRENTLY employ, excluding contract workers and volunteers?**

- <0-999995>Number .....go to SCREEN
- <999998>Refused .....go to SCREEN
- <999999>Don't Know .....go to SCREEN

**NOTE TO PROGRAMMER:**

Create a new variable called EMPTYTYPE as follows:

If QA1=0 and (QA2=(3 or RF or DK) or QA2a=0), then EMPTYTYPE = 0

If QA1=(1-999995 or RF or DK) and (QA2=(3 or RF or DK) or QA2a=0), then EMPTYTYPE = 1 (Employees only)

If QA1=0 and (QA2=1 and QA2a not equal 0), then EMPTYTYPE = 2 (Contract workers only)

If QA1=(1-999995 or RF or DK) and (QA2=1 and QA2a not equal 0), then EMPTYTYPE = 3 (Employees and contract workers)

**SCREEN**

**Screen:** The system will now screen out all of the companies who do not currently have information technology professionals.

If EMPTYTYPE=0, then go to NO EMPLOYEES

If EMPTYTYPE =1 or 2 or 3, then go to IB

**NOTE TO PROGRAMMER:**

Create new variables called EMPTYTYPE1 and EMPTYTYPE2 and EMPTYTYPE3 as follows:

If EMPTYTYPE=1, then EMPTYTYPE1= "the number of people CURRENTLY employed" and EMPTYTYPE2 = "an employee" and EMPTYTYPE3 = "employees"

If EMPTYTYPE=2, then EMPTYTYPE1= "the number of people CURRENTLY working on contract" and EMPTYTYPE2 = "a contract worker" and EMPTYTYPE3= "people working on contract"

If EMPTYTYPE=3, then EMPTYTYPE1= "both the number of people CURRENTLY employed, and the number of people working on contract" and EMPTYTYPE2= "an employee or contract worker" and

EMPTYTYPE3 = “employees or people working on contract”

NOTE:

If EMPTYTYPE = 1, interviewers will not need column 2

If EMPTYTYPE = 2, interviewers will not need column 1

**SECTION B – Occupation Selection**

**IB We will be asking you to indicate (EMPTYTYPE1) in specific information technology occupations. From now on, we will refer to these as IT occupations.**

**PLEASE NOTE: if (EMPTYTYPE2) performs more than one job, then assign the occupations which best describe the position where most hours are spent.**

**How many (EMPTYTYPE3) do you have in the following occupations:**

	<b>QB1_ Number of <u>employees</u> (excluding contract workers and volunteers)</b>	<b>QB2_ Number of <u>contract workers</u></b>
1. Computer and information systems managers (0213)	_____	_____
2. IT Project managers (0213.1)	_____	_____
3. E-commerce managers (0611.5)	_____	_____
4. Electrical and electronics engineers, except computer engineers (2133)	_____	_____
5. Computer and telecommunications hardware engineers (2147.1)	_____	_____
6. Network system and data communication engineers (2147.2)	_____	_____
7. Information systems business analysts and consultants (2171.1)	_____	_____
8. Systems security analysts (2171.2)	_____	_____
9. Information systems quality assurance analysts (2171.3)	_____	_____
10. Systems auditors (2171.4)	_____	_____
11. Database analysts (2172.1)	_____	_____
12. Data administrators (2172.2)	_____	_____
13. Software engineers (2173)	_____	_____
14. Computer programmers (2174.1)	_____	_____
15. Interactive media developers (2174.2)	_____	_____
16. Web designers and developers (2175)	_____	_____
17. Electrical and electronics engineering technologists and technicians (2241)	_____	_____
18. Computer and network operators (2281.1)	_____	_____
19. Web technicians (2281.2)	_____	_____

	<u>QB1_</u> <u>Number of</u> <u>employees</u> (excluding contract workers and volunteers)	<u>QB2_</u> <u>Number of</u> <u>contract workers</u>
<b>20. User support technicians (2282)</b>	_____	_____
<b>21. Systems testing technicians (2283)</b>	_____	_____
<b>22. IT Trainers (4131.2)</b>	_____	_____
<b>23. Technical writers (5121.2)</b>	_____	_____
<b>24. Graphic designers (5241.1)</b>	_____	_____
<b>25. Illustrators (5241.2)</b>	_____	_____

- <0> None.....go to next occupation, then A
- <1-999995> Number .....flag and go to next occupation, then A
- <999998> Refused .....go to next occupation, then A
- <999999> Don't Know .....go to next occupation, then A

**NOTE TO PROGRAMMER:** Only occupations in the first column (QB1\_) should be flagged for later random selection.

**NOTE TO PROGRAMMER:**  
 Create a new variable called NUMOCCS as follows:  
 If no occupations (from QB1\_1 to QB1\_25) were flagged then NUMOCCS=0  
 If only 1 occupation (from QB1\_1 to QB1\_25) was flagged then NUMOCCS = 1  
 If 2 occupations (from QB1\_1 to QB1\_25) were flagged then NUMOCCS = 2  
 If more than 2 occupations (from QB1\_1 to QB1\_25) were flagged then NUMOCCS =3

**A Do you have (EMPTYE3) in any other information technology occupation?**

- <1> Yes .....go to A\_1
- <3> No.....go to FLOW B
- <8> Refused .....go to FLOW B
- <9> Don't Know .....go to FLOW B

**A\_1 Please specify the occupation or kind of work:**

\_\_\_\_\_ go to A\_2

**A\_2 What are the most important activities or duties of this occupation?**

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_ go to A\_3

**QB1\_**  
**Employees**

**QB2\_**  
**Contract workers**

**A\_3 How many of these (EMPTY3) do you have?**

\_\_\_\_\_

\_\_\_\_\_

- <0-999995> Number .....go to B
- <999998> Refused .....go to B
- <999999> Don't Know .....go to B

**B Do you have (EMPTY3) in any other information technology occupation?**

- <1> Yes .....go to B\_1
- <3> No.....go to FLOW B
- <8> Refused .....go to FLOW B
- <9> Don't Know .....go to FLOW B

**B\_1 Please specify the occupation or kind of work:**

\_\_\_\_\_ go to B\_2

**B\_2 What are the most important activities or duties of this occupation?**

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_ go to B\_3

**QB1\_**  
**Employees**

**QB2\_**  
**Contract workers**

**B\_3 How many of these (EMPTY3) do you have?**

\_\_\_\_\_

\_\_\_\_\_

- <0-999995> Number .....go to FLOW B
- <999998> Refused .....go to FLOW B
- <999999> Don't Know .....go to FLOW B

**NOTE TO PROGRAMMER:**

Create two new variables called TOTALIT and TOTALCW as follows:

TOTALIT = QB1\_1 + QB1\_2 + QB1\_3 + QB1\_4 + QB1\_5 + QB1\_6 + QB1\_7 + QB1\_8 + QB1\_9 + QB1\_10 + QB1\_11 + QB1\_12 + QB1\_13 + QB1\_14 + QB1\_15 + QB1\_16 + QB1\_17 + QB1\_18 + QB1\_19 + QB1\_20 + QB1\_21 + QB1\_22 + QB1\_23 + QB1\_24 + QB1\_25 (not including RF and DK)

TOTALCW = QB2\_1 + QB2\_2 + QB2\_3 + QB2\_4 + QB2\_5 + QB2\_6 + QB2\_7 + QB2\_8 + QB2\_9 + QB2\_10 + QB2\_11 + QB2\_12 + QB2\_13 + QB2\_14 + QB2\_15 + QB2\_16 + QB2\_17 + QB2\_18 + QB2\_19 + QB2\_20 + QB2\_21 + QB2\_22 + QB2\_23 + QB2\_24 + QB2\_25 (not including RF and DK)

**FLOW B**

The system will now determine the questionnaire flow based on the responses given so far.

If EMPTYTYPE=2, then go to QG5

If EMPTYTYPE=(1 or 3) and NUMOCCS = 0 and A=1, then go to QG5

If EMPTYTYPE=(1 or 3) and NUMOCCS = 0 and A=3, then go to NO EMPLOYEES.

Else, go to RANDOMIZE

**RANDOMIZE**

The system will now take all of the “flagged” occupations from QB1\_1 to QB1\_25 and:

If NUMOCCS = 1, select the flagged occupation for further questions.

If NUMOCCS = 2, select both flagged occupations for further questions .

If NUMOCCS = 3, the system will randomly select 2 of the flagged occupations for further questions .

NOTE: The system should keep the NOC code, the occupation title and the number of employees reported for each selected occupation. These variables should be named NOC1, NOC2, Occupation1, Occupation2, Number1 and Number2.

*For example, from the randomized selection we have:*

*Occupation1: 2172.1 Database Analysts Number of employees: 7*

*Occupation2: 2147.1 Computer and telecommunications hardware engineers Number of employees: 2*

\*\*\*\*\*

## **SECTION C – Occupational Profile**

### **NOTE TO PROGRAMMER:**

The system should be set up with 2 columns – one for each occupation. Each of the questions from QC1 to QF5 will be asked about each selected occupation.

NOTE: If NUMOCCS=1, then the interviewers will not need column 2

Where the notation (     ) exists, the space should be filled with the variable indicated in the ( ).

### **NOTE TO PROGRAMMER:**

Create two new variables called INTRO and CEPROF as follows:

If CDOCC1=blank and NUMOCCS = 1, then INTRO= “We will now ask you some questions about the ( occupation1 ) who work in your area.” and CEPROF = « this occupation »

If CDOCC1=blank and NUMOCCS = 2, then INTRO = “We will now ask you some questions about the ( occupation1 ) and ( occupation2 ) who work in your area.” and CEPROF = « these occupations »

If CDOCC1=blank and NUMOCCS = 3, then INTRO = “The computer has randomly selected two of the information technology occupations present in your area. It has selected ( occupation1 ) and ( occupation2 ). We will now ask you some questions about these occupations.” and CEPROF = « these occupations »

If CDOCC1 not blank and NUMOCCS = 1, then INTRO= “Recently, you were sent a package that included a CD application to collect data on your employees in information technology occupations. We would like to thank you for providing the requested information to us. At the same time, you were told that Statistics Canada would be contacting you to conduct a more in-depth interview. We will now ask you some questions on the occupation chosen by the CD application, that is the ( CDOCC1 ) who work in your area.” and CEPROF = « this occupation »

If CDOCC1 not blank and (NUMOCCS = 2 or NUMOCCS = 3), then INTRO = “Recently, you were sent a package that included a CD application to collect data on your employees in information technology occupations. We would like to thank you for providing the requested information to us. At the same time, you were told that Statistics Canada would be contacting you to conduct a more in-depth interview. We will now ask you some questions on the 2 occupations chosen by the CD application, that is the ( CDOCC1 ) and the ( CDOCC2 ) who work in your area.” and CEPROF = « these occupations »

When CDOCC1 is not blank, CDOCC1 = Occupation1

When CDOCC2 is not blank, CDOCC2 = Occupation2



**IC (INTRO)** The remainder of the interview will cover the occupation profile, the hiring, retention and training of employees in this (these) occupation(s).

**NOTE TO PROGRAMMER**

Create two new variables called SELOCC and DESC as follows:

If NUMOCCS = 1, then SELOCC= (occupation1) or (CDOCC1) and DESC = (occupation1) or (CDOCC1),

If NUMOCCS = 2, then SELOCC= “employees in each of these occupations” and DESC = “each of these occupations”

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>QC1</b> What job titles do you give to <u>(SELOCC)</u> ?	1 _____	_____ go to IC2
	2 _____	_____ go to IC2
	3 _____	_____ go to IC2
	4 _____	_____ go to IC2
	5 _____	_____ go to IC2
<8> Refused .....		go to IC2
<9> Don't Know .....		go to IC2

**IC2** The following questions are about the full-time and part-time nature of (CEPROF). For our purposes, full-time employees are defined as working 30 hours or more per week, and part-time employees work less than 30 hours per week.

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>QC2</b> How many <u>(SELOCC)</u> are:		
<b>QC2_1</b> INDETERMINATE, FULL-TIME employees?	_____	_____
<b>QC2_2</b> TERM, FULL-TIME employees?	_____	_____
<b>QC2_3</b> INDETERMINATE, PART-TIME employees?	_____	_____
<b>QC2_4</b> TERM, PART-TIME employees?	_____	_____
<0> None .....		go to ID
<1-999995> Number .....		go to ID
<999998> Refused .....		go to ID
<999999> Don't Know .....		go to ID

**SECTION D – Hiring and recruitment**

**ID** The following questions are about hiring and recruitment practices in your area.

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD1** How many (**SELOCC**)  
have been hired within the last 6 months? \_\_\_\_\_

- <0> None.....if QD1Y = 0, go to QD2Y  
if QD1Z = 0, go to QD2Z
- <1-999995> Number .....if QD1Y = 1, go to QD1aY  
if QD1Y > 1, go to QD1bY  
if QD1Z = 1, go to QD1aZ  
if QD1Z > 1, go to QD1bZ
- <999998> Refused .....go to QD2
- <999999> Don't Know .....go to QD2

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD1a** Did this new (**SELOCC**)  
require competency or skills  
upgrading training, excluding  
orientation after being hired? \_\_\_\_\_

- <1> Yes .....go to QD1c
- <3> No .....go to QD2
- <8> Refused .....go to QD2
- <9> Don't Know .....go to QD2

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD1b** How many of these new (**SELOCC**)  
required competency or skills upgrading  
training excluding orientation after  
being hired? \_\_\_\_\_

- <1> None.....go to QD2
- <3> Number .....go to QD1c
- <8> Refused .....go to QD2
- <9> Don't Know .....go to QD2

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD1c On average, how many days of training, excluding orientation, did it take for these employees to acquire these competencies or skills?**

\_\_\_\_\_

\_\_\_\_\_

- <1> 1 to 4 days .....go to QD2
- <2> 5 to 9 days .....go to QD2
- <3> 10 to 14 days .....go to QD2
- <4> 15 to 19 days .....go to QD2
- <5> 20 to 24 days .....go to QD2
- <6> 25 days or more.....go to QD2
- <8> Refused .....go to QD2
- <9> Don't Know .....go to QD2

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD2 When staffing for (SELOCC) from outside the public sector, do you recruit...**  
*(Mark all that apply) (READ THE LIST)*

- 1 From within your region**
- 2 Across the province**
- 3 Across Canada**
- 4 Other**
- 4\_t Please specify**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- <1> Yes .....go to next region, then go to QD3
- <3> No .....go to next region, then go to QD3
- <8> Refused .....go to next region, then go to QD3
- <9> Don't Know .....go to next region, then go to QD3

**QD3 When recruiting outside the public sector, which of the following recruitment methods do you use to fill available positions for (DESC)?**

*(Mark all that apply) (READ THE LIST)*

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>1 Employee referrals</b>	_____	_____
<b>2 Help wanted ads (print media)</b>	_____	_____
<b>3 Unsolicited résumés</b>	_____	_____
<b>4 Word-of-mouth</b>	_____	_____
<b>5 Informal networking</b>	_____	_____
<b>6 University, college or IT institutes</b>	_____	_____
<b>7 Job fairs</b>	_____	_____
<b>8 Internet recruiting agency</b>	_____	_____
<b>9 Internet jobs and ads web sites</b>	_____	_____
<b>10 Government Web site</b>	_____	_____
<b>11 Government employment centres</b>	_____	_____
<b>12 Head-hunter or personnel agency</b>	_____	_____
<b>13 User groups and professional associations email list</b>	_____	_____
<b>14 Public sector official staffing procedures</b>	_____	_____
<b>15 Other</b>	_____	_____
<b>15_t Please specify this (these) other           method(s)</b>	_____	_____
<b>16 Not applicable (don't recruit)</b>	_____	_____

- <1> Yes .....go to next method, then FLOW D3
- <3> No .....go to next method, then FLOW D3
- <8> Refused .....go to next method, then FLOW D3
- <9> Don't Know .....go to next method, then FLOW D3

**FLOW D3**

The system will now determine the questionnaire flow based on the responses given so far.

If QD3\_15 = 1, then go to QD5.

If each of (QD3\_1 to QD3\_14) = 3 or RF or DK, then go to QD5.

If any of (QD3\_1 to QD3\_14) =1, then go to QD4.

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD4 Of the external recruitment methods just listed,  
which one do you find MOST  
effective, in terms of finding qualified  
(SELOCC)? (mark only one)  
(DO NOT READ LIST)**

\_\_\_\_\_

\_\_\_\_\_

- <01> Employee referrals .....go to QD5
- <02> Help wanted ads (print media).....go to QD5
- <03> Unsolicited résumés .....go to QD5
- <04> Word-of-mouth .....go to QD5
- <05> Informal networking .....go to QD5
- <06> University, college or IT institutes .....go to QD5
- <07> Job fairs .....go to QD5
- <08> Internet recruiting agency .....go to QD5
- <09> Internet jobs and ads web sites .....go to QD5
- <10> Government Web site .....go to QD5
- <11> Government employment centres .....go to QD5
- <12> Head-hunter or personnel agency .....go to QD5
- <13> User groups and professional  
associations email list .....go to QD5
- <14> Public sector official staffing procedures go to QD5
- <15> Other .....go to QD5
- <98> Refused .....go to QD5
- <99> Don't Know .....go to QD5

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD5 How many (DESC) positions are you planning to fill?**

\_\_\_\_\_

\_\_\_\_\_

- <0> None .....go to QD6
- <1-999995> Number.....go to QD5a
- <999998> Refused .....go to QD6
- <999999> Don't Know .....go to QD6

Y  
(Occupation1)

Z  
(Occupation2)

**QD5a How many of these vacant positions have remained vacant for four months or longer because of lack of qualified candidates?**

\_\_\_\_\_

\_\_\_\_\_

- <0> None..... go to QD6
- <1-999995> Number..... go to QD6
- <999998> Refused ..... go to QD6
- <999999> Don't Know ..... go to QD6

**QD6 Which of the following factors make it especially challenging to staff positions for (DESC) ? (mark ALL that apply)**  
*(READ THE LIST)*

- 1 Lack of applicants with relevant experience**
- 2 Lack of applicants with relevant level education (Bachelor's, Masters, etc.)**
- 3 Lack of applicants with required skills**
- 4 Other employers offer better salaries, incentives or benefits**
- 5 Other employers offer better opportunities for career development or growth**
- 6 Other employers offer more challenging or interesting projects**
- 7 Other employers provide the opportunity to use leading-edge technology**
- 8 Other employers have a more enticing location**
- 9 Lack of communication skills/ Language barriers**
- 10 Better conditions in the U.S. or overseas**
- 11 Public sector staffing regulations**
- 12 Other**  
**12\_t Please specify the other factors**
- 13 Not applicable**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- <1> Yes ..... go to next factor, then QD7
- <3> No..... go to next factor, then QD7
- <8> Refused ..... go to next factor, then QD7
- <9> Don't know ..... go to next factor, then QD7

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

**QD7 When hiring (SELOCC), how much importance do you place on experience compared to education?**  
*(mark only one)(READ THE LIST)*

\_\_\_\_\_

\_\_\_\_\_

- <1> More importance.....go to QD8
- <2> Same importance.....go to QD8
- <3> Less importance .....go to QD8
- <4> No importance.....go to QD8
- <8> Refused .....go to QD8
- <9> Don't know .....go to QD8

**QD8 Does your area provide any of the following types of non-financial benefits to (SELOCC)?**  
*(mark ALL that apply) (READ THE LIST)*

**Y**  
**(Occupation1)**

**Z**  
**(Occupation2)**

- 1 Recreation facilities and/or memberships** \_\_\_\_\_
- 2 Professional memberships** \_\_\_\_\_
- 3 Day care facilities and/or support** \_\_\_\_\_
- 4 Flexible working hours** \_\_\_\_\_
- 5 Organized social activities** \_\_\_\_\_
- 6 Possibility to work from outside the office/  
provide Internet access, computer,  
cellular phone, etc.** \_\_\_\_\_
- 7 Free or reduced parking fee or mass  
transit subsidy** \_\_\_\_\_
- 8 Complimentary beverages and food** \_\_\_\_\_
- 9 Other non-financial benefits** \_\_\_\_\_
- 9\_t Please specify these other  
non-financial benefits** \_\_\_\_\_
- 10 Not applicable** \_\_\_\_\_

- <1> Yes .....go to next type, then IE
- <3> No.....go to next type, then IE
- <8> Refused .....go to next type, then IE
- <9> Don't Know .....go to next type, then IE

**SECTION E – Employee retention**

**IE The following questions are about employee retention.**

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>QE1 How many (SELOCC) have left their positions in the past 6 months?</b>	_____	_____

<0> None .....if QE1Y=0, go to IF  
 .....if QE1Z=0, go to IF  
 <1-999995> Number .....if QE1Y>=1, go to QE2\_1Y  
 .....if QE1Z>=1, go to QE2\_1Z  
 <999998> Refused.....go to IF  
 <999999> Don't Know .....go to IF

**QE2 How many of the (SELOCC) who left their positions, in the last 6 months:**

- |   |       |       |
|---|-------|-------|
| <b>1 Took an IT job elsewhere inside public sector, in CANADA</b>                         | _____ | _____ |
| <b>2 Took an IT job outside your public sector, in CANADA</b>                             | _____ | _____ |
| <b>3 Took an IT job outside your public sector, in the UNITED STATES</b>                  | _____ | _____ |
| <b>4 Took an IT job outside your public sector, in another country other than the USA</b> | _____ | _____ |
| <b>5 Employee created his own company</b>   | _____ | _____ |
| <b>6 Employee is returning to school</b>  | _____ | _____ |
| <b>7 Left the IT field for a career in a different field</b>                              | _____ | _____ |
| <b>8 Retired or left the labour force</b>   | _____ | _____ |
| <b>9 Employee terminated / fired</b>  | _____ | _____ |
| <b>10 Left for other reasons</b>  | _____ | _____ |
| <b>10t Please specify these other reasons</b>   | _____ | _____ |

<0> None .....go to next reason, then IF  
 <1-999995> Number .....go to next reason, then IF  
 <999998> Refused.....go to next reason, then IF  
 <999999> Don't Know .....go to next reason, then IF



## **SECTION F – Training and Development**

**IF** The following questions deal with the nature and extent of training.

**QF1**

**A) Who is responsible for determining the nature of training needed by employees? (mark ALL that apply)**

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>1 Human resources manager</b>	_____	_____
<b>2 Information technology manager</b>	_____	_____
<b>3 Chief information officer</b>	_____	_____
<b>4 General manager</b>	_____	_____
<b>5 Direct reporting manager</b>	_____	_____
<b>6 Employee</b>	_____	_____
<b>7 Other</b>	_____	_____

<1> Yes .....go to next responsible person then QF1\_B

<3> No.....go to next responsible person then QF1\_B

<8> Refused .....go to next responsible person then QF1\_B

<9> Don't Know .....go to next responsible person then QF1\_B

**B) Who is responsible for determining which employees receive this training? (mark ALL that apply)**

	<b>Y</b> <b>(Occupation1)</b>	<b>Z</b> <b>(Occupation2)</b>
<b>1 Human resources manager</b>	_____	_____
<b>2 Information technology manager</b>	_____	_____
<b>3 Chief information officer</b>	_____	_____
<b>4 General manager</b>	_____	_____
<b>5 Direct reporting manager</b>	_____	_____
<b>6 Employee</b>	_____	_____
<b>7 Other</b>	_____	_____

<1> Yes .....go to next responsible person then IFA

<3> No.....go to next responsible person then IFA

<8> Refused .....go to next responsible person then IFA

<9> Don't Know .....go to next responsible person then IFA

**IFA** Now, we will ask some questions about **FORMAL TRAINING**. For our purposes, **FORMAL TRAINING** includes all types of training intended to develop your employees' skills or knowledge through a **STRUCTURED FORMAT**, whether it takes place inside or outside your area. It **EXCLUDES** computer-based training and on-line courses.

**Y** **Z**  
(Occupation1) (Occupation2)

**QF2** Within the last 6 months, how many **(SELOCC)** received formal training that was paid for in full or in part by the employer? \_\_\_\_\_

- <0> None .....if QF2Y=0 go to IFB  
 .....if QF2Z=0 go to IFB
- <1-999995> Number .....if QF2Y>=1 go to QF3\_1Y  
 .....if QF2Z>=1 go to QF3\_1Z
- <999998> Refused .....go to IFB
- <999999> Don't Know .....go to IFB

**Y** **Z**  
(Occupation1) (Occupation2)

**QF3** Which of the following types of formal training did your area pay for in full or in part for **(SELOCC)**?  
*(mark ALL that apply) (READ THE LIST)*

- 1 Management \_\_\_\_\_
- 2 Systems software \_\_\_\_\_
- 3 Applications software \_\_\_\_\_
- 4 Telecommunications or computer network \_\_\_\_\_
- 5 Computer language and/or programming \_\_\_\_\_
- 6 Computer hardware \_\_\_\_\_
- 7 Communication or interpersonal skills \_\_\_\_\_
- 8 Government program delivery/product \_\_\_\_\_
- 9 Language training (e.g. French, English) \_\_\_\_\_
- 10 Other training \_\_\_\_\_
- 10\_t Please specify this other training \_\_\_\_\_

- <1> Yes .....Go to next type, then QF4
- <3> No .....Go to next type, then QF4
- <8> Refused .....Go to next type, then QF4
- <9> Don't know .....Go to next type, then QF4

	<b>Y</b> <b>(<u>Occupation1</u>)</b>	<b>Z</b> <b>(<u>Occupation2</u>)</b>
<b>QF4</b> On average, how many days of this formal training did each employee in <b>(CEPROF)</b> receive, within the last 6 months?	_____	_____
<0> None .....	go to IFB	
<1-365> Number .....	go to IFB	
<998> Refused .....	go to IFB	
<999> Don't Know .....	go to IFB	

**IFB** We will now ask some questions about **INFORMAL** training. For the purpose of this survey, **INFORMAL** or **ON-THE-JOB TRAINING** is acquired as part of doing the job and can provide the employee with information, skills and aptitudes. **INFORMAL** or **ON-THE-JOB TRAINING** may involve conferences, mentoring, self-study, networking and computer-based or on-line training.

	<b>Y</b> <b>(<u>Occupation1</u>)</b>	<b>Z</b> <b>(<u>Occupation2</u>)</b>
<b>QF5</b> Within the last 6 months, did the <b>(SELOCC)</b> working in your area acquire new IT skills or knowledge through <b>INFORMAL</b> or <b>ON-THE-JOB</b> training?	_____	_____
<1> Yes .....	go to IG1	
<3> No.....	go to IG1	
<8> Refused .....	go to IG1	
<9> Don't Know .....	go to IG1	

\*\*\*\*\*

## **SECTION G – Employee survey participation**

Note to programmer:

If CDOCC1 = blank.....go to IG1  
 Else.....go to QG5

**IG1** Over the next few weeks, we will be conducting a survey of **EMPLOYEES** in information technology occupations on behalf of the Software Human Resource Council. We are counting on the employers of these workers to assist us with this survey.

**QG1 Would you be willing to provide a list of the names and business telephone numbers of your employees in the same selected IT occupation(s) so that they could be contacted directly regarding this survey?**

- <1> Yes .....go to QG3
- <3> No.....go to QG2
- <8> Refused .....go to QG2
- <9> Don't Know .....go to QG2

**QG2 Would you be willing to distribute survey material to some of your employees in (CEPROF)?**

- <1> Yes .....go to IG2
- <3> No.....go to REFUSAL SCREEN,  
then IG2 if convinced
- <8> Refused .....go to REFUSAL SCREEN,  
then IG2 if convinced
- <9> Don't Know .....go to REFUSAL SCREEN,  
then IG2 if convinced

**IG2 Thank you for your cooperation. In the next few days, we will send you a package containing a number of envelopes to distribute randomly to the employees in the selected IT occupation(s). If you have any questions, please don't hesitate to contact us at the number indicated in the package.**  
.....go to QG5

**QG3 Could you please use the Electronic Data Return Facility contained in the CD-ROM provided to transmit this information electronically?**

- <1> Yes .....go to IG3
- <3> No.....go to QG3\_A
- <9> Don't Know .....go to QG3\_A

**IG3 Please refer to the instruction provided in the package and note that only the "EMPLOYEES LIST" has to be filled-in.**  
.....go to QG5

**QG3\_A If you have the list of names and business phone numbers available, you may provide this information by fax or over the phone. What is your preference?**

- <1> Fax.....go to IG3\_A
- <3> Phone.....go to QG4
- <9> Don't Know .....go to IG3\_A

**IG3\_A** A paper form was provided in the package you received earlier to fill in the names and business phone numbers of the employees in the selected occupation(s). Please use this form to transmit the information to us. The fax number is indicated on the form.

.....Go to QG5

Programmer: Please create a file containing the contact information of each employee for (Occupation1) and (Occupation2). (If only 1 occupation selected, there is no need for a file for (Occupation2)).

<1> Last Name  
<2> First Name  
<3> Telephone Number  
<4> Extension Number  
<5> Specific Address (e.g. building, floor, and/or section number)

**QG4** I will now take the contact information for each (SELOCC). (Interviewer: ask questions <1> to <5> for each employee in each selected occupation).

- <1> Last Name?
- <2> First Name?
- <3> Telephone Number?
- <4> Extension Number?
- <5> Specific Address (e.g. building, floor, and/or section number)? .....go to QG5

**QG5** The interview is now finished. Do you have any comments about this survey?

- <1> Yes .....go to QG5\_t
- <3> No.....go to END

**QG5\_t** Comments: \_\_\_\_\_go to END

**NO EMPLOYEES**

Since your company (organization) does not have any employees in information technology occupations, we have no further questions. (*go to END*)

**END**

Thank you for your time.

## **REFUSAL SCREEN**

Your co-operation is important because the survey will provide businesses and government with up-to-date data on the labour market for those information technologies (IT) occupations.

The results will be used to shape programs and policies relating to help IT occupations. Your participation is essential in order for survey results to be reliable.

Stress:

- Importance of the respondent's information
- That the respondent's data will represent the responses of many other businesses
- Need for co-operation in order to produce reliable information
- Importance of these occupations and their industry
- Address confidentiality issues
- Users and uses: The results will provide both businesses and government with much needed information on this important group of occupations.
- Treasury Board and the provincial Chief Information Officer are aware of this survey and are supporting this survey.