



## ANNEX B: STATEMENT OF WORK

### NATIONAL MAINTENANCE SERVICES

for

### **TIME DIVISION MULTIPLEXOR (TDM) PRIVATE BRANCH EXCHANGE (PBX), KEY TELEPHONE SYSTEMS (KTS) AND RELATED EQUIPMENT**



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## 1 INTRODUCTION

The following Statement of Work (SOW) describes the maintenance and support services that may be requested by Shared Services Canada (SSC) in any subsequent bid solicitation(s) issued against this method of supply. Maintenance and support services for specific systems will be identified in the bid solicitation and may include the following services:

- a) Maintenance services for Time Division Multiplexed (TDM) Private Branch Exchange (PBX), Key Telephone Systems (KTS) and related equipment, which include;
  1. Preventative maintenance;
  2. Diagnostic and repair services; and
  3. Maintenance service reporting.
- b) Move, Adds, and Changes (MACs) services: and
- c) Support services.

In this SOW, the use of the term “Supplier” can be construed as synonymous with the term “Contractor” which will apply following the award of any Resulting Contracts.

TDM PBX, KTS and related equipment includes all Hardware and Licensed Software. Please refer to the Standard Acquisitions clauses and conditions, including SACC 4001, 4003 and 4004 for additional details.

## 2 SCOPE

### 2.1 BACKGROUND

For existing TDM PBX, KTS and related equipment across Canada, SSC requires maintenance, MAC and support services as and when ordered under any Resulting Contract(s).

SSC understands that manufacturer support for some TDM PBX, KTS, and related equipment, has been discontinued and that new parts may not be readily available. SSC-owned TDM PBX, KTS and related equipment are, however, still operating reliably and SSC would like to extend the life of these systems by having a Supplier maintain the TDM PBX, KTS and related equipment.

## 3 ADMINISTRATION AND MANAGEMENT

Service Quality Management (SQM) provides a framework for SSC and the Supplier to manage planning, design, delivery and installation, performance reporting, billing and service level credits.

The Supplier must assign functional primes and implement a comprehensive SQM framework to provide excellence in terms of service management and SSC’s satisfaction. The primary elements of this framework include account and contract management, system maintenance and support, and billing and invoicing management.



The Supplier must designate individuals to each SQM management element, in specific or multi-task capacities, at a functional level that ensures that it meets all of the requirements defined in this Request for a Supply Arrangement (RFSa) and any Resulting Contracts.

With the exception of the Supplier's Service Manager (SSM), the Supplier must ensure that all SQM functions are available, at a minimum Monday to Friday from 7:00 am to 7:00 pm Eastern Time, excluding SSC observed statutory holidays. The SSM function must be available on a 24 hours-per-day, 7 days-per-week and 365 days-per-year basis.

### **3.1 SUPPLIER'S ACCOUNT MANAGER (SAM)**

Within two (2) working days from any Resulting Contract award, the Supplier must provide the name and business contact details for the Supplier's Account Manager (SAM).

The SAM must have sufficient authority to act on behalf of the Supplier on all service issues, including technical, commercial and administrative matters.

The SAM must have a minimum of three (3) years of national account management experience within the last five (5) years, with a maintenance and support services provider.

The SAM responsibilities will, at a minimum, include:

- a) Monitoring the progress and status of the RFSa and any Resulting Contracts;
- b) Jointly resolving (with the Technical Authority and any involved 3rd parties) outstanding service issues;
- c) Supporting the development and adherence to defined SQM methodologies; and
- d) Ensuring adherence to the terms and conditions of the RFSa and any Resulting Contracts.

Within ten (10) working days from any Resulting Contract award, the SAM must provide a SQM plan to the Technical Authority which includes:

- a) Quality assurance plan: management approach to formulating and enforcing quality standards, ensuring compliance with contractual service levels, reviewing Work in progress, and providing customer service;
- b) Communication plan: approach to communicating individual task requirements, resolving technical, management, maintenance and personnel issues and risks between the Supplier's key personnel and SSC, managing communications between the Supplier and SSC, including Supplier points of contact, and processing lessons learned; and
- c) Issue management plan: approach for identifying and managing contract-related issues. This includes isolating the issue, assessing the impact, identifying responsible parties, assessment of a severity-level and determining a resolution.

The SAM must be available to meet with the Technical Authority in the National Capital Area (NCA), or another location specified by the Technical Authority, within three (3) working days of receipt of such request. At a minimum, the SAM must meet monthly with the Technical



Authority unless specified otherwise in writing by the Technical Authority. Monthly meetings must, at a minimum:

- a) Review system maintenance requiring resolution, for the previous period;
- b) Provides delivery status, progress and issues for all active Service Orders(SO);
- c) Review actions taken by the Supplier and SSC to address issues that have previously occurred;
- d) Report and track the activities that the Supplier has undertaken to improve maintenance performance levels; and
- e) Identify procedural issues that could improve the relationship between the Supplier and SSC.

If, for any reason, the Technical Authority is not satisfied with the SAM, the Supplier must designate a replacement to act in this position within ten (10) working days of receiving written notice from the Technical Authority indicating dissatisfaction with the incumbent.

### **3.2 CONTRACT DUE DILIGENCE AND REVIEW SESSION**

Within five (5) working days of any Resulting Contract award, the SAM must coordinate a Contract due diligence and review session, in the NCA, to review the Resulting Contract in detail with SSC. At a minimum, the following representatives must be in attendance:

- a) Procurement Authority;
- b) Technical Authority; and
- c) The SAM (Chairperson).

During the Contract due diligence and review session, the SAM must provide SSC with the following information:

- a) The Supplier's organizational chart;
- b) Management escalation process that describes the means by which SSC can escalate issues to the appropriate levels in the Supplier's organization; and
- c) Management escalation contact list.

The SAM must document and submit the minutes from the Contract due diligence and review session to the Procurement and Technical authorities within two (2) working days of the meeting.

The SAM must lead the team to resolve any outstanding issues following the initial Contract due diligence and review session. Outstanding issues must not affect or relieve the Supplier from its obligation to meet the timeframes in this SA and any Resulting Contracts, unless specifically approved by the Procurement Authority and documented in a Contract amendment.

### **3.3 SUPPLIER'S SERVICE MANAGER (SSM)**

Within twenty (20) working days following any Resulting Contract award, the Supplier must provide the name and contact details for the Supplier's Service Manager (SSM) who will be



responsible for all service performance-related matters and issues associated with ongoing performance of the maintenance and support services including, but not limited to:

- a) Configuration, change and inventory management;
- b) Incident management and escalation;
- c) Service Level(s) review and improvement;
- d) Maintenance window scheduling;
- e) Service quality;
- f) Service reporting; and
- g) Service processes.

The SSM must be available to meet in person with SSC functional primes Monday to Friday from 07:00 am to 5:00 pm Eastern Time (Standard or Daylight, as applicable) during working days.

The SSM must be available via pager or cell phones on a 24 hour per day basis.

### **3.4 SUPPLIER'S BILLING AND INVOICING MANAGER (SBIM)**

Within twenty (20) working days following Any Resulting Contract award, the Supplier must provide the name and contact details of a Billing and Invoicing Manager (SBIM) who will serve as the Supplier's single point of contact responsible for all matters and issues related to billing and invoicing.

The SIBM must meet with the Technical Authority, within three (3) working days from receiving a written notice from the Technical Authority, to review billing and invoicing issues and activity.

## **4 GENERAL REQUIREMENTS**

### **4.1 NATIONAL MAINTENANCE SERVICES**

National maintenance services at each TDM PBX, KTS and related equipment site include:

- a) Maintenance:
  - 1. Preventative maintenance;
  - 2. Diagnostic and repair services; and
  - 3. Maintenance service reporting.
- b) MACs; and
- c) Support services.

Preventative maintenance services must proactively be performed to identify potential or actual incidents or issues as soon as possible.





As part of the preventative maintenance services, the Supplier must perform preventative maintenance inspections as defined in Annex B – Section 5.1, for each site.

The Supplier must submit inspections reports, in a format acceptable to SSC, at the frequency (Monthly and Semi-annually) identified in bid solicitation(s) and Resulting Contracts. A sample preventative maintenance inspection form is included in Appendix A to Annex B - Sample Preventative Maintenance Inspection Form.

Where Canada's TDM PBX, KTS and related equipment supports remote monitoring, the Supplier must remotely monitor the TDM PBX, KTS and related equipment to identify service-affecting incidents, for resolution. In the event of an incident, the Supplier must diagnose the incident and repair it in accordance with the response times identified within the SOW.

The Supplier must supply either new or refurbished replacement parts as and when required to meet the incident performance requirements of any Resulting Contracts.

Maintenance service reporting must be provided by the Supplier to the Technical Authority and functional delegate(s).

The Supplier must provide MAC services for the TDM PBX, KTS and related equipment, on an as and when requested basis.

The Supplier must also provide SSC with support services for the maintained systems and equipment, on an as and when requested basis.

## **4.2 EQUIPMENT TO BE MAINTAINED**

This RFSA is for the maintenance of a variety of TDM PBX, KTS and related equipment, deployed at SSC sites which may include:

- a) TDM PBX and KTS telephone systems as identified in any bid solicitation(s) and Resulting Contract(s);
- b) Related equipment including but not limited to:
  - 1. Telephone sets of various types (digital and analog);
  - 2. Analog and Digital Trunk (DTI) interfaces;
  - 3. Associated voice mail systems;
  - 4. Remote system monitoring systems;
  - 5. Automatic Call Distribution (ACD) Management Information Systems (MIS);
  - 6. Uninterruptible Power Supplies (UPS) of various types; and
  - 7. TDM PBX and KTS batteries and rectifiers of various types.

## **4.3 RETIREMENT OR RELOCATION OF EQUIPMENT**

During the term of any Resulting Contracts SSC may choose to retire some of the TDM PBX, KTS and related equipment identified within any Resulting Contracts, or to relocate the TDM PBX, KTS and related equipment from one SSC site to another SSC site. In such cases, the Supplier must package the retired, or relocated, equipment for disposal or transport. The



Service Quote and Service Order processes will be used to manage retirement or relocation of equipment.

#### **4.4 DISPOSAL OF TELECOMMUNICATIONS EQUIPMENT**

The Supplier must remove all existing telecommunications equipment (switches, user devices etc.) that is being retired and identified for disposal by the Technical Authority.

The Supplier must dispose of the equipment in accordance with all local and federal regulations. The Supplier must provide documentation indicating the location of equipment disposal.

#### **4.5 TELEPHONE NETWORK SERVICES**

SSC will acquire network services, such as Public Switched Telephone Network (PSTN) services, long distance services, tie trunks, and Off Premise Extensions (OPX) circuits, from telecommunications service providers under separate agreements. The Supplier must work with SSC's telecommunications service providers to connect the network services to the TDM PBX, KTS and related equipment. In the event that the Supplier isolates the cause of any incident to the SSC-provided network services, the Supplier must, at no additional cost to SSC, coordinate and actively participate in incident correction activities with SSC's telecommunications service providers.

#### **4.6 TELEPHONE CABLING SERVICES**

SSC will acquire cabling services from cabling service providers under separate agreements. SSC-provided cabling services include, but are not limited to, horizontal desktop cabling, vertical feeder cable(s) feeds and horizontal feeder cable(s).

The Supplier must work with SSC's cabling service providers to connect the cabling services to the TDM PBX, KTS and related equipment. In the event that the Supplier isolates the cause of any incidents to the SSC-provided cabling services, the Supplier must, at no additional cost to SSC, co-ordinate and actively participates in incident correction activities with SSC's cabling service provider.

The Supplier is responsible for diagnostic, repair and MAC services (as defined in this annex), on the following cable components:

- a) TDM PBX and KTS equipment interface cables;
- b) All cross-connect cabling connecting TDM PBX and KTS equipment interface cables with any of the following:
  1. Horizontal desktop cabling; and
  2. Vertical and horizontal feeder cable(s).
- c) All cross-connect cabling connecting vertical feeder cable(s) with any of the following:
  1. Horizontal desktop cabling; and
  2. Vertical and horizontal feeder cable(s).



#### **4.7 SAFETY**

The Supplier must take all necessary precautions, and bear the sole responsibility for the safety methods employed in performing all Work.

#### **4.8 DISRUPTIONS TO SSC'S WORKPLACE**

The Supplier must take all necessary precautions to minimize disruptions to SSC staff. In cases where SSC indicates that its staff cannot be disturbed during Working Hours the Supplier must perform the Work, Outside Working Hours.

#### **4.9 SITE CLEANLINESS**

The Supplier is responsible for cleaning any areas soiled during the completion of Work to the satisfaction of the Technical Authority. Unless otherwise stated, clean shall mean free of debris, dust, dirt, or other residues. Acceptability will be determined by sight, touch, and/or wiping a soft clean cloth over the affected area.

#### **4.10 ALTERATIONS TO BUILDING STRUCTURE**

The Supplier must not perform any Work under any Resulting Contracts which changes or alters a building's structure (i.e. core drilling, installation of backbone or horizontal conduit, penetration of structural or fire rated walls).

Should the situation arise where the Supplier requires a building change or alteration to be made in order to perform a service requested by SSC, the Supplier must immediately identify the situation to the Technical Authority who will evaluate the requirement for a building change or alteration and coordinate with the necessary parties to implement the required changes.

#### **4.11 WORKMANSHIP**

The Supplier must ensure that all Work performed is completed following industry best practices. The Supplier must ensure that:

- a) All Work is completed to the satisfaction of the Technical Authority;
- b) All fasteners and connectors are secure;
- c) The completed Work presents no danger or harm to others; and
- d) All applicable site records have been completed to SSC on-site conventions as per Site Record requirements defined in Annex B, section 4.13.

#### **4.12 PERFORMANCE WARRANTY**

The Supplier must ensure that all Work performed for any Resulting Contracts is warranted. This is to mean that any defect found on the maintained TDM PBX, KTS and related equipment resulting from a service supplied by the Supplier will be fixed by the Supplier without any charge to SSC, for the life of any Resulting Contracts.



#### 4.13 SITE RECORD REPORTS

The Supplier must maintain accurate site records, along with any related documents and reports that must be updated when changes are made to the TDM PBX, KTS, related equipment, cabling, or network services. The records and related documentation must be in a format acceptable to SSC and consist, at a minimum, of the following:

- a) TDM PBX and KTS inventory (card and circuit maps - outlining spare circuits/slots);
- b) TDM PBX and KTS cabinet layouts – cabinet configuration diagrams (interface cards, control cards, part numbers);
- c) Telecommunications room floor plans – equipment;
- d) Cabling records – showing cable pairs and cross-connections from the TDM PBX and KTS to the user devices;
- e) Site inventory – telephone set inventories, by type;
- f) Telephone network service records including Trunks (PSTN, ISDN, Loop, etc.), circuit type (i.e. PRI, BRI, Analog, etc.), Circuit size ( i.e. 24b+1d, etc.), associated PSTN numbers, TDM PBX and KTS ports as well as any other network facilities;
- g) Detailed data records (including passwords and passkeys); and
- h) Site maintenance and repair log – for each maintenance action or repair, that contain, at a minimum:
  1. The date;
  2. Incident description;
  3. Ticket number;
  4. Action taken;
  5. Status; and
  6. Technician’s full name.

The Supplier must provide the Technical Authority with a copy of all site record keeping records and reports under any Resulting Contracts.

The first report(s), containing at a minimum the information listed in this clause, must be submitted by the Supplier no later than twenty (20) working days following any Resulting Contract award date.

All subsequent reports must be submitted within twenty (20) working days from any changes to the records or report, every one-hundred-and twenty (120) working days calculated from the Resulting Contract award date and within twenty (20) working days from the yearly anniversary date calculated from the Resulting Contract award date.

If the required site records do not currently exist, the Supplier must create them to meet this requirement. The labour to create these records must be included within the maintenance services prices.



#### **4.14 SCHEDULED SYSTEM SHUTDOWNS**

The Supplier must, when requested by SSC, power-down the TDM PBX, KTS and related equipment to allow building work to be conducted. When the building work is completed the Supplier must power-up the TDM PBX, KTS and related equipment and ensure that all systems are operating correctly.

The labour to perform a minimum of two (2) shutdowns per year (calculated from the Resulting Contract award date) for each Resulting Contract must be included within the maintenance services prices. The Technical Authority reserves the rights to request, at no additional cost to SSC, two (2) additional shutdowns within each year of the Resulting Contract Period.

### **5 PREVENTATIVE MAINTENANCE**

Preventative maintenance must be performed by the Supplier and include, at a minimum, the following:

- a) Identify and correct any existing and newly detected incidents; and
- b) Proactively identify and correct any deteriorating conditions which may cause future system or equipment failure or loss of service.

Any service-affecting incidents that are discovered through the performance on preventative maintenance services must be immediately communicated to the Technical Authority and rectified by the Supplier.

#### **5.1 PREVENTATIVE INSPECTIONS**

The Supplier must perform preventative inspections of the TDM PBX, KTS and related equipment at each SSC site. Inspections are classified as monthly and semi-annually; each requiring specific activities to be completed and reported.

When TDM PBX, KTS and related equipment support remote access, the inspections are to be performed via secure remote access, as per Annex B - Section 6.2 "Remote System Access", and in conjunction with a site visit, when required.

Preventative inspections for all SSC sites identified in any Resulting Contracts must occur during the same week of the month, and must be performed at times agreeable to the Technical Authority in order that no disruptions to SSC operations occur.

##### **5.1.1 Monthly Preventative Inspections:**

The Supplier must, at a minimum, perform the following tasks, at each site, when conducting monthly preventative inspections:

- a) For TDM PBX and KTS, the Supplier must:
  1. Access the TDM PBX and KTS telephone system(s) and verify that the system(s) are operating error free by reviewing system logs, error messages, alarms and warnings;
  2. Perform a time validation, and correction if required;



3. Check power supply levels and make adjustments, if required;
  4. Verify it is possible to remotely access the TDM PBX and KTS telephone systems, provide all equipment necessary for remote monitoring/diagnostics if it is technically possible to do so and test for error-free operations; and
  5. Create system configuration data backups for the TDM PBX and KTS (when technically possible) labelled clearly with date and site name with 1 copy to be left on site, 1 copy to be archived at the Supplier's office and 1 copy to be sent to the Technical Authority.
- b) For TDM PBX and KTS equipped with Uninterruptible Power Supplies (UPS) and/or battery back-up, the Supplier must:
1. Test specific gravity of all batteries;
  2. Visually inspect all power connections and water levels;
  3. Check battery voltage levels; and
  4. Correct any issues uncovered during the inspections.
- c) For Voice Mail systems, the Supplier must:
1. Access the voice mail system(s) and verify that the system(s) are operating error free by reviewing system logs, error messages and warnings;
  2. Identify disk storage utilised as a percentage of total VM storage capacity;
  3. Access each port to ensure that it is operating correctly; and
  4. Create system configuration data backups for the voice mail system(s) labelled clearly with date and site name with 1 copy to be left on site, 1 copy to be archived at the Supplier's office and 1 copy to be sent to the Technical Authority.
- d) For the ACD MIS, the Supplier must:
1. Access the ACD MIS system(s) and verify that the ACD system(s) are operating error free by reviewing system logs, error messages and warnings;
  2. Identify ACD disk storage utilised as a percentage of total ACD storage capacity; and
  3. Create system configuration data backups for the ACD MIS system(s) labelled clearly with date and site name with 1 copy to be left on site, 1 copy to be archived at the Supplier's office and 1 copy to be sent to the Technical Authority.

### 5.1.2 Semi-Annual On-Site Preventative Inspections

The Supplier must perform a minimum of two (2) semi-annual on-site preventative inspections of the TDM PBX, KTS and related equipment at each SSC site during each year of the Resulting Contract Period. The Technical Authority reserves the rights to request two (2) additional preventative inspections within each year of the Resulting Contract Period.

These semi-annual on-site preventative inspections will replace the monthly preventative inspection for that month. The semi-annual inspection(s) must be performed at times agreeable to the Technical Authority in order that no disruptions to SSC operations occur.



The Supplier must perform the following tasks, at each site, when conducting semi-annual on-site preventative inspections:

- a) For TDM PBX and KTS, the Supplier must:
  1. Perform all of the tasks identified for monthly preventative inspections as identified above in Annex B - section 5.1.1 – Monthly Preventative Inspections;
  2. Check, and record the results, that each trunk (PSTN access or other network services) is functional by performing, at a minimum;
    - (A) Loop tests; and
    - (B) Incoming call frequency tests.
  3. If the system is battery powered:
    - (A) Measure all battery voltage levels and record results;
    - (B) Record the battery charge current;
    - (C) Record the float and high-rate voltage setting;
    - (D) Perform specific gravity test on all battery cells and record results;
    - (E) Verify that battery charging and rectifiers are functioning;
    - (F) Verify the battery capacity is a minimum of 85% of the maximum; and
    - (G) Perform a battery load test by turning off the commercial AC power and ensure that the TDM PBX and KTS continue to function correctly without interruption (can only be performed outside Working Hours);
  4. Clean/replace machine filters (if technically possible);
  5. Clean tape and disk heads (if applicable);
  6. Conduct a detailed traffic analysis of all TDM PBX trunk routes;
  7. Conduct digitone receiver tests;
  8. Conduct Teletype/Console and CDR tests;
  9. Conduct memory tests;
  10. Verify that all peripheral devices such as printers, tapes, and disk drives are fully operational;
  11. Take all necessary actions to ensure that the traffic is evenly distributed across the TDM PBX and KTS;
  12. Update circuit card maps and configuration diagrams for the TDM PBX, KTS and each related equipment; and
  13. Perform a security audit of the TDM PBX, KTS and related equipment as identified in Annex B -section 11.4 - System Security Audit.
- b) For the VM system, the Supplier must perform all of the tasks identified for monthly preventative maintenance inspections as identified above in Annex B - section 5.1.1 – Monthly Preventative Maintenance Inspections;
- c) For the ACD MIS, the Supplier must perform all of the tasks identified for monthly preventative maintenance inspections as identified above in Annex B - section 5.1.1 – Monthly Preventative Maintenance Inspections; and.
- d) For the Telephone Recording system, the Supplier must:





1. Access the telephone recording system and verify that the system is operating error free by reviewing system logs, error messages and warnings;
2. Identify disk storage utilised as a percentage of the total storage capacity; and
3. Create two (2) system configuration data backups on removable media for the telephone recording system labelled clearly with date and site name with 1 copy to be left on site, 1 copy to be archived at the Supplier's office and 1 copy to be sent to the Technical Authority.

## **5.2 PREVENTATIVE INSPECTION REPORTS**

The Supplier must submit to the Technical Authority, in a format acceptable to SSC, preventative inspection reports within one (1) week of completion of the inspection(s).

A sample of an inspection reporting form is provided in Appendix A to Annex B - Sample Preventative Inspection Form.

No later than sixty (60) working days prior to the end of the Resulting Contract Period, the Supplier must submit to the Technical Authority, an inspection report, for each SSC site identified in any Resulting Contracts.

## **5.3 PSTN CALL ROUTING**

As part of the maintenance services the Supplier must proactively modify the programming of the TDM PBX, KTS and related equipment due to the introduction of PSTN changes such as:

- a) New Numbering Plan Area (NPA) codes;
- b) New SSC office codes; and
- c) New PSTN dialling plans.

## **5.4 DAYLIGHT SAVINGS TIME CHANGES**

As part of the maintenance services the Supplier must update the time on each TDM PBX, KTS and related equipment to reflect changes to and from daylight savings.

## **5.5 ANNUAL TRAFFIC ANALYSIS**

The Supplier must perform an annual traffic analysis for each maintained SSC telephone system that access analog or digital PSTN interface circuits by dialing an access code and any maintained SSC telephone system which uses Direct Inward Dialing (DID) PSTN services.

Each annual traffic analysis must be conducted over a two (2) week period during the specific SSC sites peak periods, as determined by the Technical Authority, and include the following:

- a) System traffic analysis:
  1. Loop(s) Failure-to-Match (FTM), usage (terminal, conference, service) threshold;
  2. Central Processing Unit (CPU) usage;
  3. D-Channel traffic activity; and





4. Dial tone speed threshold.
- b) Customer traffic analysis:
  1. Network(s) Failure-to-Match (FTM);
  2. Trunk group utilization and trunk recommendations using .01 Grade of Service for the general office trunks and .05 for the ACD trunks;
  3. Feature key usage; and
  4. Telephone set status and messaging.
- c) Customer network analysis, by Network Class of Service (NCOS):
  1. Network(s) route list measurements (if applicable);
  2. Off-hook queuing measurement; and
  3. Call-back queuing measurement.
- d) Voice mail analysis:
  1. System traffic - Port traffic and capacity.

The Supplier must submit, in a format acceptable to SSC, the annual traffic analysis report to the Technical Authority, including the data collected and recommendations for either load balancing or trunk levels, within two (2) weeks of the completion of the analysis.

## **6 DIAGNOSTIC AND REPAIR SERVICES**

The Supplier must diagnose and repair all incidents associated with the TDM PBX, KTS, and related equipment. The Supplier must determine where the incident resides and correct it.

In the event that the Supplier determines that the incident resides within the telephone network services contracted by SSC, the Supplier must, at no additional cost to SSC, co-ordinate the incident resolution as described in Annex B - section 4.5 - Telephone Network Services.

In the event that the Supplier determines that the incident resides within the cabling services contracted by SSC, the Supplier must, at no additional cost to SSC, co-ordinate the incident resolution as described in Annex B - section 4.6 - Telephone Network Services.

### **6.1 ON-SITE DIAGNOSTIC AND REPAIR SERVICES**

The Supplier must provide on-site diagnostic and repair services (on-site hardware maintenance) during the term of any Resulting Contracts. The Supplier must, as quickly as possible:

- a) Diagnose the incident;
- b) Correct the incident; and
- c) Verify that the incident has been corrected.

### **6.2 SECURE REMOTE SYSTEM ACCESS**

For TDM PBX, KTS and related equipment which support secure remote access to the telephone system programming and maintenance interface devices, the Supplier must utilize



secure remote access to the TDM PBX, KTS and related equipment to troubleshoot and repair incidents as identified in Annex B - section 11.1- Secure Remote System Access.

The Supplier must provide secure remote system access to the TDM PBX, KTS and related equipment twenty-four (24) hours per day, seven (7) days per week, and three hundred and sixty-five (365) days per year (24X7X365).

The Supplier must provide all equipment, processes and procedures necessary to support the remote system access service.

### **6.3 SOFTWARE SUPPORT**

The Supplier must provide ongoing software support and necessary software development to maintain all PBX, KTS and related equipment in fully operational order.

Upon receipt or auto-detection of a software-related incident, the Supplier must use all reasonable efforts to provide permanent correction of the software-related incident in accordance with the category of the incident and within the response times and conditions specified in Annex B - Table 6-1 Incident Categories and Response Times.

The Supplier must warrant that the software incident correction will meet the functional and performance criteria specified in the Software Publisher's specifications.

The Supplier must provide, to the Technical Authority, all software corrections on media that are free of defects and of computer viruses, and which are compatible with the systems on which the software is installed.

SSC will own the media provided by the Supplier in the performance of the software support services once the media is delivered and accepted by the Technical Authority. For the purposes of this subsection, "media" does not include the Licensed Software stored on the media.

"Software" means all software programs, in object-code form, that must be supported by the Supplier under any Resulting Contracts.

"Software-related incident" means any incident caused by software instructions or statements contained in or absent from the software, which, by its presence or absence, prevents the software from operating in accordance with the Software Publisher's specifications.

### **6.4 MAINTENANCE SUPPORT PLANS**

The Supplier must support three (3) unique Maintenance Support Plans (MSP) for TDM PBX, KTS and related equipment (Hardware and Licensed Software). MSP requirements include but are not limited to the following:

**Maintenance Support Plan # 1 (MSP-1):** This plan must support remote and on-site diagnostics and repair services for TDM PBX, KTS and related equipment (Hardware and Licensed Software). The Principal Period of Maintenance (PPM) for the MSP-1 support plan is twenty-four (24) hours per day, seven (7) days per week, and three hundred and sixty-five (365) days per year.



**Maintenance Support Plan # 2 (MSP-2):** This plan must support remote and on-site diagnostics and repair services for TDM PBX, KTS and related equipment (Hardware and Licensed Software). The PPM for the MSP-2 support plan is from 7 a.m. to 5p.m., 7 days per week.

**Maintenance Support Plan # 3 (MSP-3):** This plan must support remote and on-site diagnostics and repair services for TDM PBX, KTS and related equipment (Hardware and Licensed Software). The PPM for the MSP-3 support plan is from 7 a.m. to 5 p.m., Monday through Friday, not including weekends or local statutory holidays observed by Canada.

The Supplier must ensure that only one MSP applies per TDM PBX or KTS system and related equipment.

## **6.5 DIAGNOSTIC, ON- SITE AND RESTORATION TIMES**

The Supplier must respond to incidents with an initial diagnostic and, if required, followed by an on-site response. The initial diagnostic, on-site response and restoration times apply within the hours specified in the PPM identified in the Resulting Contracts.

The initial diagnostic will serve as an acknowledgment and acceptance of the incident. The Supplier will immediately begin remote diagnostic and restoration services whether the incident is auto-detected or reported by SSC.

In the event that the Supplier cannot resolve the incident and restore service remotely from its diagnostic centre, the Supplier must provide an on-site response by dispatching a technician to the SSC site.

Each MSP type holds a Maximum Restoration Time metric to which service levels performance calculations and credits may apply.

For MSP-2 and MSP-3 support plans, incidents reported to the Supplier after 5 p.m. will be treated as having been received at 7 a.m. the following working day.

Throughout the hours specified in the contracted MSP principal period of maintenance the Supplier's technician must continue the diagnostic and restoration activities and remain working remotely or on-site until the incident is resolved and the service restored, unless the incident cannot be resolved by the technician due to the availability of replacement parts.

In the event that replacement parts are not available, the Supplier must develop an incident resolution plan clearly identifying any actions required, including those applicable to SSC. The Supplier must present the incident resolution plan to the Technical Authority for approval. The Supplier must respond to incidents categorized within the following table.



Incident Category	Description	Initial Diagnostic Time	Maximum Time On-Site	Maximum Restoration Time (MRT)
Category 1	<ul style="list-style-type: none"> <li>a) The loss of telephone and/or voice mail services affecting 25 or more users; or</li> <li>b) Total ACD failure; or</li> <li>c) Total ACD MIS failure; or</li> <li>d) The loss of 50% or more of the PSTN access capability; or</li> <li>e) The loss of real-time or historical ACD information; or</li> <li>f) Critical<sup>1</sup> alarm on the TDM PBX or KTS systems and related equipment; or</li> <li>g) The loss of any telephone at a site running 911 call-answer on a 7x24x365 basis; or</li> <li>h) The loss of service from the 911 data control line or modem at a site running 911 call-answer on a 7x24x365 basis; or</li> <li>i) The total inability to use a software program resulting in a critical impact on user objectives.</li> </ul>	30 minutes	1 hours	4 hours
Category 2	<ul style="list-style-type: none"> <li>a) The loss of telephone and/or voice mail services affecting less than 25 users; or</li> <li>b) The loss of service to a supervisor or manager; or</li> <li>c) The loss of 25% or more of the messaging capability; or</li> <li>d) The loss of 11% to 49% of PSTN access capability; or</li> <li>e) A major<sup>1</sup> TDM PBX or KTS alarm; or</li> <li>f) The ability to use a software program but user operation is severely restricted.</li> </ul>	1 hour	2 hours	10 hours



Category 3	a) Any other incident not identified in Categories 1 and 2; or b) A minor <sup>1</sup> TDM PBX or KTS alarm; or c) The ability to use a software program with limited functions which are not critical to overall user operations	4 hours	8 hours	20 hours
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Note: 1 – All system alarms (Critical, Major and Minor), as defined by the OEM in its system documentation, must be reported as incidents and categorized according to their classifications i.e. Category 1, 2 or 3.

TABLE 6-1 INCIDENT CATEGORIES AND RESPONSE TIMES

### 6.6 DIAGNOSTIC AND RESTORATION TIME DEFINITIONS

Diagnostic time is defined as the elapsed time from when an incident ticket is created to when the Supplier's representative provides the Technical Authority an action plan for resolution of the incident.

Restoration time is defined as the elapsed time from the time when the Supplier's Service Desk (SSD) records an incident and creates a unique incident ticket to the point in time when the incident is resolved, the service is completely restored and the closure of the incident ticket has been accepted by the Technical Authority.

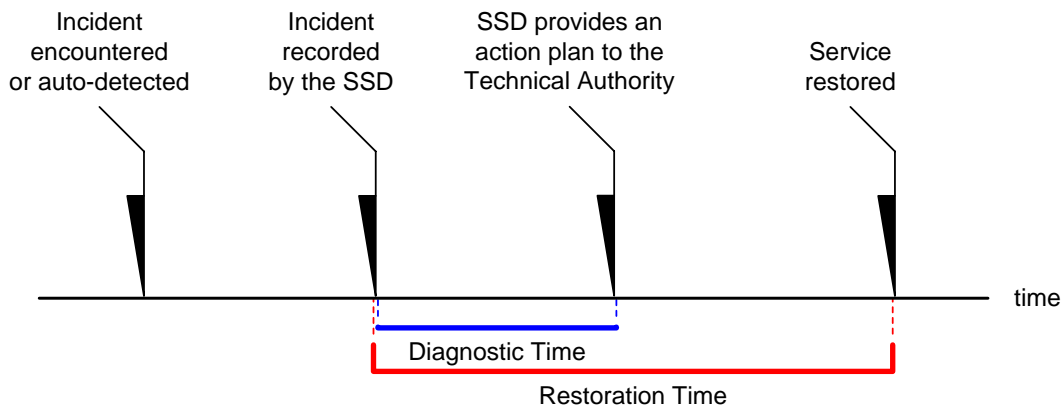


FIGURE 6-1 DIAGNOSTIC AND RESTORATION TIME

### 6.7 EMERGENCY EQUIPMENT FAILURE

In the event that an emergency failure of the TDM PBX, KTS or related equipment occurs, the Supplier must respond to SSC and work with SSC making every effort to mitigate the consequences of the failure and to quickly restore temporary telephone service until such time as replacement equipment can be installed.



For greater certainty, an emergency failure occurs when one (1) or more of the TDM PBX, KTS or related equipment components unexpectedly stops working due to an event that:

- a) Is beyond the reasonable control of the Supplier;
- b) Could not reasonably have been foreseen;
- c) Could not reasonably have been prevented by means available to the Supplier, and
- d) Occurred without the fault or neglect of the Supplier.

Examples of emergency failures include a) water damage due to a broken building water pipe; and b) acts of vandalism or terrorism.

SSC will determine on a case-by-case basis which extraordinary measures are required and will pay all costs related to service restoration, once the cost estimates are submitted by the Supplier and accepted, in writing, by the Technical Authority.

### 6.8 NOTIFICATION OF SUPPLIER DISCOVERED INCIDENTS

In the event the Supplier discovers that a TDM PBX, KTS or related equipment has a identified an incident, the Supplier must immediately create an incident ticket, notify the Technical Authority, first by telephone and then with a follow-up e-mail, specifying the nature of the incident, the time it was discovered, the incident ticket number and the current incident resolution status.

## 7 SERVICE MANAGEMENT REPORTS AND DOCUMENTATION

The Supplier must submit a number of reports and documents to SSC as part of the requirements of any Resulting Contract. The following summary is for reference purposes and should not be construed as a definitive or exhaustive list of the reports contained in this SOW.

Reports and Documents	Frequency	SOW Reference Number
Site Record Keeping Reports	Various	4.13
Preventative Inspection Reports	Monthly and Semi-Annually	5.2
Annual Traffic Analysis	Annual	5.5
Monthly Incident Management Report	Monthly	7.1
System Breach or Violation Report	Within 5 days of breach or violation	11.3
System Security Audit - report	Annual	11.4



Reports and Documents	Frequency	SOW Reference Number
Maintenance Performance Meetings - Minutes	Within 3 days from meeting date	12.6
Supplier Services Guide	30 days from any Resulting Contract Award	13.1
Monthly Summary Invoice	Monthly	15.2
Contract Expenditure Report	Monthly	15.5
Service Order Activity Report	Monthly	15.6

### 7.1 MONTHLY INCIDENT MANAGEMENT REPORTS

The Supplier must provide, to the Technical Authority, in a format acceptable to SSC, monthly incident management reports for each site. The monthly incident management reports must be received by the 15th day of the month following the reporting period and must, at a minimum, include the following information:

- a) Site name;
- b) Site code (if available);
- c) Reporting period;
- d) Date issued;
- e) A list of the closed incident tickets including ticket number, incident description, corrective action, and restoration time;
- f) A list of open incidents at end of reporting period including ticket number, incident description, and the age of each outstanding incident;
- g) Total restoration time of all closed incident tickets (if any) for the reporting period;
- h) The cause of each critical and major alarms; and
- i) For each category of incident tickets, and for each reporting period:

ID	Reporting Element	Category 1	Category 2	Category 3	Total
1	Total quantity of open tickets at start of the reporting period				
2	Total quantity of new tickets during the reporting period				
3	Quantity of open tickets at the end of the reporting period				
4	SL-MRT for closed tickets during reporting period (by category and for all tickets)				N/A



## 7.2 SEMI-ANNUAL REPORT OF MAINTENANCE AND SUPPORT BY SITE

The Supplier must provide, to the Technical Authority, in a format acceptable to SSC, a semi-annual report of maintenance and support activities undertaken at each site, identified for each component, including but not limited to the TDM PBX and KTS, Voice Mail, ACD, and Telephone Recording system. The report details must be provided as follows:

- a) **By site:** Incidents initiated by SSC (corrective maintenance), and incidents generated by the Supplier through remote diagnostics and Supplier recommendations for corrective action for each incident to avoid reoccurrence;
- b) **By Incident:** Actual Supplier performance against the response times detailed in Annex B - section 6.5 Diagnostic, On- Site and Restoration Times; and
- c) **By site:** All maintenance tasks completed for the year, as specified in Annex B - sections 5.1.1 Preventative Inspection and 5.1.2 Semi-Annual On-Site Preventative Inspections.

Sixty (60) working days prior to the end dates of any Resulting Contract Period, the Supplier must provide a semi-annual report of maintenance and support activities containing all activities applicable from the last report date up to and including the date of the report.





## 8 MACs

MACs primarily encompass the day-to-day activities in support of relocating users, adding/removing system elements to/from existing inventory, or changing user parameters.

Unless specifically requested otherwise by SSC, all MACs must be performed between the hours of 7.00 a.m. to 5 p.m. local site time, Monday to Friday, excluding SSC-observed statutory holidays.

### 8.1 MAC RESPONSE TIMES

The Supplier must meet, at a minimum, the maximum completion times allowed for MACs as detailed in Table 8.1 below:

MAC Quantities	MAC Maximum Completion Time
1 soft MAC	Two (2) working days from receipt of a MAC service order.
2-10 soft MACs	Three (3) working days from receipt of a MAC service order.
11-20 soft MACs	Four (4) working days from receipt of a MAC service order.
21+ soft MACs	Ten (10) working days from receipt of a MAC service order.
1 hard MAC	Two (2) working days from receipt of a MAC service order.
2-10 hard MACs	Three (3) working days from receipt of a MAC service order.
11-20 hard MACs	Five (5) working days from receipt of a MAC service order.
21+ hard MACs	Ten (10) working days from receipt of a MAC service order.
Complete system relocation 101 - 500 users	Thirty-five (35) working days from receipt of MAC service order.
Complete system relocation 501 - 1000 users	Forty (40) working days from receipt of MAC service order.
Complete system relocation 1001+ users	Fifty-five (55) working days from receipt of MAC service order.

TABLE 8-1 MAC MAXIMUM COMPLETION TIMES

Please note that if cabling is required to complete a MAC, the Supplier must advise the Technical Authority who will obtain the required cabling services from the cabling service providers. In the case where new cabling or cabling moves are required for the MAC completion, the receipt date of the MAC order by the Supplier from SSC will be deemed to be the time that the Technical Authority advises the Supplier that the required cabling service is complete, and the Supplier’s MAC services can proceed.



## 8.2 MOVE

Move refers to the relocation of existing user devices, up to and including complete system relocations. The Supplier must perform any/all of the following tasks if a Move is requested by the Technical Authority:

- a) Perform any physical and programming changes in the TDM PBX, KTS and related equipment to complete the requested action;
- b) Complete any telephone network and cabling connections as detailed in Annex B, sections 4.5 and 4.6;
- c) Test, and report the results, all affected components of the TDM PBX, KTS and related equipment for full functionality; and
- d) Update any TDM PBX, KTS or related equipment inventory, configuration, cabling and network records.

## 8.3 ADD

Add refers to a change within the existing inventory for the addition or removal of TDM PBX, KTS and related equipment (Hardware and Licensed Software).

In cases where additional equipment is required to affect an Add:

- a) SSC will supply the equipment required; or
- b) If requested by SSC, the Contractor must provide any required equipment listed in the Pricing Tables (including any Resulting Contract or Service Order).

A negative Add (also known as remove) may apply for the removal of existing inventory.

Adds include, but are not limited to, any of the following:

- a) Perform any physical, programming and configuration changes in the TDM PBX, KTS and related equipment to perform the requested action;
- b) Complete any telephone network and cabling connections as detailed in Annex B, sections 4.5 and 4.6;
- c) Installation of SSC provided equipment;
- d) Test, and report the results of, all affected components of the TDM PBX, KTS and related equipment for full functionality; and
- e) Update any TDM PBX, KTS or related equipment inventory, configuration, cabling and network records.

## 8.4 CHANGE

Change refers to the modification of the parameters or configuration of the TDM PBX, KTS and related equipment within the existing inventory. The Supplier must perform the tasks required to effect any Change requested by SSC including, but not limited to, the following:



- a) Perform any programming and configuration changes in the TDM PBX, KTS and related equipment to perform the requested action;
- b) Complete any telephone network and cabling connections as detailed in Annex B, sections 4.5 and 4.6;
- c) Perform testing and report the results; and
- d) Update any system configuration, network and cabling records.

## **8.5 TESTING**

The Supplier must conduct the necessary testing to verify that the MAC was successfully implemented. As a minimum the Supplier must place test calls to verify the TDM PBX, KTS and related equipment are operating within the manufacturers' and SSC guidelines.

## **9 REPLACEMENT PARTS**

In the event that a part is deemed defective, the Supplier must supply either new or refurbished replacement parts to restore service to the TDM PBX, KTS and related equipment.

All replacement parts, either new or refurbished, used to repair any TDM PBX, KTS or related equipment, must provide a minimum of the same functionality as the original part.

### **9.1 MAC PARTS**

It is anticipated that some of the existing TDM PBX, KTS and related equipment may be retired during the term of any Resulting Contract and any parts from these retired systems can be reused as MAC parts for the remaining sites. Additionally SSC may move MAC parts between SSC sites and systems.

SSC reserves the right to have the Supplier install, and maintain refurbished replacement parts owned by SSC.

Prior to the Supplier installing replacement parts provided by SSC, the Supplier must inspect the replacement parts and identify to SSC any compatibility issues or incidents that would prohibit the TDM PBX and KTS and related equipment from operating correctly.

If SSC supplies the required equipment, and the Supplier deems it to be acceptable, it must record that this is SSC-provided equipment in all records. The Supplier must not unreasonably reject SSC-supplied equipment.

No warranty will be applicable to SSC-provided equipment; however as per Annex B - section 4.12 – Performance Warranty, the Supplier must warrant the support service associated with the installation of SSC-provided equipment.

## **10 SUPPORT SERVICES**

The Supplier must provide support services, within ten (10) working days from the date of the SSC request (i.e. service order) for the maintained systems and equipment on an “as and when requested” basis. Support services include, but are not limited to, the following:



## **10.1 TRAINING SERVICES**

The Supplier must provide training services on an as and when required basis for TDM PBX, KTS and related equipment for the following service categories: TDM PBX and KTS management information system (MIS), ACD Agent, ACD supervisor/manager and ACD MIS. The training services must include, at a minimum, the following:

- a) Develop and document training courses for each category (TDM PBX, KTS, related equipment);
- b) Delivery of each training course; and
- c) Supporting documentation for each category.

## **10.2 TECHNICAL INTEGRATION SUPPORT SERVICES**

The Supplier must provide technical integration support services and resources on an as-and-when requested basis with an approved service order to perform the following:

- a) Provide information on the technical aspects of the maintained system;
- b) Provide guidance on the technical specifications applicable to integration and evolution of technology;
- c) Provide technical support and guidance for configuration and evolution;
- d) Provide technical support for technology issues;
- e) Develop documentation for integration and evolution;
- f) Develop and document application scripts; and
- g) Provide guidance on associated security issues.

The technical integration support service resource must have the following minimum qualifications:

- a) Two (2) years experience with the TDM technology identified in the bid solicitation and any Resulting Contracts;
- b) Two (2) years experience with TDM system security; and
- c) Two (2) years experience providing technical advice, guidance and support for integration and evolution of technology involving multi-disciplinary project / technical / business teams.

## **10.3 INTEGRATION MANAGEMENT SUPPORT SERVICES**

The Supplier must provide an integration management services and resources for integration on an as-and-when requested basis with an approved service order to perform the following:

- a) Create, update and manage integration and evolution project plans including milestones, deliverables and risks;
- b) Provide guidance on best practices for integration and evolution initiatives;
- c) Identify integration and evolution risks and prepare risk mitigation plans;
- d) Identify and document integration and evolution requirements and feedback;



- e) Coordinate support teams to prepare for integration and evolution initiatives; and
- f) Track the progress of the integration and evolution initiatives.

The integration management support service resource must have the following minimum qualifications:

- a) Project Management Professional (PMP) active certification;
- b) Information Technology Infrastructure Library (ITIL) certified (foundation);
- c) Two (2) years experience with information technology (IT) security;
- d) Two (2) years experience with IT system management; and
- e) Two (2) years experience managing multi-disciplinary project/technical/business teams.

## **10.4 TECHNICAL SUPPORT SERVICES**

The Supplier must provide a technical support services and resources for technical support, on an as-and-when requested basis with an approved service order to perform the following:

- a) Staging, installing, configuring and testing TDM PBX, KTS and related equipment hardware and/or licensed software;
- b) Removing TDM PBX, KTS and related equipment hardware and/or licensed software; and
- c) Updating TDM PBX, KTS and related equipment configurations and inventory records.

The technical support service resource must have the following minimum qualifications:

- a) OEM certified, as applicable; and
- b) Two (2) years experience with installing or repairing TDM PBX, KTS and related equipment Hardware and/or Licensed Software.

## **11 SYSTEM ACCESS**

### **11.1 SECURE REMOTE SYSTEM ACCESS**

The Supplier must take all necessary actions to prevent unauthorized remote access to SSC TDM PBX, KTS and related equipment. The Supplier must coordinate remote access to the TDM PBX, KTS and related equipment with the Technical Authority.

The Supplier must limit authorization to super user accounts on the TDM PBX, KTS and related equipment to the Technical Authority or, when authorized by the Technical Authority, to designated Supplier personnel.

### **11.2 PASSWORD REQUIREMENTS**

The Supplier must ensure that administrative and maintenance access to all TDM PBX, KTS and related equipment can only be accomplished using password protected login identifications. The Supplier must ensure that the Technical Authority has a current list of all passwords and corresponding login identifications, including the Supplier's, for the TDM PBX, KTS and all related equipment.



The Supplier must only add passwords and login identifications at the request of the Technical Authority. As passwords are changed, the Supplier must provide the Technical Authority with an updated password list within one working day from the date the change was made. The password list must be provided by the Supplier in a format acceptable to SSC, and include the date and time that the list was compiled.

#### **11.2.1 Password Length**

The Supplier must ensure that access to the TDM PBX, KTS and related equipment is password protected. Passwords must be a minimum of eight (8) digits in length; composed of a mix of alpha and numeric characters and include a minimum of one upper and one lower case letter.

#### **11.2.2 Password Validity**

The Supplier must change maintenance and administration passwords used to access the TDM PBX, KTS and related equipment at least every three (3) months and as and when requested by SSC Technical Authority. The new password must not be the same as any of the ten (10) previous passwords used by the Supplier.

#### **11.2.3 Password Privacy**

The Supplier must treat the TDM PBX, KTS and related equipment passwords as confidential and never:

- a) Display any password or allow any passwords to be displayed; and
- b) Disclose any password to another party without the written consent of the Technical Authority.

### **11.3 SYSTEM BREACH OR VIOLATION REPORT**

The Supplier must immediately notify the Technical Authority of any breach or violation of system security, and change all affected passwords. Within ten(10) working days or earlier if requested by the Technical Authority of the system breach or violation the Supplier must provide the Technical Authority, in a format acceptable to SSC, a report identifying the preventative measures to be undertaken to ensure that the breach or violation does not reoccur.

### **11.4 SYSTEM SECURITY AUDIT**

The Supplier must perform an annual system security audit following the manufacturer's recommendations and employing current industry best practices, on a site-by-site basis, and provide to the Technical Authority, in a format acceptable to SSC, a report for each site. The system security audit report must identify any TDM PBX, KTS or related equipment vulnerabilities and must be delivered annually within two (2) weeks of the Resulting Contracts anniversary dates.

## **12 INCIDENT REPORTING AND ESCALATION**

### **12.1 SUPPLIER'S SERVICE DESK (SSD)**

The Supplier must provide SSC, within ten (10) working days of any Resulting Contract award, with a unique toll free telephone number and email address to contact the Supplier



Service Desk (SSD) from anywhere in Canada. The SSD must be available to SSC twenty-four (24) hours-a-day, seven (7) days-a-week, 365 days-a-year.

The SSD must be able to respond to callers in both English and French. Calls placed to the SSD must be answered by the Supplier's personnel within five (5) rings for ninety-five percent (95%) of the calls placed during any given calendar month.

As part of the maintenance services, and when authorized by the Technical Authority, the SSD must provide SSC direct access to the OEM's Technical Assistance Support services through a single Toll Free telephone number. The OEM's services must be available in English and in French, based on the caller's language preference.

If, at any time, the TDM PBX, KTS or related equipment encounter an incident that was not auto-detected by the Supplier, the Technical Authority can notify the Supplier through the SSD first by telephone and then, as required, with a follow-up e-mail specifying the nature of the incident.

The Supplier must provide the Technical Authority with a reference or ticket number to allow the Technical Authority to query the resolution of the incident. The Supplier must determine the root cause of the incident and undertake all actions to rectify the issue. An overview of the incident reporting and resolution process is shown in Figure 12-1.



### Incident Reporting and Resolution

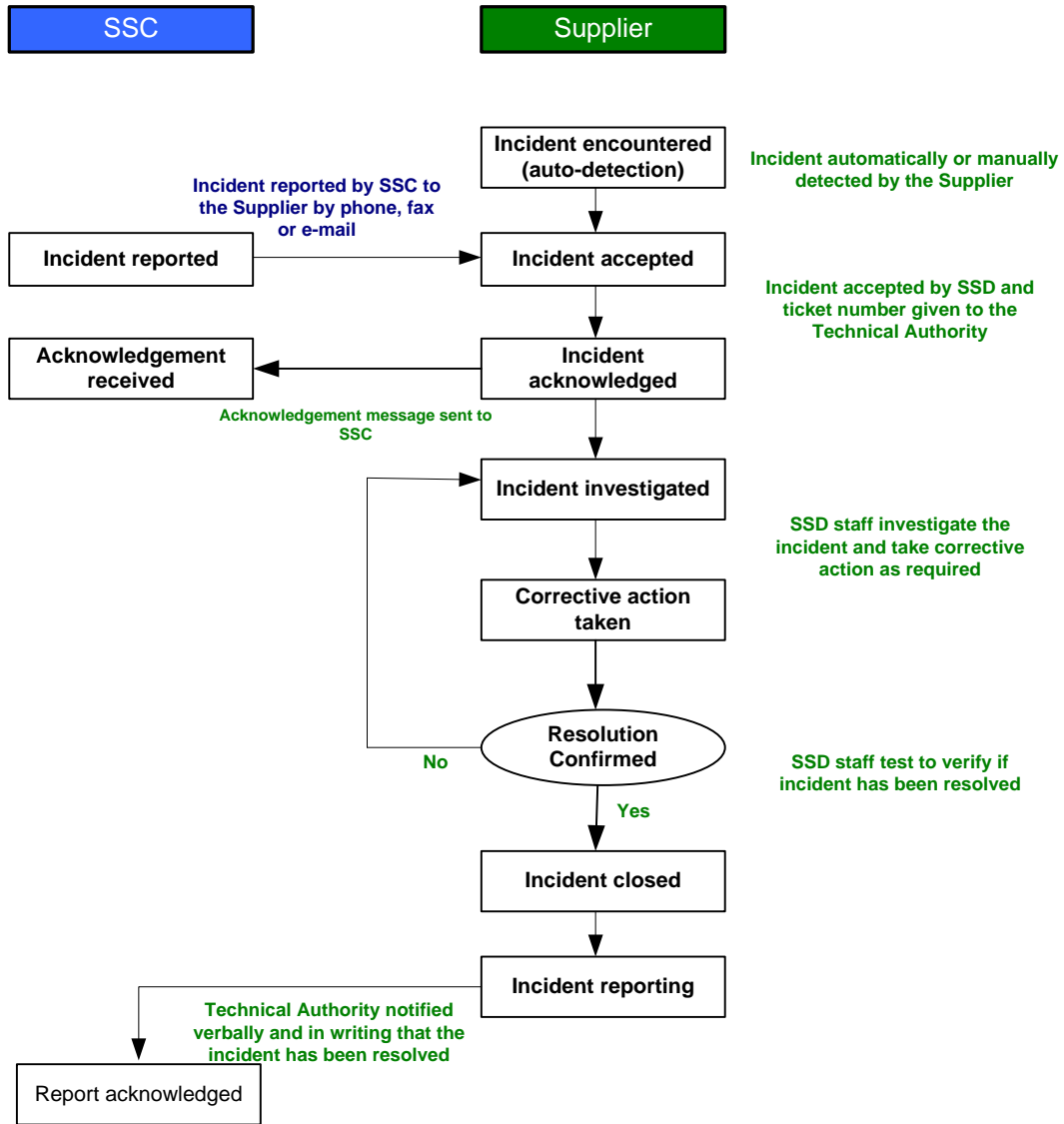


FIGURE 12-1 INCIDENT REPORTING AND RESOLUTION

## 12.2





### INCIDENT TRACKING

The Supplier must automatically create a unique ticket for each incident, including those reported by SSC and those detected by the Supplier as a result of service monitoring activity.

In all cases the Supplier must create incident tickets as soon as the incident is reported or auto-detected. The Supplier must then update the incident tickets, throughout the incident reporting and resolution process, to ensure an audit trail.

### 12.3 NOTIFICATION OF INCIDENT RESOLUTION

The Supplier must notify the Technical Authority, in a format acceptable to SSC, when an incident, either SSC reported or Supplier-discovered, has been corrected and the service restored.

After providing a notification, the Supplier must send written confirmation to the Technical Authority indicating that the incident ticket has been closed, detailing the incident’s root cause, the incident resolution activities, any additional actions to be taken by the Supplier to ensure that the incident does not reoccur, and the duration of any related service disruption.

### 12.4 INCIDENT ESCALATION PROCESS

To ensure that appropriate resources are allocated by the Supplier to quickly and effectively restore service, an incident may be escalated through both SSC and the Supplier’s organizations based upon the elapsed time from the initial report of the incident.

The escalation process which must be followed is as set out in Figure 12-2 Incident Escalation.

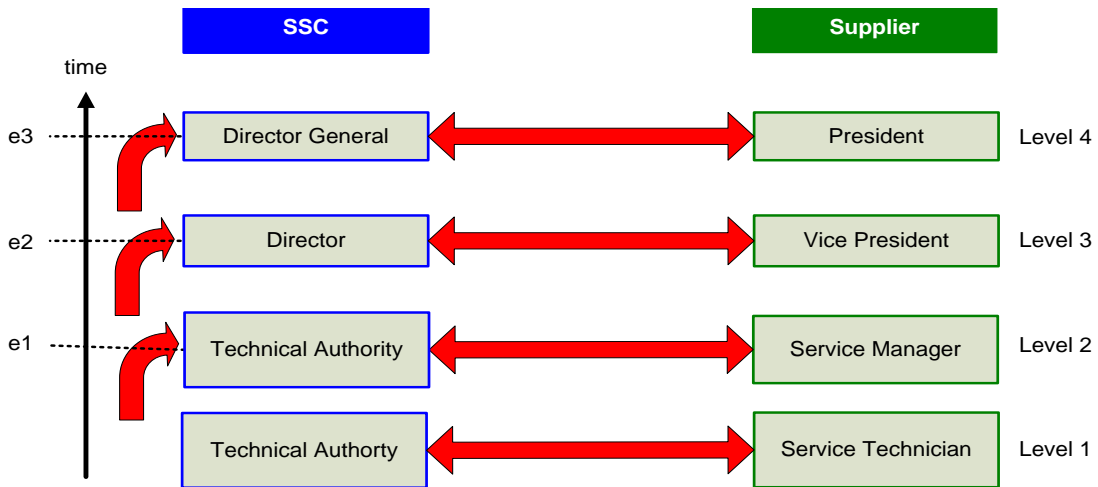


FIGURE 12-2 INCIDENT ESCALATION PROCESS

The escalation times are provided in Table 12-1 Incident Escalation Times.



Incident Escalation Times			
Classification	e1	e2	e3
Category 1	30 minutes	1 hour	2 hours
Category 2	1 hour	2 hours	5 hours
Category 3	4 hours	N/A	N/A

TABLE 12-1 INCIDENT ESCALATION TIMES

### 12.5 INCIDENT ESCALATION CONTACTS

Information for the incident escalation contacts must be inserted in a table; labelled “Incident Escalation Contacts” in the Supplier Service Guide detailed in Annex B – section 13.1.

The following table is included as an example for Supplier consideration:

INCIDENT ESCALATION CONTACTS		
		Contact Information
		Supplier
Level 4	Vice President	
Level 3	Service Director	
Level 2	Service Manager	
Level 1	Help Desk Manager	

TABLE 12-2 INCIDENT ESCALATION CONTACTS

### 12.6 MAINTENANCE PERFORMANCE MEETINGS

The SSM must meet monthly with the Technical Authority, and when requested in writing by the Technical Authority, to review service related activity delivered under any Resulting Contracts. The monthly meeting agendas must, at a minimum, include:

- a) Incident management reports and root cause analysis;
- b) Escalation issues;
- c) Maintenance and release window scheduling;
- d) Service Quote and Order activities;
- e) Service Level performance;
- f) Quality assurance activities;
- g) Status – progress reporting; and
- h) Reviewing steps being taken to improve service performance.

At a minimum, the following representatives must be in attendance:



- a) Supplier's Service Manager – (SSM) (chairperson);
- b) Technical Authority; and
- c) Supplier's Account Manager.

The SSM must document minutes from the performance meetings, including but not limited to, the identification of any issues related to roles and responsibilities, service migration strategy, SSC employee training, timelines, and scheduling of future meetings.

The SSM must forward a draft of the minutes to the Technical Authority within three (3) working days from the meeting date. The Technical Authority will endeavor to review and forward comments or acceptance (in writing) to the SSM within two (2) working days from receipt of the draft minutes.

## **13 SERVICE MIGRATION**

SSC's primary objective will be the seamless migration to the Supplier's maintenance service with minimal disruption to SSC business.

### **13.1 SUPPLIER SERVICE GUIDE**

Within thirty (30) working days from any Resulting Contract award, the Supplier must document the overall service management processes and procedures in a Service Guide.

The Supplier must maintain and update the Service Guide on a release schedule agreed to by the Technical Authority.

The Supplier must provide to the Technical Authority an electronic copy of the Service Guide in English, and in French if requested by the Technical Authority, using common "Off-the-Shelf" software.

The Supplier must ensure that the Service Guide, at a minimum:

- a) Defines the roles and responsibilities of the Supplier's functional primes, the Technical Authority and other SSC functional primes;
- b) Documents processes, procedures and methodologies for all service management functions including, but not limited to:
  - 1. Service delivery;
  - 2. Service and incident reporting and escalation management;
  - 3. MACs; and
  - 4. Billing and invoicing.
- c) Describes the communications plans to ensure the Technical Authority will be provided with information on the management, operation, communication, report and reviews of the service(s); and
- d) Details the Supplier's Service Level Objectives (SLOs).



## **14 SERVICE ORDERING**

### **14.1 GENERAL REQUIREMENTS**

Within ten (10) working days from any Resulting Contract award, the Supplier must establish a Supplier Order Desk (SOD) with a single point of contact (including email address, toll-free telephone number and a toll-free fax number) to receive Service Orders (SO) and verification/de-verification applications. The e-mail address and toll-free numbers must be available, on a 24 hours-per-day, 7 days-per-week and 365 days-per-year basis.

### **14.2 VERIFICATION/DE-VERIFICATION APPLICATION(S)**

Verification and de-verification applications are required to verify or de-verify SSC functional delegates and enable the SOD to recognize and accept/reject SOs from these individuals.

The verification/de-verification application must include, at a minimum:

- a) The Technical Authority's first and last names, email and postal addresses, SSC directory number and SSC fax number (if available);
- b) The functional delegate's first and last names, email and postal addresses, SSC directory number and SSC fax number (if available);
- c) The functional delegate back-up's first and last names, email and postal addresses, SSC directory number and SSC fax number (if available); and
- d) The name and contact details of the verification/de-verification application originator.

### **14.3 VERIFICATION AND DE-VERIFICATION PROCESSES**

Functional delegates must first be confirmed by the Technical Authority and registered with the SOD using a verification/de-verification application.

The Technical Authority will complete a verification/de-verification application for new functional delegates or for changes to an existing verified functional delegate.

The Technical Authority will forward the verification/de-verification application to the SOD and the SOD must register the functional delegate in its service order management system. Once registered in the Supplier's service order management systems, the individuals must be classified as "verified".

The Technical Authority can remove a verified functional delegate by:

- a) Issuing a verification/de-verification application form to the SOD; or
- b) Contacting the SOD by phone and verbally providing de-verification details.

### **14.4 SUPPLIER OBLIGATIONS TO THE VERIFICATION/DE-VERIFICATION PROCESS**

Within ten (10) working days from any Resulting Contract award, the Supplier must identify any additional fields it requires on the verification/de-verification application.



Within twenty (20) working days from any Resulting Contract award, the SOD must accept and process, in either of SSC's official languages, at the choice of the originator, verification/de-verification application(s) that:

- a) Are issued to the SOD'S e-mail, or facsimile;
- b) Are issued by the Technical Authority; and
- c) Have valid and complete information as defined in the article entitled "Verification/De-verification Application(s)".

During the term of any Resulting Contracts, the Supplier must update any verification/de-verification application fields affected by the addition of new requirements that have been approved through a Contract amendment.

Service Order Acceptance (SOA), Service Order Confirmation (SOC) and Service Order Rejection Notice (SORN) management processes and obligations are applicable to the verification/de-verification processes.

#### **14.5 SERVICE QUOTE AND SERVICE ORDER GOVERNANCE**

Service Quote (SQ) and Service Order (SO) governance must support the Service Quality Management framework.

The Request for Quote (RFQ) and SO governance processes may include any or all of the following sub-processes:

- a) Request for Quote (RFQ);
- b) Site Survey Request (SSR);
- c) Service Quote (SQ);
- d) Service Quote evaluation;
- e) Service Order issuance;
- f) Acknowledgement, Implementation, testing (when applicable) and confirmations of requested services; and
- g) SSC acceptance.

#### **14.6 REQUEST FOR QUOTE (RFQ)**

The RFQ process is required to establish a firm price - maximum price for certain types of activities which could include but are not limited to support services, partial system relocation and the addition or removal of system components. The RFQ process involves the following major activities:

- a) The Technical Authority will qualify the requests from SSC itself, or its clients;
- b) The Technical Authority will document the requirements in a SQ/SO template and identify it as an RFQ;
- c) The Technical Authority will issue the RFQ to the Supplier;
- d) The Supplier must acknowledge receipt of the RFQ, within thirty (30) minutes; and



- e) The Supplier must submit a firm price-maximum price quote to the Technical Authority for evaluation within the timelines stated below.

#### **14.7 SITE SURVEY REQUEST (SSR)**

If a site survey is required to respond to an RFQ, the Supplier must submit to the Technical Authority, in a format acceptable to SSC, a Site Survey Request (SSR), within two (2) working days from receipt of an RFQ.

Within ten (10) working days from any Resulting Contract award, the Supplier must submit the content and format for the SSR template to the Technical Authority for review, modifications (if required) and ultimate acceptance. At a minimum, the SSR must contain:

- a) The SSC unique RFQ number;
- b) The site details;
- c) At least three (3) timeslots in which the Supplier will be available to conduct the site survey(s), by site;
- d) The names and contact details for each Supplier participant, by site; and
- e) The estimated time to complete each site survey, once site access has been granted (must not exceed six (6) continuous Working Hours, by site, unless a longer period is requested in writing by the Supplier and granted in writing by the Technical Authority).

The Technical Authority will, when possible, select date(s) and time(s) from the available timeslots submitted by the Supplier (or request additional timeslot options if required) and confirm the selection(s), in writing, to the Supplier. It is SSC's intent to submit its selections(s) within two (2) working days from receipt of an SSR.

#### **14.8 SERVICE QUOTE (SQ)**

The Supplier must provide a firm price Service Quote (SQ) within ten (10) working days from receipt of an RFQ unless the Supplier issues, and the Technical Authority accepts, an SSR. Please refer to the Resulting Contract section entitled "Service Order - sub section b) Contractor's work quotation" for additional details and procedures.

When the Technical Authority accepts an SSR from the Supplier, the SQ must be submitted within ten (10) working days from the date(s) and time(s) selected for the site survey by the Technical Authority.

The SQ must be presented in a format acceptable to SSC and must, at a minimum, contain all mandatory fields identified in Annex B section 14-11 Service Quote and Service Order Fields.

SOA, SOC and SORN management processes and obligations are applicable to the Service Quote processes.



## 14.9 SERVICE QUOTE EVALUATION

SSC does not commit any specific timelines to the SQ evaluation process and/or subsequent initiation of the SO process.

## 14.10 SERVICE ORDER ISSUANCE

Once SSC decides to proceed with issuing an SO, SSC (by its authorized representative will issue an SO by forwarding a signed copy of a completed SO to the Supplier.

SOA, SOC, SORN and SOCN management processes and obligations are applicable to the Service Order processes.

## 14.11 SERVICE QUOTE AND SERVICE ORDER FIELDS

The Service Quote / Service Order (SQ/SO) template must include, at a minimum, the following mandatory (M) fields:

- a) (M) Issue date;
- b) (M) Supplier's full name and details;
- c) (M) Resulting Contract number;
- d) (M) Activity Type; such as Service Quote and Service Order;
- e) A unique SSC SQ/SO number, and revision number (if applicable);
- f) (M) Order type; such as Move, Add, Change, Support Services;
- g) (M) Detailed description for the Work being requested;
- h) (M) SO originator's name and contact information;
- i) SSC client organizational name, such as department (if required);
- j) (M) Site address (civic address, room, floor, postal code, etc.) where Work is to be performed;
- k) (M) Site contact information – site contact name, telephone directory number, email address;
- l) Site identification number (once assigned by the Supplier);
- m) Equipment OEM, parts model, parts identifier (such as product code, product key, etc.) and quantities (when required);
- n) Order remarks (free form text with a minimum of 1000 characters);
- o) (M) Sub-Total dollar amount (separate lines entries for one-time and recurring entries);
- p) (M) Applicable taxes GST and/or HST dollar amount;
- q) (M) Total dollar amount;
- r) (M) Billing account number(once assigned by the Supplier);
- s) (M for SO) Billing address;
- t) (M for SO) Requested Service Delivery Date (RSDD); and
- u) (M) Signing Authority (Technical Authority or Procurement Authority).



Within ten (10) working days from any Resulting Contract award, the Supplier must identify any additional fields it requires on the SQ/SO template.

Within twenty (20) working days from any Resulting Contract award, the SOD must accept and process SQ/SOs, in either of SSC's official languages, at the choice of the originator, which:

- a) Are issued to the SOD's e-mail or facsimile;
- b) Are issued by the Technical Authority or a verified functional delegate; and
- c) Have, at minimum, valid and complete information for all mandatory fields identified in this article.

During any Resulting Contract Period, the Supplier must update any SQ/SO fields affected by the addition of new requirements that have been approved through a Contract amendment.

#### **14.12 SERVICE ORDER ACKNOWLEDGEMENT**

Within thirty (30) minutes following the Supplier's receipt of a SQ/SO, the SOD must acknowledge the receipt of the SQ/SO by issuing a Service Order Acknowledgment (SOA) in a format acceptable to SSC.

The SOA must use the same official language for the SOA as used in the RFQ and SO, unless requested otherwise in the RFQ and SO.

The SOA must contain, at a minimum, the SQ/SO number, the SQ/SO revision number (if provided) and the date and time the SOA was sent.

The Supplier must issue the SOA to the RFQ and SO's originator and, unless specified otherwise, the medium of the response must be in the same manner that the RFQ and SO was originally placed (i.e. facsimile, electronic mail, etc).

#### **14.13 SERVICE ORDER CONFIRMATION**

Within one (1) working day from receipt of a valid RFQ and SO, the SOD must issue a Service Order Confirmation (SOC), to the SO's originator in a format acceptable to SSC.

The SOC must identify the SOD's single point of contact (complete with the name of the Supplier contact, telephone number, and email address) that will be accountable for the completion of the RFQ and SO.

The SOC must include a Committed Service Delivery Date (CSDD) which must meet the completion times indicated in any Resulting Contracts.

The SOC must also contain, at a minimum:

- a) Type of activity such as, Move, Add, Change, Support Services;
- b) A unique SQ/SO order number assigned by the Supplier;
- c) The site identification number assigned by the Supplier;
- d) The unique SQ/SO number assigned by SSC;





- e) SSC SQ/SO revision number (if available);
- f) The name of the RFQ and SO originator and contact information;
- g) The CSDD (in the case of an SO); and
- h) The date and time the SOC was sent.

The Supplier must identify, in the SOC, any changes or revision to the original RFQ and SO.

The Supplier must use the same official language for the SOC as the language used in the RFQ and SO, unless requested otherwise in the RFQ and SO.

Under certain circumstances, the SO's originator may request an RSDD with a delivery interval that is longer, or shorter, than the maximum completion times.

When the RSDD represents an interval that is shorter than the maximum completion times the Supplier must clearly indicate if the RSDD can be met and, if not, indicate the earliest possible CSDD.

When the RSDD requested is later than the completion times, the RSDD becomes the CSDD.

#### **14.14 SERVICE ORDER REJECTION NOTICE**

Within one (1) working day from receipt of an RFQ and SO, the SOD must issue a Service Order Rejection Notice (SORN) to the RFQ and SO's originator when the RFQ and SO details do not meet the terms specified in any Resulting Contracts. The SORN must be provided in the same language used in the RFQ and SO.

The SORN must contain, at a minimum:

- a) The reason for rejecting the RFQ and SO;
- b) An electronic copy of the original RFQ and SO;
- c) The SOD originator's name and contact details;
- d) SSC SQ/SO number and revision number (if available); and
- e) The date and time the SORN was sent.

#### **14.15 SERVICE ORDER COMPLETION NOTICE**

Within one (1) working day from completion of the SO, the SOD must provide a Service Order Completion Notice (SOCN) to the SO's originator.

The SOCN must contain, at a minimum:

- a) Type of activity, such as; Move, Add, Change, Support Services;
- b) The unique order number assigned by the Supplier;
- c) The unique SO number assigned by SSC;
- d) SSC SO revision number (if available);
- e) The date the SO was completed;



- f) A copy of the on-site contact signature that accepted the completion of the SO;
- g) The test results from the Supplier's testing;
- h) The name of the SO's originator and contact information; and
- i) The date and time the SOCN was sent.

The Supplier must use the same official language for the SOCN as the language used in the SO, unless requested otherwise in the SO.

#### **14.16 EMERGENCY SERVICE ORDER**

The SOD must accept and process Emergency Service Orders (ESO), verbally submitted by the Technical Authority to the SOD, to manage an urgent situation.

The SOD must categorize the event as an ESO, register the ESO details in its service order management systems, accept and immediately process the ESO.

The Supplier must make every effort to complete the ESO in the shortest possible timeframe, not to exceed the maximum completion times indicated in any Resulting Contracts.

An SOCN must be issued no later than one (1) working day following completion of the ESO and accompanied by a copy of the ESO details, structured in an SO format.

The ESO(s) do not require an SOA, an SOC or an SORN.

### **15 BILLING AND INVOICING**

#### **15.1 GENERAL**

Within twenty (20) working days from any Resulting Contract award, the Supplier must request in writing, from the Technical Authority, the start and end dates to be used for monthly billing periods.

The Supplier must only invoice for service(s), as defined in any Resulting Contracts, which have been performed at the prices identified in the Resulting Contracts and accepted by the Technical Authority or Procurement Authority (as applicable).

The Supplier must issue a monthly summary invoice for each site identification number.

#### **15.2 MONTHLY SUMMARY INVOICE**

Within ten (10) working days from the last calendar day of the monthly billing period, the monthly summary invoice must be issued to SSC and:

- a) Delivered in a zipped, printable and non-modifiable .pdf monthly summary invoice file, for each site identification number;
- b) Sent to the Procurement Authority's e-mail address; and
- c) Sent to SSC's Procurement Operations Directorate at:



rcngcsareportage.ncrcmasreporting@tpsgc-pwgsc.gc.ca

Original paper invoices must also be delivered to:

Shared Services Canada  
Accounts Administrator  
Place Du Portage, Phase III  
11 Laurier Street, 5A1  
Gatineau, Quebec  
K1A 0S5

The monthly summary invoice must contain, at a minimum, the fields contained in the sample template detailed in Annex B - section 15.4 Monthly Summary Invoice Template.

The monthly summary invoice must also adhere to all other applicable terms and conditions contained in any Resulting Contracts.

### **15.3 BILLING VALIDATION AND RECONCILIATION PROCESSES**

The Supplier must assist SSC with the validation of the monthly summary invoices and the monthly reconciliation of any SO details, billing exceptions, errors or credits generated by the Supplier's billing system.

If a billing element is rejected, SSC intends to provide the reason for the rejection within ten (10) working days of receiving the monthly summary invoice.

SSC will remove any rejected charges, recalculate and adjust the charges (adjustment) on the monthly summary invoice, record the corrected amount, and pay this corrected amount to the Supplier.

On each monthly summary invoice, the Supplier must include the billing adjustment (nil - if applicable) reflecting the difference between the billed amount and the paid amount (with unsubstantiated amount removed) from the previous month's invoice.

The Supplier must provide invoice details within ten (10) working days of the end of the billing period on a monthly basis, in electronic format (i.e. comma or tab delimited file format) and in a format acceptable to SSC.



### 15.4 MONTHLY SUMMARY INVOICE TEMPLATE

<b>[Supplier Name and/or Logo; and address]</b>	
Supplier Invoice #:	_____
Procurement Business Number (PBN):	_____
Service Description:	_____
Contract Number:	_____
Site Identification Number:	_____
Billing Address:	_____
Billing Period:	_____
Invoice Date:	_____ Invoice Due Date: _____

	<b><u>Amount</u></b>
Previous Month's Invoice amount:	_____
Payment received:	_____
Billing/Payment adjustment:	_____
Balance carried forward:	_____
Current month's maintenance charges:	_____
MAC charges:	_____
Support Services charges:	_____
Purchased Licensed Software charges:	_____
Purchased Hardware charges:	_____
Other charges and credits:	_____
Total invoice amount, taxes excluded:	_____
Interest on overdue account charges:	_____
Total GST:	_____
Total HST:	_____
<b><u>Total Amount Due:</u></b>	_____
<b><i>Amount Paid</i></b> (For SSC use only)	_____



## 15.5 CONTRACT EXPENDITURE REPORT

The Supplier must provide, at the emails identified in any Resulting Contracts, a Contract Expenditure Report (CER) to:

- a) The Procurement Authority;
- b) The Technical Authority; and
- c) The SSC Procurement Operations Directorate at:  
rcngcsareportage.ncrcmasreporting@tpsgc-pwgsc.gc.ca.

The CER report must be delivered on a monthly basis, and in a format acceptable to SSC, within ten (10) working days from the last calendar day of the monthly billing period and must include, at a minimum, the following information:

- a) The Contract number;
- b) The monthly billing period (start and end dates);
- c) The year-to-date total;
- d) The % of the total Contract value (taxes included) expended;
- e) For each: the monthly billing period, the calendar year, and since Contract award
  1. The amount invoiced without taxes;
  2. The harmonized sales tax (HST) amount invoiced;
  3. The goods and services tax (GST) amount invoiced; and
  4. The total amount invoiced with HST and GST.
- f) For each monthly billing period, the CER must also include:
  1. Total billing activity for approved SOs; and
  2. Total billed charges for approved SOs.

## 15.6 SERVICE ORDER ACTIVITY REPORT (SOAR)

The Supplier must provide monthly, for each Resulting Contract, in a format acceptable to SSC, a Service Order Activity Report (SOAR) to the Technical Authority within ten (10) working days from the last calendar day of the monthly billing period. The SOAR must include, at a minimum:

- a) The Resulting Contract number;
- b) The reporting period (start and end dates); and
- c) For Request for Quotes (RFQ):
  1. A list of all open RFQs including RFQ numbers and revisions, at the start of the reporting period;
  2. A list of all new RFQ, including their associated numbers and revisions, opened during the reporting period;
  3. A list of all RFQs; including their associated numbers and revisions, closed during the reporting period; and



4. A list of all RFQs, including their associated numbers and revisions, open at the end of the reporting period.
- d) For Site Survey Requests (SSR):
1. A list of all open SSRs including SSR numbers and revisions, at the start of the reporting period;
  2. A list of all new SSRs, including their associated numbers and revisions, opened during the reporting period;
  3. A list of all SSRs; including their associated numbers and revisions, closed during the reporting period; and
  4. A list of all SSRs, including their associated numbers and revisions, open at the end of the reporting period.
- e) For Service Quotes (SQs):
1. A list of all open SQs including SQ numbers and revisions, at the start of the reporting period;
  2. A list of all new SQs, including their associated numbers and revisions, opened during the reporting period;
  3. A list of all SQs; including their associated numbers and revisions, closed during the reporting period; and
  4. A list of all SQs, including their associated numbers and revisions, open at the end of the reporting period.
- f) For each SOs issued within the reporting period;
1. Service order number(s);
  2. Date(s) issued;
  3. Description of services requested;
  4. Site address(es) and site identification number(s);
  5. Service Order Completion Notice (SOCN) date(s) (when available);
  6. Number of billable days in the billing period (when applicable);
  7. Total dollar value for each MAC activity – Non-Recurring Charges (NRC)(if applicable);
  8. Total dollar value for each MAC activity – Monthly Recurring Charges (MRC) (if applicable);
  9. Total dollar amount of each SO – NRC (excluding GST/HST);
  10. Total dollar value of each SO – MRC (excluding GST/HST);
  11. Applicable GST/ HST of each SO - NRC;
  12. Applicable GST/HST of each SO – MRC;
  13. Total dollar amount of each SO (including GST/HST); and
  14. SO status, (defined in terms and in a format acceptable to SSC).
- g) For each and all verification / de-verification applications;
1. Name of requestor;
  2. Telephone number of the requestor;
  3. Name of the functional delegate;



4. Functional delegate's email address;
5. Functional delegate's postal address (full mailing address);
6. Functional delegate's telephone number;
7. Functional back-up delegate's name;
8. Functional back-up delegate's email address;
9. Functional back-up delegate's postal address (full mailing address); and
10. Functional back-up delegate's telephone number.

## **16 SECURE FILE TRANSFER PROTOCOL (FTP) OR WEB SITE**

While not a mandatory requirement of any Resulting Contract, the Supplier is encouraged to establish document and communications management tools (a secure File Transfer Protocol (FTP) or a secure web site) to assist with the day-to-day management obligations of any Resulting Contract and the inter-actions with SSC.

In the event the Supplier offers a secure site to SSC, the site must meet the requirements stated in section 16 of Annex B and the cost of operating such a tool must be included in the prices quoted in any Resulting Contract and not charged separately.

### **16.1 SECURE FILE TRANSFER PROTOCOL SITE REQUIREMENTS**

File Transfer Protocol (FTP) is used to transfer files between computers within or outside a private network. The Supplier can provide a secure FTP site which will allow, among other functions, authorized SSC personnel to download, at a minimum, the information defined in the Resulting Contracts.

If a secure FTP site is provided, the Supplier must obtain the approval of the Technical Authority before using it to manage documentation and information related to the Resulting Contracts. Prior to its use, the secure FTP site must meet the following security requirements:

- a) Only the required IP ports are open;
- b) Audit trails;
- c) Secure Shell-2 (SSH-2 standard);
- d) Enables AES-128-bit encryption for access and exchange of information;
- e) All accesses to the secure FTP site must be logged and require either:
  1. Authentication by user identification and password; or
  2. Authentication by SSH Keys or X.509 certificates.
- f) User identification is issued for a specific length of time and reconfirmed annually;
- g) The Supplier must not use protocols that send clear text usernames or passwords;
- h) The passwords must:
  1. Be user selectable and requires a minimum of eight (8) digits in length; composed of a mix of alpha and numeric characters and include a minimum of one upper and one lower case letter;
  2. Be known only by the authorized user of the FTP site account(s);
  3. Not be embedded in any automated logon procedures (sign-on script);



4. Never displayed on a personal computer (PC) monitor;
  5. Never printed or included on a computer file or print output;
  6. Be changed at least once every ninety (90) calendar days; and
  7. Be protected by one-way 128-bit encryption.
- i) The password history file must be set to remember, at a minimum, the last ten (10) passwords used, in order to prevent users from re-using them; and
  - j) Three (3) consecutive failed attempts to enter the correct password must result in the account being locked. SSC users will need to contact the SSD and authenticate themselves in order to have the password reset. Upon re-entering the new password to access the secure FTP site, these users must be prompted to change their password.

## 16.2 SECURE WEB SITE REQUIREMENTS

If a secure web site is offered by the Supplier, the Supplier must meet the requirements identified in this section.

The Supplier must obtain the approval of the Technical Authority before using a secure web site to manage documentation and information related to any Resulting Contracts.

Prior to its use, the secure web site must meet the following security requirements:

- a) Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS);
- b) 128-bit Secure Sockets Layer (SSL) encryption before and during any access and exchange of information;
- c) All accesses logged;
- d) Only the required IP ports are open;
- e) Audit trails;
- f) Anti-virus and intrusion protection;
- g) Authentication by user identification and password;
- h) User identification issued for a specific length of time and reconfirmed annually;
- i) The Supplier must not use protocols that send clear text usernames or passwords;
- j) The passwords must:
  1. Be user selectable and require a minimum of eight (8) digits in length; composed of a mix of alpha and numeric characters and include a minimum of one upper and one lower case letter;
  2. Be known only by the authorized user of the secure web site account(s);
  3. Not be embedded in an automated logon procedure (sign-on script);
  4. Never displayed on a personal computer (PC) monitor;
  5. Never printed or included on computer file or print output;
  6. Be changed at least once every ninety (90) calendar days; and
  7. Be protected by one-way 128-bit encryption.
- k) The password history file must be set to remember, at a minimum, the last ten (10) passwords used, in order to prevent users from re-using them; and





- l) Three (3) consecutive failed attempts to enter the correct password must result in the account(s) being locked. SSC users will need to contact the SSD and authenticate themselves in order to have the password reset. Upon re-entering the new password to access the secure web site, these users must be prompted to change their password.

The secure web site must operate 7 days per week, 24 hours per day, 365 days per year (7x24x365), excluding scheduled maintenance, and be accessible by a web browser that provides all its functionality as users interact in English and in French (if requested by the Technical Authority).

The Supplier must identify:

- a) The key functional capabilities that the Supplier will ensure are available through the secure web site; and
- b) The overall plan and schedule that the Supplier will follow to ensure that the secure web site completely fulfills on the functional requirements offered by the Supplier for any Resulting Contracts.

The secure web site may include an initial orientation page, navigation, and help pages, in both English and French (if requested by the Technical Authority) that include:

- a) Identification of the secure web site's current functionality;
- b) Search capability for information resident on the secure web site;
- c) Supplier's organization and contact information; and
- d) Secure web site map.

The Supplier may provide the Technical Authority with the ability to administer SSC's secure web site users' identification and passwords via a secure web-based connection.

The Supplier may ensure that all Resulting Contract-related information accessed via the secure web site remains accessible on-line for the Contract Period.



**APPENDIX A TO ANNEX B - SAMPLE PREVENTATIVE INSPECTION FORM**

PREVENTATIVE INSPECTION FORM				
Site Name:			Date Performed:	
	Frequency	Action Required	Result	Technician Comments <sup>1</sup>
TDM PBX and KTS systems	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	System logs reviewed for errors and warnings	<input type="checkbox"/> OK <sup>2</sup> <input type="checkbox"/> RA <sup>3</sup>	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Perform time validation and correction (if required)	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Measure AC power supply levels and make adjustments	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Confirm TDM PBX, KTS and related equipment remote access functionality	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Clean/replace machine filters	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Clean tape and disk heads	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Conduct digitone receiver tests	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Conduct TTY/Console and CDR tests	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Conduct memory tests	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Verify all peripheral equipment (i.e. printers, tapes, and disk drives) are fully operational	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Create system configuration data backup – 1 copy left on site, 1 copy sent to the Technical Authority and 1 copy archived at the Supplier's maintenance office	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Update circuit card maps and configuration diagrams and submit to Technical Authority	<input type="checkbox"/> OK <input type="checkbox"/> RA	

<sup>1</sup> 'Technician Comments' – provided for the technician to note any observations, test results, or remedial action which may be required

<sup>2</sup> 'OK' – indicates that identified action has been completed and no deficiencies exist

<sup>3</sup> 'RA' – indicates that remedial action is required



PREVENTATIVE INSPECTION FORM				
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Perform security audit of the TDM PBX and KTS systems	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Correct any issues uncovered during the inspections	<input type="checkbox"/> OK <input type="checkbox"/> RA	
UPS and Battery back-up	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Test specific gravity of each battery cells and report the results	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Visually inspect all power connections and fluid levels	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Verify battery voltage levels	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Measure all voltage levels and report the results	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Measure and report the battery charge current	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Measure and report the battery float and high voltage setting(s)	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Verify the battery charging and rectifier systems are functional	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Verify the battery capacity is at a minimum of 85% of the maximum capacity	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Perform a battery load test by turning off the commercial power and ensure the systems continue performing correctly without interruption	<input type="checkbox"/> OK <input type="checkbox"/> RA	
Voice Mail (VM)	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Review VM system logs for errors and warnings	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Analyse and document the VM utilised disk storage capacity as a percentage of total disk storage capacity	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Access each VM port to ensure it is operational	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Create copies of VM system data backup – 1 copy left on site, 1 copy sent to the Technical Authority and 1 copy archived at the Supplier’s maintenance office	<input type="checkbox"/> OK <input type="checkbox"/> RA	



PREVENTATIVE INSPECTION FORM				
ACD MIS	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Review ACD MIS system logs for errors and warnings	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Analyse and document the ACD MIS utilised disk storage capacity as a percentage of total disk storage capacity	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input checked="" type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Create copies of ACD MIS system data backup – 1 copy left on site, 1 copy sent to the Technical Authority and 1 copy archived at the Supplier's maintenance office	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Perform and record results for: loop tests	<input type="checkbox"/> OK <input type="checkbox"/> RA	
Network Services (i.e. PSTN trunks, tie trunks, etc.)	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Perform and record results for: Incoming call frequency test	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Conduct a detailed analysis and report the results, for all TDM PBX trunks routes. Ensure traffic is evenly distributed across all routes.	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Review TRS system logs for errors and warnings	<input type="checkbox"/> OK <input type="checkbox"/> RA	
Telephone Recording System (TRS)	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Analyse and document the TRS utilised disk storage capacity as a percentage of total disk storage capacity	<input type="checkbox"/> OK <input type="checkbox"/> RA	
	<input type="checkbox"/> Monthly <input checked="" type="checkbox"/> Semi-annual	Create copies of TRS system data backup – 1 copy left on site, 1 copy sent to the Technical Authority and 1 copy archived at the Supplier's maintenance office	<input type="checkbox"/> OK <input type="checkbox"/> RA	
Technician Signature				



**APPENDIX B TO ANNEX B – GLOSSARY OF TERMS**

In this Supply Arrangement and any Resulting Contracts, the following terms have the meanings as defined below. Any term not defined below will have the meaning ascribed to it as set out in Newton’s Telecom Dictionary.

#	Term	Definition
1	ACD	Automatic Call Distribution
2	ACD MIS	Automatic Call Distribution Management Information System
3	ANSI	American National Standards Institute
4	CDR	Call Detail Recording
5	CER	Contract Expenditure Report
6	Contractor / Supplier	Please refer to Standard Acquisitions Clauses and Conditions (SACC) for specific definitions and application of these terms
7	CSDD	Committed Service Delivery Date
8	EIA	Electronic Industries Alliance
9	EoL	End of Life
10	ESO	Emergency Service Order
11	Hard MAC	MAC order requiring the installation or movement of hardware on-site
12	in a format acceptable to SSC	This statement means that the Supplier has the flexibility to establish its preferred communications format (reports, file type, etc.) to meet the contractual, technical, financial and/or operational requirements. The Technical Authority will assess the format and, when acceptable, will provide formal acceptance. Further changes to the accepted format must follow change management procedures throughout the life of the Resulting Contract
13	Invoice Due Date	The date the invoice is due to be paid
14	IVR	Integrated Voice Response
15	KTS	Key Telephone System(s)
16	MAC	Move, Add, and Change
17	Media	A device on which software is stored. Media is only the storage device and does not include the stored software
18	OEM	Original Equipment Manufacturer
19	Off-the Shelf	A term defining a non-developmental item (NDI) of supply that is both commercial and sold in substantial quantities in the commercial marketplace



#	Term	Definition
20	Outside Working Hours	Any hours other than the hours of 7:00 am to 5:00 p.m., Monday to Friday local site time
21	OPX	Off Premise Extension
22	PBX	Private Branch Exchange(s)
23	PSTN	Public Switched Telephone Network
24	PSTN Interface	An interface circuit which connects a telephone system to the PSTN for the purpose of making calls to other PSTN locations
25	RSDD	Requested Service Delivery Date
26	Site	Geographic location of SSC TDM PBX or KTS telephone systems and related equipment
27	Site Identification Number	Number assigned by the Supplier to identify SSC TDM PBX, KTS telephone system and related equipment
28	SOA	Service Order Acknowledgment
29	SOC	Service Order Confirmation
30	SOCN	Service Order Completion Notice
31	SOD	Supplier's Order Desk
32	Soft MAC	MAC order completed by using software only
33	SO	Service Order
34	SORN	Service Order Rejection Notice
35	SOW	Statement of Work
36	SSC	Shared Services Canada
37	SSD	Supplier's Service Desk
38	TDM	Time Division Multiplexor
39	UPS	Uninterruptible Power Supply
40	Working Hours	The hours of 7:00 a.m. to 5:00 p.m. local time, Monday to Friday local site time.