

**2017-2018 Government of Canada  
Print to Mail (PTM) Project**

**Request for Proposal**

**MAGNETIC INK CHARACTER RECOGNITION (MICR)  
PRODUCTION PRINTERS**

**SUBSTANTIATION OF TECHNICAL COMPLIANCE  
FORM**

**Mandatory Criteria - Technical Requirements**

**Instructions for Mandatory Requirements:** Bids will be evaluated in accordance with article 4.3.1 Mandatory Technical Criteria of the RFP. For all requirements, Bidders must place an "X" in the Compliant — Yes or No column that corresponds with their answer. If an "X" is placed in the "No" column the bid will be deemed non-compliant and given no further consideration.

If available, Bidders should provide documentation to substantiate their response. Bidders must indicate the precise location of the substantiation in the "Reference" column. In the event that there is no substantiating documentation the Bidder must describe how the requirement is met.

## 2. MICR Printers Hardware- General Requirements [M]

The following requirements and configuration shall apply to all printers purchased under the contract. [M]

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response						
		YES	NO							
1.	<p>The printer solution provided to Canada must include sufficient printers to meet the minimum daily total throughput capacity level for cut-sheet volumes per site listed below.</p> <table><tr><th>SITE</th><th>MINIMUM CUT SHEET OUTPUT IMPRESSIONS PER DAY AT PEAK</th></tr><tr><td>Winnipeg</td><td>1,200,000</td></tr><tr><td>Summerside</td><td>1,200,000</td></tr></table>	SITE	MINIMUM CUT SHEET OUTPUT IMPRESSIONS PER DAY AT PEAK	Winnipeg	1,200,000	Summerside	1,200,000			
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Winnipeg	1,200,000									
Summerside	1,200,000									
2.	<p>The bidder must provide the calculations and supporting description of how the number of printers required to meet CRA capacity requirements was determined.</p>									
3.	<p>The printer solution must provide identical printers for the two CRA PTM sites.</p>									
4.	<p>The Bidder must provide consistency with respect to operations, micro-code, software and hardware support, maintenance, trouble-shooting and print output across PTM Production Sites.</p> <p>a) The same model must be proposed for all printers at both sites.</p> <p>b) The same number of printers must be bid for both sites.</p>									
5.	<p>The printers must, as of the solicitation closing date, be:</p> <p>a) New and of current manufacture, SSC will not accept “like new” or “certified new” refurbished printers;</p> <p>b) Certified by the manufacturer to be at the most current engineering level;</p> <p>c) Of General Availability status.</p>									

### 3. INFRASTRUCTURE AND TECHNOLOGY MANDATORY REQUIREMENTS

#### 3.1 Infrastructure (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers must interface and function within a multiple z/OS mainframe computing complex, tightly interconnected in a parallel system complex (SYSPLEX) configuration.			
2.	The printers must support connectivity to local production Gigabit Ethernet LAN switch.			
3.	The printers must interface and function in a Transmission Control Protocol/Internet Protocol (TCP/IP) Network environment.			
4.	The printers must be defined to a local print server. Canada's current print server software is Canon OCE PRISMA Production server V5. The printers must support being driven by the print server, utilising the Intelligent Printers Data Stream (IPDS) print protocol, via the Transmission Control Protocol/Internet Protocol (TCP/IP) network protocol, across Gigabit Ethernet LAN.			
5.	<p>The printers must support the IPDS protocol as described in the IBM Data Stream and Object Architectures manual "Intelligent Printers Data Stream Reference" - Seventh Edition (November 2002), IBM Publication S544-3417-06.</p> <p>The Contractor must provide continuing support for the printers for future developments and enhancements to the IPDS protocol.</p>			
6.	The printers must support TCP/IP connectivity to a z Series mainframe, and support being defined to, and driven directly by, IBM's Print Services Facility for z/OS version 4.5 across this TCP/IP connection.			
7.	The printers must support subsequent versions and releases of the stated logical configuration components.			

## 3.2 Technology (M)

### 3.2.1 Print Output (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers must print in both simplex and duplex print formats.			
2.	The printers must support 8.5" x 11" and 8.5" x 14" paper sizes.			
3.	The printers must print in landscape and portrait orientations.			
4.	The printers must support printing of multiple logical pages per physical page.			
5.	The printers must support printing of fonts, graphics, and images on the same logical page.			
6.	The printers must support stock paper from 20 to 50 lbs, including: a) Pre-printed stock b) Pre-dyed stock c) Pre-drilled stock d) Pre-perforated stock			
7.	The printers must provide a method of visual separation of output by print job.			
8.	The printers must provide a method of visual separation of different copies of a given output.			

### 3.2.2 Paper Handling (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers must support selective use of different paper stocks within a document, producing printed, insertion-ready output of variable intermix of colored pages and able to support a minimum of three different paper stocks per document.			
2.	The printers must provide a minimum of four input trays, with two input trays each having a minimum of 1500 sheets of cut sheet 20 lb. stock, and two input trays with a minimum capacity of 500 sheets.			
3.	<p>a) The printers must have a minimum of two high capacity output stackers each capable of holding a minimum of 3,000 sheets of 20 lb cut sheet paper.</p> <p>b) The printers must permit the removal of printed output without interruption of printing.</p>			

### 3.2.3 Paper handling – Output Sampling (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers must support random sampling of pages.			
2.	The printers must provide a configurable sampling tray.			
3.	The printers sample feature must be operator configurable.			

### 3.2.4 Printing Requirements (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	<p>The printers must support the following IPDS command sets (Data Tower specified in brackets if applicable):</p> <ul style="list-style-type: none"> <li>a) DC1 - Device Control</li> <li>b) TX1 - Text (*PTOCA - minimum required Data Tower Level = PT2)</li> <li>c) IM1 - IM image (IPDS)</li> <li>d) IO1 - IO image (*IOCA)</li> <li>e) GR1 - Graphics (GOCA)</li> <li>f) BC1 - Bar Code (BCOCA)</li> <li>g) PS1 - Page Segment</li> <li>h) OL1 – Overlay</li> <li>i) LF1, LF2 and LF3 - Loaded Font</li> <li>j) UTF16 support for PSF OpenType/TrueType fonts</li> </ul>			
2.	<p>The printers must print all current client Advanced Function Presentation Data Stream (AFPDS) production output, producing identical results with no changes to application code or invocation Job Control Language (JCL).</p>			
3.	<p>The printers must decompress and print generated 300 dpi AFP Page Segments that have been compressed using International Telecommunications Union - Telecommunications Standardization Sector (ITU-TSS) (formerly CCITT) Group 4 facsimile compression algorithms.</p> <p>The printers must perform this function without impact to the print device's rated speed, by emulating technology similar to IBM's Advanced Function Image and Graphics (AFIG) feature, and IBM's Decompression Performance Enhancement (DPE) feature.</p>			

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
4.	The printers must utilize CRA's existing 300 x 300 dpi AFP print resources such as fonts and graphics without transformation to alternate resolutions that would result in a loss of content and print quality.			
5.	The printers must print the IBM AFP Font Collection product: a) At 300 dpi resolution using AFP raster fonts b) At 300 dpi resolution using scalable AFP outline fonts c) Open Type /TrueType Unicode fonts for z/OS PSF AFPDS			
6.	The printers must support the production of graphic images and documents at a resolution of 600 x 600 dpi.			
7.	The printers must print OGL standard and screen shades.			
8.	The printers must be compatible with AFPDS print streams either natively through PSF or through fully compatible transformation.			
9.	The printers must print black MICR output conforming to CPA standard 006 for production of MICR encoded documents.			
10.	The printers must print black MICR output that are all points addressable with respect to positioning and orientation on the logical page, including but not limited to multiple MICR lines on a single impression, while conforming to CPA standard 006.			
11.	The printers must include the MICR font E13B, accessible using 300 dpi AFP data stream.			



Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
12.	a) The printers must include MICR verification equipment which allows the quality of the printed MICR output to be verified in accordance with CPA standards.  b) The Contractor must provide 2 units per site.			
13.	The printers must print Optical Character Recognition (OCR) characters, specifically OCR "Font A" and OCR "Font B", conforming to CPA standard 017 for OCR.			
14.	The printers must print optical marks and Universal Bar Codes such as 2D data glyphs and machine readable QR codes, in designated areas of each form that may be read by mail insertion and postal sortation equipment.			
15.	The printers must provide a reference list of bar codes currently available for use on the printers.			

### 3.2.5 Additional Print Stream Support (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers must support printing of documents in PDF format.			

### 3.2.6 Operational Requirements (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers must be 100% compatible across print sites, enabling output to be routed to any site for output processing.			
2.	The printers must provide operator console messaging.			
3.	The printers must include a visual alert system such as an indicator light, to signal when operator intervention is required.			
4.	a) The printers must produce consistently high quality output, monitored by automated printers based facilities. b) The threshold where alert(s) are generated must be installation specified.			
5.	The printers must have the ability, under automated control to suspend printer operation, depending on the severity of quality of output legibility events.			
6.	The printers must provide the capability for the operator to resume printing of a print job, at or before the point where an error occurred, such as a paper jam.			

### 3.3 Capacity Requirements (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers must have a published monthly duty cycle equal to or greater than a minimum of three (3) million impressions per month.			

### 3.4 Security (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers must provide controlled access to print resources such as electronic forms, overlays, fonts, and signatures.			
2.	The printers must automatically delete electronic forms, data and signatures from the print device's memory at successful completion of each print job.			
3.	The printers must disable any remote diagnostic capability.			

### 3.5 Physical Space Available (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers must meet the stated production requirements (refer to Section 2.1 of the SOR) within the space available in each of the print rooms, as per the dimensions stated in Appendix A and B of the SOR, with allowances for some paper storage in each sites print room, estimated at 40 sq. meters.			
2.	<p>Within one week of Contract Award the Contractor must meet with representatives of Canada in person or via teleconference, to present and review their proposed installation plans.</p> <p>The attendees will develop an implementation strategy taking into consideration such factors as CRA and Canada operational requirements, delivery and removal schedules, while ensuring that all equipment will be installed and accepted by Canada by no later than March 31, 2018.</p>			

### 3.6 Health and Safety Requirements (M)

Ref #	Requirement Description	Compliant		Bidder Document Reference (location/page) or response
		YES	NO	
1.	The printers and respective consumables must not contain any parts, devices or ingredients that, when operated or applied in accordance with OEM instructions, would cause injury or harm.			
2.	<p>Any hazardous waste issues with respect to consumables for the printers must be identified either on the packaging or with documentation provided with the consumable item.</p> <p>Consumables packaging must be clearly labeled in English with proper application and use instructions.</p>			