This amendment is raised to:

- 1. Modify the closing date;
- 2. Modify the Statement of Work;
- 3. Modify the Evaluation Criteria; and
- 4. Provide answers to questions asked and revised to date.

1. At page 1 - The solicitation closes on July 10, 2019 at 14H00 EDT

2. At Annex A – Statement of Work SW.4.1 Deliverables

Delete: in its entirety

Insert:

SW.4.1 Deliverables

Phase 1 (from contract award to March 31, 2020)

- i. Provide a base map of very high resolution (VHR) geospatial images, or high resolution (HR) images, as applicable, based on geographic areas of interest identified by STATCAN for a specified period in time (the start of the project).
- ii. On a monthly basis, task collection for VHR geospatial imagery/data for points of interest identified by STATCAN.
- iii. On a quarterly basis (should the geography option be exercised), task collection for HR geospatial imagery/data for specified geographic areas. Based on broad area change detection conducted by Statistics Canada, task tip-and-cue VHR data collection for areas of interest.
- iv. Provide back haul post collection mosaic and image processing (radiometric and flat field correction, ortho and geo-rectification and visual colour applied).
- v. Deliver data to Statistics Canada through File Transfer Protocol (FTP) on a monthly basis.
- vi. On a monthly basis, a client service representative must be available to call-in to a one hour monthly production meeting.

Phase 2 – Option period 1 (April 1st, 2020 – March 31st, 2021)

Phase 3 – Option period 2 (April 1st, 2021 – March 31st, 2022)

Phase 4 – Option period 3 (April 1st, 2022 – March 31st, 2023)

3. At Part 4 – Section 4.1.1.1 Mandatory Technical Criteria

Delete: M2 in its entirety

Delete: M2 in its entirety

Insert:

	The Bidder must demonstrate compliance by providing the following information for each sample*:
М2	 a. High resolution data - resolution of 5 meters per pixel or better and could be either optical (red, green, blue, infrared), SAR, lidar, or other providing it is fit for change detection based on land use. b. Very high resolution meaning data with a resolution of 0.5 meters per pixel or better and include the red, green, blue, and infrared bands. The sample data provided must be "cloud free" and be fit for use. *The Bidder must provide sample data via FTP. You must provide the following with your bid:
	FTP server:
	FTP username: FTP password:
	FTP URL:

4. Find below all questions and answers so far provided

Regarding to Page 8 Mandatory requirements: M1 Bidder needs 3 projects over the last 7 years - 3 questions: Can you let me know The projects you mentioned are experience of providing satellite data only or projects which involved in information extraction in change detection of land use?

Projects listed as part of a bid should include the provision of satellite data according to clients' directives, and include hosting of data through a client access portal. This service should also include providing support via an API for cloud computing.

Do you accept similar land use change detection projects as eligible experience? (Since we need client's authorization to disclose info, the more open of your requirement, the more easier for bidders.)

We do not require land use change detection as part of this request for proposal.

Our company was incorporated two year ago to support Canada and US market, will our head office's experience count?

Experience should be based on the provision of relevant services to the request for proposal.

Regarding to Page 8 M2: Hosting: We have cloud base platform for client's direct access. Only in contract period or for a long time for agency access. Once you download the data, Can you specify that how long do you want to hosting the data online?

This requirement is no longer applicable.

We did not see price requirement on hosting cost?

This requirement is no longer applicable.

Regarding to Page 8 M3: Sample Data: Our policy is provide 9 square KM for demo data? Can you let me know if it meet your minimum requirement?

Canada will not penalize bidders providing demo data in square KM

Can you let me know the demo data is in L1, L2 or L4 or combined?

The demo data can be of any geography as long as it is taken by the sensor you are proposing as part of your bid. Separate images should be provided for each sensor/price point you would like us to consider.

Do you need information extraction service for current stage?

Information extraction, change detection is not required as part of this request for proposal.

Please let me know if we can make production oversea?

Data can be produced in country of origin, but transfer via FTP should be made from a local server

Regarding SW.4.1 Deliverables Phase 1 iv: "Provide back haul post collection mosaic and image processing (radiometric and flat field correction, ortho and geo-rectification and visual colour applied)." Would this be a requirement for all datasets for delivery of imagery or just select data sets such as the initial base map?

This would be a requirement for all datasets.

Under section 1.2 and others, a 9 month contract period is listed. Section 6.4.1 lists the start of the contract to be the date of the contract award to March 31, 2020. This assumes a date of July 1 for the contract start. Can you provide some guidance on how soon after June 3rd a submission would be selected?

We anticipate an award of the contract in early August. Collection will begin in the same month.

There are several factors to consider in order to price a web service offering. Under the deliverables section SW 4.1, v) "Provide image/data hosting services with user interface/download functionality, as well as offer an application programming interface (API)." Can you elaborate in more detail as to what is expected?

Section 4.1 v) has been modified. See above.

Under the deliverables section SQ 4.1, iv) Provide back haul post collection mosaic and image processing (radiometric and flat field correction, ortho and geo-rectification and visual colour applied)." Also in section SW 4.0, v) "Data must timestamped."

Under a cloud-free requirement, a deliverable may require multiples passes of the satellite to cover the area of interest with acceptable data. When mosaicking these datasets together there would be several images from different acquisition dates. Can you elaborate on what timestamp is required?

Ideally, the timestamp (dd/mm/yyyy) would be unique to the areas of the mosaic for which it applies. If it is not possible to timestamp at that level of granularity, then the mosaic should be stamped with the day ranges for the month and year for which the mosaic applies (dd-dd/mm/yyyy).

When mosaicking datasets together, the cloudy data is generally discarded and not delivered along with the final deliverable. Is this the case or does Stats Canada want all data collected with proper metadata (including timestamp) but color balanced and properly referenced together?

We would be interested in the cloudy data as well.

The evaluation is based on a 70% technical/ 30% financial submission. Therefore the price submitted needs to be a fixed cost, and not a range, and some unknowns would need to be sorted out to come to a correct cost.

The cost submitted in the bid should be fixed based on the price per square kilometer and the minimum number of kilometers purchased per area of interest.

Under the data requirements section SW 4.0, iii) "Data for specific areas of interest must be "cloud free" and be fit for use." What is the accurate definition of cloud free in this case?

Cloud free would mean that cloud cover obstructs less than 10% of the total area of the imagery provided.

Does this represent that all data must have 0% cloud cover within all delivered imagery or is there leniency? A 0% cloud cover data requirement significantly increases the amount of tasking and production required to cloud-path data with layers of imagery and would increase the overall cost.

Cloud free would mean that cloud cover obstructs less than 10% of the total imagery within our area of interest.

Under the deliverables section SW 4.1, iii) "On a quarterly basis (should the geography option be exercised), task collection for HR geospatial imagery/data for specified geographic areas. Based on broad area change detection conducted by Statistics Canada, task tip-and-cue VHR data collection for areas of interest."

Tip/cue requirement would need to be defined in order to provide a fixed cost. The price will change based on the number of targets, total area of each target and cost to host each dataset in the web service. Could you provide a number of targets and size that is expected per month?

The cost submitted in the bid should be fixed based on the price per square kilometer and the minimum number of kilometers to be purchased, per area of interest/specified geographic area.

If these targets are to be provided during the contract temporal window and are unknown at the time being, how would Stats Canada want this priced (\$/sqkm with a minimum order size)?

The cost submitted in the bid should be fixed based on the price per square kilometer and the minimum number of kilometers to be purchased, per area of interest.

Under Section Part 4, 4.1.1.1, M3) "The Bidder must provide sample data." "The sample data provided must be "cloud free" and be fit for use." Is there a minimum requirement for sample data or would a single image under sections a and b suffice?

There is no minimum requirement for sample data. A single image for each of the proposed sensors for your bid under sections a and b would suffice. The data should allow us to assess the sensor's ability to facilitate change detection.

NOTE: if you would like to propose more than one sensor for section a or b an additional image for that sensor should be provided.

Can you provide additional parameters for the data?

i. Projectionii. Datumiii. Delivery format (Would FTP suffice for just <u>sample</u> data)

Delivery of sample data will be effected through FTP.

What is the volume of data expected to be processed?

Approximately 1,248 sq/km will need to be processed each month (VHR). Should the HR option be exercised, that would add 5,686 sq/km of imagery to be processed each month at that level of resolution.

What operating system does STATCAN currently run from?

We currently use ArcGIS 10.5.1 for our geospatial processing.

Will any training be expected to be provided as part of the contract?

No training will be necessary.

Are the project case studies provided under "mandatory requirements" expected to be the same as the case studies provided under "point rated requirements"

The case studies indicated for each requirement are the responsibility of the bidder. Suppliers will not be penalised for listing the same project(s) more than once for the various requirements.

Has STATCAN performed their own feasibility study over the areas provided to ensure that they are suitable for VHR image extraction?

This project *is* the feasibility study.