

Innovative Solutions Canada Program

Challenge EN578-170003/10: Earth observation images processing and management system

Attachment 1

Question and Answer #1 to #2

This document contains questions and answers related to this challenge.

Question #1:

Are there any further requirements on the system provided by PHAC? Which EO data products are needed? What resolutions, spectral bands, revisit rates? What volume of data is expected? Are there any further details on the pre-processing functionality needed?

Response #1:

The **Desired Outcomes and Consideration section** of this Challenge Notice has been updated to include the following new information:

The EO data and products will enable estimation of variables and indicators related to environmental determinants of health.

Targeted environmental determinants desired are land use and land cover determinants (e.g. forest cover, type and density, forest fragmentation metrics, shrublands, grasslands, croplands, urban and built up areas, semi-urban areas, surface water, wetland types, micro artificial and natural water containers, etc.) and climate and microclimate determinants (e.g. vegetation index, percent vegetation cover, land surface temperature, land surface moisture, soil moisture, accumulated surface degree-days, near surface air temperature, near surface air humidity, precipitation, etc.).

Enhanced access to multi-source open data (e.g. satellite images), along with preprocessing functionality such as image format conversion, re-projection, creation of masks (e.g. cloud and water detection and masking), image correction (radiometric, atmospheric and geometric corrections), spatial integration (co-registration) and down scaling functions.

The EO data and products must cover local (spatial resolution < 30 m), regional (30 < spatial resolution < 250 m), national (250 < spatial resolution < 500 m) and global scales (500 < spatial resolution < 1000 m), with a daily, weekly, monthly (climate and microclimate determinants) and yearly (land use and land cover determinants) time frequencies.

Include EO data and products from 1990 to present days are needed.

Question #2:

After phase 2, what funding is available for the operation of the site?

Response #2:

The Call for Proposals encompasses Phase 1 and 2 only. Implementation and operation of the solution would be defined in a separate procurement. Small businesses that participate in Phase 1 and 2 of the program are not guaranteed a Phase 3 contract.