

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Bid Receiving - PWGSC / Réception des soumissions -
TPSGC
11 Laurier St. / 11, rue Laurier
Place du Portage , Phase III
Core 0A1 / Noyau 0A1
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
Science Procurement Directorate/Direction de
l'acquisition de travaux scientifiques
11C1, Phase III
Place du Portage
11 Laurier St. / 11, rue Laurier
Gatineau, Québec K1A 0S5

Title - Sujet Commercial Satellite Imagery	
Solicitation No. - N° de l'invitation E60SQ-120001/A	Amendment No. - N° modif. 003
Client Reference No. - N° de référence du client E60SQ-120001	Date 2013-05-02
GETS Reference No. - N° de référence de SEAG PW-\$\$\$Q-054-25646	
File No. - N° de dossier 054sq.E60SQ-120001	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2013-05-29	Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Bootsma, Lena C.	Buyer Id - Id de l'acheteur 054sq
Telephone No. - N° de téléphone (819) 956-1751 ()	FAX No. - N° de FAX (819) 997-2229
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

This amendment to the LOI is raised to: post the decks presented by NRCan and DND on Industry Day; communicate a change to the procurement regarding who can be an Offeror; and elicit further input from Industry on three items as detailed below.

- 1) The closing date of the LOI has been extended to May 29 for the purpose of posting subsequent amendment(s) to communicate feedback and outcomes of the consultative process. May 9 is the requested submission date for response to Attachment 4, Additional Items for Industry Feedback, as inserted at item 4 of this amendment.

- 2) See attached for decks presented by NRCan and DND on Industry Day.

- 3) Upon review of feedback from Industry it is evident that Canada's intention to issue Standing Offers to Satellite Operating Agencies (SOAs) only is not beneficial to Canada. Restricting Offerors to SOAs is not coherent with the practices of all SOA-Distributor relationships, thus providing a barrier for access to some satellite-sensors; it may reduce competition; it may reduce quality of service potential; and it decreases options for value-added products.

This notice is to communicate the intention to revise the RFSO to allow for either an SOA or a distributor to provide an offer. With their offer, a distributor will be required to provide certification of authorization from the SOA for their offer, including rights to license Canada's use of imagery and acceptance of the End-User License Agreement with indication of which license classes will be provided.

- 4) Insert the following Attachment to the LOI after Attachment 3:

ATTACHMENT 4 ADDITIONAL ITEMS FOR INDUSTRY FEEDBACK

Canada is seeking further Feedback from Industry on the following items.

Respondents are asked to submit their responses by close of business Tuesday May 9th in electronic format (MS Word or pdf) by e-mail to Lena Bootsma at the following address:
lena.bootsma@tpsgc-pwgsc.gc.ca .

Item 1: Pricing Presentation

Feedback from Industry received so far has indicated the want for simplicity and flexibility in providing pricing for the Financial Offer. Canada is seeking the following feedback to assist in determining a pricing structure for the Financial Offer of the RFSO (see Attachment 2 to Part 4 in draft RFSO) which will result in the Basis of Payment for the eventual NMSO.

- 1.1 For respondents to the previous RFSO issued in 2009, please identify the specifics of what was difficult about the Financial Presentation Sheets; what were the limitations and constraints; and in what ways is it not able to represent your offer?
- 1.2 Provide concrete suggestions on a pricing structure or basis within which all Offerors can submit a Financial Offer, taking into consideration that it must provide the basis for which an Offeror will price any order for imagery by an Identified User of an eventual NMSO, including any surcharges

and discounts and license classes.

Item 2: End User License Agreement (EULA)

In the proposed End User License Agreement (EULA), Appendix B to Statement of Requirement, Annex "A" of the RFSO, B7.0 specifies the terms for the license classes, with designated sharing entities listed in Table A, License Class Designations.

Feedback from Industry received thus far has determined that some conditions of the EULA may not be acceptable and that clarification is required regarding sharing. Canada requires the Offerors to accept the terms and conditions of the EULA with their offer to be compliant, there will be no negotiation after solicitation closing. By submitting an offer, an Offeror agrees to accept the terms and conditions of the RFSO, including the EULA. Canada is seeking further input from Industry towards the development of one common license agreement. A table is provided for the submission of costing response to 2.2 and 2.3. If a class will not be offered, provide "NIL" response for that class in the table:

- 2.1 Identify any articles in the terms and conditions of the EULA which are not acceptable as currently written, explain why, and provide alternate wording;

AND

- 2.2 Indicate your current understanding of how sharing is allowed under the EULA between the Scenarios below. If more than one Scenario would be allowed, what would the percentage cost difference be, if any, from the base Class 0? If neither was your understanding, please specify what your understanding is.

AND

- 2.3 Article B7.0 of the EULA in the draft RFSO included with the LOI currently states that none of the Classes are cumulative of their lower Class unless explicitly indicated in the class itself. Canada is also interested in a cumulative license class structure whereby the higher license class purchased would be delivered also with all classes preceding it. Canada is asking for Industry feedback on the acceptance of this scenario, and to indicate what the percentage cost difference would be versus non cumulative.

Scenario A: The Licensee (any Identified User) is allowed to share the Product with the sharing entities specified in Table A for which a license is purchased, solely for the purposes of a joint project between the Government of Canada and the sharing entity.

Scenario B: The Licensee (any Identified User) is allowed to share the Product with the sharing Entities specified in Table A whose jurisdictions, if applicable, are involved in the image(s) of the Product, regardless of project.

Scenario C: The Licensee (any Identified User) is allowed to share the Product with the sharing Entities specified in Table A whose jurisdictions, if applicable, are involved in the image(s) of the Product, or whose jurisdictions are related to the jurisdictions involved in the images of the Product, regardless of project.

Scenario D: The Licensee (any Identified User) is allowed to share the Product with any and all the sharing entities specified in Table A for which a license is purchased, regardless of project.

For example, if, under the EULA Class 2, the GoC as the Licensee purchases a set of imagery Product covering the Alberta Oilsands region, is the Product sharable:

Scenario A - solely with the Government of Alberta for a joint project ;

Scenario B - with the Government of Alberta regardless of projects; or

Scenario C - with the Governments of Alberta and any other provinces/territories which are related to the oilsands region due to environmental concerns, regardless of projects; AND/OR?

Scenario D - with the governments of all the Canadian Provinces and Territories.

Table 1 – Submission of % Cost Difference for Sharing Scenarios from Class 0

License Class	Based on Non-Cumulative Classes				% Cost Difference For Cumulative Classes
	Scenario A	Scenario B	Scenario C	Scenario D	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Item 3: Provision of Metadata

Feedback from Industry indicates a requirement for clarification on the provision of Metadata. There is concern from Industry that changes in Metadata requirements are difficult to accommodate due to the need for software changes. This notice is to bring attention to paragraph three (3) of Article 5, Metadata Requirements, in Annex A, Statement of Requirement, within the draft RFSO. As per this Article, if the metadata is not provided as an implicit part of the Product, it may be provided in associated files (eg text file) included with Product delivery.

- 3.1 In light of the above, please identify if there are any issues with providing the Metadata Requirements detailed in Article 5 of Annex A, Statement of Requirement, as last amended (see LOI Amendment 002).



Promoting Canadian Public Sector Application of Satellite Remote Sensing through NMSOs



www.nrcan.gc.ca



Natural Resources
Canada

Ressources naturelles
Canada

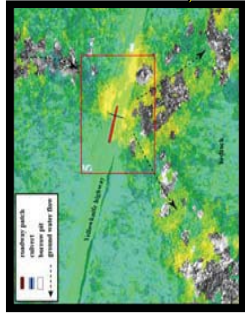
**Doug Bancroft, Director General
Canada Centre for Remote Sensing
April 9, 2013**

Canada

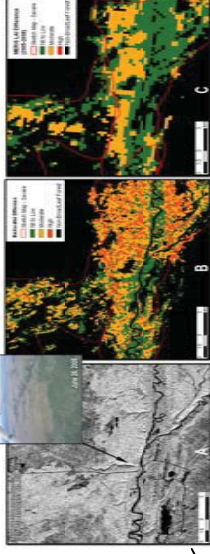
Satellite Earth Observation: Essential to Canada



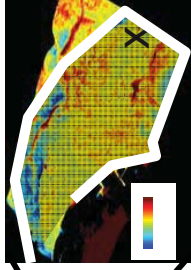
Yellowknife Highway



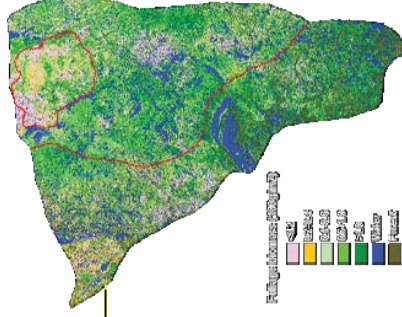
Insect Defoliation



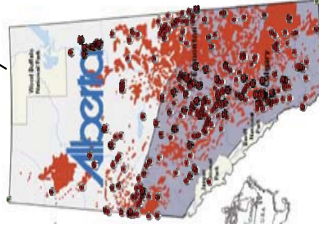
Mackenzie Valley
Pipeline Route



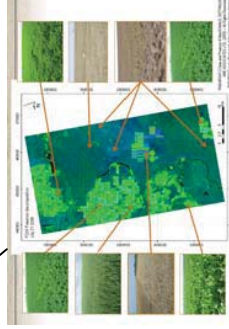
Caribou Habitat



Monitoring
Oil, gas, mine



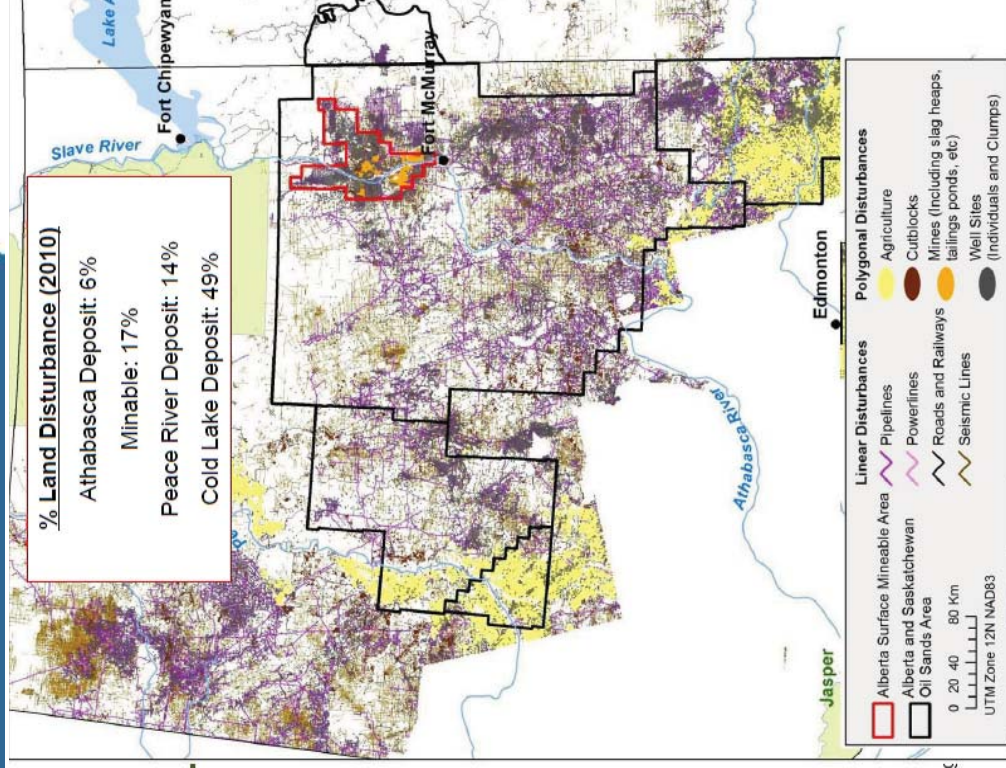
Crop
monitoring



Land Disturbance in Alberta

The existing activity

- Land (vegetation, soils, topography) disturbed by conventional (mines) and *in situ* oil sands development
- Open pit mines & tailings, pipelines, seismic lines, well pads, roads, powerlines, settlements
- Other sectors: forestry, agriculture, conventional oil & gas



Priority: Canada's Oilsands



Economy

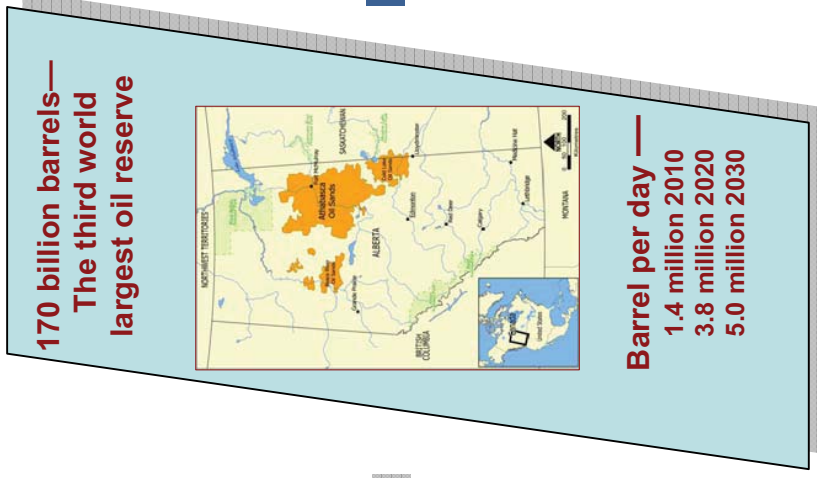
Energy security

\$87 billion GDP
In 2008

135,000 direct jobs
In 2009

\$9 / \$6 billion
provincial / Federal
revenue in 2009

Oilsands



Environment

Landscape
disturbance

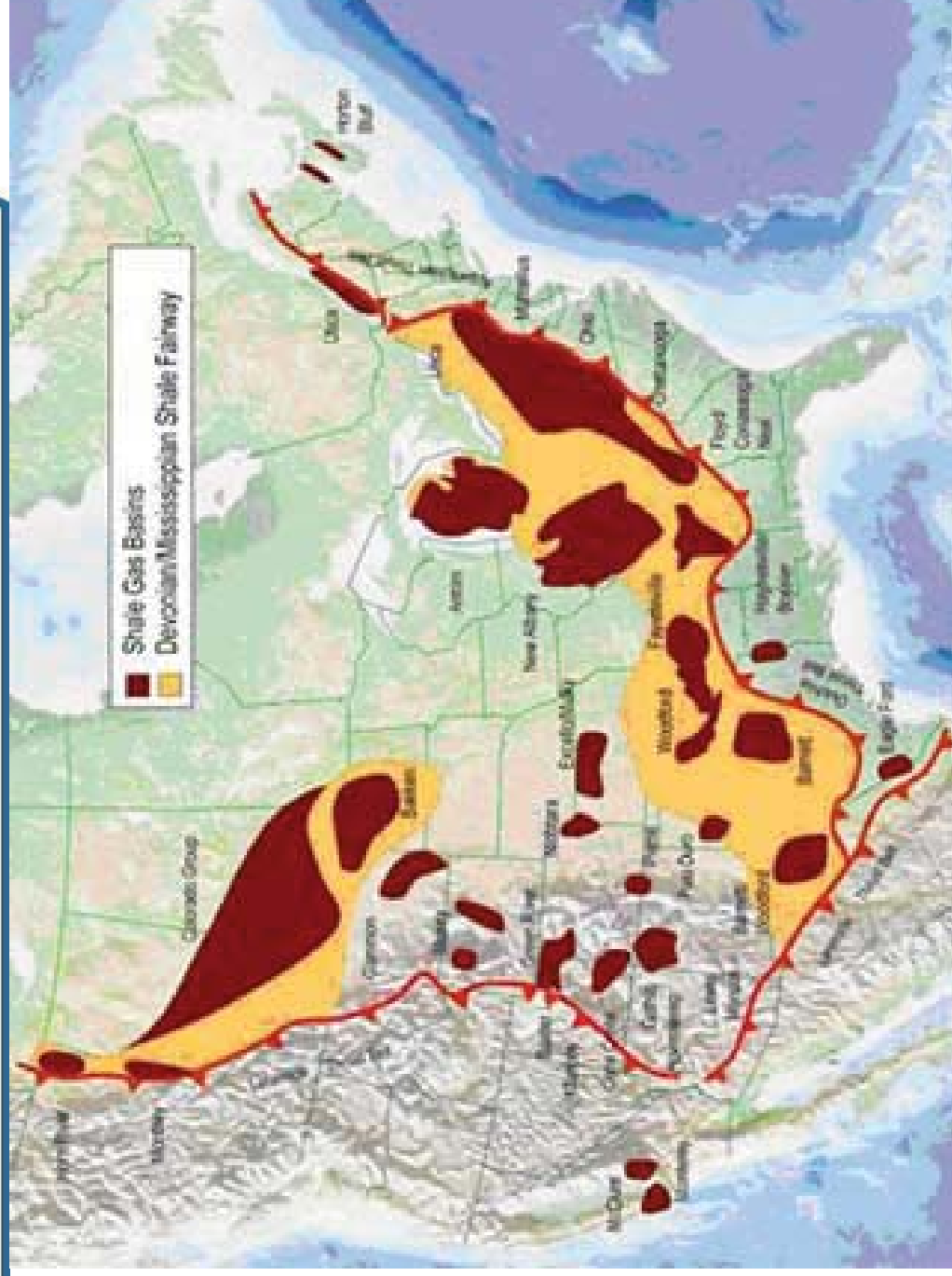
Water quality
& quantity

Air quality
GHG emissions

Ecosystem health

Source: http://oilsands.alberta.ca/FactSheets/The_Facts_Aug2011.pdf/

Rising Priority: Shale Gas Development

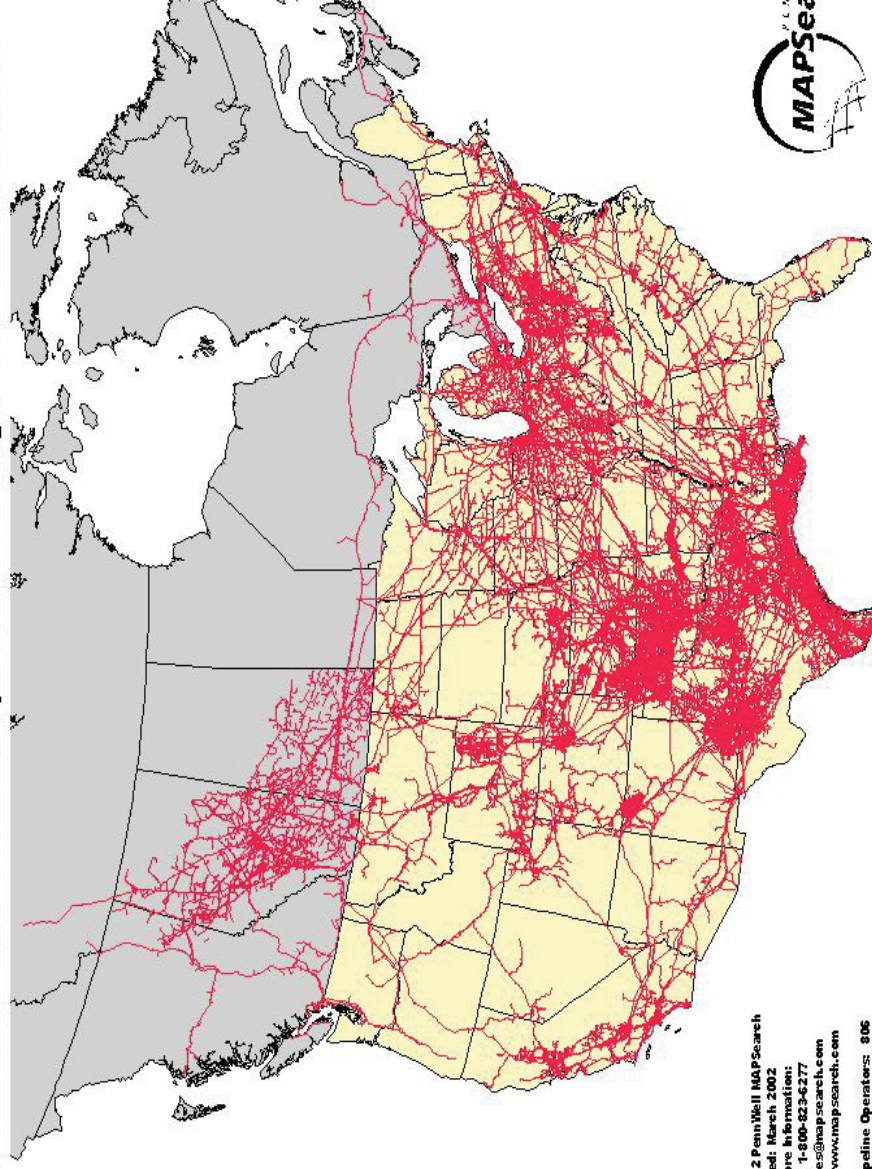


Rising Priority:

Operational Pipeline Monitoring



PennWell MAPSearch Pipeline Coverage - All Commodities



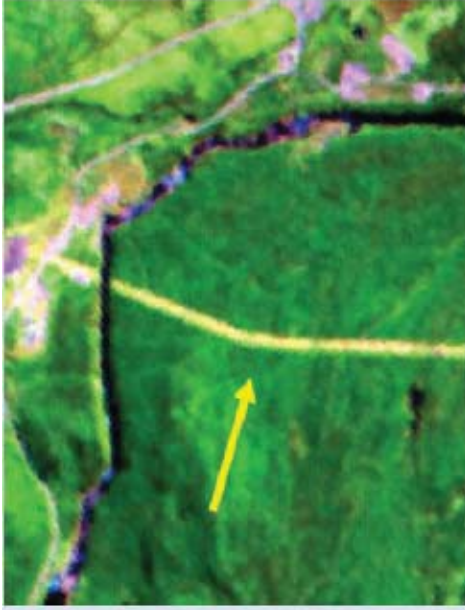



Copyright 2002 PennWell MAPSearch
Revised: March 2002
For More Information:
Phone: 1-800-823-6277
E-Mail: sales@mapsearch.com
Web Site: www.mapsearch.com
Number of Pipeline Operators: 806



Linear infrastructure detection: Requires remote sensing science

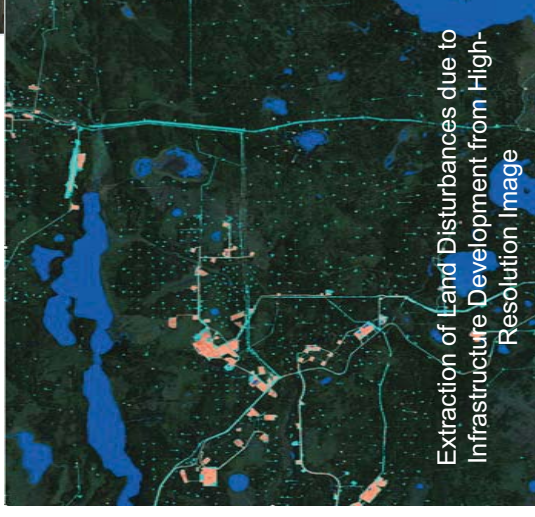


Pipeline	<p>Landsat bands 5,4,3 — scale 1:50 000</p> 	<p>(Government of Alberta, 2010)</p> 
Powerline		

Promoting EO Application: Linear feature detection using high-res imagery



- **Lead scientists:**
Dr. Ying Zhang, CCRS
- **Key collaborators:**
Gov. of Alberta
- **Target outputs:**
 - Methods and tools for operational monitoring of infrastructure development using high resolution imagery
 - Recommendations to integrate the outputs in compliance monitoring operations
- **Target Outcome:**
 - Province adopt high-res imagery for operational monitoring

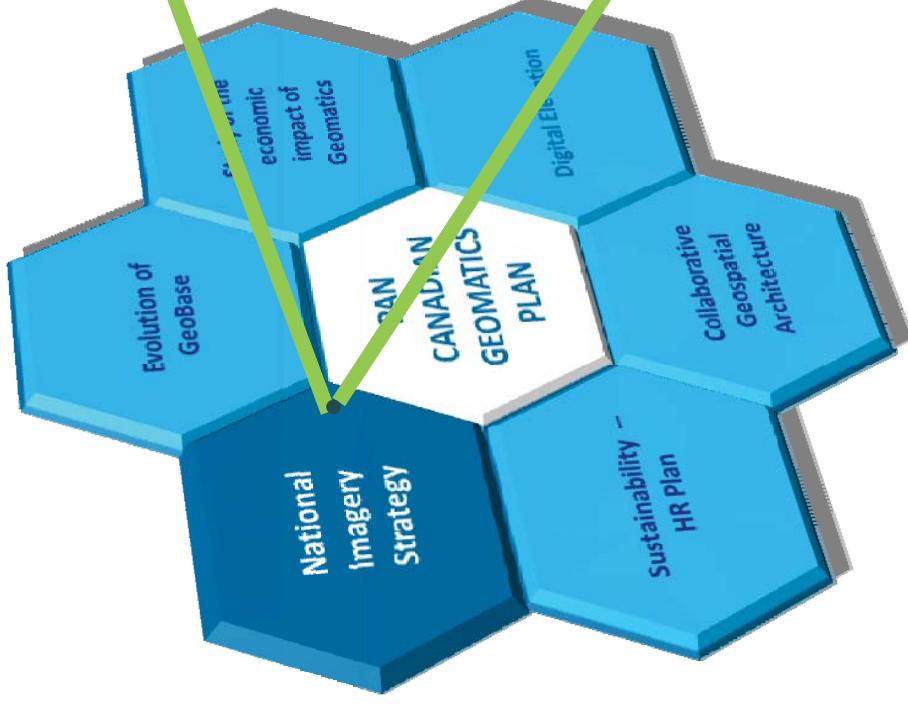


Extraction of Land Disturbances due to Infrastructure Development from High-Resolution Image

Regulatory context for Oilsands



The National Imagery Strategy



NIS Goals

- Meet public sector needs
- A sustainable and comprehensive system of systems
- Accessibility, security, availability, policy and temporal coverage
- Support development of auxiliary industry

Business process, policy & governance

- **Coordinated acquisitions mechanisms (NMSO)**
- Enhanced support for policy and decision-making
- National and international alignment with interoperability of geospatial data

System Perspective

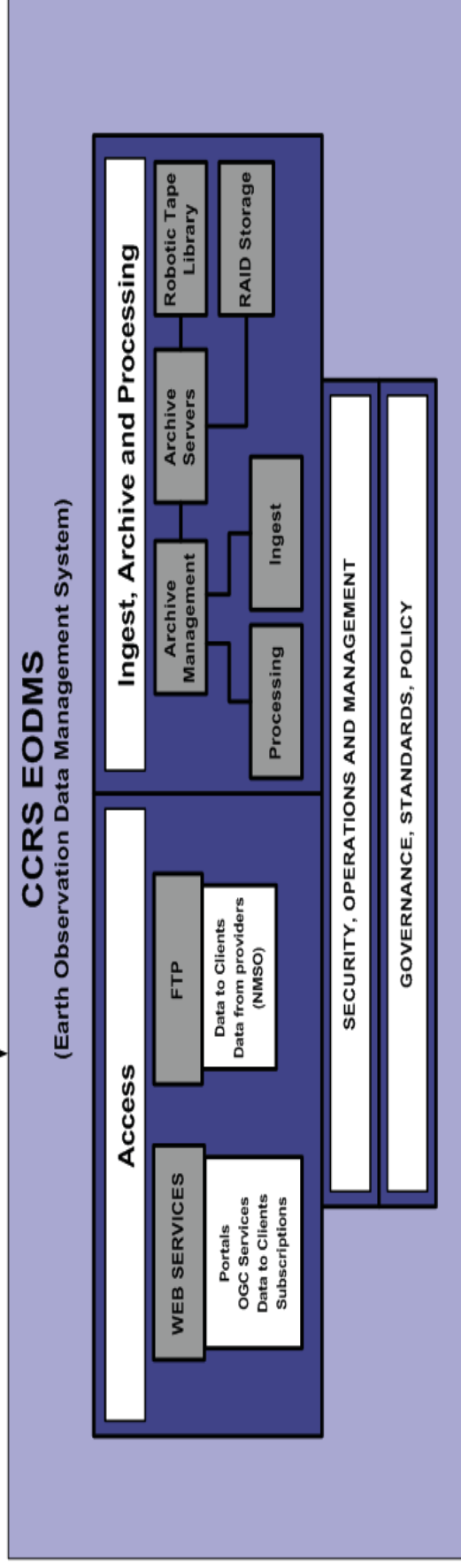
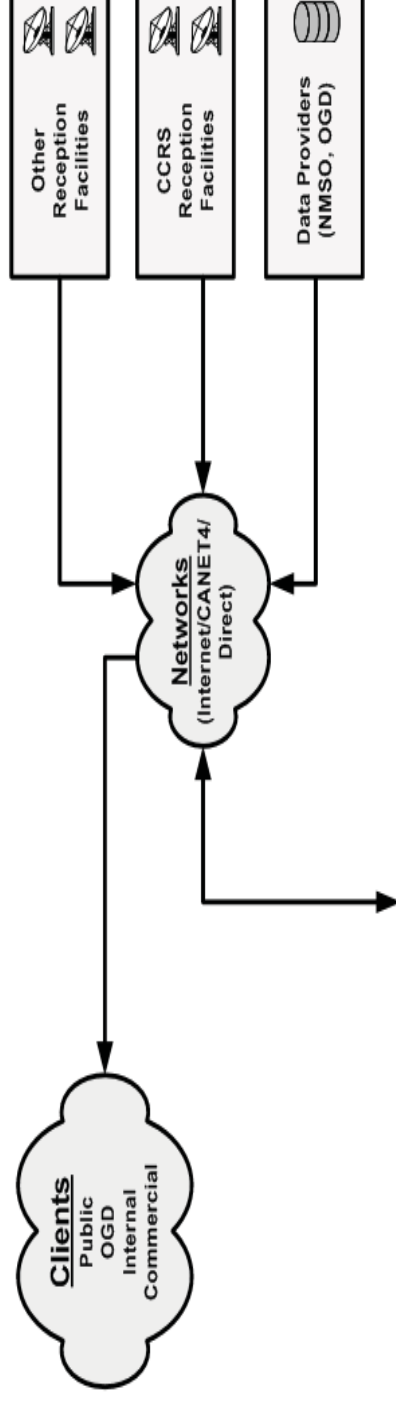
- Increased data accessibility and interoperability
- Increased public facing access to imagery data holdings
- Long-term ROI

NIS Outputs

The Advanced System of NEODF: EO Data Management System (EODMS)



High-Level Overview of CCRS Archive and Access Architecture



Concluding Remarks

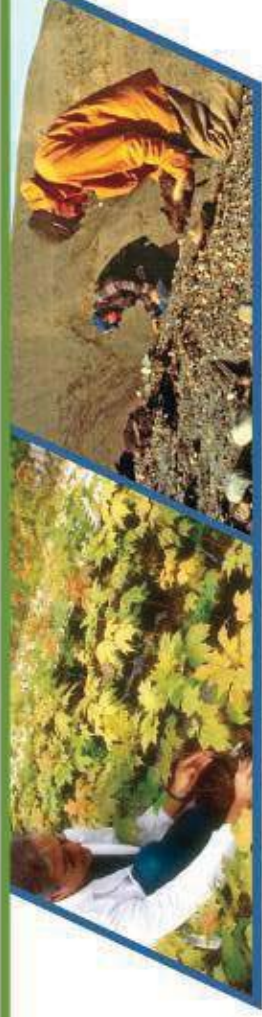


- Canada has high demand for commercial satellite imagery for development and stewardship of its natural resources and environment, and for safety and security of its citizens
- Canada's political systems make it necessary for all level of governments to work together
- Gov. of Canada is promoting EO application
 - Through National Imagery Strategy (NIS) in the Pan Canada Geomatics Plan, in which NMSO is a major component to NIS
 - CCRS is also conducting Remote Sensing Science to enable regulatory compliance monitoring by provincial/territorial governments
- Expanded data sharing through NMSO will facilitate the EO application, ultimately increasing imagery sales



Developing National Master Standing Offers for Commercial Satellite Imagery – Wave II

RFSO: The Technical Aspect



www.nrcan.gc.ca

Industry Day Engagement Session
April 9, 2013

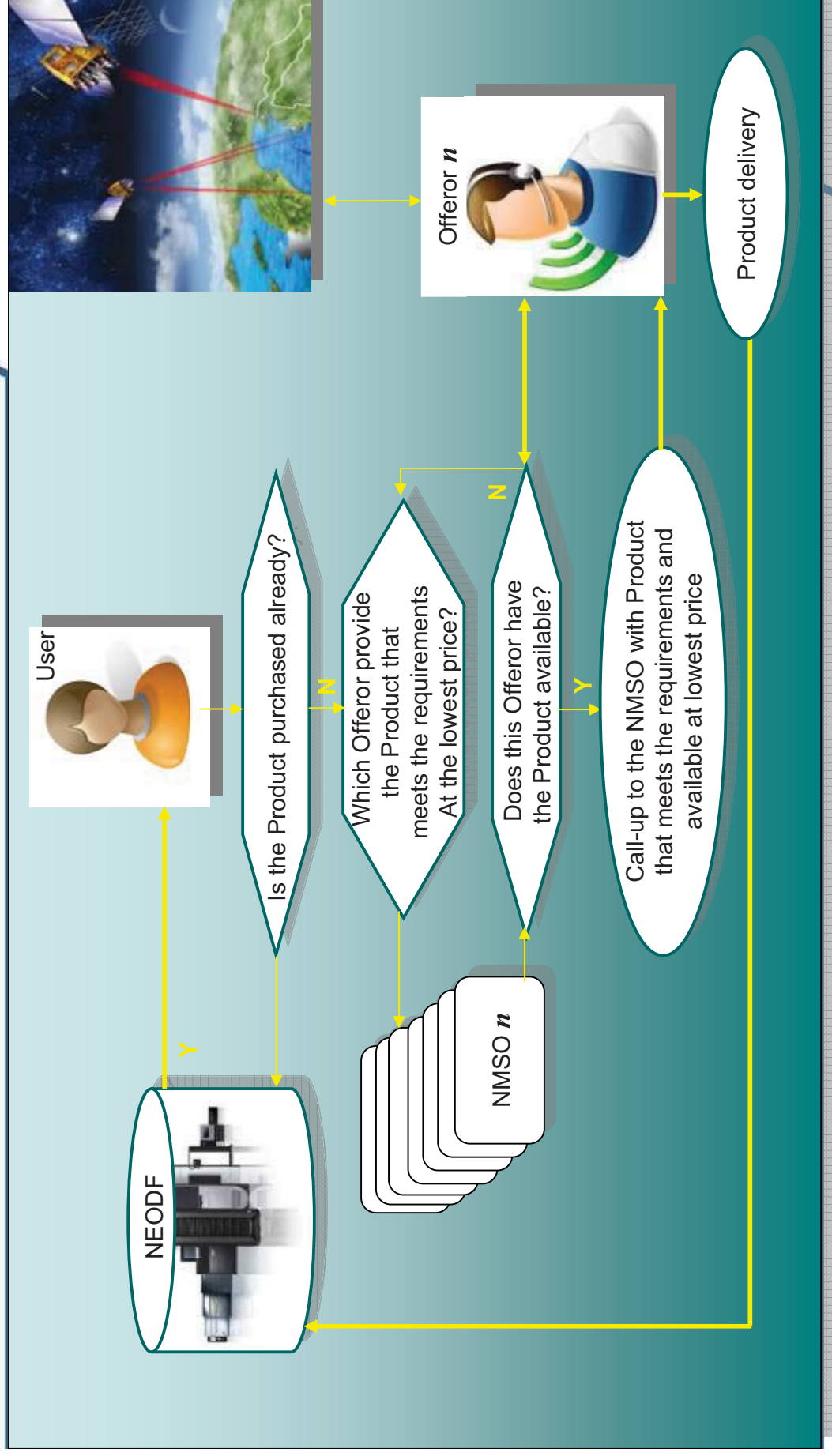


Natural Resources
Canada

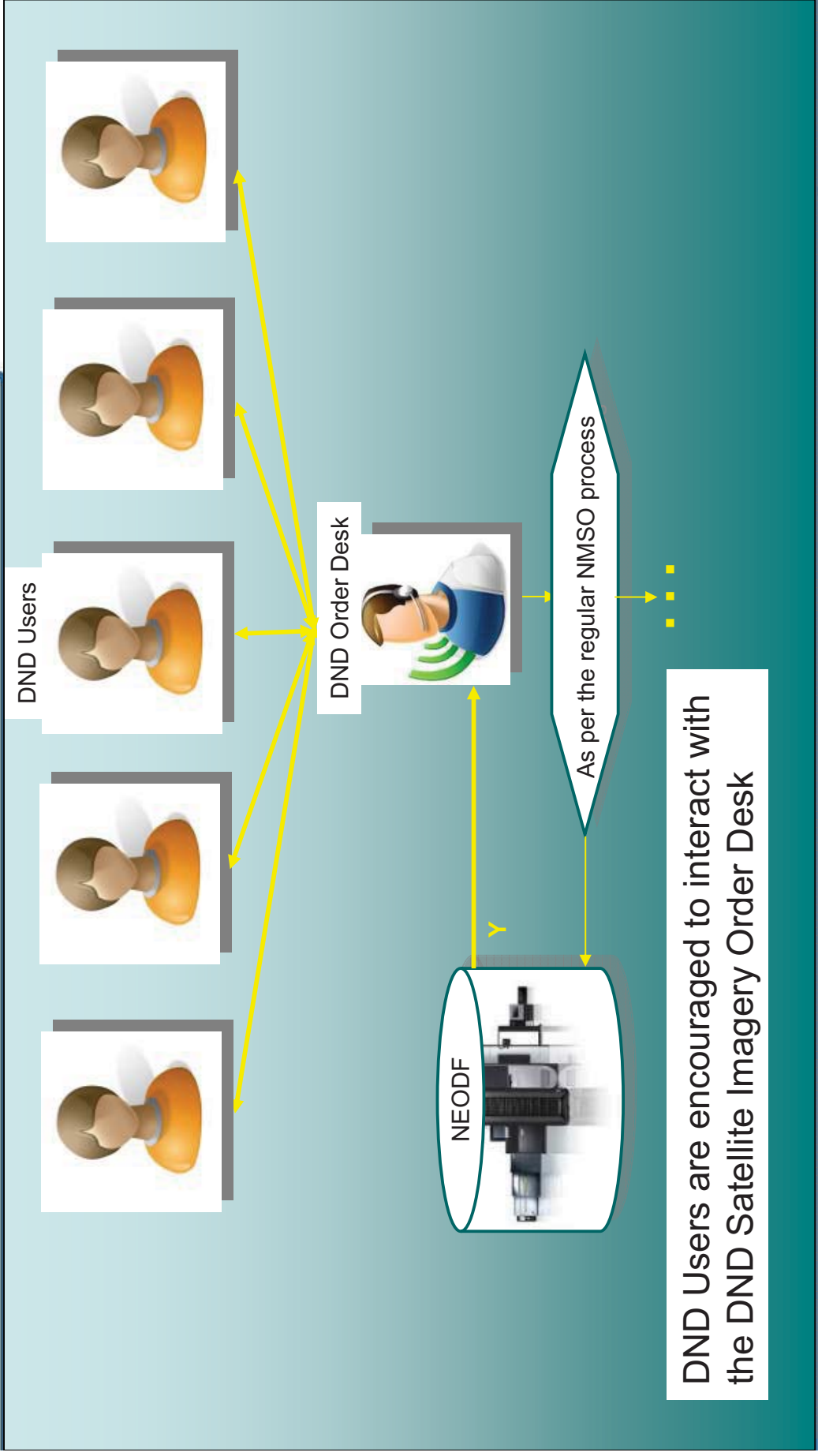
Ressources naturelles
Canada

Canada

Call-up to NMSO: User Viewpoint



NMSO: DND Order Desk



Product Categories



Required Product	Basic Product
	Orthorectified Product
Optional Product	Stereo pairs
	Other image bundles
	DEM
	Mosaics
	Image stacks
	Other value-added products

Metadata Properties - Changes



Property required	Browse Image (Thumbnail)
	Ordering info (inc. technical authority's name)
	Properties specific to Products (e.g. Mosaic, Stereo-pairs)
	Image size
Property desirable	Processing history
	Radiometric accuracy
	Geometric accuracy
	Optical: Sun azimuth, elevation, viewing angles SAR data: Max/min of Incidence angle

Tasking / Delivery Priorities



Suggested Tasking Priorities	Suggested Delivery Priorities
Background-T	Background-D
Standard-T	Standard-D
Operational-T	Operational-D
Rush-T	Rush-D
Emergency-T *	

Time Constraints



Time parameter	Background	Standard	Operational	Rush
Order Desk Accessibility	8/5	8/5	24/7	24/7
Lead time to confirm availability	3 days	<1 days	<12 hrs	<6 hrs
Lead time to plan ARO	3 days	<1 days	<12 hrs	<6 hrs
Advance notice before imaging window	3 days	1 days	12 hr	6 hrs
Confirmation of successful acquisition	3 days	1 days	12 hr	2 hr
Lead time to change an order	3 days	<3 days	12-24 hr	4 hr
Lead time to cancel an order	1 day	1 day	6 hr	6 hr
Processing/delivery time after acquisition	10 days	1-3 days	12 hr	3 hr
Processing.Delivery time for archive data	10 days	1-3 days	6 hr	2 hr

* Emergency-T: Latest possible time that does not jeopardize the health of the satellite

Speculative Collection



- **Request for Conducting Background* Data Collection**
 - Defined user requirements without funds
 - Requirement communicated to all operators
 - Operator collects imagery to populate its archives
 - Order for archived data if funds become available
 - Risk is on operator

*Not to confuse with Background-T or Background-D priorities

Services Required or Desirable

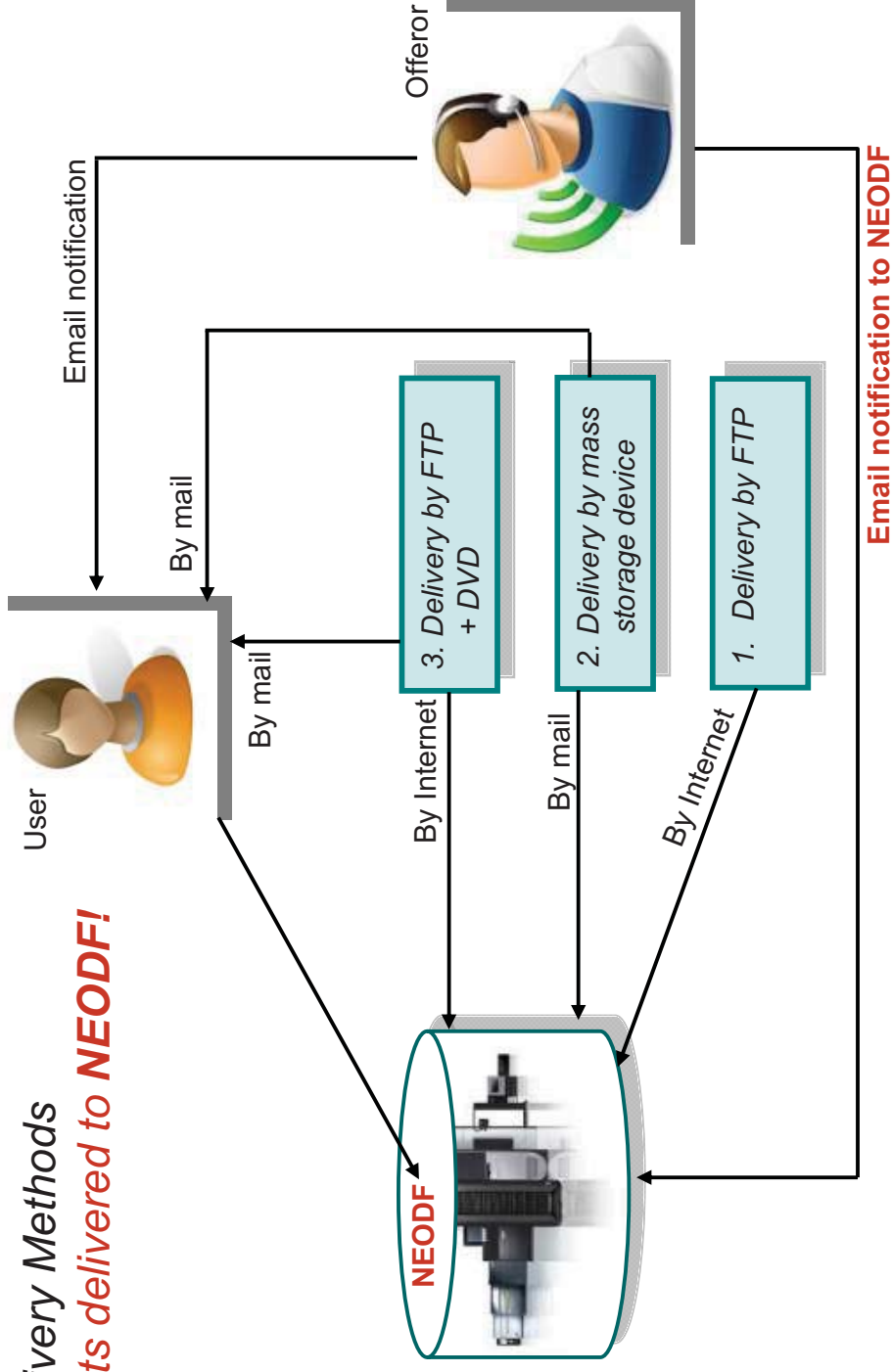


Requirements Added

Services required	Ensuring same Product ordered once only
Services desirable	A mechanism to facilitate identification of new acquisition orders targeting same region (overlap or conflicting)
	Both assistance and on-line catalogue access
	Cover as many license classes as possible

Product Delivery

Three Delivery Methods
*All Products delivered to **NEODF**!*

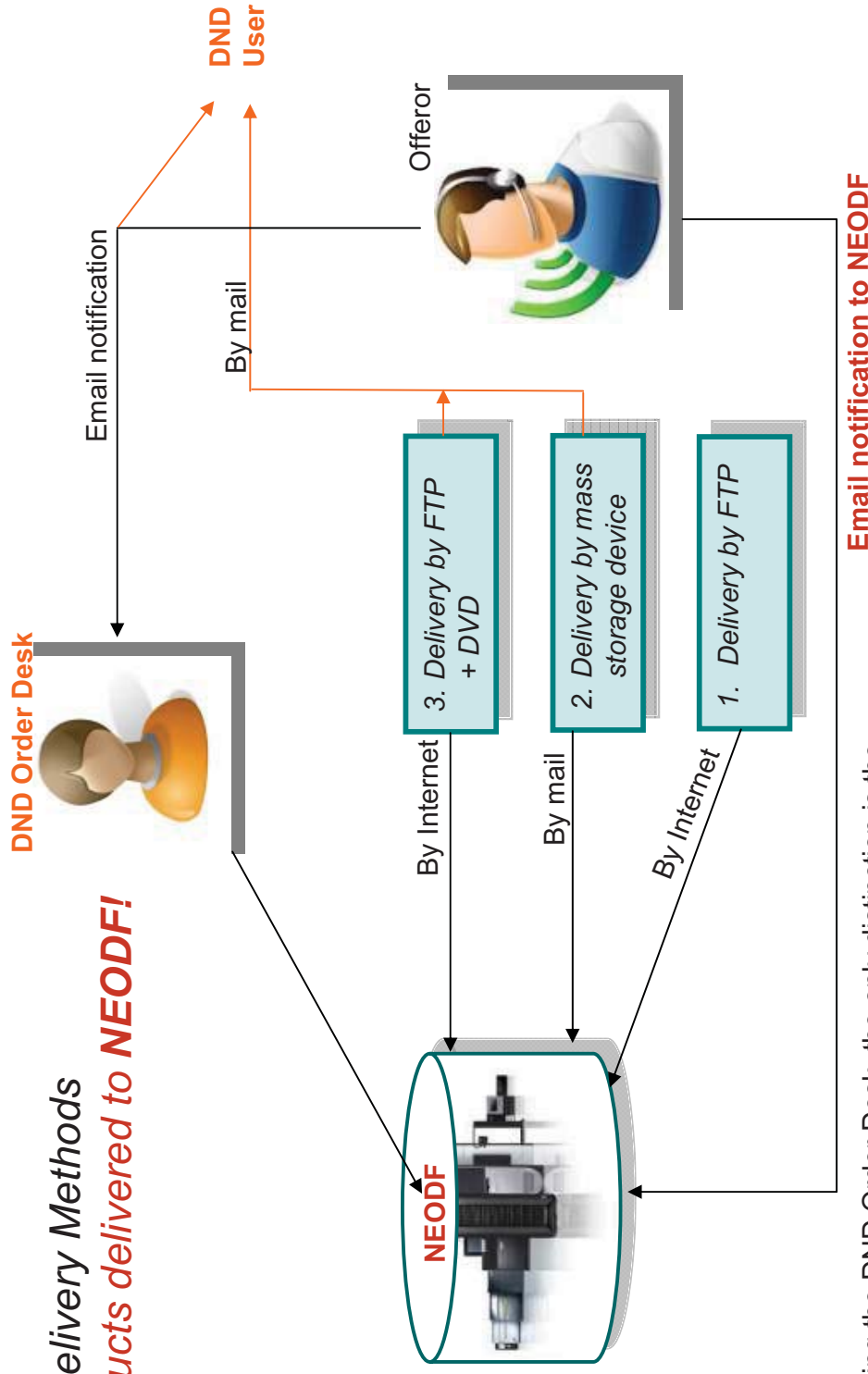


Product Delivery

DND Order Desk*

Three Delivery Methods

*All Products delivered to **NEODF**!*



*When using the DND Order Desk, the only distinction is the delivery notification email also goes to NEODF

End User License Agreement: Proposed License Classes



<i>License Class</i>	<i>Included Entities</i>
Base/Class 0	Canadian Government Departments, Agencies, and Crown Corporations
Class 1	Base + Canadian Academic Research community affiliated with a recognized University or College
Class 2	Base + Provincial and Territorial Governments in Canada
Class 3	Class 2 + Local (Municipal, Aboriginal People - First Nations, Inuit, Metis or Tribal Councils) Governments in Canada. Local Governments would include two cities with over 500,000 in population and up to 20 municipalities with less than 500,000 in population.
Class 4	Base + Local Governments (Municipal, Aboriginal People - First Nations, Inuit, Metis or Tribal Councils) in Canada. Local Governments would include two cities with over 500,000 in population and up to 20 municipalities with less than 500,000 in population.
Class 5	Civilian Departments of the Government of Canada and their international counterparts as per their mandates. (Example: Canadian Ice Service and US National Ice Center and International Ice Patrol under the North American Ice Service [NAIS]).
Class 6	Base + USA Government Agencies (Military and Civilian) e.g. US Department of Defense
Class 7	Base + Military Partners (USA, UK, AUS, New Zealand)
Class 8	Base + Military Partners (USA, UK, AUS, New Zealand) + 26 NATO Member Countries (See http://www.nato.int/pfjp/eapc-cnt.htm .)
Class 9	Base + Military Partners (USA, UK, AUS, New Zealand) + 26 NATO Member Countries (See http://www.nato.int/pfjp/eapc-cnt.htm .) + any of 23 NATO Partners for Peace (See http://www.nato.int/pfjp/sig-cntr.htm .)
Class 10	Note: Class 10 is replaced by Class 12 below.
Class 11	Base + public at large. See Article B14.0 entitled "Public Good".
Class 12	Base + Military and Defence related organizations of foreign countries with which Canada is involved in international duties (example: United Arab Emirates forces in Afghanistan). The list of foreign countries will vary depending on the operations involved. The list of countries will be provided to the Offeror for country list approval prior to sharing. An addendum to the license shall list the countries approved for sharing.

Technical Evaluation Criteria



Mandatory Criteria

M1	A satellite operator (new)
M2	Offer at least: 1 Basic Product; 1 Ortho Product
M3	Provide required services (new)
M4	Provide required metadata (new)

Point-rated Criteria (new)

		Points available
PR1	Provision of services desirable	14
PR2	Provision of metadata desirable	8

Maximum points available overall: 22

Required minimum points overall: 10

NMSO Wave II Project Team



- Canada Centre for Remote Sensing, Natural Resources Canada
 - Doug Bancroft, Director General
 - Robert Landry, Senior Environmental Scientist
 - Alex Trichtchenko, Senior Research Scientist
 - Aining Zhang, NMSO Project Lead
- Department of National Defence
 - Francois Alain, Major, D Geo Int Capability Integration
 - Pierre Naud, Section Head, Canadian Forces Joint Imagery Centre
 - David Turcotte, Captain, MCE Geospatial Information and Services Squadron
 - Luc Germain, DND Satellite Imagery Order Desk
 - Mario Couture, Mapping and Charting Establishment Client Services
- Public Works and Government Services Canada:
 - Mark Diotte, Manager
 - Linda Latray, Manager
 - Lena Bootsma, Supply Specialist
 - Gaetane Dagenais, Supply Team Leader