Retooling of the Applications Development Activity

National Forum on Earth Observation from Space

YVES CREVIER

A/HEAD, EARTH OBSERVATION APPLICATIONS AND UTILIZATIONS

Canadian Space Agency   Agence spatiale canadienne

Canada

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Retooling the Applications Development

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Part 1 : Setting the Context
11:30 to 12:30

- Setting Context
- What We Heard and What We Learned
- Recommendations
- Next Steps

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Part 2 : Dialogue
13:45 to 14:30

- Open Space Discussion
- Report Out
- Next Steps

3

Our Session Objectives

- To provide context on the drivers leading to efforts to modernize the applications development activity.

- To share some of the key findings received during the information gathering process.

- To present the draft recommendations for modernizing the applications development activities (Tracks).

- To gather additional perspectives on areas of divergence that will help refine the feedback received into more meaningful approaches to retool the Activity.

- To foster ways for stakeholders to stay engaged.

Guiding Motivation

"Technology and science are only as good as our ability to use the information they provide"

"The successes are dependent on our ability to relay the information the final mile to the people"

Marine Scientist, No. 17, 2006
About the tsunami warning system

Modernization Context

Legacy programs (GRIP, EOADP, SOAR), need to support growth of value-added sector, improve processes, address new trends, support new governance.

Primary Driver	Key Challenge	Target Outcome
Address the need to redesign the approach to accelerating innovations in the space applications domain.	Move beyond current practices to a re-invigorated vision of the future.	Build a modernized application development framework. (Predictable, flexible, adaptable and focused)

Accelerate innovation in the delivery of new or improved space based applications targeting the needs and priorities of Canadians.

Address Barriers

Improve Investment Attractiveness
Improve data access, policy & pricing
Facilitate access to domestic and foreign data
Stimulate development of HQP

Create New Customer Value

Build on CSA heritage
Focus on National Priorities
Create new partnerships
Support all ARLs
Address Canada's environmental, socio-economic, and innovation challenges with space

CSA Leadership to Action

Streamline
Improve Partnerships
Integrate, Enable and Convene

More data sources
New space assets and industry trends
Partner with other funding programs
Support knowledge Creation
Capitalize on downstream big data infrastructure

Accelerate innovation
Put the best minds to work
Invest in New Space and Data Analytics
Acknowledge Industry Diversity
Leverage stakeholder expertise for Growth and competitiveness

Leverage Resources

Develop Space Economy

SmartEarth

Applying advanced space solutions
to improve the Canadian quality of life

Guiding Principles

- Space for Canadians
- Predictable, flexible and scalable processes
- Inclusive and collaborative
- Integrated use of space data
- Development of capacity for the Government and academic sectors
- Development and growth of a competitive VAS in Canada

Information

- Environmental Scan
- Consultation process
- Round-table discussions

3 TRACKS
Accelerator
Integrator
Enabler

3 COMPASSES
Data
Outreach
Coordination

GRIP-EOADP-SOAR → Retooling → SmartEarth

Structure

- Support commercial opportunities, GC needs and capacity building

- Tracks: Accelerator, Integrator, Enabler
- Compasses: Data, Outreach, Coordination

Process

- Not Policy driven
- Variable project support cycles
- Structured in sectoral siloes

- Whole of Government/horizontality
- Top-down approach to selection of themes
- User-pull
- Predictable call-up cycles/advance notice
- Scalable and flexible

Customer

- Federal Government, Industry and Academic sectors

- SmartEarth for every body
- Encourage collaboration
- Engage emerging sectors – expand pool

Data

- EO data preferred
- RADARSAT focused

- Ease of access
- Include EO, GNSS, AIS, SATCOM – integration
- Open to all data

Collaboration

- Purpose focus communications
- Occasional community meetings
- Sporadic news

- Community of practice and thematic clusters
- Regular dialogue meetings
- Advisory group
- Continuous and targeted outreach

	Accelerator Track	**Integrator Track**	**Enabler Track**
Value proposition	**Fast track** innovation towards solution	**Strengthening** relation between Canadian Users	**Progress** knowledge, growth and competitiveness
Focus	Innovation challenges, Rapidly turn ideas into new products and services	Canadian Policy Priorities Space as a CORE component	Using Space data for Emerging Opportunities
Recipients	Inc.ca 🎓	🏛 Inc.ca 🎓	Inc.ca 🎓
Channels	Contracts	Contracts, Agreements	Grants & Contributions
Project value	$, $$, $$$	$$$$	From $ to $$$
Project cycle	Multi-stage project process over 4 years	Projects on 3-5 year horizon	1-2 years projects Solicited & non-solicited
Outcome	Increase ARL towards Pre-operational level	Increase collaboration and alignment among sectors	Increase capacity Support investment and trades

Enabling Elements Being Pursued COMPASSES

Data
Facilitate access to data

- Expand data pool
- Support the uptake of new space data
- Contribute Canadian assets
- Fluid data contribution
- Formal data loan, sharing, contribution and access agreements, data purchase

Outreach
Bridge the gap between Space data and Canadians

- Increased awareness and outreach on space-derived applications
- Focus on Societal benefits
- Capitalize on Open data
- Explore Citizen Science opportunities

Coordination
Maintain dialogue, stimulate cooperation

- Building a critical mass
- Improve partnerships
- Retain stakeholders
- Informed actions through dialogue
- Convene workshop on regular basis
- Applications Advisory Committee

Next Steps

- Implementation (FY 2019/20)

  - Establish investment priorities – Top-Down approach (Q1, Q2)
    - From high level Governance to sectoral subject matter experts
  - Launch AO for the Enabler Track (Q2)
  - Planning and preparation for RFPs under the Accelerator and Integrator Tracks (Q3, Q4)
  - Exploration of Applications Advisory Committee (Q2)

- Full implementation in FY 2020/21

Questions to be Explored with You

1. Focus on what we learned/heard:
   - Based on shared documentation, what topic would you consider the most important challenge moving forward?

2. Focus on the proposed concept:
   - What do you think of the new applications development concept as presented today?
   - What elements would you incorporate to improve the program?

3. Focus on the way forward:
   - What could be implemented to continue this engagement process?

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