

# ***Thematic Sessions Results***

## ***Session 4: Earth Observation and Satellite Services***

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Canadian Space  
Agency

Agence spatiale  
canadienne

Canada



# Main Findings

- What do you consider to be the technological and economic opportunities in space applications (Sat Com, EO, navigation, space situational awareness-SSA)?
  - CSA to be the Hub of identification of new ideas and manage priority setting process.
  - Taking into account global situation.
  - CSA role to nurture new promising ideas. Government to use procurement to stimulate innovation.
  - Must have export potential
  - Maintain Radar leadership.
  - Debris is a huge problem – SSA is the solution
  - Mitigate space debris, is there an opportunity? Get the big pieces down first.
  - Higher demand for high resolution optical images – development of applications rather than generating data. Combing data (radar and optical). Industry could make a case for building their own ground stations.





# Main Findings

- Are there new and emerging areas of space activities where Canada should envisage taking a leading position?
  - Green House Gas and air quality monitoring
  - Disaster management. Canada can and should take leadership.
  - Handling *big data*. How to bring together different data types. Need for knowledge based system.
  - Machine to machine data handling and processing.
  - Hyperspectral addressed by multi-spectral on microsat.
  - Market is changing (growing), more consumers have a desire for processed EO data and derived user friendly information, motion imagery.
  - Pipelines monitoring
  - Micro and nano sats are enablers because break-even point goes down





# Main Findings

- How can we maximize benefits from our investments?
  - Data downlink is becoming a limiting factor. More ground stations are required, and on-board processing is also a promising avenue.
  - Make a commitment for smaller more frequent, regular missions.
  - Open data policy
  - Opportunities generated from ESA program
  - PPP's. Government to establish a mechanism or the right model, works in a mature market only.





# Main Findings

- Create new mechanism to involve scientists.
- Call for experts when launching missions. Separate scientist selection from prime selection.
- For scientist, call for ideas (sensors) on a regular basis. Open the process.
- New opportunities must be aligned with Canadian foreign policies (whole of government approach)

