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Panel 3: Near-Term Implementation Ideas, Strategies, and Plans Canadian Space Agency

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Canada

Challenges

- Budget constraints
- No clear plans for what next
- How to sustain the expertise developed with ISS?
- How to ensure a sustainable exploration program?
  - What do we need for international cooperation?
  - Why should governments support exploration?

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What are the benefits?

- What are the values for citizens in our countries
  - Governments are elected nationally!
- Key question being asked constantly
  - Should not be an after-though to justify why we spend money
- Think now about exploration outcomes and how to measure them
  - Measure all projects against this framework

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Maintain an Int'l Dialogue

- Groups such ISECG are essential to prepare the next steps
- Bring the discussion at the right level at the right time
- Build on ISS partnership and track record of collaboration
  - Added value for all partners big and small
- Continue the global exploration roadmap
  - The journey could be longer than expected but we will reach the destination

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Precursor Missions

- Exploration is not robots versus human or scientific knowledge versus human expansion
  - Need to maximize the synergy between scientific and human precursor missions
- Priority is to sustain the planned missions
  - Moon, Mars, Asteroids
- Additional missions to the Moon
  - e.g. demonstrate ISRU

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Preparatory Activities

- Develop the required capabilities
- Maintain the expertise
- Maximize the utilization of ISS to prepare for exploration beyond LEO
  - e.g. Technology demonstrations, preparation for long-duration human flights
- Technology development
  - Gap analysis - each country will target its own key technologies

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CSA Activities

- Finalize the Canadian exploration plan
  - Demonstrate benefits
- Increase the robotic utilization on ISS
- Invest in signature technologies
- Prototype integration and analogue deployments
- Strategic participation to missions
  - Mars 2016, 2018, Osiris-REX, Lunar Lander
  - ISS Rendezvous, On-Orbit Robotics

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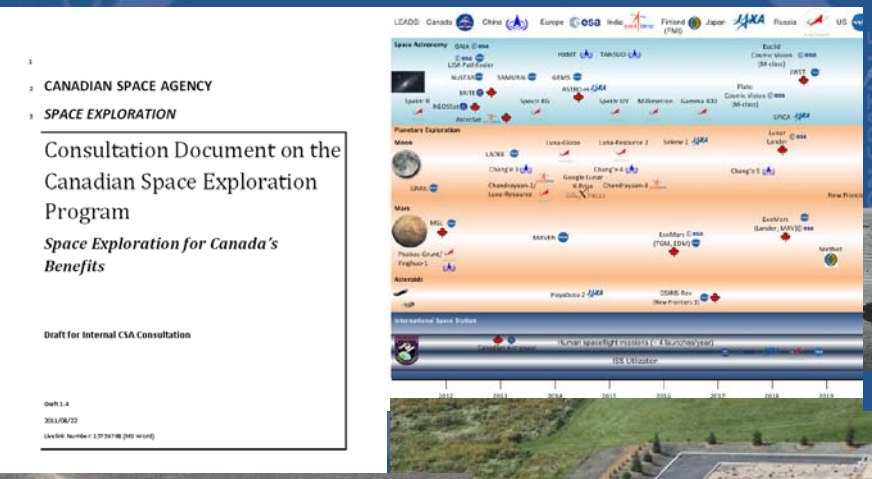
Preparatory Activities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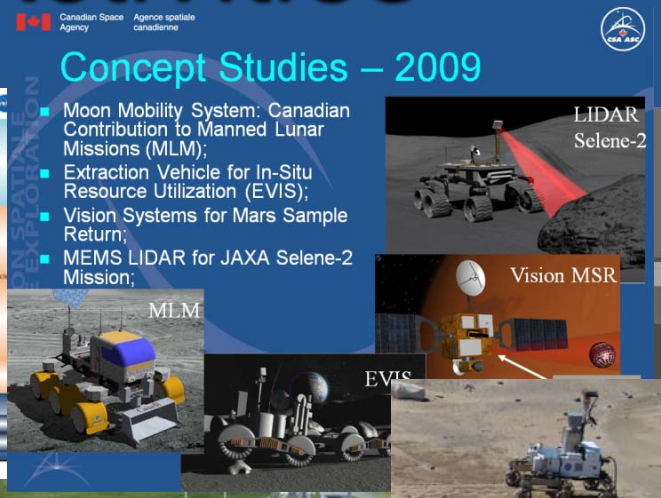
SPACE EXPLORATION

Consultation Document on the Canadian Space Exploration Program

Space Exploration for Canada's Benefits

Draft for Internal CSA Consultation



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Analogue Deployments

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Conclusions

- Strategic planning informing and informed by GER
- Focus investments on Canada's signature science and technologies
- Exploration Core Program
  - Moderate funding to increase readiness of Canada's space sector for mission opportunities
- Niche contributions to international missions
  - Early, critical, visible

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