Satellite Canada Innovation Network Space Support Program (SatCan SSP)

Assisting Canada's Space SME's

An NRC-IRAP Programme
2019-2020

Public

NRC-IRAP
Promoting the development of Canadian business

NRC promotes the development, the adaption and/or adoption of technology by small and medium-sized enterprises (SMEs) in Canada through its Industrial Research Assistance Program (IRAP)

- Mandate: to stimulate wealth creation for Canada through technological innovation
- Help organizations provide innovation assistance services to SMEs in Canada
- Undertake activities that help in building and integrating innovation capacity in Canada for the benefit of firms in Canada

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SatCan's Mission

- Drive Growth and Global Excellence for the Canadian Space Technology and Industry
  - Accelerate support to small-medium business
  - Develop skills in the sector with a targeted space curriculum
  - Position key technology contributions to large commercial and government projects (SME, Academia)
  - Access to a premier network of innovation partners, international government agencies, commercial space organizations, academia, funding and facilities.
  - Connect industry to International Commercial and Government Projects (Europe, US, Canada, others).
  - Backing upstream technology development and growing downstream space applications.

SatCan and NRC/IRAP: Space Support Programme (SSP)

- **Mission Statement**:
  - *SatCan and NRC-IRAP are focused on identifying, researching and analyzing, Canadian SME's to develop key space technologies and applications required by the global supply chain.*

- We Will Do This By:
  - Marketing to Eligible SME's:
    - Combination of IRAP and SatCan list of potential companies.
  - Engage SME's:
    - Meet with candidate SME's to develop an optimal strategy for that market.
  - Educate SME's About the Global Ecosystem:
    - Discuss and inform the candidate company about challenges, opportunities and comparative and competitive actors.
  - Facilitate Strategic Discussions:
    - Make initial introductions to potential partners and collaborators within the industry supply chains.
  - Research Information for SME's:
    - Provide SME's researched information for funding opportunities, various business model, market research and potential strategies to address particular markets.

Supporting the Growing Canadian Space Sector

The SSP is made possible by IRAP's second round of "Contributions to Organizations" (CtO) project. It is aimed at companies that could benefit from expert consulting services relating to the emerging and rapidly expanding markets across the space sector.

- Revenues in the Canadian Space industry totaled $5.6B in 2017, and supports ~22,000 jobs*
- 95% of Canadian Space Companies are SMEs, accounting for nearly 50% of revenues. They are integral to the wider health of Canadian Space. *
- Space SMEs are highly innovative, corresponding to 54% of all space expenditures on R&D. In total, Organizations reported >200 inventions and >100 patents.*

*State of the Canadian Space Sector Report 2018, CSA 2018

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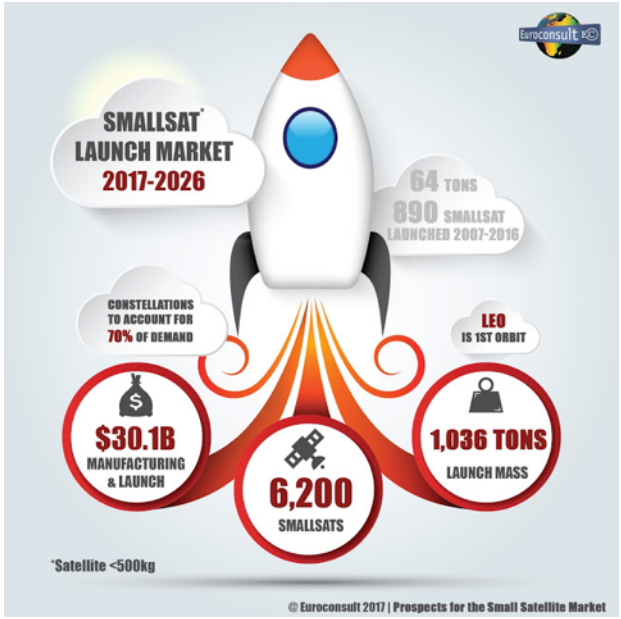
The Fast-Changing Space Environment

New low-cost approaches to build and operate smaller satellites and wider space technology is changing the space ecosystem, in part enabled by I.T., A.I, 3D printing, industrial processes and other advancements.

- Disruptive technologies are revolutionizing the traditional space sector through the introduction of innovative technologies and solutions
- How do these new companies across the value-chain find the support needed to best position themselves?
- The SSP program is designed to provide solutions to start-up and SME companies.



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Supporting Innovative Ideas

Innovative technology and engineering are employed by Canadian SME's, but require wider business support navigating contracts, business, marketing, finance and policy to scale up to viable companies that will feed into the Canadian Economy.

- **Market positioning**. *Who are potential competitors, suppliers, clients, partners?*
- **Market influences**. *Assess ecosystem activity, global economy, geo-political factors.*
- **Downstream markets**. *What are end user cases? What is needs now and in the future?*
- **Go-to market strategy**. *How to deliver the product or service? What pricing model to use? Who is the customer?*
- **Business case**. *Build the business case. What do investors need to see?*

…and many more services

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Potential Across the Space Sector Canadian SME's

8,600 satellites <500kg will be launched by 2028

Manufacturing and Launch of Small satellites to grow from $12.6B (2009-2018) to $42.8B (2019-2028)

Earth observation data and services market to top $12B in 2028

Over 4000 satellites to be launched to support LEO broadband communications

Need to develop new lower-cost launch solutions to provide access to space

Advances in Machine Learning enabling Canadian robotics

*Source: All figures shown here, Euroconsult

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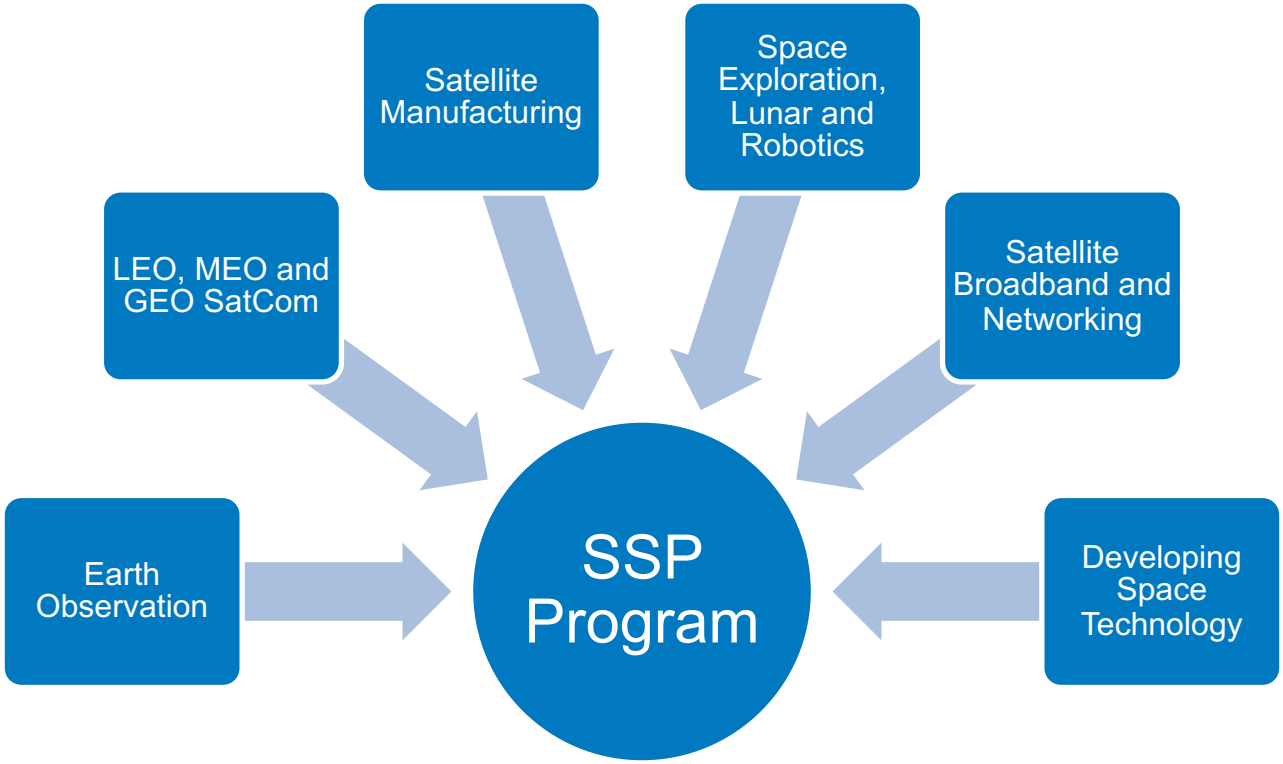
Target Company Market Segments - SSP



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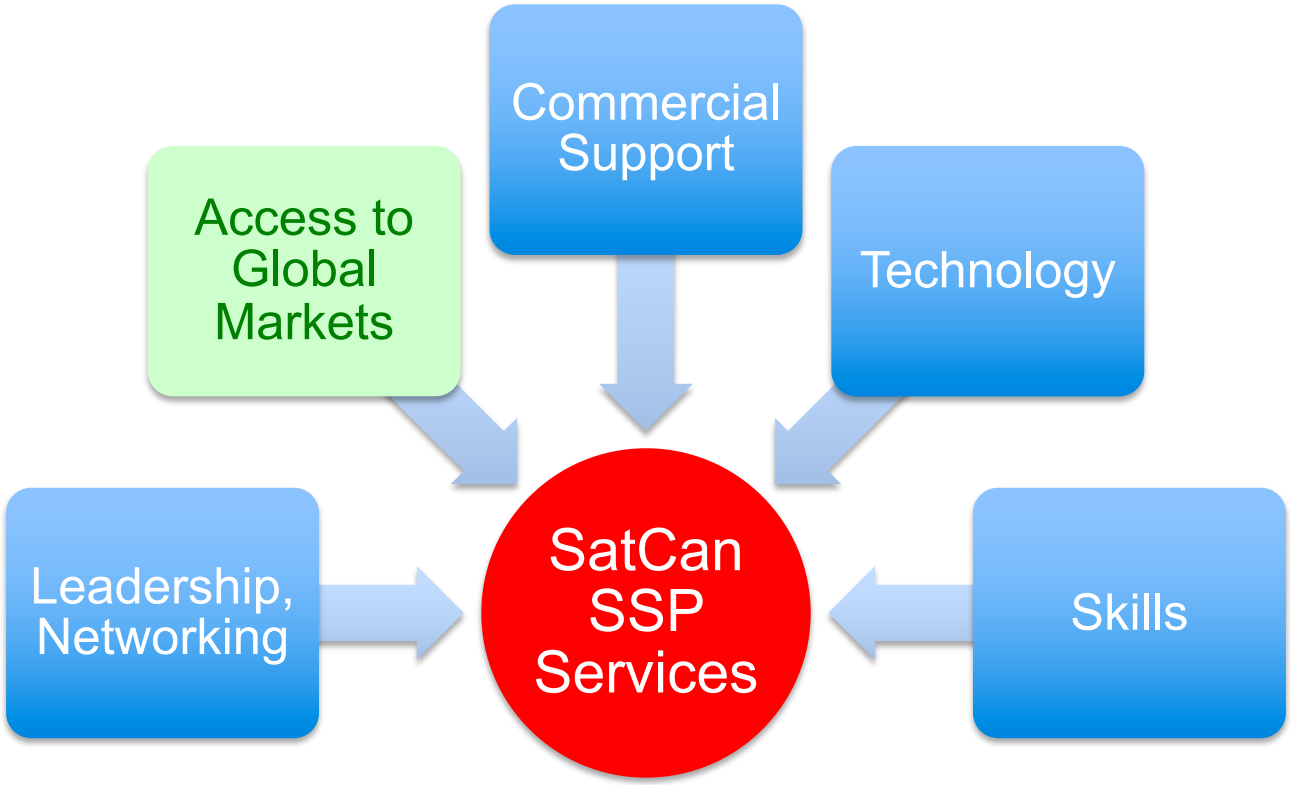
Objectives for SATCAN SSP Services

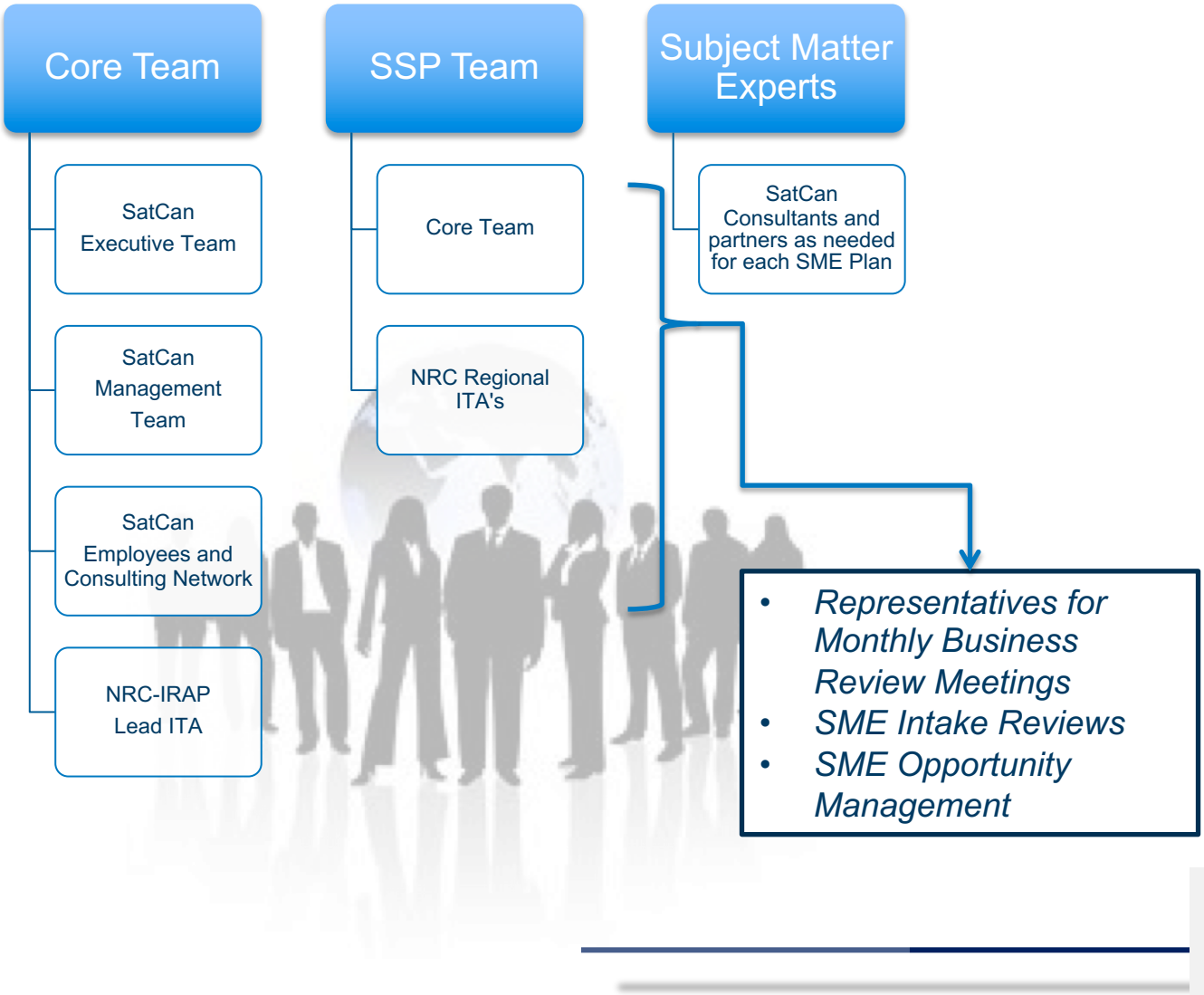
- Each SME receives a custom plan. (These are sample services)
  - Access to Expert Advisors
    - Industry/Government/Academia Partners, Skills Development.
  - Design and Certification Support
    - Options for hardware and software certification for Space Environment.
  - Business Support
    - Options for business models and financial opportunities, introductions to commercial experts and market reports.
  - Growth in International Markets
    - Research on global space technology and business ecosystems.
  - Access to IP
    - Facilitate access to government/academia and partner technology.
  - Facilitate Networking Opportunities
    - Conferences, introductions to key partners and organizations.
  - Specialist Consulting Support
    - Provision of research, administrative support and other necessary informed services by skilled individuals, in order to support high level works.

SatCan SSP Services to SME's



** Aligned with the Final Report: Canadian Space Innovation Network (CSIN) March 31, 2017, Doyletech.*

SatCan SSP Resources



SatCan SSP Program – Getting Started

- SME Target List to be defined and assessed
  - Candidate SME's from NRC ITA's nationally.
  - SatCan actively invites and recruits SSP clients.
- Management Review Process for SSP Program
  - Joint SatCan and NRC process.
  - SatCan invites SSP clients to introduce new SME's.
- Account Management
  - Each SME is treated as a Client with an assigned SatCan Account Manager.
  - The Account Manager is responsible to manage the client relationship through the SSP process and deliver the services.
  - The Account Manager works with NRC/IRAP ITA throughout the program.

How SME's come to the Program

- Referred Opportunities:
  - IRAP
    - Existing Clients with local ITA representative (Account Manager for IRAP)
    - Introduced to SatCan SSP by ITA/NRC
  - SatCan
    - SME is actively recruited by SatCan; either from past service or marketing initiatives.
    - Candidates are forwarded to NRC Lead ITA to initiate IRAP engagement process.
- Unreferred Opportunities:
  - Any eligible SME's may apply through the online form provided by SatCan. The qualification process is the same.

SME Introduction to SSP Program

- Introduction Phase:
  - Kick-off Meeting: Introduction to SatCan and the services for SSP.
- SSP Plan Development
  - Opportunity Assessment (OA)
    - Account Manager gathers key info on the SME Project
    - Opportunity Assessment Model Developed
  - Development of SME-specific Plan
    - From output of the OA Model.
- Next Steps and Implementation
  - Identify SatCan and other Services (future) for SME to implement plan.
  - Feedback from the client at end of process (value received).

Summary – SME SSP Program

- New SME Opportunities
  - Identify new SME opportunities, manage through a "Review" process and defining requirements for a "Growth Plan":
    - Commercial (Marketing, Financial, Contracts)
    - Leadership and Collaboration
    - Technology (Strategy, IP, Proposals)
    - Access to Global Markets (Partnerships)
    - Skills
- Cooperative Efforts
  - Approval of expended resources in an SME Opportunity managed step by step between ITA and SatCan.
- Ongoing Review
  - Regular review of progress for each SME to assess any changes required.

Click Here to Apply Now!

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Satellite Canada Innovation Network

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