Canadian GNSS Activity

Seventh meeting of the International Committee on Global Navigation Satellite Systems (ICG)

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Canada





Canada is a GNSS User

 GNSS has impact on the Canadian economy, national security and safety of life.

 Direct annual economic benefits of GPS technology in Canada are estimated \$6-7 billion range.

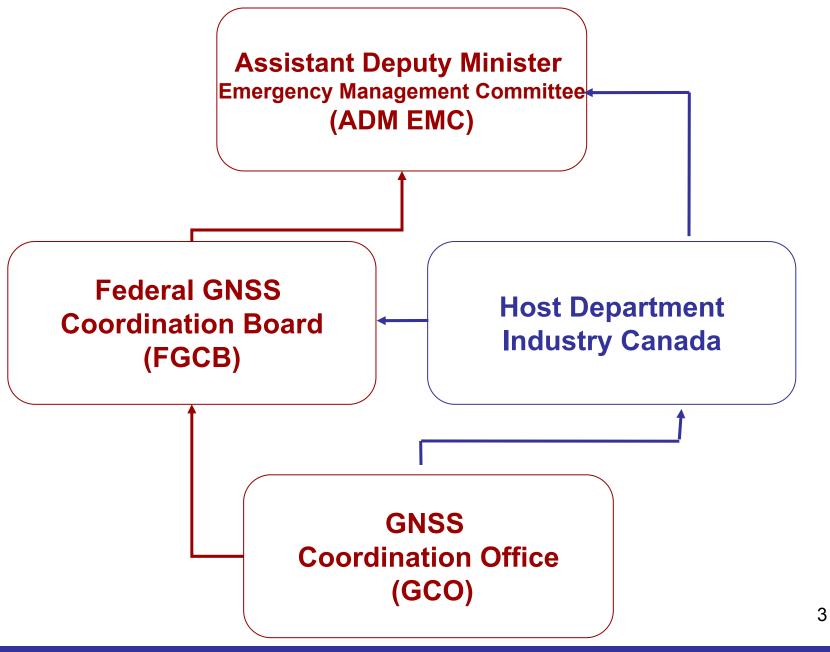




Canadian GNSS Vision

- Canadian stakeholders engagement
- Sustainable GNSS data access
- Sovereignty, security and safety of citizens
- Optimal use of national resources
- Coordination of Canadian views
- Collaboration with international partners









Federal GNSS Coordination Board (FGCB)

- Advise the Canadian government and coordinate GNSS matters among its members as well as international bodies
- Collaborate, share information/expertise, and provide advice
- Present annual objectives and priorities to ADM EMC
 - Provide oversight for FGCB



GNSS Coordination Office (GCO)

- Act as the federal point of contact for GNSS
- Provide support for the FGCB operations
- Develop an annual work plan consistent with objectives and priorities
- Provide catalyst/facilitator role for FGCB working groups
- Ensure reports and recommendations are prepared and presented



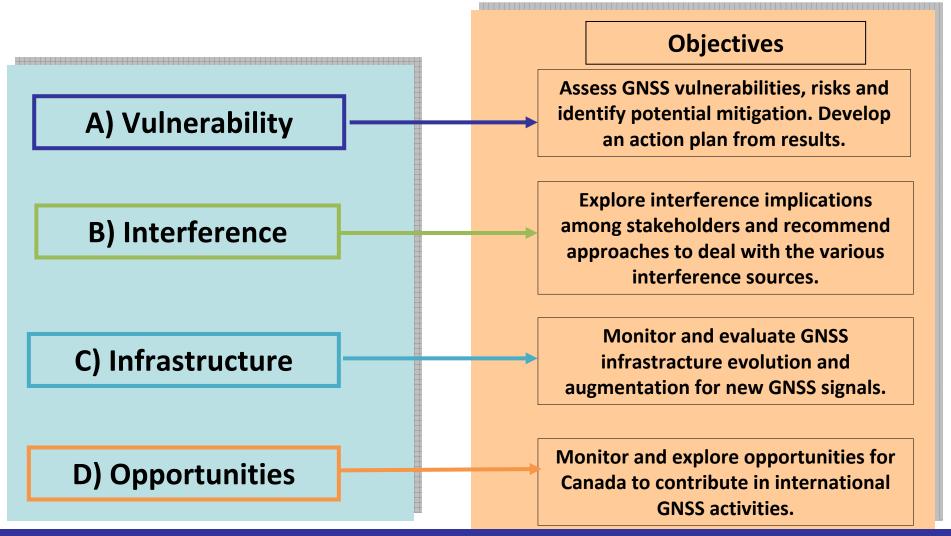
Our accomplishments so far...

- Signed MOU in 2011 by seven government departments
- Established "Points of Contact" at stakeholder departments
- Formed a GNSS Governance WG with GCO sponsors and additional known stakeholders
- Established initial priorities and work plan
- Three FGCB meetings so far
 - Excellent response with 14 departments and agencies participating





FGCB Working Groups







Our participation in the ICG

- Establish communications with GNSS providers and users
- Obtain information on GNSS infrastructures developed worldwide
- Benefit from collective solutions to deal with GNSS vulnerabilities
- Explore augmentation solutions for the Arctic



Benefits to the ICG

 Valuable GNSS expertise and capability

- Research (Government and Universities)
- Industry (Service providers, manufacturers)
- Collaboration with the ICG and its Working Groups







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Canada and the ICG

FGCB (4) Working Groups

A) GNSS Vulnerability Assessment

Objectives: Assess GNSS vulnerabilities, risks and potential mitigation; Develop an action plan from results.

B) Interference

Objectives: Explore implications among stakeholders and recommend approaches to deal with the various interference sources.

C) GNSS Infrastructure

Objectives: Monitor and evaluate GNSS infrastructure evolution and augmentation for new GNSS signals.

D) Opportunities

Objectives: Monitor and explore opportunities for Canada to contribute in GNSS activities internationally.

ICG Working groups

A) Compatibility and interoperability

Objectives: Enhance compatibility and interoperability among current and future global and regional space-based systems; Develop a strategy to support mechanisms to detect and mitigate sources of interference

B) Enhancement of performance of GNSS services

Objectives: Promote and coordinate activities aimed at enhancing GNSS performance, recommending system enhancements and meeting future user needs

C) Information dissemination and capacity building

Objectives: Build capacity in space science and global navigation satellite systems (GNSS) technology

D) Reference frames, timing and applications

Objectives: Define minimum operational performance standards for GNSS performance monitoring networks





THANK YOU

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