



Defence Leaders Combat Engineer Conference 2024

Canadian Requirement for Camp Sustain

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Liaison Officer to USEUCOM

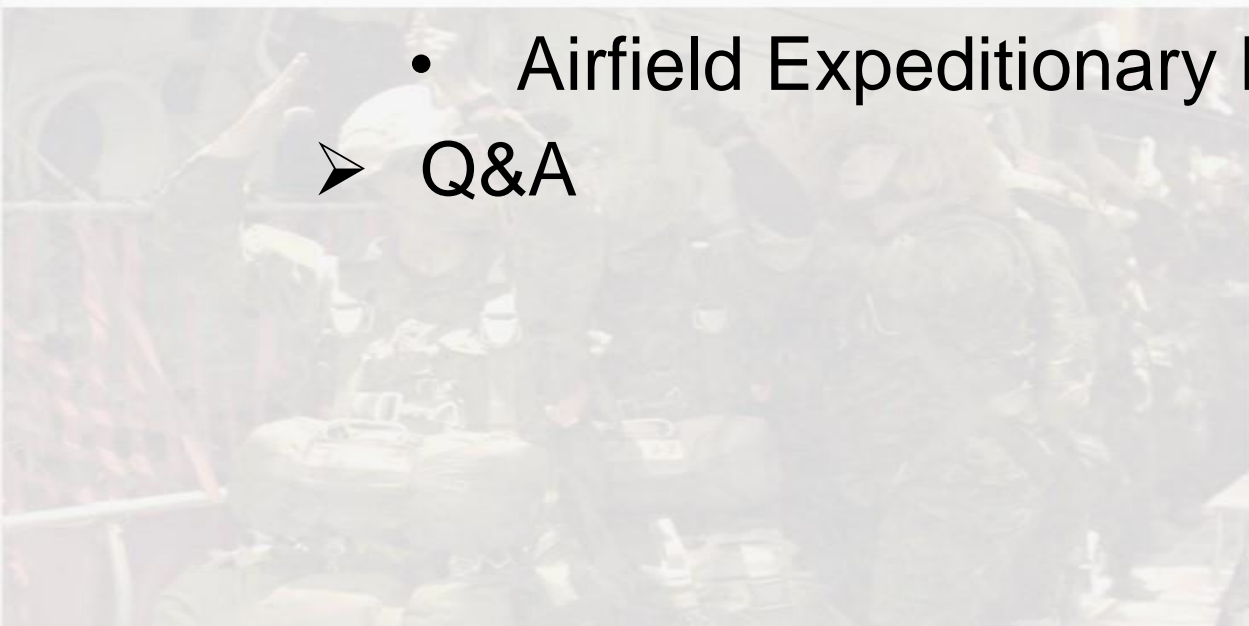
14 March 2024





Outline

- Canadian Army Engineer Major Capital Projects
- Deployable Camp Projects
 - Camp Sustain (CS)
 - Tactical Power Systems (TPS)
 - Advanced Water Supply System (AWSS)
 - Airfield Expeditionary Beddown
- Q&A

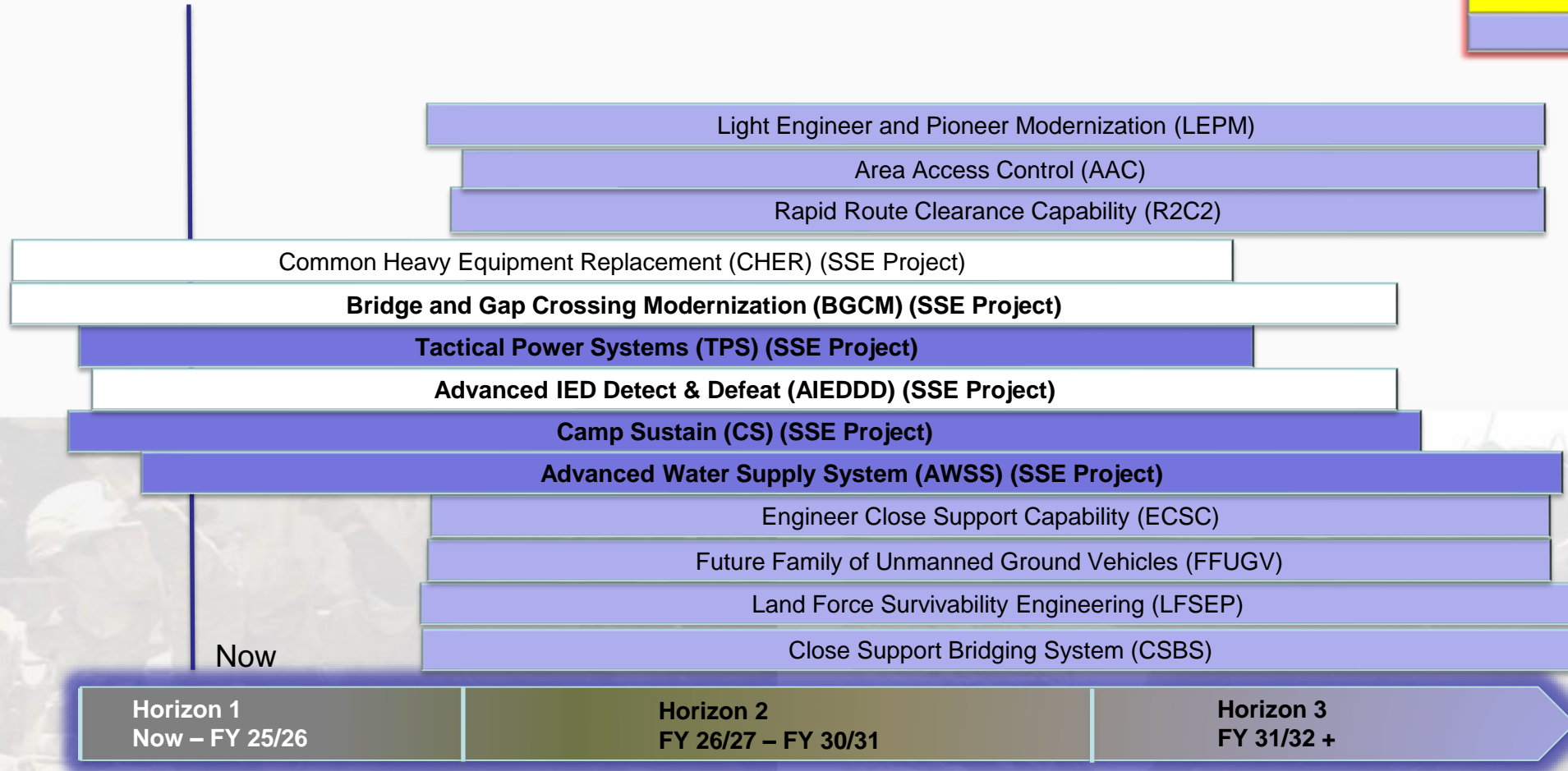




CDN Engr Major Capital Projects

Legend

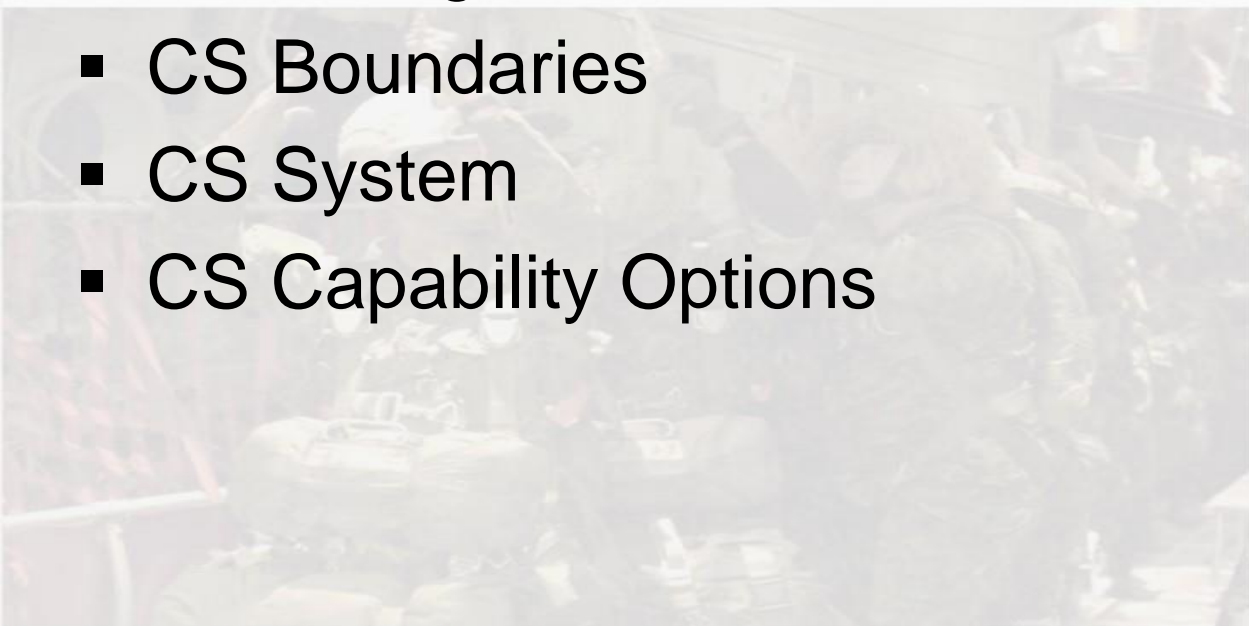
Implementation
Definition
Option Analysis
Identification
Pre-Ident





Camp Sustain (CS) Project

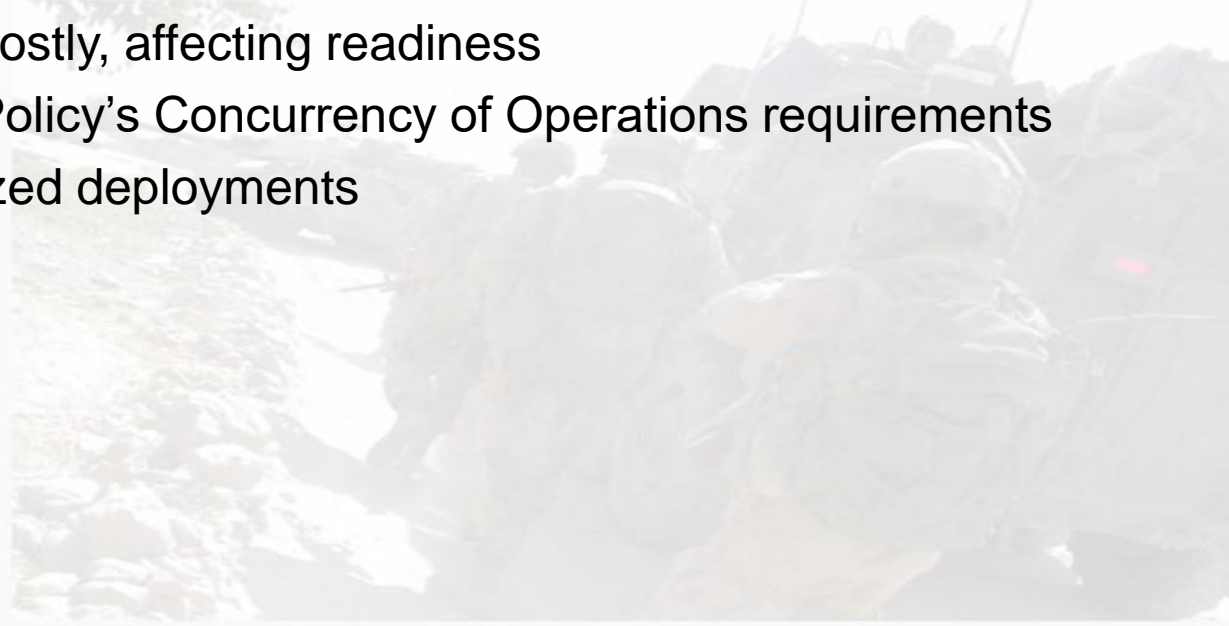
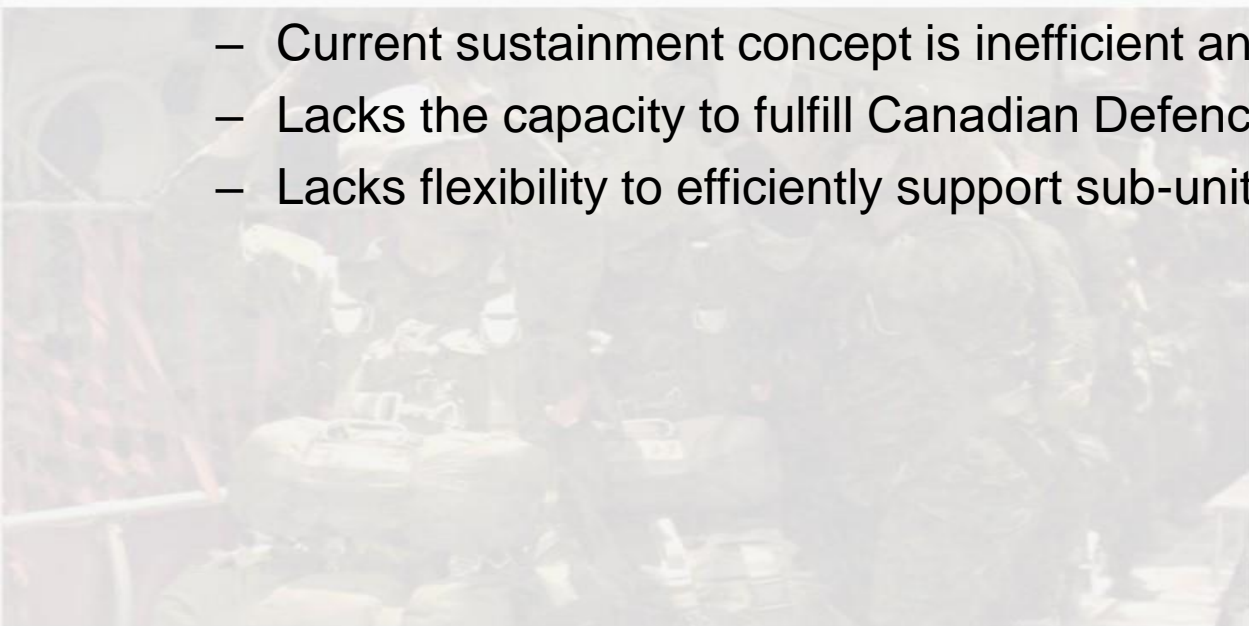
- Deployable Camp Infrastructure and Utilities Systems (Camp Sustain) (W8476-226540/A):
<https://canadabuys.Canada.ca/en/tender-opportunities/tender-notice/pw-hl-675-80770>
- CS Background
- CS Boundaries
- CS System
- CS Capability Options





Camp Sustain Background

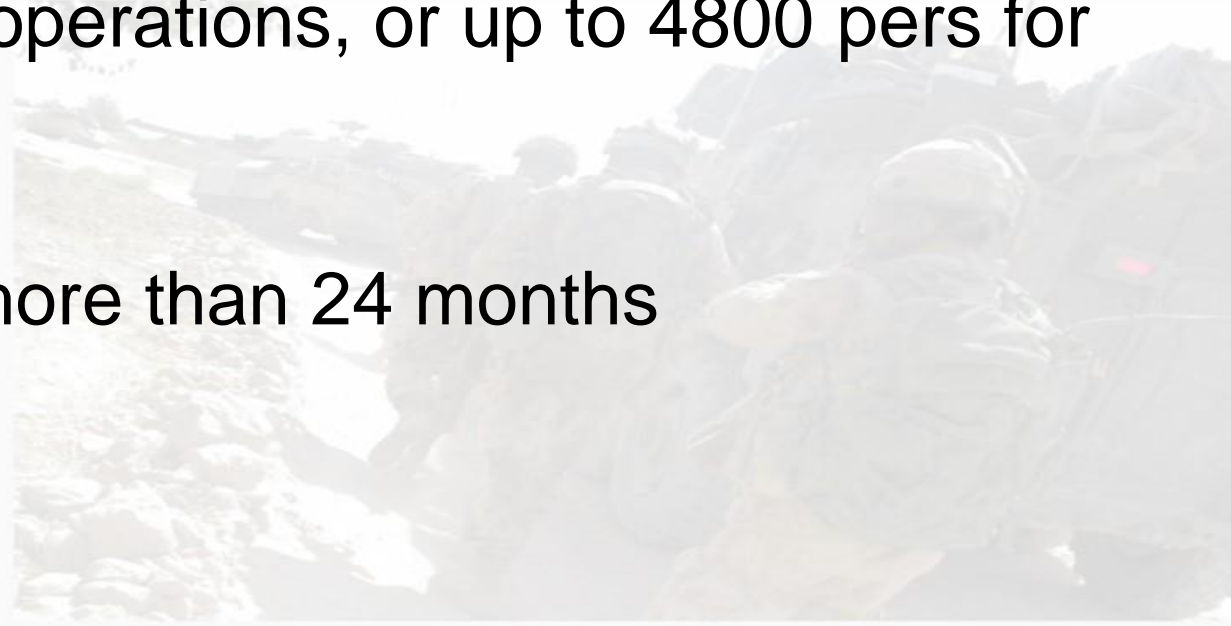
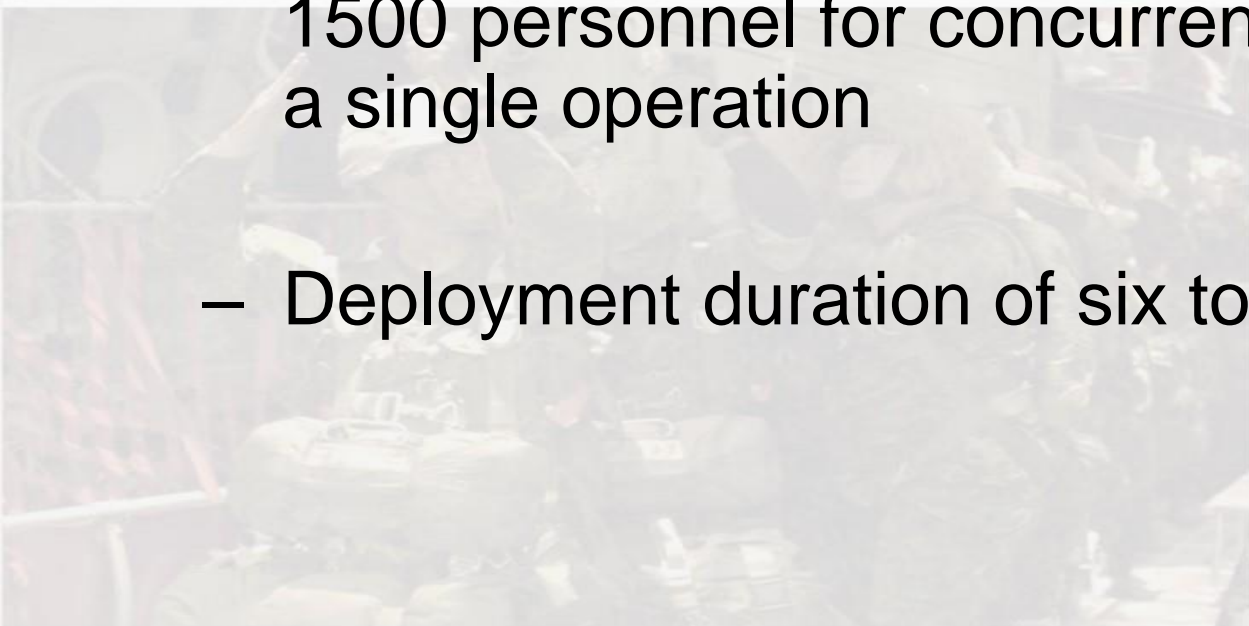
- Replacement project for the in-service Re-locatable Temporary Camp (RTC)
- In-service RTC Capability Deficiencies
 - Inefficient energy and resource consumption and is technologically unable to meet current energy efficiency requirements
 - Unable to operate efficiently and effectively in cold weather conditions
 - Requires frequent preventive and corrective maintenance
 - Current sustainment concept is inefficient and costly, affecting readiness
 - Lacks the capacity to fulfill Canadian Defence Policy's Concurrency of Operations requirements
 - Lacks flexibility to efficiently support sub-unit sized deployments





Camp Sustain Boundaries

- CS project will deliver a deployable camp infrastructure and utilities system to provide sustained, robust and flexible support during CAF expeditionary and domestic operations:
 - Sustain up to four concurrent deployed task forces of 100 to 1500 personnel for concurrent operations, or up to 4800 pers for a single operation
 - Deployment duration of six to more than 24 months





Camp Sustain System

- Enable soldiers to live and operate during Domestic Operations & Training as well as Expeditionary Missions
- Include a broad range of facility sub-systems





Camp Sustain Capability Options

- Upgrade RTC
- Acquire new system
- Contract per-use system
- Hybrid of above



- Total Project Value - \$250-499 M





Camp Sustain Schedule

Activity	Approximate Date
Industry Engagement Activities	Summer 2024
Draft Request for Proposal(s)	Spring 2025
Solicitation (Request for Proposal(s))	Spring 2026
Award (Contract(s))	2027/2028
Initial Operational Capacity	2029/2030
Full Operational Capacity	2031/2032



Tactical Power System (TPS)



DELIVERABLE:

- The TPS project will replace much of the up to 60kW in-service tactical power capability. This includes generators, distribution systems, and additional equipment to allow micro-grids to be created for larger generators.
- The new electrical power systems will be used throughout the CAF but primarily by the Army in all potential areas of operations both domestically, internationally, and in training.

REQUIREMENTS CONSIDERATIONS:

- Focuses solely on power generation up to 60 kW.
- Employed at the tactical level (Brigade group and below).
- Intended for temporary use (training exercises and small deployments).
- Expected life of 20+ years.
- Introduce energy efficient technologies and environmental protection considerations.

PROJECT STATUS:

- In Options Analysis
 - Enter Definition – 2024/25
 - Implementation – 2026/27
 - Contract Award – 2028/29
 - Final Delivery – 2030/31
- FUNDING
 - Total Project Value - \$100-249 M

CONTACT INFORMATION:

- TPS Project Director
- Maj Matt Ng
- DLR 7-3
- Matthew.Ng@forces.gc.ca

RFI: <https://buyandsell.gc.ca/procurement-data/tender-notice/PW-HL-675-80770>

Advanced Water Supply System (AWSS)



DELIVERABLE:

- This project will provide the CAF with a modern water supply system from sub-sub unit to division level that will reduce the logistic burden of transporting water, increase soldier survivability and increase our combat effectiveness.
- Deliverables include:
 - Formation-size mobile water production system to replace the in-service ROWPU.
 - Distribution systems (Jerry Cans and canteens sanitizing system (TBC), storage & distribution equipment).
 - Light, mobile RO water purification system.
 - Atmospheric Water Generation (AWG).

REQUIREMENT CONSIDERATIONS:

- Replace in-service ROWPU modernized system, including distribution and storage systems.
- Provide formation water supply capability with increased output in a 20' ISO Container:
 - 10000+ L/hr fresh water above 200K L/day is desired
 - 60%-70% of the system's capacity with salt water
- Provide a mobile RO for sub-sub units (1K-1.5K L/day)
- Provide a standalone AWG system (500-1500 L/day) TBC
- Be suitable for extreme climate and environment conditions (Note: light capability & AWG are to be used above 0°C)

PROJECT STATUS:

- In Options Analysis
 - Enter Definition – 2024/25
 - Implementation – 2026/27
 - Contract Award – 2028/29
 - Initial Delivery – 2028/29
 - Final Delivery – 2029/30
- FUNDING
 - Total Project Value - \$50-99 M

CONTACT INFORMATION:

- AWSS Project Director
- Capt Chris Klunder
- DLR 7-3-2
- Christopher.Klunder@forces.gc.ca

Air Force Expeditionary Capability (AFEC) Program

- The AFEC Program will provide the operational and training equipment necessary to support the Royal Canadian Air Force expeditionary structure, including:
 - 2 Deployment suites
 - 1 Training suite.
- 17 contributing projects
- FOC 2027
- Total Project Value \$299-499M

AFEC Program Scope

Air Exped Beddown



Log Veh



Pack-Up Kits



Water Purification



Recovery



Hvy Eqpt



2 Wing Mess, Dining, Accom



Pers Wpn



2 Wing Training Suite



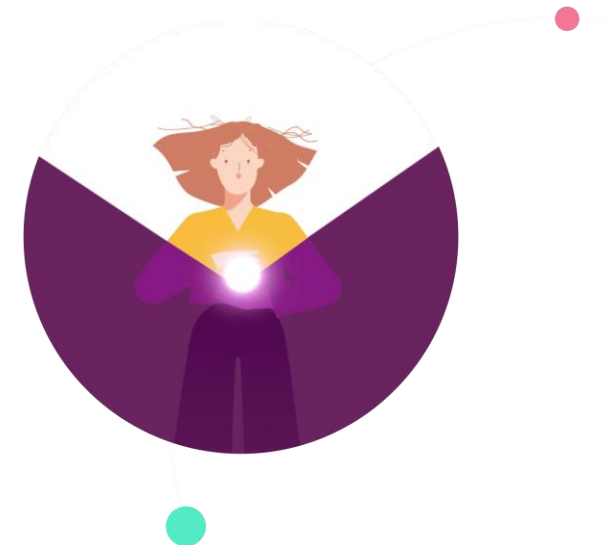
REPRESENTATIVE IMAGES ONLY



INNOVATION FOR DEFENCE EXCELLENCE AND SECURITY PROGRAM (IDEaS)

IDEaS officially launched on April 9, 2018 as DND/CAF's access to external innovation program.

- Mission: Deliver innovative solutions to DND/CAF's defence and security challenges to improve and advance Canada's defence capabilities.
- Budget: \$1.6B over 20 years



Website: www.Canada.ca/Defence-IDEaS



Questions?

