
Canadian Security Materials Technology Roadmap Steering Committee

Companies operating in Canada in the value chain for armoured vehicles and/or personal protective equipment (from advanced materials suppliers to OEMs) are invited to submit the candidacy of a member of their leadership team to become a member of the Canadian Security Materials Technology Roadmap Steering Committee.

About the security materials industry in Canada

Canada's armoured vehicle (AV) and personal protective equipment (PPE) industry is globally competitive. This industry is based upon conventional engineered materials such as Kevlar, polymer matrix composite laminates and monolithic ceramics, which are rapidly approaching their performance limits.

While there are continuing advances in constitutive material properties such as fibres and monolithic ceramics, these advances are occurring at a relatively slow rate compared to the rapidly evolving demands for higher performance and lower weight protection systems.

New transformational technologies required

New transformational technologies are required to continue to improve armour mass-efficiency (protection for a given weight) and to address capability deficiencies identified by the user communities (first responders, law enforcement, and military).

Canadian Security Materials Technology Roadmap (SMTRM)

The National Research Council (NRC) and Defence Research and Development Canada (DRDC) are working together to advance state-of-the-art armour technology solutions for the Canadian Armed Forces (CAF) and other user communities, such as first responders.

The aim is to strengthen this defence and security sector in Canada by developing and integrating advanced new materials and structures to improve the performance of AV and PPE, including increased ballistic protection.

Development and implementation of a Canadian Security Materials Technology Roadmap (SMTRM) that will engage stakeholders to define and implement R&D projects aligned with science and technology investment priorities is critical to the realization of this objective.

The technology roadmap process is not an acquisition process and is not in direct support of any government procurement. The assurance of open, fair and transparent procurement processes is imperative for both government and industry. Committee members will be required to abide to the SMTRM Steering Committee terms of reference and ethics code.

SMTRM Steering Committee

The Steering Committee will provide guidance to the SMTRM. Its primary responsibility will be to provide industry leadership to the roadmap including:

- Providing input into the direction and goals of the SMTRM
- Vetting the proposed work plan, objectives and timeline
- Actively participating in each stage of the roadmap development process and contributing to technical discussions
- Striving for consensus in its recommendations, using the best available evidence, as well as best practices
- Recommending appropriate implementation strategies, including leveraging from other initiatives or involvement from other stakeholders
- Reviewing and validating documentation produced throughout the process such as workshop reports
- Fostering effective, open, transparent and fair discussions
- Encouraging interchange of information between TRM participants
- Acting as a champion of the SMTRM among respective employing organizations and across the industry as a whole

Members of the Steering Committee will also be asked to provide an industry perspective and guidance on the direction of the NRC Security Materials Technology Program.

The SMTRM Steering Committee will be jointly chaired by representatives from industry and the National Research Council Canada.

Phase 1 of the SMTRM will deliver a high-level roadmap for Canadian industry. The SMTRM Steering Committee then has the option to instigate Phase 2 to deep dive into specific technology domains identified during Phase 1. This may involve formation of technical sub-committees that will report back to the SMTRM Steering Committee.

Membership on the SMTRM Steering Committee is open to leaders within any company operating in Canada in the value chain for armoured vehicles and/or personal protective equipment for ballistic protection, from advanced materials suppliers to OEMs.

Selection process

The SMTRM Steering Committee will consist of a mix of small and large companies across the value chain in Canada. Companies will be selected to represent a range of technology readiness levels, from low to high, in order to understand both the medium and longer term technology requirements of Canada's PPE and AV industries.

Applicants need to demonstrate their suitability against the selection criteria as outlined below. Applicants must hold sufficient rank or position to facilitate effective business

management and have the authority to fulfill their role. Support from upper management in the applicant's organization is important, as the applicant will need to confirm that they have time to attend committee meetings and workshops, review documents in advance of workshops or meetings and fulfill duties as technology committee chair (if applicable).

#	Mandatory criteria	Evaluation method	Criteria weight
0	Confirmed support from employing organization	Letter of support from upper management	N/A
0	Company's products include vehicle armour, personal protective equipment or their underlying technologies (including nanoscale materials technologies)	Letter of application	N/A
	Rated criteria		
1	Demonstrated leadership (low=0, medium=15, high=30)	Letter of application	20
2	Relevant technical expertise (low=0, medium=10, high=20)	CV	20
3	Company business model emphasizes scientific/engineering innovation	Letter of application	15
4	Level of interest demonstrated (low=0, medium=5, high=10)	Letter of application	15
5	Availability (low=0, medium=10, high=20)	Letter of application	20
6	Experience (involvement in related networking initiatives) (low=0, medium=10, high=20)	CV	10
	TOTAL		100

Please submit questions to NRC.SecurityMaterials-MaterielSecurite.CNRC@nrc-cnrc.gc.ca

Please submit your completed application and all supporting documentation to NRC.SecurityMaterials-MaterielSecurite.CNRC@nrc-cnrc.gc.ca by Thursday 15 January 2015.

More information

Visit the [SMTRM web page](#) for more information.