

# RPAS – THIRD CALL FOR PROJECT IDEAS

## Guidelines



Transport  
Canada



National Research  
Council Canada

Conseil national de  
recherches Canada

## Program Details & Objectives

CRIAQ is organizing a third call for project ideas on Remotely Piloted Aircraft Systems (RPAS) technologies in collaboration with the National Research Council of Canada (NRC) and Transport Canada (TC).

This program aims to identify innovative technology ideas and collect scientific data that will support the development of regulations, test methods and certification methods of compliance that will enable the safe operations of RPAS (also known as UAV or UAS) in Canada.

CRIAQ will support Transport Canada and NRC in the deployment of a research and development program on RPAS, using their networks with the objective of:

- **Promoting collaborative research** activities to support the development of the Canadian regulatory framework.
- **Supporting other key initiatives** as required.

## Call for project ideas

Interested industrial partners are invited to submit a project idea in collaboration with research partners for one of the following themes:

- **BVLOS-1 : Airborne Collision Avoidance System Qualification** :To provide risk mitigation data on specific DAA (Detect and Avoid) systems in order to inform the regulator and assist in the issuance of BVLOS Special Flight Operations Certificates (SFOCs).
- **BVLOS-2 : Robust Communication Links** :Provide data on Command and Control (C2) link characteristics for BVLOS operations at low altitudes (<500 feet) using a small to medium sized RPAS, to inform regulatory development.
- **BVLOS-3 : Probability of injury**: Provide data on the probability of impact of RPAS on persons, in case of an uncontrolled event in low altitude BVLOS operations, by small to medium size RPAS.
- **BVLOS-4 : Detection & Identification of Drones / Counter UAV Technologies** : Stimulate the development of efficient yet affordable drone detection & tracking technologies for airport environments, to reduce risk to manned aircraft, while informing the regulator on detection & tracking technological capabilities.

## Details on project funding

This program does not guarantee access to funding for your project; funding will need to be secured through a specific funding program.

Applicants who receive a positive evaluation of their project idea will be provided with contact information to local funding agencies by CRIAQ.

## **Submission Process:**

For each proposal, please choose a theme and follow the link below to complete the submission form(s) by 14<sup>th</sup> January, 2021:

- **BVLOS-1: Qualification of Collision Avoidance Systems**
- **BVLOS-2: Communication links**
- **BVLOS-3: Probability of Injury**
- **BVLOS-4: Detection & Identification of Drones / Counter UAV**

Please click [here to access the submission form](#).

For more information, please contact [projets@criaq.aero](mailto:projets@criaq.aero) with the Subject « **RPAS 2021 BVLOS** »

## **Application submission and approval process**

All project ideas will be evaluated by a joint committee composed of representatives from CRIAQ, the NRC and TC. CRIAQ will act as the contact point for receiving project ideas and coordinating the initiative.

All Quebec-led projects dealing with Technological Readiness Level (TRL) 2 to 6 and meeting CRIAQ criteria will also be invited to follow the CRIAQ process\*\*. Project teams may also make direct contact with other Canadian funding agencies if they meet their eligibility criteria.

Depending on the content of the final project plan, Transport Canada may act as an advisor or observer of the project.

## **Eligibility Criteria:**

- Projects must address one of the topics listed above.
- Project ideas must be submitted by an industrial partner.
- Industrial partners must have an R&D presence and/or manufacturing facility in Canada, and operations in Canada must be able to commercialize the R&D results of the project.
- The industrial partner(s) must have an annual sales and/or annual investments of \$500,000.
- Intellectual property arising from the project will be managed by the project participants, as CRIAQ-NRC-TC does not claim or manage intellectual property rights.

**Timeline:**



**Potential programs for projects support:**

Agency	Location	TRL	Recipients	Public support
CRIAQ	Provincial Quebec* *funding recipients must be in QC but partners outside of QC are eligible	- 2-4 4+	Research organizations (universities, colleges, research centres) Industries + Research organizations (universities, colleges, research centres)	Maximum 40% of project eligible expenditures  Maximum 50% of project eligible expenditures
IRAP	All provinces	4-6	SME and research organizations as subcontractors to the lead SME	Please visit <a href="#">IRAP's website</a> for more information.
NSERC	All provinces	2-4	Research organizations (universities, colleges, research centres)	Maximum 50% if OEM + Research organizations Maximum 66% if SME + Research organizations <u>or</u> SME + OEM + Research organizations
ARRI	All provinces		SMEs	Please visit <a href="#">ARRI's website</a> for more information and submission process.

*\* Not exhaustive. Access to support is submitted to programs eligibility criteria*