



**CSA-ESA-ARTES-GOP-0001**

**Canadian Space Agency  
Agence spatiale canadienne**

---

**Guidelines for the preparation of a Proposal  
for the CSA ESA Program under the ESA  
ARTES program**

**Revision -**

**February 28, 2017**

**FOR CANADIAN SPACE AGENCY USE ONLY**

This document and the information contained herein are not to be used for any purpose other than to accomplish Canadian Space Agency programs and projects whether they are completely Canadian initiatives or in cooperation with International Partners. The contents of this document are not to be disclosed or transferred in whole or in part, to any third party without the prior written consent of the Canadian Space Agency.

**REVISION HISTORY**

Issue	Approved CR No	Description of authorized change	Affected Para/Section	Publication Date	DM Init
-		Initial release		February 28, 2017	

**TABLE OF CONTENTS**

**1 INTRODUCTION..... 4**

**2 MANDATORY CRITERIA..... 4**

**3 REQUIRED INFORMATION FOR EVALUATION: ..... 5**

    PRODUCT AND TECHNOLOGY..... 5

    BUSINESS OPPORTUNITY ..... 5

    TARGET CUSTOMER ..... 5

    MARKET ANALYSIS ..... 5

    COMPETITION..... 5

    DEVELOPMENT PLAN ..... 6

**4 EVALUATION PROCESS..... 6**

## 1 INTRODUCTION

When required, a Proposal is a means for the applicant that seeks funding under the ARTES program to obtain a letter of support from the CSA. If such letter of support is obtained, the applicant can then use this letter of support as part of its proposal to ESA.

To minimise the level of effort required by the applicant, whenever possible, the information requested by the CSA is information that the applicant will have to submit eventually to ESA. To ensure that the desired activity meets the CSA ESA Program Objectives listed in Annex A, additional information is requested from the applicant. On the basis of this initial information, the eligibility of the proposed idea for ARTES support can be assessed by relevant CSA experts and early feedback can be provided. Once the Proposal is found acceptable by CSA, a letter of support will be provided.

The suggested length of a Proposal is 5-10 pages and the applicant is encouraged to include diagrams, charts, and tables as appropriate to support the written text.

## 2 MANDATORY CRITERIA

In order to be considered for further evaluation to receive a letter of support from the CSA, the following mandatory criteria must be met and supporting information/evidence must be provided in the proposal.

- i) European Partnership or ii) Involvement of a European Client or iii) Flight Opportunity.  
A European partnership should be involving a European industrial partner investing in the proposed project and needs to be demonstrated with letters of support and commitment. A European client commitment also needs to be demonstrated using a letter of support describing the client objectives and plans at a high level. Finally, a European flight opportunity must be concrete and supported with strong evidence of partner engagement via letters of support and commitment. Only one of these three elements is essential in obtaining a letter of support by the CSA.
- An rationale explaining why is this opportunity better addressed by the ESA's ARTES program than national programs like the CSA's Space Technology Development Program (STDP) <http://www.asc-csa.gc.ca/eng/programs/stdp/>
- A description of the foreseen socio-economic benefits for Canada
- An indication of the anticipated wider socio-economic impact of the proposed development on your business (e.g. business expansion, job creation, profit growth, etc.).

### **3 REQUIRED INFORMATION FOR EVALUATION:**

#### **PRODUCT AND TECHNOLOGY**

This section should:

- Describe the product to be developed or service to be provided (the “intended development”)

The contents of this section should include:

- A description of the product (the intended development) and the starting point
- A summary of key product features
- A summary of key design characteristics
- An outline of potential uses for the product

#### **BUSINESS OPPORTUNITY**

This section should describe the identified opportunity for the intended development and how the proposed new solution relates to existing solutions.

The contents of this section should include:

- An overview of the current market landscape the product aims to address.
- An explanation of the key market forces driving adoption of products in this landscape.
- A summary of the alternative solutions or approaches in the market today and their relative positioning.
- An explanation of the opportunity for your product in this landscape.

#### **TARGET CUSTOMER**

This section should describe the target users/customers of the intended development and provide supporting evidence that your product will meet the needs of these target customers.

The contents of this section should include:

- A description of the customer segments that are planned to be targeted with the proposed product.

#### **MARKET ANALYSIS**

This section should describe the market potential for the intended development, including the potential impact on this market of your proposed development.

The contents of this section should include:

- A summary of the key players in this market, including major vendors and customers.
- An estimate of your market share and revenues today and your predicted future market share and revenues upon completion of the intended development.

#### **COMPETITION**

This section should describe the competition for your proposed product.

The contents of this section should include:

- An overview of the current competitors and their key strengths/weaknesses.
- An explanation of your competitive advantage over these competitors.

## **DEVELOPMENT PLAN**

This section should describe the programmatic aspects of the intended development.

The contents of this section should include:

- A summary of total project costs and the impact of requested ESA co-funding.
- A breakdown of ESA funding and industry contribution.
- A project timetable, including the intended start date, duration and expected completion date for all key project components.
- Details of any other completed and/or running development activities (under internal, national or ESA funding) that are relevant to the proposed activity, together with an explanation of how these other activities affect the proposed development (e.g. time dependencies, input/output dependencies, lessons learnt).

## **4 EVALUATION PROCESS**

This section presents the evaluation process that will be used by the CSA to select activities where a letter of support will be provided. Evaluators will assess the screened applications according to the criteria listed below. Evaluators will be experts in the field relevant to the applications and may include representatives of other Canadian government departments. The applicant shall use the information provided in this section regarding the evaluation process as additional guidelines for the information to include in its proposal.

Before a final decision is made, the CSA may seek input and advice from other organizations, including (but not limited to) federal, provincial, territorial and municipal government agencies and organizations.

The amount of support will be determined according to the total cost of the project, as well as the other sources of funds invested by other stakeholders and the applicant.

Finally, it is important to note that the CSA will also make its funding decisions based on the best interests of the Canadian space program and in order to promote a balanced approach to favor a healthy, diversified and competitive Canadian satcom industry.

### **4.1 EVALUATION CRITERIA**

#### **4.1.1. Degree of Innovation**

This criterion evaluates the novelty associated with the new concepts, products and/or know-how to be developed. Innovation can range from sustaining innovations that improve the performance of existing products (but do not create new markets) to disruptive innovations that offer an entirely different value proposition leading to the creation of new markets.

#### **4.1.2. Market Assessment**

This criterion evaluates the applicant's understanding of the market needs associated with the proposed technology. It includes a thorough analysis of market demand. Incidentally, this criterion also evaluates whether the proposal addresses the existence and number of competing alternatives on the market.

#### **4.1.3. Alignment with Program Objectives and Benefits to Canadian**

This criterion evaluates the alignment of the proposed activities with the specific objectives of Canada's participation in the ARTES program and the more general objectives of the ESA program. It also assesses the benefits for Canadian, including the socio-economic benefits that would result from the proposed activities

#### **4.1.4. Development of Industrial Core Capabilities**

This criterion evaluates the potential of increasing industrial capabilities through the advancement of knowledge (know-how) or improvement of the state-of-the-art. It also assesses how the proposed project will contribute to enhancing Canadian industry's ability to meet national space needs. This readiness is reflected by the breadth and depth of the technological domains in which the Canadian industry is active.

#### **4.1.5. Competitive Advantage**

This criterion assesses the merit and potential of the proposed project to positively affect the company's competitive advantage and/or overall market share. It is recognized that an improvement in the company's overall market share (or competitive advantage) can be achieved through creating a new market, penetrating for the first time an existing one and/or increasing one's position in an already accessed market.

#### **4.1.6. Path to Commercial Potential / Flight Opportunities**

This criterion evaluates the applicant's roadmap for implementing the technology in space. This criterion seeks answers to the following:

- Does the applicant have a post-project strategy, with expected budget and schedule, to further develop the technology in order to achieve commercial potential?
- What future space missions are relevant for this technology?

## **ANNEX A**

### **ESA Program Objectives**

Canada and the European Space Agency (ESA) have been cooperating in space activities for over 40 years. Formal Canada–ESA cooperation started in 1979, with the signing of the first Cooperation Agreement that has since been renewed four times. The main objectives of the Canada/ESA Cooperation Agreement are to:

- Foster innovation and competitiveness by exposing companies from the Canadian space sector to ESA activities and programs dedicated to developing space applications, technologies and systems;
- Maintain or increase the ability of the Canadian space sector to successfully contribute to Canadian space initiatives by providing access to ESA flight opportunities, so as to demonstrate and qualify technologies and elements of space systems;
- Facilitate access to European space contracts and international public and private space contracts, if applicable; and
- Keep abreast of European space policy directions and Europe's technological, scientific, programmatic and commercial space environments to better guide the Canadian Space Agency (CSA) strategic planning process.