→ CANSAT

2018-2019 GUIDELINES

→ INTRODUCTION

The European Space Agency (ESA) endorses and supports a range of CanSat activities across its Member States, all leading to a European final event – the European CanSat competition. The CanSat project, aimed at secondary school students, mainly addresses Technology, Physics, and programming curricular subjects. By offering the practical experience of working on a small-scale space project, CanSat makes use of these subjects in an interdisciplinary manner, and promotes collaboration and teamwork.

What is a CanSat?

A CanSat is a simulation of a real satellite, integrated within the volume and shape of a soft drinks can. The challenge for the students is to fit all the major subsystems found in a satellite, such as power, sensors and a communication system, into this minimal volume. The CanSat is then launched by a rocket to an altitude of about one kilometre, or dropped from a platform, drone or captive balloon. Then its mission begins. This involves carrying out a scientific experiment, achieving a safe landing, and analysing the data collected.

Educational value of the CanSat project

Through the CanSat project, the participating student teams experience all the phases of a real space project, from selecting the mission objectives, designing their CanSat, integrating the components, testing the system, preparing for launch, and analysing the scientific data obtained. Throughout this process the students:

- learn by doing,
- get acquainted with the enquiry-based methodology that is typical of real-life scientific and technical professions,
- acquire and/or reinforce fundamental Technology, Physics, and programming curricular concepts,
- understand the importance of coordination and teamwork,
- enhance their communication skills.

→ PROJECT PHASES

The phases of the European CanSat competition reflect and take into account the set of national CanSat activities – mostly national competitions – which lead to the selection of one national team that will participate in the European competition (only one team per ESA Member State and Associate Member State is admitted to the European competition).

The 2019 European CanSat Competition consists of five phases:

1. Phase 1 – Kick-off of the European CanSat Competition
2. Phase 2 – National competitions
3. Phase 3 – Preparation of the European CanSat launch campaign
4. Phase 4 – European CanSat launch campaign
5. Phase 5 – Post-launch campaign activities

→ Phase 1 - Kick-off of the European CanSat Competition

In this phase student teams have to enrol in a national CanSat activity, either participating in the respective national competition or, in case there is none, preparing to submit their CanSat project proposal directly to ESA.

Case 1. Countries with a national CanSat competition which is recognised by ESA (see pages 7 and 8.) will automatically be granted participation in the European competition. The national competition organisers are requested to send ESA the name of their national winning teams via email (cansat@esa.int) indicating "2019 European CanSat Competition National Winner" in the subject line, no later than 6 May 2019, 22:00 Central European Time (CET). Exceptions to this deadline may be authorised by ESA for specific situations and only after receiving a justified written request from the national organiser.

In the school year 2018-19, CanSat national competitions will take place in: Austria, Belgium, Czech Republic, Denmark, Germany, Greece, Ireland, Italy, Malta, Nordic countries (Finland, Norway and Sweden), Portugal, Poland, Romania, The Netherlands, Spain, The UK .

Case 2. Countries where a national CanSat competition does not exist. In this case student teams can apply/register and submit their CanSat proposal by completing the dedicated proposal form and emailing it directly to ESA at cansat@esa.int by **2 December 2018, 22:00 (CET)**. The teams that can apply directly to ESA must reside in: Estonia, France, Hungary, Luxembourg, Switzerland, Canada or Slovenia.

Based on the quality of the submitted proposals, one team per country will be selected by an Evaluation Committee nominated by ESA.

On 14 December 2018 ESA will let the selected teams **know that they have been accepted to participate in the European competition.**

[1] The list of countries hosting a national competition may be subject to change.

Student team eligibility conditions

In order for a student team to be accepted in the European competition the following conditions have to be fulfilled:

1. Each student team shall comprise a minimum of 4 (required) up to a maximum of 6 students (aged 14 - 20) resident in an ESA Member State or Associate State , respecting one of the following conditions:
   - Team of students enrolled full-time in a secondary school.
   - Team of students in home schooling condition (certified by the National Ministry of Education or delegated authority).
   - Team of members of a social club enrolled full-time in a secondary school
2. At least 50% of the students included in a team must be nationals of an ESA Member or Associate State.
3. University/higher education students cannot participate in this competition.
4. Each team needs to be supervised by a teacher or mentor (Team Leader) responsible for monitoring the team's technical progress, offering help and advice, and acting as the team's point of contact with ESA's Education Office. The Team Leader must be available to accompany the team to the competition launch campaign.
5. If your school or country requires that more than one teacher/mentor accompanies the students, the participating team needs to submit evidence of this. However, the total amount of participants must not exceed seven people (e.g. maximum of 6 students + 1 teacher or 5 students + 2 teachers) due to capacity limitations.
6. It is forbidden for a team to participate in the European CanSat competition more than once, with the exception of the teacher/mentor and up to one student from the former team.

[2] A **minimum of 4 students per team** is required in order to guarantee proper team interaction and collaboration.
[3] **ESA Member States in 2018**: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, United Kingdom.
ESA Associate States in 2018: Canada, Slovenia.
[4] In the framework of the current collaboration agreement between ESA and the Republic of Malta, teams from **Malta** can also participate in the European CanSat Competition as guest competitors. Teams from other countries may also participate in the European CanSat Competition as guest competitors if approved by ESA. See Annex 1.

→ Phase 2 – National competitions

In order for a national CanSat competition to be recognised by ESA (and, as a consequence, for the national winning team to be automatically accepted in the European competition):

1. Student teams must comply with European competition eligibility criteria stated above.

2. The national teams must perform all of the following tasks:
   - Selection of mission objectives;
   - Definition of technical requirements necessary to achieve the objectives;
   - Design of CanSat hardware and software;
   - Design of ground station/ground telecommunication system;
   - Documentation of design reviews, leading to design refinement;
   - Integration and testing of the CanSat;
   - National launch campaign.

3. The national organisers have to guarantee a fair geographical distribution and participation of teams from across their country.

4. The national organisers are encouraged to run their national competitions between summer 2018 and the first week of May 2019.

5. The national organisers must make sure that the participating teams are aware of the European CanSat Competition requirements stated in Chapter 3.3. The European Space Agency will not make exceptions if any requirement is not met at the European Launch Campaign, even if these exceptions were made in the National Competitions.

6. The national organisers should have the intention of continuing the CanSat national activity in the future, and try to guarantee editions on a yearly basis.

7. It is the obligation of the national organiser to make sure that the winning team (or, in case of unavailability for exceptional reasons, second ranked team) is able to attend the European Launch Campaign. The organisers must also ensure that all the organisational and administrative aspects of the participation of the winning team in the European CanSat competition are suitably arranged in due time (such as: insurance coverage, etc).

→ Phase 3 - Preparation of the European CanSat Launch Campaign

Under the supervision of their teacher/mentor, all the teams participating in the European CanSat launch campaign will have to carry out technical work on their CanSats, applying the procedures used in the typical lifecycle of a real space project, which are:

- Selection of mission objectives;
- Definition of technical requirements necessary to achieve these objectives;
- Design of hardware and software;
- Design of ground station/ground telecommunication system;
- Submission of the Critical Design Review Report (only for teams directly selected by ESA*)
- Submission of a **Pre-launch Report** of a maximum of 15 pages (written in Verdana font, size 11) to ESA by 9 June 2019, 22:00 CET;
- Integration and testing of the CanSat before the European launch campaign starts.

What is the Pre-Launch Report (PLR) ?

The Pre-Launch report, or PLR, is a **15 page document** (excluding appendices) that summarises all the work done (progress), providing a full description of the CanSat mission, system and functionalities, and indicating the steps, rationale and trouble-shooting which was needed to achieve the CanSat refined design, as well as a detailed budget. This document should accurately record all the details of the completed CanSat prototype. This will be the main document provided to the Jury members before the European launch campaign, who will then be tasked with evaluating the work and performance of each team as described in Chapter 4.

The Pre-Launch Report must be submitted to ESA in pdf format (written in Verdana font, size 11) at cansat@esa.int with the name of the team and of the document submitted written in the subject line (e.g. “Team A Pre-launch report”). The document attached should be in a pdf format, with the following file name format: teamA_ prelaunch report.pdf

Any additional appendices to the first 15 pages of the document will be excluded from the version of the PLR that will be sent to the jury.

*What is the Critical Design Review (CDR) ?

In order to ensure that the national competition winners and the teams with no national competition selected directly by ESA have a fairly comparable level of preparation, the teams selected directly by ESA will have to submit an additional report prior to the Pre-Launch Report, the Critical Design Review Report, or CDR. The CDR is a technical document that ensures that the design can meet the stated performance requirements, taking into account all the system constraints.

Compiling the CDR allows student teams to evaluate the detailed design effort, determine readiness for hardware fabrication and for software coding, and establish the final configuration of the secondary mission.

The CanSat CDR must contain:

- A demonstration that all the requirements stated in the guidelines for the European CanSat Competition have been fulfilled
- The design specifications needed to fulfil the secondary mission (see 3.2)
- Results of the completed requirements verification tests
- Overview of mission operations
- Detailed budget

The CDR must be submitted to ESA via email (cansat@esa.int) no later than 31 March 2019, 22:00 CET, with the name of the team and of the document submitted clearly written in the subject line (e.g. “TeamA_ cansat CDR report”). The document should be attached in a pdf format with the following file name format: teamA_ cansat CDR report.pdf.

ESA will provide guidelines as well as templates for the required reports to each participating team.

→ Phase 4 - European CanSat launch campaign

The highlight of the European CanSat competition is the launch campaign, taking place from 24 to 28 June 2019. All national teams' CanSats will be launched by a rocket up to an altitude of 1 km. The CanSats will then separate from the rocket, conduct their missions, and land on the ground to be recovered by the teams. The location of the European CanSat competition finals will be known and announced at the beginning of 2019. The teams' CanSats must be flight-ready in time for the launch campaign.

A Jury of space experts will be nominated by ESA to evaluate the teams and their work. The Jury will select the winning teams based on the criteria listed in Chapter 4.

Outline of the launch campaign

Day 1	Teams arrive Ice breaker activity Opening ceremony
Day 2	Presentation of projects to the jury at the working site First technical inspection of CanSats Drop tests of CanSats
Day 3	Launch of CanSats
Day 4	Presentation of results by CanSat teams Closing ceremony
Day 5	Social programme Teams depart

→ Phase 5 - Post-flight activities

After the launch campaign the teams will be requested to prepare and submit their CanSat Final Report (CFR), which follows the standards of a scientific paper, including an abstract and details of the whole project. The report should be limited to a **maximum of 25 pages** (excluding appendices) and must summarise the work done before, during, and after the launch campaign, with a special focus on the results obtained and the (scientific/engineering/technical) conclusions. Only after submission of the CFR will the members of the teams receive an ESA certificate recognising their participation in the 2019 European CanSat Competition.

The CanSat Final Report has to be submitted to ESA at cansat@esa.int by 14 July 2019, 22:00 CET, stating the name of the team and of the document submitted in the subject line (e.g. "TeamA_ cansat final report"). The document should be sent in a **pdf format**, using the following file name format: teamA_ cansat final report.pdf.

ESA will provide guidelines as well as templates for the required reports to each participating team.

Overview of the competition timeline

Phase 1: Kick-off of the European CanSat Competition	
Activity	Date
Competition announcement and ESA call for proposals for countries with no national competition	October 2018
Deadline for submission of proposals from countries with no national competition	2 December 2018
ESA announcement to the teams selected from countries with no national competition	14 December 2018
Student teams submit their Critical Design Review Report to ESA (only by teams from countries with no national competition)	31 March 2019
ESA sends feedback of Critical Design Review to teams from countries with no national competition	15 April 2019

Phase 2: National competitions	
Activity	Date
National competitions take place	Summer 2018 – 5 May 2019
Deadline for national competition organisers to communicate name of winning teams to ESA	6 May 2019

Phase 3: Preparation of the European Launch campaign	
Activity	Date
Student teams submit their Pre-launch Report to ESA	9 June 2019

Phase 4: European launch campaign	
Activity	Date
European launch campaign	24-28 June 2019

Phase 4: European launch campaign	
Activity	Date
Student teams submit their CanSat Final Report to ESA ESA mails the participation certificates to the teams	14 July 2019

→ Mission overview

The CanSat competition is designed to simulate all aspects of a real satellite mission, including design, development, testing, launch, operations, and data analysis, by means of teamwork.

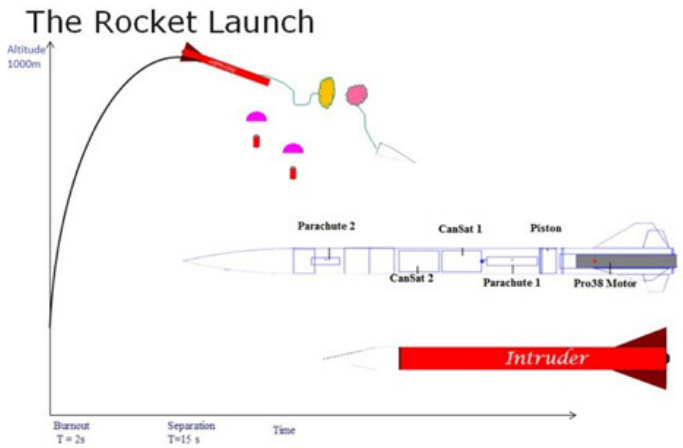
3.1 The rocket launch

An example of a rocket launch is given below and could differ from the one used in the final launch campaign.

A commercial model rocket kit, such as the Intruder, can launch the CanSats. Each rocket can host 2 or 3 CanSats with the following characteristics:

Mass:	3 kg
Length:	1.5 m
Diameter:	79.4 mm
Span:	232 mm
Apogee:	approx. 1000 m
Flight time:	approx. 140 s
Propellant mass:	280 g

The rocket would deploy its parachute at apogee, which is reached at around 15 seconds after take-off, together with the two CanSats. Just after the apogee (0-2 seconds later), the CanSats would separate from the rocket and make separate parachute descent. The CanSats are usually found within 1 km of the launch site. However, recovery of the CanSats cannot be guaranteed.



3. 2 Primary and secondary CanSat missions

1. Primary mission

The team must build a CanSat and program it to accomplish the following compulsory primary mission:

To measure, after release and during descent, the following parameters:

- **Air temperature**
- **Air pressure**

and transmit these data as telemetry to the ground station at least once every second

During the post-flight analysis, it must be possible for the team to analyse the data obtained (for example, make a calculation of altitude) and display it in graphs (for example, altitude vs. time and temperature vs. altitude).

2. Secondary mission

The secondary mission of the CanSat must be selected by the team. Teams can take ideas from real satellite missions, or collect scientific data for a specific project, make a technology demonstration for a student-designed component, or any other mission that would fit inside the CanSat and show its capabilities.

Some examples of missions are listed below, but teams are free to design a mission of their choice, as long as they can demonstrate to have some scientific, technological or innovative value. Teams should also keep in mind the limitations and requirements of the CanSat mission (Chapter 3.3), and focus on the feasibility (both technical and administrative) of their chosen mission.

Some secondary mission examples:

1. **Advanced telemetry:** After release and during descent, the CanSat measures and transmits additional telemetry to that required for the primary mission, for example:
   - Acceleration
   - GPS location
   - Radiation levels

2. **Telecommand**: During descent, commands are sent from the ground to the CanSat to perform an action, such as switching a sensor on and off, changing the frequency of measurements, etc.

3. T**argeted landing**: The CanSat navigates autonomously with a control mechanism that controls a parafoil, for instance. The objective is for the CanSat to land as close as possible to a fixed target point on the ground after it has been released from the rocket. This mission is an advanced telemetry/telecommand mission.

4. **Landing system**: A safe landing system alternative to the standard parachute for the CanSat would be deployed.

3.3 CanSat technical requirements

The CanSat hardware and mission must be designed following these requirements and constraints:

1. All the components of the CanSat must fit inside a standard soft drinks can (115 mm height and 66 mm diameter), with the exception of the parachute. Radio antennas and GPS antennas can be mounted externally on the top or bottom of the can, depending on the design, but not on the sides.

2. The antennas, transducers and other elements of the CanSat cannot extend beyond the can's diameter until it has left the launch vehicle.

3. The mass of the CanSat must be between a minimum of 300 grams and a maximum of 350 grams. CanSats that are lighter must take additional ballast with them to reach the 300 grams minimum mass limit required.

4. Explosives, detonators, pyrotechnics, and inflammable or dangerous materials are strictly forbidden. All materials used must be safe for the personnel, the equipment, and the environment. In case of doubt by ESA, Material Safety Data Sheets (MSDS) may be requested from the teams.

5. The CanSat must be powered by a battery and/or solar panels. It must be possible for the systems to remain switched on for four continuous hours.

6. The battery must be easily accessible in case it has to be replaced/recharged.

7. The CanSat must have an easily accessible master power switch.

8. Inclusion of a positioning system for retrieval (beeper, radio beacon, GPS, etc.) is recommended.

9. The CanSat should have a recovery system, such as a parachute, capable of being reused after launch. It is recommended to use bright coloured fabric, which will facilitate recovery of the CanSat after landing.

10. The parachute connection must be able to withstand up to 500 N of force. The strength of the parachute must be tested to ensure that the system will operate nominally.

11. For recovery reasons, a maximum flight time of 120 seconds is recommended. If attempting a directed landing, then a maximum of 170 seconds flight time is recommended.

12. A descent rate between 8 and 11 m/s is recommended for recovery reasons. However, the CanSat's descent speed must not be lower than 6 m/s or higher than 12 m/s for safety reasons.

13. The CanSat must be able to withstand an acceleration of up to 20 g.

14. The total budget of the final CanSat model should not exceed 500€. Ground Stations (GS) and any related non-flying item will not be considered in the budget. More information regarding the penalties in case the teams exceed the stated budget can be found in the next section.

15. In the case of sponsorship, all sponsored items should be specified in the budget with the actual corresponding costs on the market.

16. The assigned frequency must be respected by all teams in the Launch Campaign. The range of allowed frequencies changes depending on the country where the event is hosted and will be communicated in due time. It is recommended that teams pay attention to the design of the CanSat in terms of hardware integration and interconnection, so the radio frequency can be easily modified if necessary.

17. The CanSat must be flight-ready upon arrival at the launch campaign.

3.4 Meeting the requirements for the European Launch Campaign

To verify that the CanSats are suitable for launch, a technical inspection and a drop test will take place at the beginning of 2019 European CanSat Competition Launch Campaign. The way the requirements are evaluated is as follows:

- **Requirements 1, 2, 3, 7, 12 and 16 will be evaluated** on site by a specially appointed CanSat technical team. Teams that don't pass any of the tests at the first attempt will only be permitted one second chance to amend the issues, in order to meet all the requirements. In case of failing at the second attempt, the team will be considered not to have achieved flight status and their CanSat won't be approved for launch.

- **Requirements 10 and 13** refer to tests that should be carried out prior to the 2019 European CanSat launch campaign and the proof of these tests being successful should be stated in the PLR.

- A statement of confirmation that the rest of the requirements are met should be included in the Pre-Launch Report, paying special attention to **requirement 14**, which must be stated in the document

→ EVALUATION AND SCORING

4.1 The jury

The Jury, **appointed by ESA**, will be comprised of CanSat experts, education experts, or engineers and scientists who will evaluate the teams' performances during 'Phase 4: European CanSat Competition launch campaign', taking into account the CanSat Pre-launch Report. The jury members will score the teams during the launch campaign and announce the results from their scoring in the Closing Ceremony.

The jury will typically have 4-6 members, and their fields of expertise can vary from science to engineering or education. The jury board is usually comprised of:

- Space science/engineering expert(s)
- IT/Electronics expert(s)
- Education expert(s)
- Radio communication expert(s)

CanSat National organisers are encouraged to indicate/recommend to ESA experts who can be part of the jury for the 2019 European CanSat Competition. These nominations must be received by email at cansat@esa.int **no later than 1 March 2019**. ESA will ultimately decide on the final composition of the jury and the appointment of its members.

Scoring

Performance in the following areas will be evaluated:

A. Technical achievement

The Jury will take into account how the teams obtained the results, how reliable and robust the CanSat was, and how the CanSat performed. Innovative aspects of the project will be judged (e.g. the tools selected and the hardware/software used).

The aspects evaluated will be:

- **Mission's technical complexity**: The CanSat's technical level, understanding of the technical concepts and the originality of the engineering aspects of the mission.
- **Performance of the Primary mission**: The CanSat's technical performance in terms of deployment and data collection for the Primary Mission.
- **Performance of the Secondary mission**: The CanSat's technical performance in terms of deployment and data collection for the Secondary Mission.

B. Scientific value

The scientific value of the teams' missions and the teams' scientific skills will be evaluated. This includes the scientific relevance of the mission, the quality of the technical reporting (both written and oral) and the team's scientific understanding that will be assessed from the team's ability to analyse and interpret results appropriately.

The aspects evaluated will be:

- **Scientific relevance:** Assessment of whether measurements are done with a clear and well-founded scientific purpose, the extent to which the CanSat is used in an original way and if the data collection is appropriate for reaching the objective.
- **Scientific understanding:** Level of understanding of the scientific principles that underlie the project.
- **Technical reporting:** Ability to summarise with clarity and provide a readable and complete Pre-Launch report, the proper labelling of the graphs and use of the correct units and the ability to present scientifically sound data and interpretations during the launch campaign.

C. Professional competencies

The Jury will assess the team's collaboration and coordination, adaptability and communication skills.

The aspects evaluated will be:

- **Teamwork**: Collaborative effort of the team in order to complete the tasks in the most effective and efficient way.
- **Adaptability**: Attitude towards continual improvement and ability to adapt to new conditions, both from the national competition towards the European Competition (if applicable) and/or as far as ideas for improvement after the European Competition are concerned.
- **Communication**: Oral presentation skills, the ability to provide a captivating presentation involving confident speaking skills and a visually appealing presentation.

D. Outreach

The team will be awarded points on how the project is communicated to the school and the local community, taking into account web pages, blogs, presentations, promotional material, media coverage etc.

Marking scheme

The overall balance between the items to be evaluated is as follows:

Technical achievement	35%
Scientific value	35%
Professional competencies	20%
Outreach	10%
TOTAL	100%

Penalties

Teams' final scores will be penalised with 1% per day of late submission of the CanSat Pre-Launch Report. Similarly, 1% of the final score will be subtracted per 10 euros extra spent over the maximum CanSat budget of 500 euros.

4.3 Prizes

In the previous editions of the European CanSat Competition (between 2010 and 2018), the Jury awarded:

- 1st Prize
- 2nd Prize
- 3rd Prize

Since the level of the teams coming to the European CanSat Competition has become increasingly high over the years, with different teams often scoring very similar results, ESA has decided to change the award scheme in order to be able to acknowledge the teams' strengths in a fairer way.

Therefore, at the 2019 European CanSat Competition, the prizes will be awarded according to the following categories:

- **European CanSat 2019 prize:**
  This prize will be awarded to the team with the best overall score.
- **Highest Technical Achievement prize:**
  This prize will be awarded to the team with the best score in the 'Technical Achievement' field.
- **Outstanding Science Mission prize**:
  This prize will be awarded to the team with the best score in the 'Scientific value' field.
- **Most Professional Team prize**:
  This prize will be awarded to the team with the best score in the 'Professional competencies' field.
- **Best Outreach prize:**
  This prize will be awarded to the team with the best score in the 'Outreach' field.

***Honorary prize (optional)**: The jury may award an 'honorary prize' in any of the two following scenarios:

- When a guest team has an outstanding performance, by ranking top in one or more of the fields mentioned above (see Annex 1)
- When a team goes 'above and beyond' in a particular area not covered by one of the official prizes.

The following rules will also apply:

- A team can't receive more than one prize.
- The European CanSat 2019 prize will always be awarded to the team with the highest overall score.
- If a team is ranked the highest in several categories, priority will be given to the highest weighting prizes (Outstanding Science Mission (35%) or Highest Technical Achievement (35%)); in case a team is ranked the highest both in the Scientific value and Technical Achievement fields, the prize awarded will be for the category in which the team has the highest score margin, ahead of the 2nd ranked team in that field.

For example, let's imagine one team has the best scores in both Technical Achievement (scoring 8.5) and Outreach (scoring 9.5). They will then be granted the *Highest Technical Achievement* prize, and the *Best Outreach* prize will be granted to the second best score in that field.

In a different scenario, where a team has both the best overall score (scoring 8.5) and the best score in Outreach (scoring 9.5), this team will be awarded the *European CanSat 2019* prize instead, as this prize needs to be awarded to the best overall score, and the 2nd ranked team in the 'Outreach' field would get the respective prize.

→ FUNDING & SPONSORSHIP

For the competition launch campaign, ESA will sponsor the accommodation, meals and local transportation expenses for **up to 7 participants** (6 students and 1 teacher or, exceptionally, as described in the 'requirements' section, 5 students and 2 teachers) per national team, as well as all costs for the rocket launches and related flight activities.

All teams are responsible for their own travel bookings and expenses to/from their hometowns and the main airport/train station of the launch campaign location, as well as the costs of their CanSat hardware and tools.

→ CONTACT

All questions and expressions of interest should be directed to:

Email: cansat@esa.int

More information:
CanSats in Europe Portal www.esa.int/Education/CanSat

→ Annex 1

Guest Competitors scheme (applies to non-ESA Member or Associate States)

The participation of your CanSat team and your role as guest competitors is accepted as follows:

- The guest team must be the winner of the National or regional CanSat Competition of the country.
- The guest team must be endorsed by the country's Space Agency or equivalent entity. For this, an email or letter of endorsement should be sent to cansat@esa.int no later than 1 March 2019. ESA will assess a guest team's participation on a case by case basis.
- The guest team must fulfil the eligibility criteria stated in this document.
- The guest team's CanSat must fulfil the technical requirements stated in the guidelines of the 2019 European CanSat Competition stated in Chapter 3.3.
- The guest team will be allowed to participate in the launch campaign with the other European teams and will be evaluated by the European CanSat Jury. However, as only the European teams can receive one of the official prizes stated in section 4.3, the guest team will receive an 'honorary prize' should they rank at any of these levels.
- The guest team will be able to use the same accommodation and local transportation means and have access to the meals and facilities provided by the competition organiser as per the other teams, but will have to cover all the expenses except: the meals, the use of the technical facilities and the launch costs, which will be covered by ESA.
- The guest team will be exempt from submitting to ESA the requested reports (such as the pre- launch report or the CanSat final paper), as they are guest competitors. Submission to ESA of these document is therefore optional.
- The guest team will provide ESA with a description of their CanSat mission/experiments in advance, to be passed to the Jury by a deadline that will be communicated to them in due time.