



eac

Sr. Vincenzo Torti
Presidente Generale del Club
Alpino Italiano (CAI)
Via Petrella 19
2014 Milano
Italia

European Astronaut Centre
Linder Höhe
51147 Cologne
Germany
T +49 (0)2203 6001 0
F +49 (0)2203 6001 103
www.esa.int

Cologne, 31/07/2019

Subject: Agreement between Italian Alpine Club (CAI) and ESA

Dear Mr Torti,

The purpose of this letter is to renew the cooperative agreement (hereinafter referred to as the "Agreement") between the Italian Alpine Club (hereinafter referred to as "CAI") and the European Space Agency (hereinafter referred to as "ESA"), hereinafter also referred to individually as "Party" or collectively as "the Parties", for the instructional implementation of ESA's Cooperative Adventure for Valuing and Exercising human behavior and performance Skills (CAVES) training course.

In the past years, ESA has benefitted from the technical support of the Speleological School of the Central Commission for Speleology of CAI during CAVES 2012, 2013 and 2014 courses, with the participation to the courses of a CAI National Instructor of Speleology. In addition, in 2015 the cooperation was formalised through an exchange of letters leading to the successful joint implementation of the CAVES 2015 and 2016 courses.

The Parties wish to renew this agreement, extending its applicability to the whole Italian territory and more generally to any official training activity during the CAVES event in the EU. This letter aims at renewing the successful collaboration, in particular with respect to defining principles aiming at ensuring the proper and safe conduct of ESA CAVES technical caving activities and their compliance with statutory rules and regulations applicable to ESA and CAI, including but not limited to the CAI Code of Ethics, as well as best practices.

1. Description of CAVES

ESA's Cooperative Adventure for Valuing and Exercising human behavior and performance Skills (CAVES) course provides a unique experience in which participants must adapt to living and working together in a very special technical environment, to meet team, scientific, and exploration-related mission objectives. Many aspects of the location, environment, and course content have been specially designed to put trainees in spaceflight-analogous situations and to impose spaceflight-like stressors.

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The total duration of the course is thirteen days. For six days, the participants live and cooperate in a pitch-black cave isolated from the outside world. Complex cave systems – some of them unmapped or unexplored – offer the perfect environment to put trainees in space-like situations. In addition to exploring, mapping and surveying the underground caverns, astronauts perform a scientific programme that includes the search for life, as they would on a mission to another planet.

The CAVES crew is typically formed by six astronauts, selected from ESA and American, Russian, Canadian and Japanese space agencies, supported and monitored by instructors and speleological personnel.

The safety organisation of the course is documented and verified at the occasion of a Training Readiness Review in which all aspects of readiness of the course, including safety and logistics, are determined and documented.

2. Purposes

2.1. CAI will make reasonable efforts to:

- 2.1.1. Collaborate with ESA to enable the preparation and safe implementation of the ESA CAVES course in accordance with the techniques and training protocols defined by the CAI National School of Speleology;
- 2.1.2. Provide to ESA, through the CAI National School of Speleology, a list of qualified speleological instructors (either Istruttore Sezionale di Speleologia (ISS), Istruttore di Speleologia (IS) or Istruttore Nazionale di Speleologia (INS)) which are members of CAI and could serve as experts in the CAVES training course;
- 2.1.3. Recognise the activities performed by its members during the CAVES course as institutional activities of CAI.

2.2. ESA will make reasonable efforts to:

- 2.2.1. Implement the technical guidelines produced by the CAI National School of Speleology in order to ensure a safe and proper conduct of the CAVES training course as well as the specific technical recommendations made by CAI on equipment and technical procedures;
- 2.2.2. On the basis of the list provided by CAI as per 2.1.2 above, involve CAI qualified instructors of Speleology (either ISS, IS or INS) as speleological and support personnel in the implementation of the CAVES training course;
- 2.2.3. Provide a selection of photos and a short report of the course to be used exclusively on the CAI website and in CAI publications;
- 2.2.4. Ensure visibility of CAI through ESA CAVES social media;
- 2.2.5. Offer to the National School of Speleology CAI available opportunities for participation in instructional courses provided at the European Astronaut Centre;
- 2.2.6. Provide insurance cover for instructors nominated by CAI, aligning it to that applicable to all CAVES personnel.

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3. Representatives of the Parties

For the purposes of this Agreement, the representatives of the Parties will be:

3.1 CAI

Programmatic contact:

Mrs. Andreina Maggiore
Director Italian Alpine Club (CAI)
Via Petrella 19,
2014 Milan
Italy
+39 022057231
a.maggiore@cai.it

Technical contact:

Sr. Stefano Nicolini
Direttore Scuola Nazionale di Speleologia CAI
Via Petrella 19,
2014 Milan
Italy
+39 022057231
direttore@sns-cai.it

3.2 ESA

Programmatic contact:

Mrs V. Zinck-Dasmien
Administrator
Coordination Team
Directorate of Human and Robotics Operations
ESA- ESTEC
Keplerlaan 1
2201 AZ Noordwijk
The Netherlands
+31-71-565- 8937
Valerie.Zinck@esa.int

Scientific/Technical contact:

Loredana Bessone
CAVES Project coordinator
Space Training Team
Directorate of Human and Robotics Operations
ESA-EAC
Linder Hoehe
51147 Cologne
Germany
+49 2203 6001 340
Loredana.bessone@esa.int

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3.3 Any change in the Parties' representatives, or in the corresponding details, will be communicated in writing by the respective Party making such change to the other Party.

4. Financial Arrangements

The Parties will each bear the cost of discharging their respective responsibilities. For the avoidance of doubt, ESA costs include allowances for mission and travel expenses paid to CAI instructors providing support to the CAVES training course. It is understood that the ability of the Parties to carry out their obligations is subject to the availability of appropriated funds, in compliance with the Parties' respective rules and policies. Should either Party encounter budgetary problems that may affect the activities to be carried out under this Agreement, the Party encountering the problems will notify and consult with the other Party as soon as possible.

5. Public Information

The Parties retain the right to release public information regarding their own activities under this Agreement. The Parties will coordinate with each other in advance concerning releasing to the public information that relates to the other Party's responsibilities or performance under this Agreement.

6. Language

For the implementation of this Agreement, all documents exchanged by the Parties (including technical documents) will be written in English and/or in Italian.

7. Personal data

Any personal data that may be collected or produced in the frame of the implementation of this Agreement shall be processed by the Parties in accordance with the laws and regulations at national and European levels applicable to the protection of these personal data.

8. Cross-Waiver of Liability, Hold Harmless

8.1. With regard to activities undertaken pursuant to this Agreement, neither Party shall make any claim against the other, employees of the other, the other's related entities (e.g., contractors, subcontractors, institutional partners, collaborators and/or volunteers), or employees, collaborators and/or volunteers of the other's related entities for any injury to or death of its own employees or employees of its related entities, or for damage to or loss of its own property or that of its related entities, whether such injury, death, damage, or loss arises through negligence or otherwise, except in the case of gross negligence and willful misconduct.

8.2. Each Party will hold harmless and indemnify the other Party for any claim that may be successfully asserted against that latter Party by any third party for a damage caused by the former Party in the frame of the implementation of this Agreement.

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9. Applicable Law, Consultation and Dispute Resolution

9.1 This Agreement will be applied and interpreted according to Italian law.

9.2 The Parties will consult with each other promptly when events occur or matters arise that may call into question the interpretation or implementation of the terms of this Agreement. Any issue in the interpretation or implementation of this Agreement will be referred for settlement to appropriate individuals designated, respectively, by the Parties to this Agreement. If they are unable to come to an agreement, then the issue will be referred to the ESA Director of Human and Robotics Exploration and the General President of CAI for reaching an amicable settlement.

9.3 Any dispute arising in connection with this Agreement which cannot be amicably settled through consultation, will be finally settled, at the request of either Party, under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules. The seat of the arbitral tribunal will be in Milan, Italy. The language of the arbitration will be English.

10. Entry Into Force and Duration

This Agreement will enter into force as of the date of CAI affirmative reply. This Agreement will remain in force until 31 December 2024, unless mutually extended by written agreement of the Parties or terminated earlier in accordance with section 11 below. The Parties will favorably consider an extension of their cooperation beyond its initial duration period.

11. Termination and Amendment

Either Party may unilaterally terminate this Agreement by providing at least six (6) months prior written notice to the other Party. The provisions of this Agreement concerning Financial Arrangements, Cross-Waiver of Liability, Hold Harmless as well as Applicable Law, Consultation and Dispute Resolution will continue to apply after the expiration or termination of this Agreement. This Agreement may be amended by the mutual agreement of the Parties, executed in writing and signed by authorized representatives of CAI and ESA.

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If the above terms and conditions are acceptable to you, I propose that this letter, together with your affirmative reply, made by countersigning this letter below, constitute the Agreement between ESA and CAI for the implementation of this cooperative effort.

Sincerely,

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Frank De Winne
Head ISS Operations & Astronaut Group
Directorate of Human and Robotic Exploration

For CAI

A handwritten signature in black ink, appearing to read 'Vincenzo Torti', written over a horizontal line.

Vincenzo Torti
General President Italian Alpine Club (CAI)

Date: 29/08/2019