



CTBTO
PREPARATORY COMMISSION

CTBT SDGs

CTBT Innovation Challenge Towards
Securing Sustainable Development

Background

“Every single person on this planet has a right to live in a safe world, and I think the CTBTO is an organization which is a leader in protecting public health and safety for civilians.”

– HRH Princess Sumaya bint El Hassan,
Hashemite Kingdom of Jordan

Increasingly recognized as a contributor to preserving peace and security in a world riddled with problems not limited to nuclear insecurity, the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and the CTBTO Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) offer opportunities that are beneficial to human well-being. Beyond serving the core mandate of the Treaty, the capabilities of the CTBT verification regime can also contribute to sustainable social and economic development and yield compelling new civil and scientific benefits. Therefore exploring the ways in which CTBT verification technologies and data collected by the International Monitoring System (IMS) can be paired with emerging tools (e.g. geospatial imagery, machine learning, data visualization) can help pave the way to potentially high impact outcomes for sustainable development. Sharing IMS data for civil and scientific applications under standard confidentiality agreements has proven to be a benefit to the primary mission of monitoring for nuclear explosions because the expanded experience with and knowledge of signals and noise leads to enhanced analysis methods.

In this regard, the CTBTO is pleased to announce the first Innovation Challenge to CTBTO Youth Group (CYG) members. The Innovation Challenge tasks CYG members with investigating potential linkages between the CTBT and the Sustainable Development Goals (SDGs). CYG members are encouraged to submit a research proposal highlighting original ideas on how the Treaty and the work of the organization can help to achieve one or more of the SDGs.

Objectives and Benefits

The objectives and benefits of the Innovation Challenge include:

- Raising awareness on the relationship between the CTBT and the SDGs;
- Building capacity through mentorship;
- Strengthening support for the Treaty and its verification regime by encouraging new examples of how science and diplomacy contribute to the United Nations 2030 Agenda for Sustainable Development;
- Increasing visibility of the CTBT through media coverage and reporting on selected projects;
- Reinforcing linkages between the CTBT and the SDGs;
- Revitalizing current scientific/technical members of the CYG and expanding CYG membership;
- Contributing to confidence building by highlighting the wider benefits of CTBT verification technologies and activities.

Successful Innovation Challenge applicants will be mentored by a member of the Provisional Technical Secretariat (PTS) and receive funding to attend and present their project findings at the CTBT: Science and Technology 2019 conference in Vienna from 24 to 28 June 2019. Applicants aged 35 and under are encouraged to submit a proposal.



Phases of the CTBT Innovation Challenge

Phase 1: Call for proposals

- Applicants are encouraged to submit a research proposal highlighting original and innovative ideas connecting the CTBT and/or the CTBTO with one or more of the SDGs.
- The proposal submission period is open until **6 January 2019**.

Phase 2: Proposal review phase

- The CTBTO will review each proposal and select those which best meet the criteria for original and innovative approaches.
- Authors of selected proposals will be notified by the end of January 2019, at which time instructions regarding Phase 3 will be provided.
- Innovation Challenge submissions that have not been selected will go through the regular registration process for oral or poster presentations at SnT2019 and the authors will be notified accordingly.

Phase 3: Mentoring and project execution phase

- Authors of selected proposals will be paired with a PTS mentor to assist in project development and ensure high quality results.
- Mentors will provide guidance on the best format to present project results during SnT2019 (e.g.: on a panel, as a poster, as an exhibit).

Phase 4: Presentation during SnT2019

- Projects will be integrated into the programme of SnT2019 and presented by the authors during the conference.

Call for Proposals

Conditions

- Applicants should be 35 or younger.
- CTBTO Youth Group membership. If you are not yet a member, please apply here: <https://youthgroup.ctbto.org/user/register>.
- Applicants may submit proposals for working individually or in a group of two persons.
 - Groups should include participants from different fields or disciplines (e.g. a group might consist of individuals with backgrounds in data visualization and policy);
 - Collaboration across regions is highly encouraged.
- Successful applicants should be ready to present their work, either as an individual or in a group of two, at SnT2019.
- Proposals must be submitted in English.

Submission Material

- Curriculum vitae.
- A maximum **1000 word proposal** that outlines how you will work within the scope of the Treaty and the organization to creatively advance one or more of the SDGs. The proposal should include:
 - Method of work;
 - Distribution of work if it is a group project;
 - Preliminary arguments or expected findings;
 - Discussion of how the selection criteria outlined below will be addressed.
- A **200 word abstract** based on your proposal.
- We encourage creative proposals which pair IMS data with emerging technologies.
- Proposals do not necessarily need to be scientific or technical in nature. They can also focus or build on existing best practices, standards, policies and/or legislation to produce recommendations that can:
 - Inform national, regional or global policies on the advancement of the SDGs;
 - Create a platform for interdisciplinary and interregional collaboration to help use the verification regime to achieve one or more of the SDGs.

How to Submit Your Proposal

- Proposals should be submitted online through this [link](#) by **6 January 2019**. For group projects, only one author should submit a proposal on behalf of the group, indicating the name of the second author.
- Abstracts should be submitted online through the SnT2019 abstract submission portal <https://ctnw.ctbto.org> by 31 January 2019.

Selection Criteria

- Intersection between the SDGs and the opportunities and solutions to continuously improve the work of the CTBTO;
- Relevance of the project to one or more SDGs;
- Relevance of the project to the Treaty and the CTBTO, keeping in mind that all areas of the organization and the Treaty can serve as a baseline for proposed research;
- Interdisciplinarity;
- Interregionality;
- Creativity, specifically by pairing IMS data with emerging tools (e.g. geospatial imagery, machine learning, data visualization);
- Innovation and originality of ideas.

Food for Thought

Some ideas to get you started...

Check out how the work of the CTBTO has been connected to the SDGs here:

http://www.unvienna.org/sdgs/org_CTBT.html





© CTBTO



An untapped source for climate change monitoring
The data picked up by CTBTO stations supports research into icebergs and movements of glaciers, hurricanes and tornadoes, landslides and avalanches, seasonal and yearly variations of specific radionuclides, ocean processes and marine life, helping scientists better understand climate change.

[read more](#)



© CTBTO



Resources

- Spinoffs for Disaster Warning and Science (CTBTO):
<https://www.ctbto.org/verification-regime/spin-offs-for-disaster-warning-and-science/>
- Using IMS Data for Climate Studies (CTBTO):
<https://www.ctbto.org/press-centre/highlights/2015/using-ims-data-for-climate-studies/>
- SnT2017: Book of Abstracts (CTBTO):
https://www.ctbto.org/fileadmin/user_upload/SnT2017/Book_of_Abstracts_SnT_2017.pdf

If you have any questions, please send us an email at youthgroup@ctbto.org