

ACCESS TO SPACE FOR ALL INITIATIVE



UNITED NATIONS



Team of Universidad del Valle
de Guatemala, second-round
KiboCUBE awardee.

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**UNITED NATIONS
OFFICE FOR OUTER SPACE AFFAIRS**

ACCESS TO SPACE FOR ALL INITIATIVE



UNITED NATIONS
Vienna, 2022



FOREWORD

Space-based solutions are key to ensuring sustainable development on Earth and the peaceful use and exploration of outer space. Space applications such as Earth observation, telecommunications and global navigation strengthen economic growth and promote technological advancements. It is in the best interests of all stakeholders to make these benefits universally accessible.

As access to the benefits of space is not yet universal, further efforts are required to promote the use of space-based applications.

The support we receive from our partners is priceless. Under the Access to Space for All initiative, we work with a wide variety of partners to boost the impact of our capacity-building efforts.

The Access to Space for All initiative enables communities from all over the world to use and benefit from space technologies and applications thanks to the cooperation among established space actors, the United Nations and new or emerging space entities.



Mr. Niklas Hedman

Acting Director
United Nations Office for
Outer Space Affairs



CONTENTS

Foreword	ii	DREAM CHASER An orbital space mission utilizing Sierra Dream Chaser® spaceplane	17
Abbreviations and acronyms	iv	Accessing Space with Vega-C	18
WHAT IS "Access to Space for All initiative"?	1	Accessing Space with the International Space Station (ISS) Bartolomeo Platform	19
PARTNERSHIP	2	United Nations/Japan Cooperation Programme on CubeSat Deployment from the International Space Station (ISS) Japanese Experiment Module "KiboCUBE"	20
AWARDEE'S STORY - KENYA Benefit from the initiative for development	6	United Nations/Mohammed Bin Rashid Space Centre Cooperation Programme on Payload Hosting Initiative, "PHI" ...	21
AWARDEE'S STORY - GUATEMALA Inspiring youth and research in the country	7	ISONscope Telescope provision in cooperation with the Keldysh Institute of Applied Mathematics of the Russian Academy of Sciences	22
NUMBERS	8	EDUCATION COMPONENT	23
IMPACT	10	United Nations/Japan Long-term Fellowship Programme on Nano-Satellite Technologies hosted by Kyushu Institute of Technology	24
SERVING THE 2030 SUSTAINABLE DEVELOPMENT GOALS	11	Webinars	25
TRACKS	12	TOOLS COMPONENT	26
HANDS-ON COMPONENT	13	VALUE PROPOSITIONS	27
Fellowship Programme for the Drop Tower Experiment Series ...	14	From the founder of the initiative	28
Fellowship Programme on the Large Diameter Centrifuge HyperGravity Experiment Series	15		
The United Nations/China Cooperation on the Utilization of the China Space Station	16		



Abbreviations and acronyms

CMSA	China Manned Space Agency	Kyutech	Kyushu Institute of Technology
ESA	European Space Agency	LDC	Large Diameter Centrifuge
ESTEC	European Space Research and Technology Centre	MBRSC	Mohammed Bin Rashid Space Centre
DLR	German Aerospace Center	MRIC	Mauritius Research and Innovation Council
DropTES	Fellowship Programme for “Drop Tower Experiment Series”	NASA	National Aeronautics and Space Administration
HyperGES	Fellowship Programme on the Large Diameter Centrifuge Hypergravity Experiment Series	NGO	non-governmental organization
ISON	International Scientific Optical Network	PHI	Payload Hosting Initiative
ISONscope	Telescope provision in cooperation with Keldysh Institute of Applied Mathematics	PNST	Post-graduate study on Nano-Satellite Technologies
ISS	International Space Station	SDGs	Sustainable Development Goals
JAXA	Japan Aerospace Exploration Agency	SEIC	Space Engineering International Course
KIAM RAS	Keldysh Institute of Applied Mathematics of Russian Academy of Sciences	STEM	Science, Technology, Engineering and Mathematics
KiboCUBE	United Nations/Japan Cooperation Programme on CubeSat Deployment from the International Space Station (ISS) Japanese Experiment Module	UCB	Universidad Católica Boliviana
KSA	Kenya Space Agency	UNISEC	University Space Engineering Consortium
		UNOOSA	United Nations Office for Outer Space Affairs
		UVG	Universidad de Valle de Guatemala
		ZARM	Center of Applied Space Technology and Microgravity



WHAT IS "Access to Space for All initiative"?

Access to Space for All is a joint initiative of UNOOSA and space agencies, research institutions and industry aimed at developing technical know-how, engineering processes and infrastructure of the United Nations Member States in the areas of hypergravity and microgravity, satellite development and space exploration.

Access to Space for All provides research and orbital opportunities for Member States to access space and to ensure that the benefits of space, in particular for sustainable development, are truly accessible to everyone.

Space technologies, data and applications already play an integral role in sustainable development and their importance will become even stronger in the years to come, underscoring the importance of efforts such as Access to Space for All.

Team of Universidad Católica Boliviana "San Pablo",
seventh-round DropTES awardee.

© Fabio Richard Díaz Palacios



ACCESS TO SPACE FOR ALL PARTNERSHIP

Partnerships are the driving force behind the success of the Initiative. Working together with various public and private actors allows us to capitalize on the experience, knowledge and technical capacities for the benefit of the Member States.

UNOOSA is always looking for new partners to complement the existing work and expand the portfolio of opportunities on offer.



ACCESS TO SPACE FOR ALL

Partners



© Airbus Defence and Space GmbH



© Avio S.p.A



© China Manned Space Agency



© European Space Agency

"We are very pleased to host the African ClimCam on our ISS Bartolomeo platform soon. Through our complete All-in-One Space Mission Service, the team can fully concentrate on development and exploitation of their environmental monitoring payload."

*Stéphane Vesval,
Senior Vice President of Airbus
Defence and Space*

"Avio is very proud to support UNOOSA in this ambitious and worthy cause. Thanks to Vega C, new countries all over the world will experience their first access to space and become part of the ever-growing space community"

*Giulio Ranzo,
CEO of Avio SpA*

"Under the Access to Space for All initiative, the China Manned Space Agency (CMSA) cooperates closely with UNOOSA to bring access to space for more countries in need, especially developing countries, via China Space Station."

*Chun Hao,
Director General of CMSA*

"Using the Large Diameter Centrifuge, the European Space Agency (ESA) provides access to up to 20 times Earth gravity for weeks or months on end, to test gravitational effects on fluids, materials or living systems. Student teams worldwide can propose through the HyperGES."

*Torben Hendriksen,
Head of ESA-ESTEC*



ACCESS TO SPACE FOR ALL

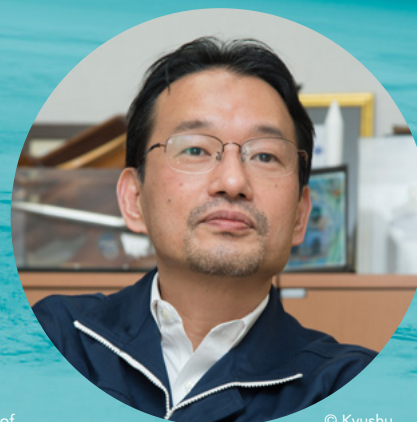
Partners



© Japan Aerospace
Exploration Agency



© Keldysh Institute of
Applied Mathematics of
Russian Academy of Sciences



© Kyushu
Institute of
Technology

"KiboCUBE is supporting capacity-building opportunities worldwide by utilizing the 'Kibo' module on the ISS as a platform to deploy CubeSats. In the spirit of the initiative, we strive to continuously provide access to space for all."

*Tasaki Kazuyuki,
Director of International
Relations and Research
Department, JAXA*

"Sharing technology, information and know-how in space exploration makes an important contribution to promoting dialogue and confidence-building among States in this field, which are necessary for ensuring the long-term sustainability of outer space activities. Our cooperation is undoubtedly increasing the prevalence of this norm globally."

*Alexander Aptekarev,
Director of KIAM RAS*

"You cannot learn how to build a satellite by reading books. You need to build a satellite with your own hands. PNST offers an opportunity for students to acquire hands-on experience with real satellites."

*Mengu CHO,
Director of Space Engineering
International Course, Kyutech*

ACCESS TO SPACE FOR ALL

Partners



© Mohammed
Bin Rashid
Space Centre



© Sierra Space



© Center of Applied
Space Technology
and Microgravity

"Our partnership with UNOOSA on the Payload Hosting Initiative (PHI) is an important part of our commitment to supporting the development of the space industry globally, and in enabling knowledge-sharing and capacity-building for all stakeholders concerned."

*Salem Al Marri,
Director General of MBRSC*

"We are building the Dream Chaser spaceplane and destinations in low-Earth orbit to make space accessible to everyone. Cooperating with UNOOSA to create on-orbit opportunities for United Nations Member States – particularly those in the developing world – corresponds with our mission to build platforms in space to improve life on Earth."

*John Roth,
Vice President of Business
Development, Sierra Space*

"The DropTES Programme has been implemented since 2014 and is open to student teams from entities that are Member States of the United Nations. Students learn about microgravity science by performing experiments in the Bremen Drop Tower and the new GraviTower Bremen Pro."

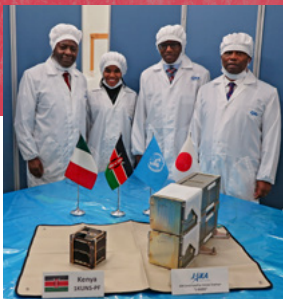
*Thorben Könemann,
Head of Science and
Operation, ZARM*



ACCESS TO SPACE FOR ALL

Awardee's Story - Kenya Benefit from the initiative for development

Selected as awardee
of KiboCUBE
2015



©JAXA

2017 KiboCUBE played a significant role
in the establishment of KSA.



©JAXA



KENYA SPACE AGENCY
Possibilities beyond our skies

2018
1KUNS-PF deployed
from the ISS

Through KiboCUBE, Kenya launched the nation's first technology demonstration satellite 1KUNS-PF in May 2018. Kenya is also part of one of nine teams awarded the China Space Station utilization opportunity, and in 2021 the Kenya Space Agency (KSA) was part of the winning consortium under the Bartolomeo programme to fly the ClimCam project on the International Space Station. Also, in 2021 KSA became an awardee of the ISONscope programme which provides a telescope for the observation of near Earth space objects.

2021
Selected as awardee
of Bartolomeo



©IAF

2021
Selected as awardee
of ISONscope

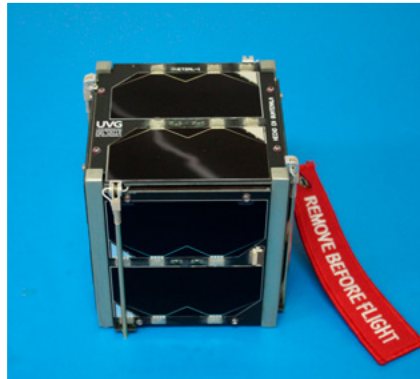


©KSA

Awardee's Story - Guatemala

Inspiring youth and research in the country

ACCESS TO SPACE FOR ALL



Quetzal-1

©UVG

The second-round awardee of the KiboCUBE, Universidad de Valle de Guatemala (UVG), developed Quetzal-1, which was the first CubeSat of Guatemala. It was deployed into orbit in June 2020.

More than 100 students from Guatemala were involved in the Quetzal-1 project. Over 70% of the Quetzal-1 components were developed in their own facilities.



Domestic publications

©Prensa Libre



Workshop for students

©UVG

UVG promoted STEM education and gender equality throughout the country. UVG published two books and a documentary to share their experience not only domestically, but with the world.

UVG has applied to more opportunities like Bartolomeo and is planning to expand its activities.



©UVG

The newly published book by Quetzal-1 team



ACCESS TO SPACE FOR ALL

Numbers

UNOOSA is working with partners to provide opportunities and is expanding the impact of the initiative.

9 hands-on opportunities are offered under the initiative.

#AccSpace4All is now one of the most popular topics on the UNOOSA Twitter account.

Total views on #AccSpace4All

>1,000,000

>50 webinar sessions have been held under the Access to Space for All initiative in 2021.

Online participants in 2021

>1,800

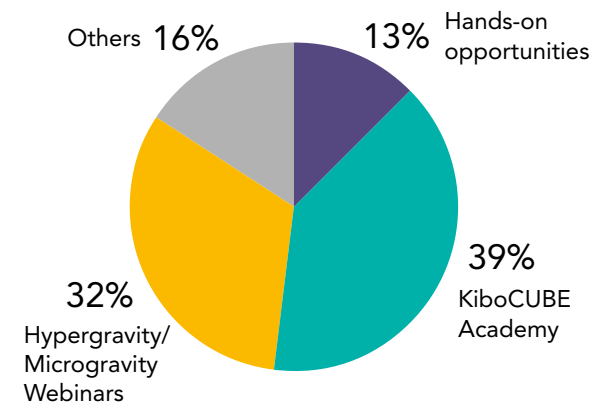
Videos published on the YouTube channel in 2021

>70 hours

Total views on the YouTube channel in 2021

>7,000

Views on the YouTube channel in 2021



@UNOOSA #AccSpace4All

Follow us @UNOOSA on social media and use the hashtag #AccSpace4All to help us get the message across!



ACCESS TO SPACE FOR ALL

Numbers



TOP3 #AccSpace4All Facebook posts 2021

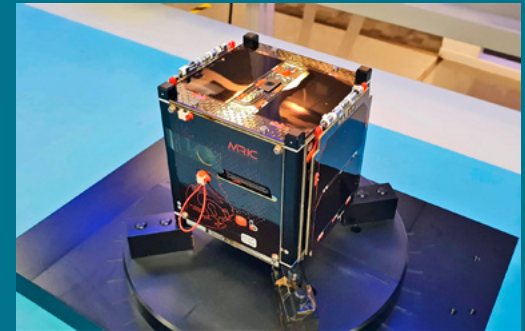
Forest Side SSS (Girls) is the 1st school in #Mauritius to have decoded MIR-SAT1 telemetry! The first CubeSat of by Mauritius Research and Innovation Council - MRIC launched in June through #AccSpace4All #KiboCUBE with JAXA (Japan Aerospace Exploration Agency) is contributing to promoting #STEM and space technology! Stay tuned for more information on the #MIRSAT1 adventure!

51,460 views



The 1st satellite of #Mauritius, #MIRSAT1, developed by Mauritius Research and Innovation Council - MRIC, will be deployed from the #InternationalSpaceStation tomorrow under the #UNOOSA & JAXA (宇宙航空研究開発機構) #KiboCUBE programme! Join the YouTube streaming from 12:35CEST

22,246 views



Want to learn more about the kind of experiments and research that #hypergravity conditions make possible? Read the story of the winners of our #HyperGES fellowship with ESA – European Space Agency, from Mahidol University in Thailand, who are going to conduct research on watermeal as source of oxygen and food for #spaceexploration.

15,459 views





ACCESS TO SPACE FOR ALL

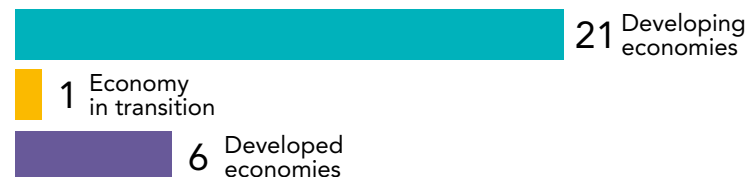
Impact

The Initiative focuses predominantly on supporting developing countries, with some of the programmes being exclusively open for these nations. As of February 2022, Access to Space for All awarded 28 opportunities to 44 entities from 31 countries.

The nationalities of the 28 principal investigators are almost evenly distributed across Africa, the Americas, Asia and Europe.



Principal investigator distribution



28 awardees

44 entities

31 countries and regions

as of February 2022

Gender empowerment is among the key priorities of the initiative. In 2021, women represented 23 per cent of team members in the applications the Office received across the different opportunities. We strive to achieve an ever-stronger participation in the teams, as teams that apply are encouraged to be gender-balanced, matching the spirit of Access to Space for All.

Representation of women is one of the selection criteria for our hands-on opportunities.

In 2021, to celebrate the “World Space Week” theme “Women in Space”, Access to Space for All held a webinar “Access to Space for All – A Focus on the Women in the Initiative”, and invited female speakers, including partners and awardees, to share their experiences.





ACCESS TO SPACE FOR ALL

Serving the 2030 Sustainable Development Goals

Access to Space for All requires applicants to make the link between what they try to achieve with their application and the SDGs.

From the beginning of the initiative, UNOOSA has received applications spanning all the Sustainable Development Goals (SDGs), including improving communications in areas subject to disasters using CubeSats, cancer prevention and treatment, and the development of high-efficiency solar cells.

The pictures here show examples of awardee projects towards different SDGs.

Among others, Access to Space for All contributes to the SDGs, especially Goal 4 on Quality Education, Goal 8 on Decent Work and Economic Growth, and Goal 9 on Industry, Innovation and Infrastructure.



Workshop for women on Quetzal-1
© Ivan Castro



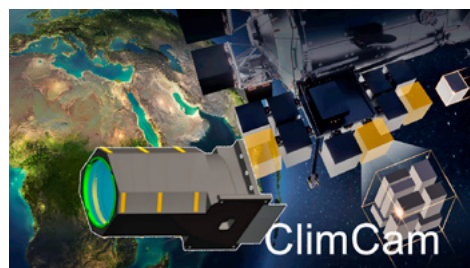
Antenna-building workshop held in Mauritius
© MRIC



QUETZAL-1 Project for water quality
© UVG



Outreach activity at Mahidol University
© Mahidol University



Bartolomeo awardee, ClimCam Team
© Airbus



Ventilator designed by DropTES awardee team
© UCB



TRACKS

Access to Space for All has three tracks to deliver different capabilities: the Hypergravity and Microgravity Track, the Satellite Development Track and the Space Exploration Track. Each track is underpinned by three components that provide a complete capacity-building programme and information hub.

HYPERGRAVITY AND MICROGRAVITY

Building capacity for conducting experiments in orbit



Hands-on opportunities in hypergravity and microgravity from ground to orbit



Open source tools bridging hands-on and education components



Education material for building up experiments

SATELLITE DEVELOPMENT

Building capacity that enables the development, deployment and operation of satellites



Hands-on opportunities for satellite deployment



Open source tools bridging hands-on and education components



Education material supporting the whole life cycle of satellites

SPACE EXPLORATION

Broadening the engagement in space exploration



Hands-on opportunities to engage in space exploration



Open source tools bridging hands-on and education components

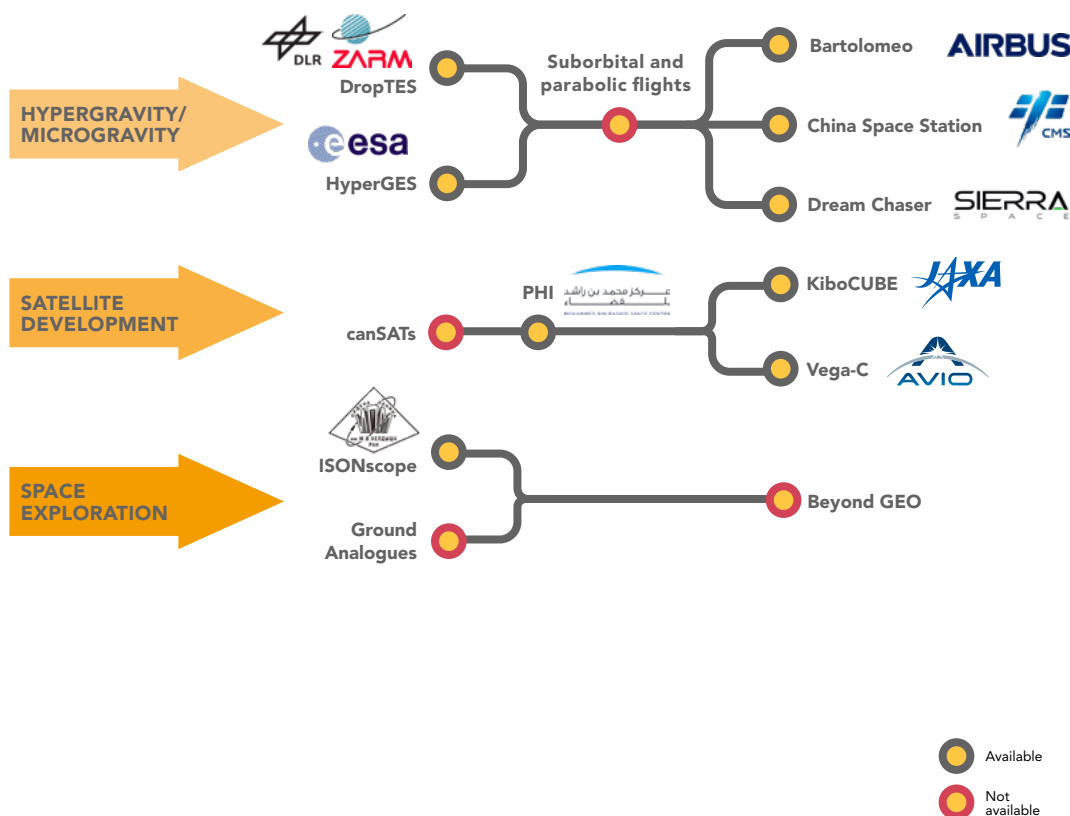


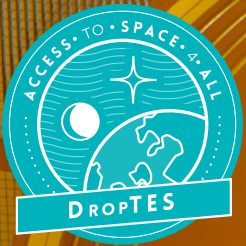
Education material for space exploration



HANDS-ON COMPONENT

The hands-on component is based on opportunities provided by different partners and aimed at providing access to space research facilities and infrastructure in order to develop technical know-how.





ACCESS TO SPACE FOR ALL

Hands-on component

Fellowship Programme for the Drop Tower Experiment Series

In collaboration with the Center of Applied Space Technology and Microgravity (ZARM) and the German Aerospace Center (DLR), the Drop Tower Experiment Series (DropTES) Fellowship Programme has been open since 2014 to research teams from United Nations Member States.

In this fellowship programme, students can learn and study microgravity science by performing experiments in the Bremen Drop Tower, a ground-based laboratory with a drop tube of a height of 146 metres in Bremen, Germany. It enables short microgravity experiments to be performed in various scientific fields, such as fluid physics, combustion, thermodynamics, material science and biotechnology.



Partners: ZARM and DLR

Partnership agreement signed in: 2013

Provided in opportunity: A microgravity experiment consists of five drops or catapult launches at the Bremen Drop Tower.

Who can apply: Research teams from entities from Member States of the United Nations.

Inside the Bremen Drop Tower. ©ZARM, University of Bremen

ACCESS TO SPACE FOR ALL

Hands-on component

Fellowship Programme on the Large Diameter Centrifuge HyperGravity Experiment Series

In collaboration with the European Space Agency (ESA), the HyperGravity Experiment Series (HyperGES) Fellowship Programme has been open since 2019 to research teams from United Nations Member States.

The Fellowship Programme provides opportunities for scientists and researchers with a team of students from Member States of the United Nations with particular attention to developing countries to conduct their own hypergravity experiment series at the Large Diameter Centrifuge (LDC) facility located at the European Space Research and Technology Centre (ESTEC) in Noordwijk, Netherlands.



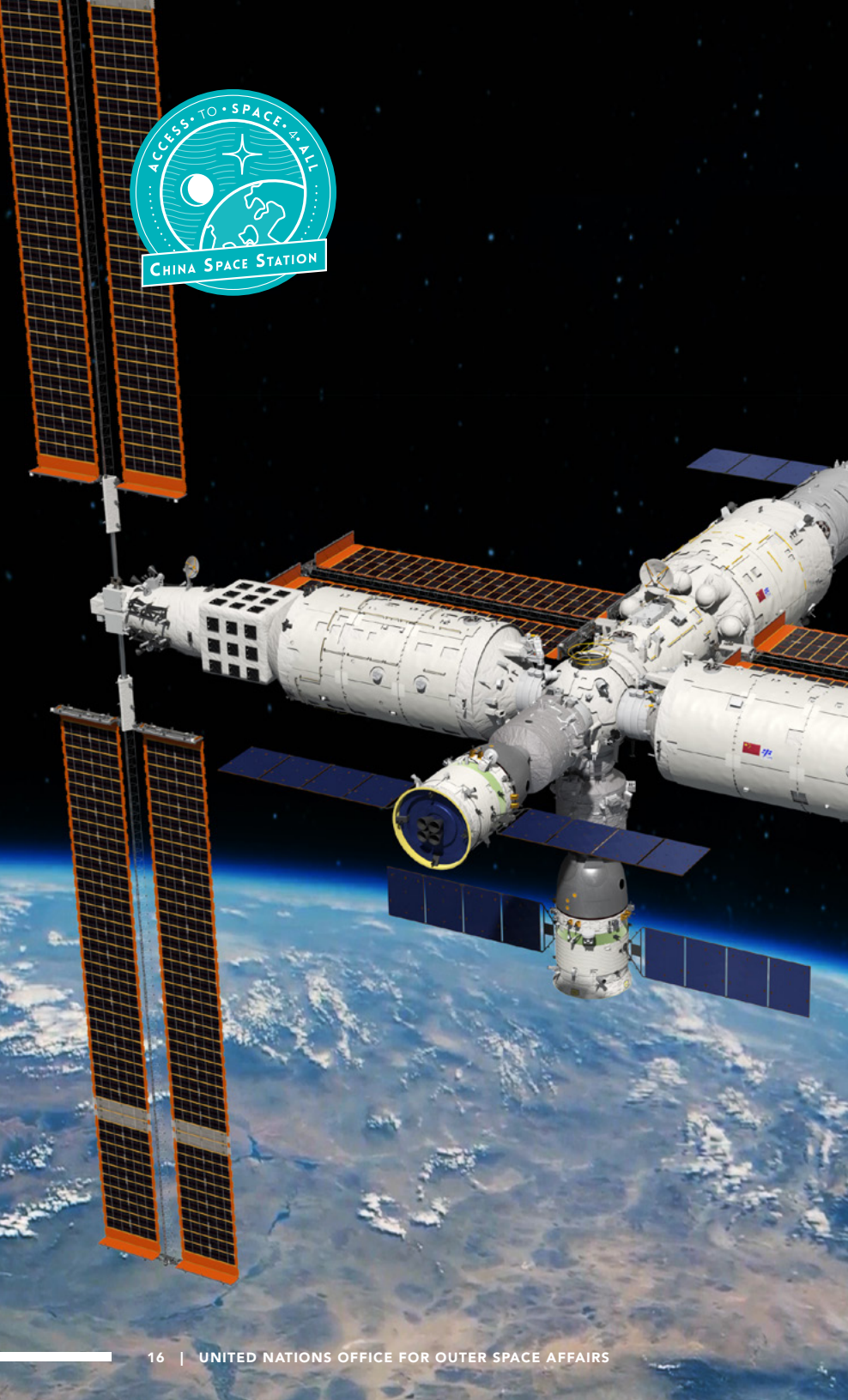
Partners: ESA

Partnership agreement signed in: 2019

Provided in opportunity: Access to the LDC facility to conduct a hypergravity experiment series

Who can apply: Research teams from entities from Member States of the United Nations with particular attention to developing countries





ACCESS TO SPACE FOR ALL

Hands-on component

The United Nations/China Cooperation on the Utilization of the China Space Station

UNOOSA, in cooperation with the China Manned Space Agency (CMSA), UNOOSA launched the “United Nations/China Cooperation on the Utilization of the China Space Station” programme under the framework of the UNOOSA Access to Space for All initiative.

It provides scientists from around the world with an opportunity to conduct their own experiments on board the China Space Station. It is an innovative and future-focused programme to open up space exploration activities to all nations and to create a new paradigm in building capabilities in space science and technology.



Partners: CMSA

Partnership agreement signed in: 2016

Provided in opportunity: An opportunity to conduct experiments on board the China Space Station

Who can apply: Public and private organizations including institutes, academies, universities and private enterprises with scientific orientation in Member States of the United Nations with particular attention to developing countries

ACCESS TO SPACE FOR ALL

Hands-on component

DREAM CHASER An orbital space mission utilizing Sierra Dream Chaser® spaceplane

UNOOSA is partnering with Sierra Space to offer United Nations Member States the opportunity to participate in an orbital space mission utilizing the Sierra Dream Chaser® spaceplane. The mission will be open to all Member States of the United Nations, and developing countries are particularly encouraged to participate. The mission will carry experiments, payloads, or satellites provided by institutions in the participating countries.



Partners: Sierra Space

Partnership agreement signed in: 2016

Provided in opportunity: An opportunity to fly payloads or experiments in low-Earth orbit on board the Dream Chaser® spaceplane

Who can apply: Member States of the United Nations with particular attention to developing countries

Dream Chaser® spaceplane ©Sierra Space





ACCESS TO SPACE FOR ALL

Hands-on component

Accessing Space with Vega-C

UNOOSA and Avio S.p.A. (Avio) have joined forces at the seventy-fourth session of the General Assembly to announce an agreement to cooperate on providing institutions from Member States, in particular developing countries, with the opportunity to apply to use, free of charge, satellite slots for 1U CubeSat or aggregates using a Vega-C rocket.

Through this opportunity, UNOOSA and AVIO undertake to provide one launch opportunity using a Vega-C launcher for a CubeSat or aggregates of CubeSats of a maximum of 3U.



Partners: Avio S.p.A.

Partnership agreement signed in: 2019

Provided in opportunity: Deployment of a CubeSat or aggregates of CubeSats of a maximum of 3U in orbit by using Vega-C launcher

Who can apply: Member States of the United Nations with particular attention to developing countries

Launch of a Vega launch vehicle ©Avio S.p.A

ACCESS TO SPACE FOR ALL

Hands-on component

Accessing Space with the International Space Station (ISS) Bartolomeo Platform

UNOOSA is partnering with Airbus Defence and Space GmbH to offer the opportunity to operate a payload on the Airbus Bartolomeo external platform on the International Space Station. The mission is open to entities from Member States of the United Nations, and developing countries are particularly encouraged to participate.

This opportunity provides an All-In-One mission service from Airbus, for a year, for a payload of a maximum size of 3U, to be hosted in the Bartolomeo platform aboard the Columbus module of the International Space Station.

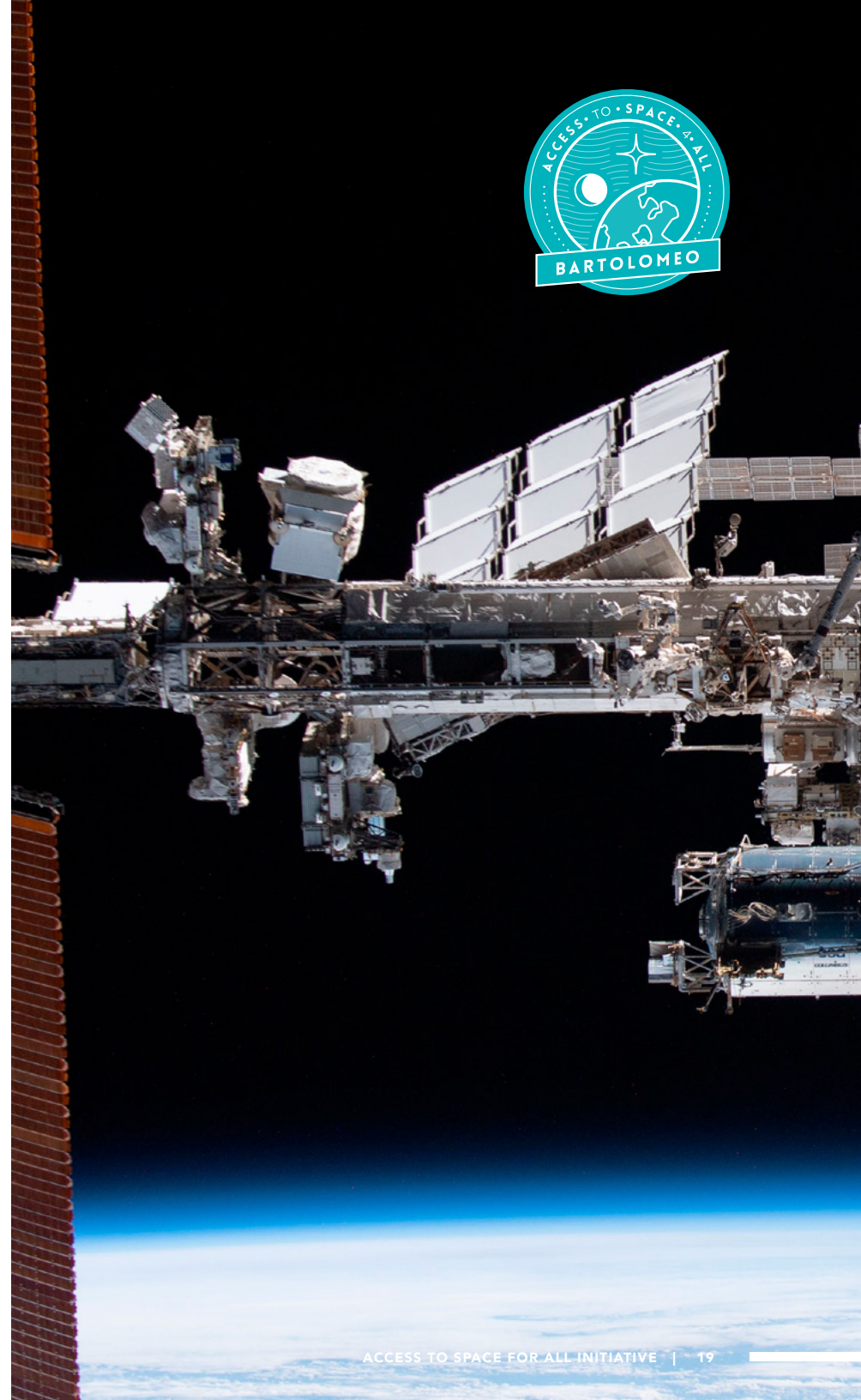
AIRBUS

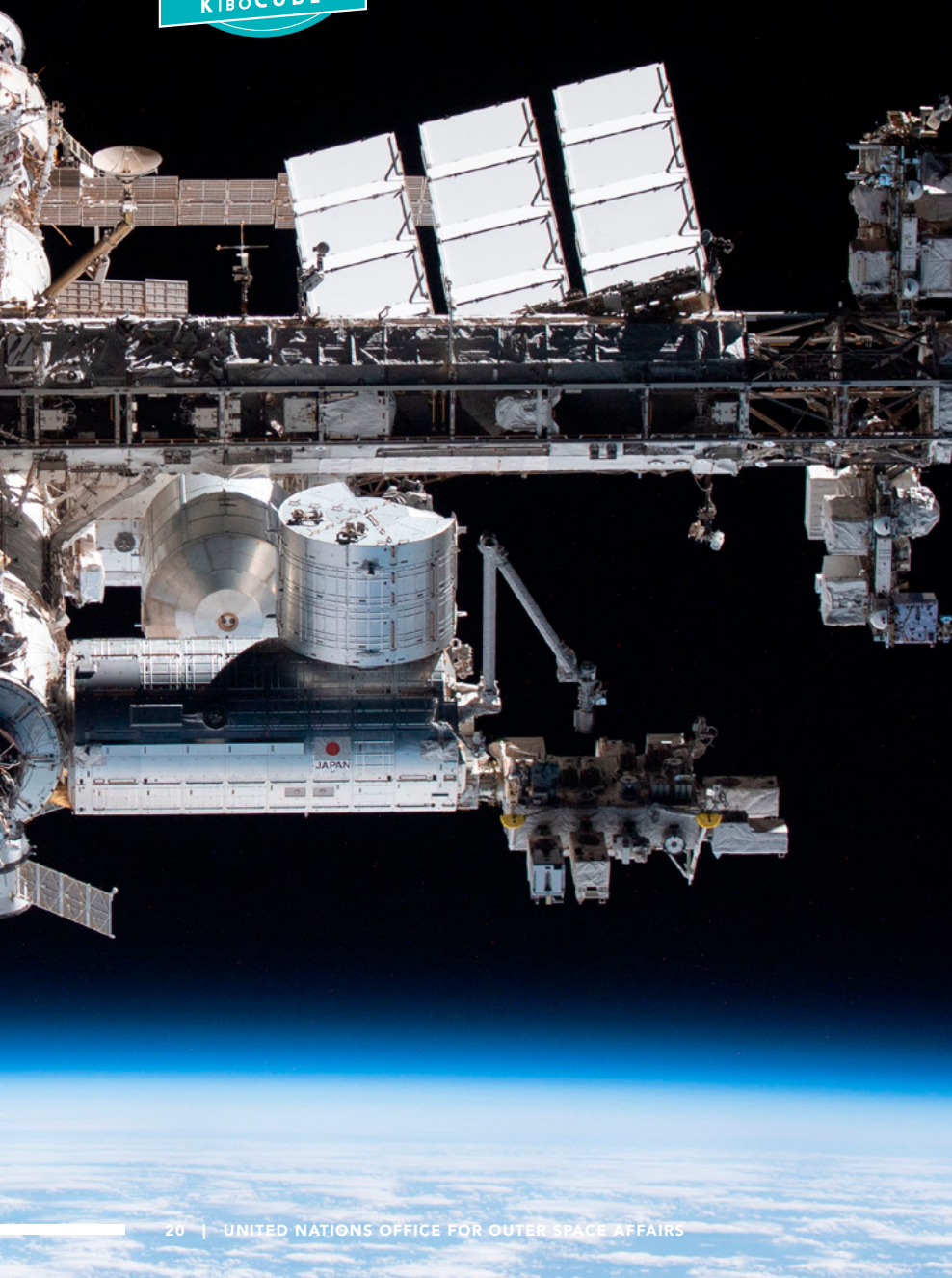
Partners: Airbus Defence and Space

Partnership agreement signed in: 2018

Provided in opportunity: An opportunity to deploy a payload using Airbus Bartolomeo external platform on the International Space Station

Who can apply: Member States of the United Nations with particular attention to developing countries





ACCESS TO SPACE FOR ALL

Hands-on component

United Nations/Japan Cooperation Programme on CubeSat Deployment from the International Space Station (ISS) Japanese Experiment Module "KiboCUBE"

Started in 2015, KiboCUBE is the collaboration programme between UNOOSA and the Japan Aerospace Exploration Agency (JAXA) that provides educational and research institutions from developing countries with the opportunity to develop a cube satellite (CubeSat) and have it deployed from the Japanese module "Kibo" of the International Space Station.

KiboCUBE lowers the threshold for countries to enter space activities and contributes to national capacity development in spacecraft engineering, design and construction, inspiring new generations of scientists and engineers.



Partners: JAXA

Partnership agreement signed in: 2015

Provided in opportunity: An opportunity to deploy a 1U CubeSat from the Kibo module on the International Space Station

Who can apply: Entities located in developing economies and economies in transition that are Member States of the United Nations

ACCESS TO SPACE FOR ALL

Hands-on component

United Nations/Mohammed Bin Rashid Space Centre Cooperation Programme on Payload Hosting Initiative, "PHI"

UNOOSA and the Mohammed Bin Rashid Space Centre (MBRSC) of the United Arab Emirates provide the opportunity to host payloads as part of the Payload Hosting Initiative (PHI). This offers a payload hosting capacity and a launch and ground station for the PHI mission. The selected entities will provide tested payloads to MBRSC ready for integration with the spacecraft and participate with MBRSC in flight model assembly, integration, and testing activities.

This opportunity permits different teams to have their payload hosted under the same satellite platform created by MBRSC.



Partners: MBRSC

Partnership agreement signed in: 2021

Provided in opportunity: Deployment of a maximum volume of 5U payload on PHI-1 mission

Who can apply: Research institutes, universities, other public organizations, NGOs and eligible private companies located in Member States of the United Nations





ACCESS TO SPACE FOR ALL

Hands-on component

ISONscope Telescope provision in cooperation with the Keldysh Institute of Applied Mathematics of the Russian Academy of Sciences

UNOOSA and the Keldysh Institute of Applied Mathematics of the Russian Academy of Sciences (KIAM RAS) supply telescopes to developing countries and associated capacity-building on astronomy.

This opportunity includes a small wide field-of-view telescope and the provision of all the necessary software and training for the operation and observation data processing with a focus on objects in near-Earth space. Winning organizations will also join the International Scientific Optical Network (ISON) for global observation cooperation.



Partners: KIAM RAS

Partnership agreement signed in: 2019

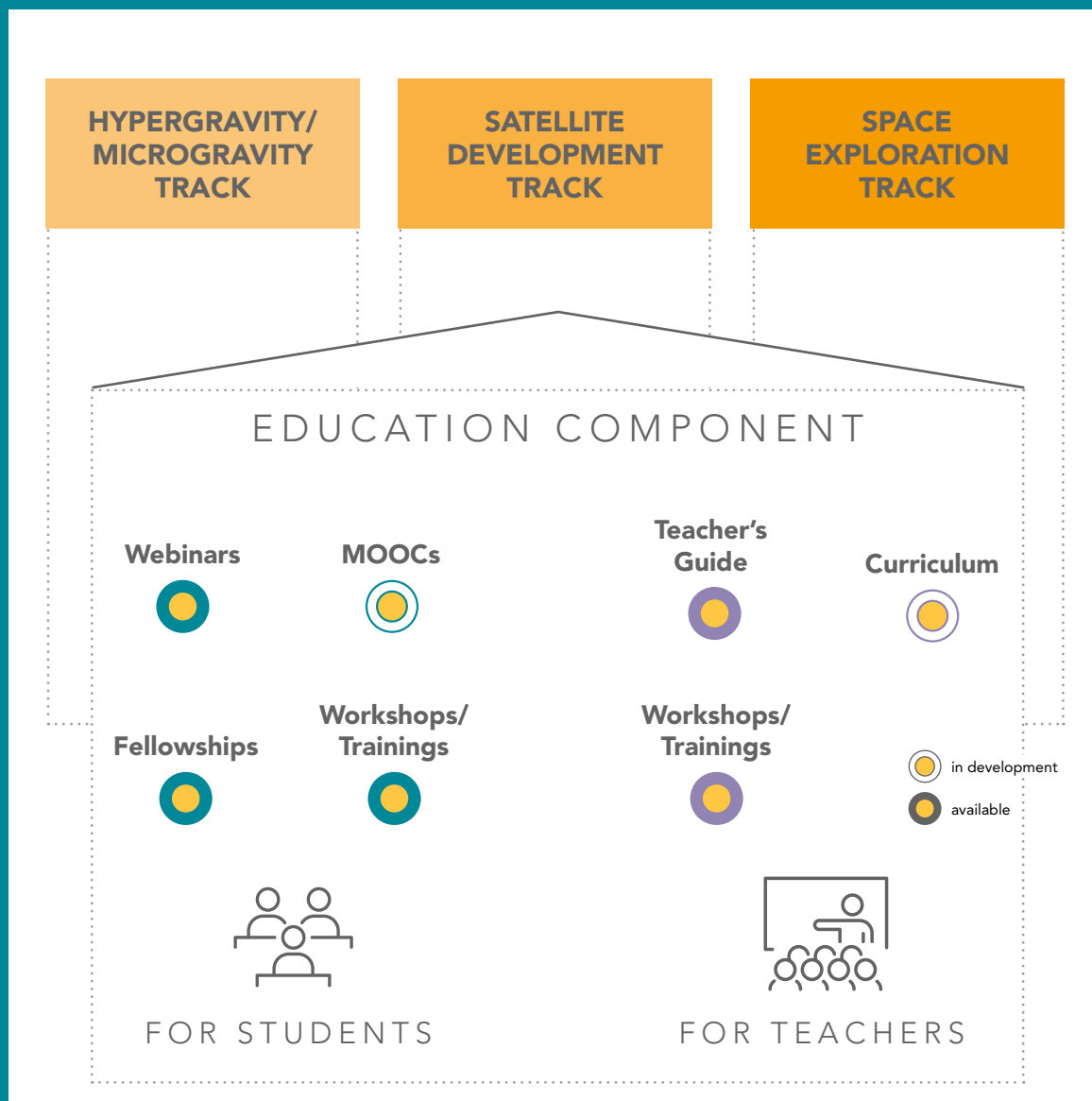
Provided in opportunity: A small wide field-of-view telescope with an aperture of about 20 cm and necessary accessories, and training of experts to operate it

Who can apply: Research organizations, higher education institutions and universities, regional or international organizations in developing countries



EDUCATION COMPONENT

The education component provides the theoretical foundations needed to fully utilize the opportunities under the hands-on component of Access to Space for All and the tools under the tools component. The education component supports the three tracks of Access to Space for All (Hypergravity and Microgravity Track, Satellite Development Track and Space Exploration Track), and consists of the elements in the figure.





ACCESS TO SPACE FOR ALL

Education component

United Nations/Japan Long-term Fellowship Programme on Nano-Satellite Technologies hosted by Kyushu Institute of Technology

The Post-graduate study on Nano-Satellite Technology (PNST) Fellowship Programme was initiated in 2013 by UNOOSA and the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan in conjunction with the Kyushu Institute of Technology (Kyutech).

PNST offers six fellowships per year (three masters, three doctorals) to aspiring postgraduate-level students who are interested in studying nano-satellite design and learning basic space technology development. All PNST fellowship students enrol in the English-based Space Engineering International Course (SEIC) at Kyutech.



ACCESS TO SPACE FOR ALL

Education component

Webinars

Webinars became a common way for the Office to conduct capacity-building activities during the COVID-19 pandemic. The Office conducted various webinars related to the initiative, such as those dedicated to supporting new rounds of opportunities, and a series devoted to specific topics.

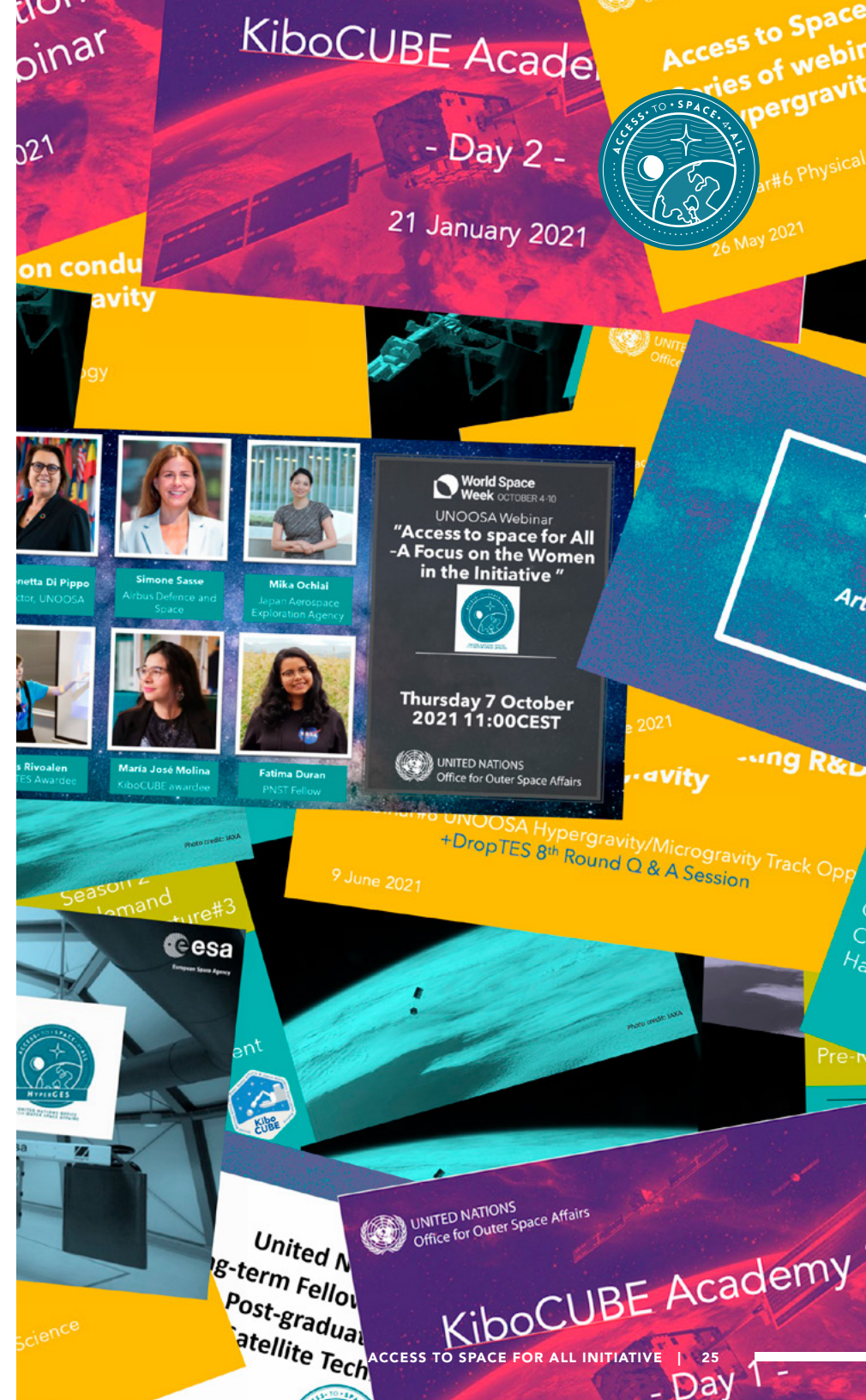
Webinar Series on Conducting R & D in Hypergravity/Microgravity

A series of nine live webinars held in April–June 2021 to introduce the fundamentals, special characteristics and advantages of the Hypergravity/Microgravity environment, along with an overview of the type of R&D that can be conducted and how. 45 speakers from 40 entities in 13 nations shared knowledge with the audience.

KiboCUBE Academy Webinar Series

Two seasons (Season 1: January and February 2021, Season 2: November and December 2021) of seven live webinars and 21 pre-recorded lectures on the technical aspects of how to develop, operate and utilize a CubeSat conducted with JAXA and the University Space Engineering Consortium (UNISEC).

All these webinars are available on the UNOOSA AccSpace4All webpages and the UNOOSA YouTube channel.





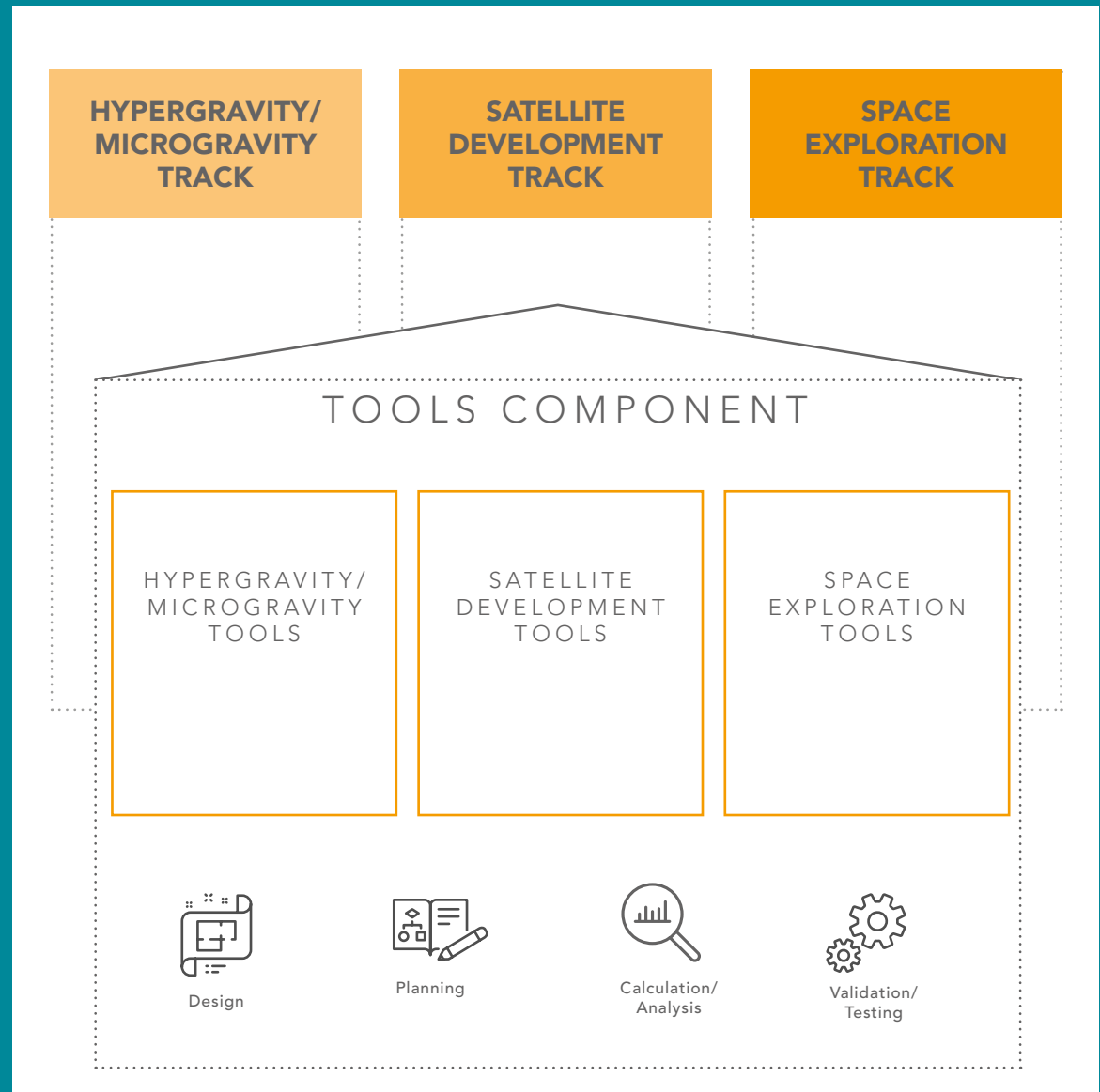
TOOLS COMPONENT

As an important step in gradual learning, the tools component will create a compilation of open-source tools related to the three tracks that can be used to prepare the applications for the hands-on opportunities.

The tools component is a work in progress, and it will consist of the following elements:

- Design
- Planning
- Calculation/Analysis
- Validation/Testing

The tools component complements the education component. It helps use the acquired knowledge and apply it by using tools to achieve better insights into the way a real-life space system behaves. In this way, using the tools component will help candidates prepare better applications for the Access to Space for All initiative.



ACCESS TO SPACE FOR ALL

Value propositions



UNOOSA sees the benefits of partnerships and contributions from space agencies, research institutions, universities, industries and the private sector in promoting the benefits derived from the space economy for effectively addressing the challenges facing humanity. In this regard, UNOOSA welcomes offers to establish new partnerships and strengthen strategic alliances aimed at effectively addressing those challenges for the benefit of all.

Our main value propositions for PARTNERS

- Visibility of infrastructure, facilities and corporate social responsibility.
- Cost-efficient.
- Opportunities integrated in the tracks become more impactful and have more reach.
- Partner with United Nations to bridge the space divide and support the development of cross-cutting skills.
- Promote the safe and sustainable use of outer space.

Our main value propositions for APPLICANTS

- Acquire cross-cutting STEM skills.
- Get sustainable A-Z capabilities.
- Learning by doing.
- Development of the space economy.
- Cross-fertilization – skills acquired through these opportunities can be used in other fields.
- Access to research facilities and infrastructure.
- Visibility of research.



From the founder of the initiative

Leveraging the utilization of space assets and democratizing related benefits for sustainable socioeconomic development is of paramount importance in this modern world. The contribution that space exploration and use make to the betterment of human life is beyond measure and still rapidly expanding.

The United Nations tries to leave no one behind as we advance international cooperation to help Member States turn dreams and ambitions into reality. The Access to Space for All initiative is a powerful vehicle translating the value of working together into tangible results, fuelling the growth of the space community. Access to Space for All expands access to the marvels of the space era and contributes to peaceful use and exploration of outer space.



Ms. Simonetta Di Pippo

Former Director
United Nations Office for
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**THE UNITED NATIONS OFFICE
FOR OUTER SPACE AFFAIRS (UNOOSA)**

IS RESPONSIBLE FOR ADVANCING INTERNATIONAL COOPERATION
IN THE PEACEFUL USES OF OUTER SPACE AND HELPS ALL COUNTRIES
USE SPACE SCIENCE AND TECHNOLOGY TO ACHIEVE
SUSTAINABLE DEVELOPMENT.



BRINGING THE BENEFITS
OF SPACE TO HUMANKIND