Bridging the Space Divide in Emerging Countries
To Mars and beyond...
Scheduled to enter the Martian atmosphere in 2021, the same year that the UAE celebrates its 50th anniversary, the Emirates Mars Mission or “Hope probe” will not only be the world’s first Martian weather satellite, it will also be the first Arab and Islamic mission to another planet. Equipped with a powerful digital camera, as well as infrared and ultraviolet spectrometers, the Hope probe will be the first to provide a comprehensive picture of the Martian climate, studying it through daily and seasonal cycles in order to understand how the planet’s atmosphere evolves over time. Currently, more than 70 Emirati scientists and engineers, almost all of whom are under 35, are working on the probe. That number is expected to grow to 150 by 2021. After collecting science data from the probe, the UAE will share the data with more than 200 academic and scientific institutions around the world for free. The mission will leave behind a valuable and enduring legacy in the form of human capital: a generation of experienced scientists and engineers trained and inspired by the Mars mission.

The Hope Probe, Emirates Mars Mission
WE BRING A NEW DIMENSION TO YOUR HORIZONS

Thales Alenia Space
a Thales / Leonardo company

#SPACEFORLIFE

70th INTERNATIONAL ASTRONAUTICAL CONGRESS
SAVE THE DATE!
21–25 October 2019
Washington, D.C. United States

#IAC2019 will celebrate the 50th anniversary of a feat once thought impossible: humans walking on the moon.

Space: The Power of the Past, the Promise of the Future

IAC2019.ORG
1 WELCOME MESSAGES

1.1 Welcome Message from IAF

Dear GLEC 2019 Delegates,

We are delighted to welcome you to the ninth IAF Global Conference, and the Federation’s first event ever to be held in Morocco! The Global Conference on Space for Emerging Countries, GLEC 2019, is co-organized together with our colleagues from the Royal Centre for Remote Sensing (CRTS) and the Centre National d’Études Spatiales (CNES).

First conference of its kind, GLEC 2019 aims at actively engaging emerging countries in the space scene by highlighting the socio-economic benefits of space applications. A rich and comprehensive programme has been prepared for the Conference and will feature stimulating plenaries and keynotes, an exhibition, a seminar focusing on the next generation and several social events and networking opportunities.

Over the course of the next three days we will closely examine what are the key aspects for resourcing, operationalizing and establishing successful national space programmes in emerging and developing space countries.

In line with its mission to promote international development and “Connecting all Space People”, the IAF truly believes in the value of involving everyone in the space arena, and we look forward to fruitful discussions, knowledge sharing and to the creation of renewed international relations between space faring nations and space developing nations.

Once again, we would like to repeat our sincere gratitude to everyone, starting from the IPC Co-Chairs and Members, who has worked tirelessly in putting together this Global Conference. A big thanks also to all participants who have joined us here in Morocco to take part in this exceptional event and contribute to such a timely discussion.

We are confident that you will find the upcoming days to be enriching and inspiring, enjoy GLEC and Marrakech!

Jean-Yves Le Gall
President, International Astronautical Federation (IAF)

Pascale Ehrenfreund
Incoming President and VP for Global Conferences, International Astronautical Federation (IAF)

1.2 Welcome Message from the IPC Co-Chairs

On behalf of the International Programme Committee, we warmly welcome you to the GLEC2019 Conference on “Space for Emerging Countries” in the beautiful city of Marrakech. We believe we have chosen a venue that guarantees a successful technical conference amid the culture and scenery of Marrakech.

The conference theme “Bridging the space divide in emerging countries”, has been carefully chosen to mark an important milestone of the IAF Global Innovation Agenda 2016-2019. The first aim of this strategy is related specifically to expanding the scope of IAF activities to emerging countries and connecting with new communities with a view to involve stronger participation of emerging countries in the IAF activities, and broadly in space activities, provide knowledge and expertise support to these countries, and ultimately produce benefits for these countries.

The proposed program is rich and varied with Keynote speakers and invited panelists split between six plenary sessions and a GLEC 2019 Seminar on the Next Generation’s View on Space for Emerging Countries. This exciting programme will allow participants to reflect upon and celebrate accomplishments of space emerging countries, and jointly explore current and future opportunities, as well as discuss solutions to the challenges faced by emerging countries.

This event is even more interesting because it takes place at a time when space activities are undergoing profound changes, with the double effect of technological innovations and the emergence of new actors.

The expected contributions of participants representing space agencies, industry, academia and the younger generation, will undoubtedly help to provide collective insight to the challenges facing emerging countries. We hope this will create opportunities for more collaborations and networking that will strengthen the links of cooperation and exchange between the actors in the global space venture.

We hope all participants will have a productive and fun-filled time at this very special conference.
2 ORGANIZERS INFORMATION

2.1 International Astronautical Federation (IAF)

Founded in 1951, the International Astronautical Federation is the world’s leading space advocacy body with more than 366 members, 68 countries on six continents, including all leading agencies, space companies, societies, associations and institutes worldwide.

Following its theme “A space-faring world cooperating for the benefit of humanity,” the Federation advances knowledge about space and fosters the development and application of space assets by advancing global cooperation.

As the organizer of the annual International Astronautical Congress (IAC), and other meetings on specific space-related topics, the IAF actively encourages the development of astronautics for peaceful purposes and supports the dissemination of scientific and technical information related to space.

International Astronautical Federation (IAF)

100 Avenue de Suffren
75015 Paris
France

Phone: +33 1 45 67 42 60
Email: info@iafastro.org
Website: www.iafastro.org

Connecting @ll Space People

Be part of the conversation @iafastro

2.2 Royal Centre for Remote Sensing (CRTS)

The Royal Centre for Remote Sensing (CRTS) is the national institution responsible for the promotion, use and development of remote sensing applications in Morocco. CRTS coordinates and carries out the national programme of remote sensing in collaboration with ministerial departments, private operators and universities.

CRTS uses operational systems to collect, produce and analyze data from Earth observation satellites and other sources. It also runs the national archiving facilities. CRTS provides its expertise in remote sensing to national and regional organisations, ranging from private sector companies to government and non-government institutions, involved in projects for resources management and environmental assessment.

Royal Centre for Remote Sensing (CRTS)

Angle Avenue Sanawbar et Avenue Allal El Fassi quartier Hay Riad
11000 Rabat
Morocco

Phone: +212 5 37 71 14 35 / +212 5 37 71 54 48
Website: www.crts.gov.ma

2.3 Centre National d’Études Spatiales (CNES)

Founded in 1961, the Centre National d’Études Spatiales (CNES) is the government agency responsible for shaping and implementing France’s space policy in Europe. Its task is to invent the space systems of the future, bring space technologies to maturity and guarantee France’s independent access to space.

CNES is a pivotal player in Europe’s space programme, and a major source of initiatives and proposals that aim to maintain France and Europe’s competitive edge. It conceives and executes space programmes with its partners in the scientific community and industry, and is closely involved in many international cooperation programmes — the key to any far-reaching space policy.

The agency’s more-than 2,400-strong workforce constitutes an exceptional pool of talent, with some 1,800 engineers and executives, 35% of whom are women. Through its ability to innovate and its forward-looking vision, CNES is helping to foster new technologies that will benefit society as a whole, focusing on:

- access to space-civil applications of space
- sustainable development
- science and technology research
- security and defence

Centre National d’Études Spatiales (CNES)

2 Place Maurice Quentin
75039 Paris
France

Phone: +33 1 44 76 75 00
Email: info@spacegeneration.org
Website: www.cnes.fr

3 PARTNER ORGANIZATION INFORMATION

3.1 Space Generation Advisory Council (SGAC)

The Space Generation Advisory Council in Support of the United Nations Programme on Space Applications (SGAC) is a global non-governmental, non-profit organization and network which aims to represent university students and young space professionals ages 18-35 to the United Nations, space agencies, industry, and academia.

Headquartered in Vienna, Austria, the SGAC network of members, volunteers and alumni has grown to more than 13,000 members representing more than 150 countries.

SGAC was conceived at UNISPACE III in 1999, whereby states resolved, as part of the Vienna Declaration, “To create a council to support the United Nations Committee on the Peaceful Uses of Outer Space, through raising awareness and exchange of fresh ideas by youth. The vision is to employ the creativity and vigour of youth in advancing humanity through the peaceful uses of space”.

Space Generation Advisory Council (SGAC)
c/o ESPIC, Schwarzenbergplatz 6
1030 Vienna
Austria

Email: info@spacegeneration.org
Website: http://spacegeneration.org
4 INTERNATIONAL PROGRAMME COMMITTEE

4.1 International Programme Committee Co-Chairs

Dris El Hadani
Director General, Royal Centre for Vector Sounding (CRTS), Morocco

Jean-Pascal Le Franc
Director of Planning, International Relations & Quality, Centre National d’Études Spatiales (CNES), France

Volonathan Munsami
VP for Developing Countries and Emerging Nations (AV), Chief Executive Officer (CEC), South African National Space Agency (SANSA), South Africa

4.2 International Programme Committee Members

Ahmed ABOU, Africa Space Workshops, United Kingdom
Nour ABDELALATIF AL HAMASHI, United Arab Emirates Space Agency (UAESA), United Arab Emirates
Saied AL MAARI, Mohammed Bin Rashid Space Centre (MBRSC), United Arab Emirates
Adnan ALRAIS, Mohammed Bin Rashid Space Centre (MBRSC), United Arab Emirates
Snidvongs ANOND, Science & Technology Development Agency (GISTDA), Thailand
Ahmed ABDI, Centre de Recherche d’Applications de l’Information et des Technologies pour le Développement (CRTS), Morocco

Christianus DEWIANTO, Indonesian National Institute of Aeronautics & Space (LIPI), Indonesia
Thomas DIAMALUDIN, Indonesian National Institute of Aeronautics and Space (LIPI), Indonesia
Anas ELMAMOUN, African Regional Centre for Space Science & Technology, Morocco
Sim EUNSU, Korea Aerospace Research Institute (KARI), Republic of Korea
Ahmed FARID, German Aerospace Centre (DLR), Egypt
Jürg FEUSTEL-BÜCHL, Space Consultant, Germany
Martha GAGGERO, Centre de Investigación y Desarrollo Espacial (CIDEA), Uruguay
Christina GIANNOPAPA, European Space Agency (ESA), France
Toshikazu HAKISHI, Mitsubishi Electric Co., Japan
Karim HOUARI, Agence Spatiale Algérienne (ASA), Algeria
Mamoud HUSSAIN, National Authority for Remote Sensing & Space Sciences, Egypt
Othonsou Temédéou ISAIAH, SpaceNEWS Africa, Nigeria
Juan Jaramillo ROJAS, Ecuadorian Civilian Space Agency (EIA), Ecuador
Mohamed KHALAFULLI, National Centre for Scientific and Technical Research (CNRST), Morocco
Sakthir KIRE, Japan Space Exploration Agency (JAXA), Japan
John Njoroge KIMANI, Kenya Space Agency, Kenya

Yoshiki KINOSHITA, Japan Space Exploration Organization (JAXA), Japan
Otto KOULIKELA, Gras University of Technology (TU Graz), Austria
Sergey KIRIKALEV, Roscosmos, Russian Federation
Raul KUDELKA, Centre National d'Études Spatiales (CNES), France
Joo-Jin LEE, Korea Aerospace Research Institute (KARI), Republic of Korea
Raksha LEKHTANOV, Geo-Information & Space Technology Development Agency (DGISTDA), Thailand
Fernanda LIMA, Brazilian Space Agency (ABE), Brazil
Maousi Faki MAHMAAT, African Union Commission, Republic of Chad
Absolakar MAMRINBA NDIYONGUI, Agence Gabonaise d’Études et d’Observations Spatiales (AGEOS), Gabon
Peter MARTINEZ, University of Cape Town, South Africa
Francisco MENDIETA JIMENEZ, Mexican Space Agency (AEM), Mexico
Fritz MERKLE, OHB System AG, Germany
Andrew MILLS, South African National Space Agency (SANSA), South Africa
Sue MOSTERT, Space Commercial Services Holdings (Pty) Ltd, South Africa
Clay MOWRY, Blue Origin, United States
Ronnie NADER, Ecuadorian Civilian Space Agency (EIA), Ecuador

Praeven NAIR, Indian Space Research Organisation (ISRO), India
Tibahane QUATARRA, Science and Technology Division, Human Resources, Science and Technology Development African Union Commission, Ivory Coast
Nicola PETER, German Aerospace Centre (DLR), Germany
Anh Tuan PHAM, Vietnam National Space Center (VNNSC), Vietnam
Alexandre J. ROMAN, Paraguayan Space Agency (AEP), Paraguay
Barbara RYAN, Group on Earth Observation (GEO) (Retired), Switzerland
Raul SABULARSE, Philippine Council for Industry, Energy and Emerging Technology Research and Development, Department of Science and Technology, The Philippines
Imran SALOUMI, Secure World Foundation (SWF), South Africa
Phineas SARO, Indonesian National Institute of Aeronautics and Space (LIPI), Indonesia
Robbie SCHINGLER, Planet, United States
Kia-Uwe SCHOLM, International Institute of Space Law (IISL), France
Mohamed SEIDU ONIELO, National Space Research & Development Agency (NASRDA), Nigeria
Emily SHANKLIN, SpaceX, United States
Mary SMITH, Lockheed Martin Corporation (LMC), United States
Luc ST PIEIRE, United Nations Office for Outer Space Affairs (UNOOSA), Austria
Sir Martin SWEETING, Surrey Satellite Technology Ltd (SSTL), United Kingdom
Nguyen Trung THANG, Vietnam National Space Center (VNNSC), Vietnam
Akinaoake ABOROSOBA, Space Generation Advisory Council (ISACG), Nigeria
Jean-Jacques TORTORA, European Space Policy Institute (ESPI), Austria
Ranita TOUKERBI, Space Generation-Advisory Council (ISACG), Tunisia
Anthony TSOGOARAS, National Aeronautics and Space Administration (NASA), United States
Saud bin Mohammad Al SAIHI, King Abdulaziz City for Science & Technology (KACST), Saudi Arabia
Carlo VIBERTI, SpaceLand Africa, Mauritius
Jim VOGT, P4AKids, Germany

Alain WAGNER, Airbus Defence and Space, France
Tefessa WAWA, Ethiopian Space Science Society (ESSS), Ethiopia
Stephanie WAM, Space Generation Advisory Council (ISACG), United States
Yan WANG, Chinese Society of Astronautics (CSA), China
Krytal WILSON, Secure World Foundation (SWF), United States
Wu YINHUI, China National Space Administration (CNSA), China

GLOBAL CONFERENCE ON SPACE FOR EMERGING COUNTRIES
MARRAKECH, MOROCCO
24-26 April 2019
5 PRACTICAL INFORMATION

5.1 Floor Plan and Maps

Les Jardins de l’Agdal Hôtel

1: GLC 2019 at the Les Jardins de l’Agdal Hôtel: Avenue Mohammed VI, Marrakech 40000
2: Gala Dinner at La Maison Arabe Hôtel: Derb Assehbi, Marrakech 40000
3: Koutoubia Mosque – Famous Mosque in Marrakech
4: Jemaa Al Fna – Busy Square and Marketplace
5: Jardin Majorelle – Botanical Garden and Yves Saint Laurent Museum
5.2 Registration

Opening Hours
Wednesday 24 April, 08:00-18:00
Thursday 25 April, 08:30-18:00
Friday 26 April, 08:30-16:30

5.3 Useful information

About Morocco

AIRPORT AND LOCAL TRANSPORTS INFO: http://www.transfert-marrakech.com/

TIME ZONE: UTC +1

CURRENCY: 1€ = 11,50 Moroccan Dirhams (MAD)

AREA: 710,000 square kilometres

POPULATION: Approx. 33 million people

CAPITAL: Rabat

LANGUAGE: Moroccan Arabic is the official language and Amazigh (Berber) will be heard most, along with French. English is also spoken in many places.

TIPPING: Tip at your own discretion.

ELECTRICITY: 220 Volts & 50 Cycles – standard 2 circular pins (take adapter as per Europe).

TELEPHONE: The international direct dialling code for Morocco is +212.

GIFTS AND SOUVENIRS: For centuries, Moroccan crafts have been world-famous for their variety and quality. The best thing to remember is that hard bargaining is essential!

VACCINATION AND HEALTH: Please consult your GP regarding vaccinations. Most people who travel to Morocco do not take additional vaccinations but advice varies. This is entirely your choice. Malaria is not normally present in Morocco, however you should ensure good bite avoidance by covering up with clothing such as long sleeves and long trousers especially after sunset and using insect repellents on exposed skin.

WATER: Water is not safe to drink straight from the tap, rivers or creeks. If you drink water in a café or restaurant, make sure you ask for ‘mineral’ water.

CLIMATE: Early mornings will immediately warm up as soon as the sun rises and the days will be warm and hot depending on the season.

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<tr>
<th>Month</th>
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<th>Min °c</th>
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Morocco Entry Requirements

VISAS: British & European nationals do not need a visa to enter Morocco for the purpose of tourism for up to 3 months.

When entering the country, make sure your passport is stamped. Some tourists have experienced difficulties leaving the country because their passport bears no entry stamp.

PASSPORT VALIDITY: Your passport should be valid for at least 3 months following your stay in Morocco but we suggest having 6 months remaining on your passport as a precaution. If you are unsure about this timing, please contact us for confirmation.

To get all useful information related to visa application for Morocco, please visit: https://www.consulat.ma/en/visitingexploring-morocco.
## CONFERENCE PROGRAMME

### 6.1 Conference at a Glance

<table>
<thead>
<tr>
<th>Time</th>
<th>Wednesday 24 April</th>
<th>Thursday 25 April</th>
<th>Friday 26 April</th>
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<tbody>
<tr>
<td>08:00</td>
<td>Registration</td>
<td>Keynote 1</td>
<td>Registration</td>
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<tr>
<td>09:00</td>
<td>Opening ceremony</td>
<td>Keynote 2</td>
<td>Keynote 5</td>
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<td>10:00</td>
<td>High-Level Panel 1</td>
<td>Financial Models</td>
<td>Space Industry</td>
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<td>11:00</td>
<td>Exhibition Opening</td>
<td>and Resourcing</td>
<td>Development and</td>
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<td>+ Tea/Coffee Break</td>
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<td>Support</td>
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<td>12:00</td>
<td>High-Level Panel 2</td>
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<td>Benefits of Space</td>
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<td>Technology and</td>
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<td>14:00</td>
<td>Welcome Lunch</td>
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<td>Benefits of Space</td>
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<td>Development</td>
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<td>17:00</td>
<td>Tea/Coffee Break</td>
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<td>18:00</td>
<td>Welcome Reception</td>
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<td>Gala Dinner</td>
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6.2 Day-by-day (Plenaries & Side Events)

Wednesday, 24 April

09:00 - 10:00 OPENING CEREMONY
Location: Les Jardins de l’Agdal Hôtel

Speakers:

- Abdellatif Loudiyi
  Minister Delegate to the Head of Government in charge of the National Defense Administration, Morocco

- Jean-Yves Le Gall
  President, International Astronautical Federation (IAF), France

- Moulay Hafid Elalamy
  Minister of Industry, Investment, Trade and Digital Economy, Morocco

- Pascale Ehrenfreund
  VP for Global Conferences and incoming President, International Astronautical Federation (IAF), Germany

- Driss El Hadani
  GLSC 2019 IPC Co-Chair, Secretary General, Royal Centre for Remote Sensing (CRTS), Morocco

Master of Ceremony:

- Christian Feichtinger
  Executive Director, International Astronautical Federation (IAF), France

10:00 - 10:20 HIGH LEVEL KEYNOTE 1
Location: Les Jardins de l’Agdal Hôtel

Speaker:

- Tidiane Ouattara
  Space Science Expert and GMES & Africa Program Coordinator, African Union Commission (AUC), Ethiopia

10:30 - 10:50 EXPO OPENING AND RIBBON CUTTING
Location: Patio Andalou, Les Jardins de l’Agdal Hôtel

10:50 - 11:40 TEA/COFFEE BREAK
Location: Patio Andalou, Les Jardins de l’Agdal Hôtel

11:40 - 13:10 SESSION 1: PART 1
Location: Les Jardins de l’Agdal Hôtel

The primary focus of emerging countries in developing national space programmes is to leverage the benefits of space technologies and applications products and services. Whereas some countries may have a fair appreciation of what this entails, there are a significant number of emerging countries that have not grasped this important benefit and how this can assist in the socio-economic development of the country. The Session focus will be on:

1. Recognizing the relevance of space technologies and applications to achieving the Sustainable Development Goals (SDGs),
2. Valuing how space technologies and applications can assist in the socio-economic development of a country.

Moderator:

- Jean-Pascal Le Franc
  GLSC 2019 IPC Co-Chair, Director of Planning, International Relations and Quality, Centre National d’Études Spatiales (CNES), France

11:40 - 11:50 KEYNOTE 1: Part 1
Location: Les Jardins de l’Agdal Hôtel

Speaker:

- Driss El Hadani
  GLSC 2019 IPC Co-Chair, Secretary General, Royal Centre for Remote Sensing (CRTS), Morocco

Location: Les Jardins de l’Agdal Hôtel

Speakers:

Mohammed Al Ahbabi
Director General, UAE Space Agency (UAESA), United Arab Emirates

Pascale Ehrenfreund
Chair of the Executive Board, German Aerospace Center (DLR), Germany

Sergey Saveliev
Deputy Director General, State Space Corporation Roscosmos, Russian Federation

Mohammed Al Ahbabi
Director General, UAE Space Agency (UAESA), United Arab Emirates

Pascale Ehrenfreund
Chair of the Executive Board, German Aerospace Center (DLR), Germany

Sergey Saveliev
Deputy Director General, State Space Corporation Roscosmos, Russian Federation

Jean-Yves Le Gall
President, Centre National d’Études Spatiales (CNES), France

Chris Lee
Chief Scientist, UK Space Agency, United Kingdom

Valanathan Munsami
CEO, South African National Space Agency (SANSA), South Africa

Rashad Nabiyev
CEO / Chairman of the Board, Azerspace, Azerbaijan

Azzedine Oussedik
General Director, Agence Spatiale Algérienne (ASAL), Algeria (Invited)

Dominique Tilmans
Honorary Senator, Chair of YouSpace Chair of EURISYS, France

13:10 - 14:40  AIRBUS WELCOME LUNCH

Location: Les Jardins de l’Agdal Hôtel

Keynote: Oliver Juckenhoefel
Senior Vice President On-Orbit Services and Exploration, Airbus Defence and Space, Germany

Sponsored by:

AIRBUS

14:40 - 16:10  SESSION 1: Part 2

The primary focus of emerging countries in developing national space programmes is to leverage the benefits of space technologies and applications products and services. Whereas some countries may have a fair appreciation of what this entails, there are a significant number of emerging countries that have not grasped this important benefit and how this can assist in the socio-economic development of the country. The Session focus will be on:

1. Recognizing the relevance of space technologies and applications to achieving the Sustainable Development Goals (SDGs),
2. Valuing how space technologies and applications can assist in the socio-economic development of a country.

Moderator:

Valanathan Munsami
GLNC 2019 Co-Chair, VP for Developing Countries and Emerging Nations, International Astronautical Federation (IAF), CEO, South African National Space Agency (SANSA), South Africa
14:40 - 14:50  KEYNOTE 1: Part 2
Location: Les Jardins de l’Agdal Hôtel
Speaker: Charles F. Bolden
President / CEO, The Bolden Consulting Group LLC, United States

14:50 - 16:10  PLENARY 1: High Level Panel 1 Part 2 – Industry Perspective
Location: Les Jardins de l’Agdal Hôtel
Speakers:
- Kyle Acierno
  Vice President for Global Sales, ispace, Inc., Japan
- Bruce Chesley
  Senior Director for Strategy, Space and Missile Systems, The Boeing Company, United States
- Luigi Scatteia
  Director – Space, PwC Advisory, France
- Jean-Loïc Galle
  CEO, Thales Alenia Space, France
- Oliver Juckenhoefel
  Senior Vice President On-Orbit Services and Exploration, Airbus Defence and Space, Germany
- Stuart Martin
  CEO and Executive Director, Satellite Applications Catapult Ltd., United Kingdom
- Sias Mostert
  Managing Director, Space Commercial Services Holdings (SCS), South Africa
- Vitaly Safonov
  Deputy Director General, ISS Glavkosmos, Russian Federation

16:10 - 16:40  TEA/COFFEE BREAK
Location: Patio Andalou, Les Jardins de l’Agdal Hôtel

16:40 - 18:10  SESSION 2: FINANCIAL MODELS AND RESOURCING
Location: Les Jardins de l’Agdal Hôtel
Given the many competing social and economic priorities of emerging countries, the finances usually committed to national space programmes is generally sub-optimal. However, additional levels of funding are contingent upon demonstrating an appreciable value proposition through either a return on investment or value on investment. The Session focus will be on:
1. Categorizing the financial models that could be adopted in national/regional space programmes, and
2. Pinpointing what development banks are looking for in providing financial loans and assistance for space technologies and applications.
Moderator: Kirsten Armstrong
President, Petra Strategy, United States

16:40 - 16:50  KEYNOTE 2
Location: Les Jardins de l’Agdal Hôtel
Speaker: Steve Bochinger
COO, Euroconsult, France

16:50 - 18:10  PLENARY 2: FINANCIAL MODELS AND RESOURCING
Location: Les Jardins de l’Agdal Hôtel
Speakers:
- ZHONG Penghua
  Deputy Director of International Business Department, DFH Satellite Co., Ltd., China
- Talal Al Kaissi
  Advisor – Strategic Projects, UAE Space Agency (UAESA), United Arab Emirates
- Mmboneni Muofhe
  Co-Chair, Group on Earth Observation (GEO), South Africa
Given the nascent stage of developing countries in the field of space science and technology, technology and skills development become important success factors for the long-term sustainability of national space programmes. Hence, the consideration of different approaches to such development and the protection of intellectual property is vitally important during the implementation phase of national space programmes. The Session focus will be on:

1. Grasping the role played by academia in developing the requisite knowledge and skills required for national space programmes, and
2. Contextualising the role of government in supporting the implementation of national space programmes.
3. Understanding the cooperation modalities among the key players involved in skills and technology development.

Moderator:
Rania Toukabri
National Point of Contact for Tunisia, Space Generation Advisory Council (SGAC), Tunisia

09:30 - 09:40 KEYNOTE 3
Location: Les Jardins de l’Aгадal Hôtel
Speaker:
Juan de Dalmau
President, International Space University (ISU), France
09:40 - 11:00 PLENARY 3: TECHNOLOGY AND SKILLS DEVELOPMENT

Location: Les Jardins de l’Agdal Hôtel

Speakers:
- Abdelaziz Benjouad
  Vice President for Research & Development, International University of Rabat, Morocco
- Otto Koudelka
  Head of the Institute of Communications Network & Satellite Communications, Graz University of Technology (TU Graz), Austria
- Aimin Niu
  Programme Officer, United Nations Office for Outer Space Affairs (UNOOSA), Austria
- Amal Layachi
  Head of Capacity Building Department, Royal Centre for Remote Sensing (CRTS), Morocco
- Pierluigi Mancini
  NAVISP Programme Manager, European Space Agency (ESA), France
- Tidiane Ouattara
  Space Science Expert and GMES & Africa Program Coordinator, African Union Commission (AUC), Ethiopia

11:00 - 11:30 TEA/COFFEE BREAK

Location: Patio Andalou, Les Jardins de l’Agdal Hôtel

11:30 - 13:00 SESSION 4: BASE INFRASTRUCTURE REQUIREMENTS

Location: Les Jardins de l’Agdal Hôtel

Given the limited experience of emerging countries in space science and technology, the full scope of the infrastructure requirements is not always understood and appreciated. Also, the appropriate use of such infrastructure also goes hand in glove with the infrastructure itself. These considerations are important to ensure that national space programmes are both efficient and effective. The Session focus will be on:

1. Identifying the base infrastructure required for operationalizing efficient and effective national space programmes,
2. Appreciating how to develop the appropriate skills and expertise required for the efficient operations of space infrastructure.

Moderator:
- Krystal Wilson
  Director of Space Applications Programs, Secure World Foundation (SWF), United States

11:40 - 13:00 PLENARY 4: BASE INFRASTRUCTURE REQUIREMENTS

Location: Les Jardins de l’Agdal Hôtel

Speakers:
- Adnan Alrais
  Senior Director of Remote Sensing, Mohammed Bin Rashid Space Centre (MBRSC), United Arab Emirates
- Neevy van Laningham
  Asia Pacific Space Policy Cooperation Senior Specialist, U.S. Department of State, United States
- Rei Kawashima
  Secretary-General, UNISEC-Global, Japan
- Agnieszka Lukaszczuk
  Senior Director, European Affairs, Planet, Belgium
- Andiswa Mlisa
  Managing Director for Earth Observation, South African National Space Agency (SANSA), South Africa
- Jean-Philippe Duval
  Francophone Africa Advisory Leader and PwC Relationship Partner, AfDB, PwC, France
- Adam Lewis
  Australian Lead, Digital Earth Africa, Australia

Speaker:
- Pilar Zamora
  Executive Director, Colombian Space Agency, Colombia
13:00 - 14:30  IDEA “3G” DIVERSITY LUNCH
Location: Les Jardins de l’Agdal Hôtel
The IDEA “3G” Diversity Lunch will feature a Keynote Speech by Widad Elkakhradi, Student at the National School of Applied Sciences of Agadir.

The lunch, organized in the frame of the IAF “3G” International Platform for Diversity and Equality in Astronautics (IDEA) will focus on the importance of highlighting excellent role models for young female space professionals from Morocco. In this purpose, Widad Elkakhradi, 18 year-old Moroccan, space camp alumni, and passionate about aeronautics and robotics will give a 10-minute keynote on the utmost importance of women’s right and how each of us can contribute to a brighter future for women from emerging countries.

Speaker:
Widad Elkakhradi
Student, National School Of Applied Sciences Of Agadir, Morocco

14:30 - 18:00  SEMINAR ON THE NEXT GENERATION’S VIEW ON SPACE FOR EMERGING COUNTRIES
Location: Les Jardins de l’Agdal Hôtel
The GLEC 2019 Seminar on the Next Generation’s view on Space for Emerging Countries is a half-day seminar organized in cooperation with the Space Generation Advisory Council (SGAC). The event aims to engage Moroccan and African students and young professionals and provides an opportunity for capacity building and policy input on space applications.

The programme will feature 3 keynote addresses, 5 working group discussions and a short panel discussion where participants can ask questions.

PROGRAMME
14:30 - 14:40  Workshop Introduction
Temidayo Isaiah
African Regional Coordinator, Space Generation Advisory Council (SGAC)
Imane El Khantoudi
National Point of Contact for Morocco, Space Generation Advisory Council (SGAC)
Jean-Yves Le Gall
President, International Astronautical Federation (IAF)

14:40 - 14:55  Keynote 1
Adnan Alrais
Director, Remote Sensing Department, Mohammed Bin Rashid Space Centre (MBRSC)

14:55 - 15:10  Keynote 2
Dris El Hadani
Director General, Royal Center for Remote Sensing (CRTS)

15:10 - 15:25  Keynote 3
Amal Khatri
Executive Director, Space Programme South African National Space Agency

15:25 - 15:40  Special Guest
Charles F. Bolden
Former administrator, National Aeronautics and Space Administration (NASA)

15:40 - 15:45  Working Group Introduction
Abraham Akinwale
National Point of Contact for Nigeria, Space Generation Advisory Council (SGAC)

15:45 - 17:00  Working Groups
Working Group 1: Regional Collaboration on Space Applications
Andiswa Mlisa
Managing Director Earth Observation, South African National Space Agency (SANSA)

Working Group 2: IoT and Space Applications
Maria-Gabriella Sarah
Senior Partnership Officer, European Space Agency (ESA)

Working Group 3: Legal and Policy Challenges of Space Applications
Agnieszka Łukaszczyk
Senior Director, European Affairs Planet
Working Group 4: Technology Development for Socio-Economic Development

Neevy van Laningham
Senior Specialist
Asia Pacific Space Policy Cooperation

Working Group 5: Engagement of the Next Generation from Emerging Countries

Hansley Noruthun
SGAC 2nd African Space Generation Workshop Manager

17:00 - 17:30 Panel

Moderator:
Leehandi De Witt
National Point of Contact for South Africa, Space Generation Advisory Council (SGAC)

Hansley Noruthun
SGAC 2nd African Space Generation Workshop Manager
Kyle Acierno
Vice President Global Sales and Strategy, ispace Japan
Agnieszka Łukaszczyk
Senior Director, European Affairs, Planet

17:30 - 17:55 Summary of Group Work (5’ per Working Group)

17:55 - 18:00 Conclusion

Rania Toukebri
National Point of Contact for Tunisia, Space Generation Advisory Council (SGAC)

19:30 - 22:00 GALA DINNER

Location: La Maison Arabe Hôtel

Derb Assehbi, Marrakech 40000, Morocco

Bus departure at 19:30 outside Les Jardins de l’Agdal Hôtel.

Friday, 26 April

09:30 - 11:00 SESSION 5: SPACE INDUSTRY DEVELOPMENT AND SUPPORT

Location: Les Jardins de l’Agdal Hôtel

Recent developments in the global space sector demonstrates an increasing role played by the space industry and private sector institutions. This underscores the need for developing a local space industry as an important segment of the space value chain, especially where there is a move for space agencies to farm out key space initiatives to the local industry rather than building in-house capabilities to implement these. The Session focus will be on:

1. Unpacking the role to be played by a local space industry sector in the space value chain,
2. Understanding the evolution of private space sector institutions from the start-up phase to the fully operational phase.

Moderator:
Kammy Brun
Head of Global Business Development, China HEAD Aerospace Group, China

09:30 - 09:40 KEYNOTE 5

Location: Les Jardins de l’Agdal Hôtel

Speaker:
Pascale Ehrenfreund
Chair of the Executive Board, German Aerospace Centre (DLR), Germany

09:40 - 11:00 PLENARY 5: SPACE INDUSTRY DEVELOPMENT AND SUPPORT

Location: Les Jardins de l’Agdal Hôtel

Speakers:
Kasia Clatworthy
Head of Customer Knowledge Transfer and Training Department, Surrey Satellite Technology Ltd (SSTL), United Kingdom
Nomfuneko Majaja
Chief Director, Legal and Compliance – Special Economic Zones and Space Affairs, Vice Chair, South African Council for Space Affairs Department of Trade and Industry, South Africa
Yuan Hongyi
General Manager, Huang Satellite Operations Division, Third Academy of China Aerospace Science & Industry Corporation (CASIC), China
11:00 - 11:30 TEA/COFFEE BREAK
Location: Patio Andalou, Les Jardins de l’Agdal Hôtel

11:30 - 13:00 SESSION 6: LEGAL AND POLICY
Location: Les Jardins de l’Agdal Hôtel

Given the sensitive nature of space science, especially in respect of (i) dual use technologies, (ii) the United Nations (UN) Treaties and Conventions, and (iii) national space law that is needed to govern the peaceful use of outer space; legal and policy considerations must be given to these important factors. Emerging countries are not necessarily familiar with this domain and these can easily be ignored in the establishment phase of national space programmes. The Session focus will be on:

1. Understanding the key policy drivers of national space programmes and the process entailed in developing national space policies,
2. Highlighting the relevance of UN Treaties and Conventions to national space programmes, and
3. Creating awareness on the need for national space legislation to ensure the peaceful use of outer space

Moderator:
David Kendall
Former Chair, United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS), Canada

11:30 - 11:40 KEYNOTE 6
Location: Les Jardins de l’Agdal Hôtel
Speaker:
Irmgard Marboe
Professor of International Law, Head of the National Contact Point for Space Law, University of Vienna, Austria

11:40 - 13:00 PLENARY 6: LEGAL AND POLICY
Location: Les Jardins de l’Agdal Hôtel
Speakers:
Mohammed Khalil
Ibrahim
Professor, School of Aerospace and Automotive Engineering, Rabat International University, Morocco

Marta Gaggero
Chief Counsel, Centro de Investigación y Difusión Aeronáutico Espacial (CIDA-E), Uruguay

Magda Cocco
Partner ICT / Space Group, VdA – Vieira de Almeida, Portugal

Jairo Becerra
Director of the Socio-Legal Research Centre, Universidad Católica de Colombia, Colombia

Tanja Masson-Zwaan
Assistant Professor and Deputy Director of the International Institute of Air and Space Law (IIASL), Leiden University, The Netherlands

13:00 - 13:10 KEYNOTE BY IAF VP FOR GLOBAL MEMBERSHIP DEVELOPMENT
Location: Les Jardins de l’Agdal Hôtel
Speakers:
Mohammed Al Ahbabii
VP for Global Membership Development, International Astronautical Federation (IAF), United Arab Emirates
13:10 - 14:30 LUNCH
Location: Les Jardins de l’Agdal Hôtel

14:30 - 15:50 RESULTS AND RECOMMENDATIONS
Location: Les Jardins de l’Agdal Hôtel
Moderator:

Panel 1 – Part 1
Moderator: Jean-Pascal Le Franc
GLEC2019 IPC Co-Chair,
Director of Planning,
International Relations and Quality,
Centre National d’Études Spatiales (CNES), France

Speakers:

Panel 1 – Part 2
Moderator: Valanathan Munsami
GLEC2019 IPC Co-Chair,
VP for Developing Countries and Emerging Nations,
International Astronautical Federation (IAF),
CEO, South African National Space Agency (SANSA), South Africa

Panel 2 Moderator
Kirsten Armstrong
President, Petra Strategy, United States

Panel 3 Moderator
Rania Toukabi
National Point of Contact for Tunisia,
Space Generation Advisory Council (SGAC), Tunisia

Panel 4 Moderator
Krystal Wilson
Director of Space Applications Programs,
Secure World Foundation (SWF), United States

Seminar on the Next Generation’s View on Space for Emerging Countries Moderator
Imane El Khantouti
National Point of Contact for Morocco,
Space Generation Advisory Council (SGAC), Morocco

Panel 5 Moderator
Kammy Brun
Head of Global Business Development,
China HEAD Aerospace Group, China

Panel 6 Moderator
David Kendall
Former Chair
United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS), Canada

15:50 - 16:20 CLOSING CEREMONY
Location: Les Jardins de l’Agdal Hôtel
Speakers:

Pascale Ehrenfreund
VP for Global Conferences and incoming President,
International Astronautical Federation (IAF), France

Driss El Hadani
GLEC 2019 Local Organising Committee Chair,
Director General, Royal Centre for Remote Sensing (CRTS), Morocco

Jean-Pascal Le Franc
GLEC2019 IPC Co-Chair,
Director of Planning, International Relations and Quality,
Centre National d’Études Spatiales (CNES), France

Valanathan Munsami
GLEC2019 IPC Co-Chair,
VP for Developing Countries and Emerging Nations,
International Astronautical Federation (IAF),
CEO, South African National Space Agency (SANSA), South Africa

Jean-Yves Le Gall
President, Centre National d’Études Spatiales (CNES), France

Master of Ceremony: Christian Feichtinger
Executive Director, International Astronautical Federation (IAF), France
7 GALA DINNER

Thursday, 25 April

Location:
La Maison Arabe Hôtel
Derb Assehbi, Marrakech 40000, Morocco

Bus departure at 19:30 from Les Jardins de l’Agdal Hôtel.

The ticket price (including VAT) is € 60,00 and can be purchased online or on-site in cash.

8 EXHIBITORS AND SPONSORS

8.1 Exhibition Area Floorplan
8.2 List of Exhibitors by Stand Number

<table>
<thead>
<tr>
<th>Stand: 6</th>
<th>Azerкосmos</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contact:</strong></td>
<td>Nargiz Samadova</td>
</tr>
<tr>
<td><strong>Events Manager:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Address:</strong></td>
<td>72 U. Haji beyli str., AZ1000, Baku, Azerbaijan</td>
</tr>
<tr>
<td><strong>Tel:</strong></td>
<td>+994 12 5650055 ext. 266</td>
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<tr>
<td><strong>Fax:</strong></td>
<td>+994 12 5650066</td>
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<tr>
<td><strong>Mobile:</strong></td>
<td>+994 55 9033586</td>
</tr>
<tr>
<td><strong>Mail:</strong></td>
<td>nargiz.samadova@azerкосmos.az</td>
</tr>
<tr>
<td><strong>Web:</strong></td>
<td><a href="http://www.azer%D0%BA%D0%BE%D1%81mos.com">www.azerкосmos.com</a></td>
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Azerкосmos is the national satellite operator of Azerbaijan. The company, established with the mission to connect people around the world, provides satellite-delivered telecommunications and Earth Observation services to its customers in public and private sectors.

Azerкосmos operates 3 satellites. The first, Aeraspace-1, is a telecommunications satellite located at 46° East longitude and has a wide coverage area including countries in Europe, Africa, the Middle East, and Central Asia. Manufactured by Orbital Sciences Corporation and launched by Arianespace, Aeraspace-1 is equipped with 36 transponders: 24 in C-band and 12 in Ku-band.

Under the terms of a strategic partnership with Airbus DS, in 2014, Azerкосmos took over the rights to operate and commercialize the satellite Aeraspace-1.

To enhance the coverage area and spectrum of services, in 2018, Azerкосmos launched its second telecommunications satellite Aeraspace-2 into geostationary orbit at 45° East longitude.

To conduct scientific research in the field of astronautics, Azerкосmos established the Research and Development Center.

To identify innovative startup projects and products in the space and related industries, Azerкосmos conducts the NewSpace Business Acceleration Program. This program provides technological, industrial, and business mentoring and offers seed funding for early stage space startups.

<table>
<thead>
<tr>
<th>Stand: 1</th>
<th>DFH Satellite Co., Ltd</th>
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<tr>
<td><strong>Contact:</strong></td>
<td>ZHONG Penghua</td>
</tr>
<tr>
<td><strong>Tel:</strong></td>
<td>+86-18500077727</td>
</tr>
<tr>
<td><strong>Mail:</strong></td>
<td><a href="mailto:zhongpenghua@dfh.spacechina.com">zhongpenghua@dfh.spacechina.com</a></td>
</tr>
<tr>
<td><strong>Address:</strong></td>
<td>No.104 Yoyui Road, Haidian District, Beijing 100094, China</td>
</tr>
</tbody>
</table>

Established in May 2001 in Beijing, DFH Satellite Co., Ltd. (National Engineering Research Center of Small Satellites and Applications) is a professional aerospace company that provides solutions and service of high performance satellite for earth observation, space communication, space science experiment and new technology demonstration. Up to 2019, the company has launched 90 satellites, with over 78 of them still working in orbit, and the accumulative in-orbit lifetime is nearly 400 years. We also offer a series of related knowledge transfer service, including training on satellite research and development and engineering management, mission consultation, joint designing and development.

<table>
<thead>
<tr>
<th>Stand: 4</th>
<th>CONTEC</th>
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<tbody>
<tr>
<td><strong>Contact:</strong></td>
<td>Sunghee Lee</td>
</tr>
<tr>
<td><strong>CEO:</strong></td>
<td></td>
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<tr>
<td><strong>Address:</strong></td>
<td>O-201, B022, 169-84 Gwahakro, Yuseong-Gu, Daejeon, 34133, Republic of Korea</td>
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<tr>
<td><strong>Tel:</strong></td>
<td>+82-42-863-4523 (Office)</td>
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<tr>
<td><strong>Fax:</strong></td>
<td>+82-10-3108-4523 (personal)</td>
</tr>
<tr>
<td><strong>Mobile:</strong></td>
<td>+82-42-863-4524</td>
</tr>
<tr>
<td><strong>Mail:</strong></td>
<td><a href="mailto:shlee@contec.kr">shlee@contec.kr</a></td>
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CONTEC provides satellite ground station services and satellite image-utilization services through own ground station with our accumulated skills and technologies for future value.

<table>
<thead>
<tr>
<th>Stand: 7</th>
<th>Open Cosmos</th>
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<tbody>
<tr>
<td><strong>Contact:</strong></td>
<td>Remco Timmermans</td>
</tr>
<tr>
<td><strong>Head of Communications:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Address:</strong></td>
<td>Open Cosmos Ltd. RAL Atlas Building R27 Fermi Avenue Harwell OX11 0QX United Kingdom</td>
</tr>
<tr>
<td><strong>Tel:</strong></td>
<td>+44 7435 011 792</td>
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<td><strong>Mail:</strong></td>
<td><a href="mailto:remco@open-cosmos.com">remco@open-cosmos.com</a></td>
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<tr>
<td><strong>Twitter:</strong></td>
<td>@remco_cosmos</td>
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<tr>
<td><strong>Twitter:</strong></td>
<td>@timmermansr</td>
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Open Cosmos is led by its founder Rafael Jorda Siquier, a Spanish entrepreneur who had the idea to make space more accessible. Open Cosmos was created in 2015 and set up in the UK at the Harwell Space Cluster, at the European Space Agency Business Incubation Centre. It has now grown to 40+ employees, with a fully-functional laboratory and clean room to build satellites. Open Cosmos raised 1557 million in a Series A round of funding in 2018 and attracted several new customers for which it is building satellites that are to be launched from as early as autumn 2019.

At GLEC 2019 Open Cosmos will demonstrate its unique 'beeApp' mission design, analysis, test and operations software, in combination with its accessible and easy-to-use 'beeKit' payload development and qualification hardware platform.
QinetiQ offers also affordable high performance sovereign satellite intelligence systems for commercial and security markets and related industries. Our space activities cover manned and unmanned spacecraft, launch/re-entry vehicles, control centres, robotics and a wide range of information systems.

Contact:
Peter Holsters
Vice Manager
Address:
QinetiQ Space
Hogenakkerhoekstraat 9
9150 Kruibeke
Belgium

Tel: +32 3 250 14 14
Web: www.QinetiQ.be

Stand: 2
ICE Cubes by Space Applications Services

Contact:
Dr Hilde Stenuit
Vice Manager
Address:
Space Applications Services - NL Office
Huygenstraat 34
Space Business Park
2201 DK Noordwijk (Zhi)
The Netherlands

Tel: +31-71 781 781 5
Direct: +31 6 212 55 457
Mail: hilde.stenuit@spaceapplications.com
Web: www.spaceapplications.com
www.icecubeservice.com

ICE Cubes is a commercial space access service created by Space Applications Services NV/SA. The International Commercial Experiment Cubes service (ICE Cubes) service provides fast, direct and affordable access to space. The service enables any organisation, public or private entity, such as universities, commercial companies and research centres to participate in research, technology and education. The ICE Cubes service provides for a very appealing asset and innovative approach for capacity building and skills development by providing access to space for the broad community.

Space Applications Services NV/SA is an independent Belgian company founded in 1987, with a subsidiary in Houston, USA.

Our aim is to research and develop innovative systems, solutions and products and provide services to the aerospace and security markets and related industries. Our activities cover manned and unmanned spacecraft, launch/re-entry vehicles, control centres, robotics and a wide range of information systems.

Visit us for a talk on how you can benefit from the ICE Cubes space access service for your research, technology or skills development projects.

Stand: 3
Shanghai Academy of Spaceflight Technology (SAST)

Contact:
Wu Linna
Vice Manager
Address:
Yuanliang Road, No.3888
Minhang district,
Shanghai
China

Tel: 0086-21-24186650
Mail: wulinna1214@sina.com

Headquartered in Shanghai, P. R. China since 1961, Shanghai Academy of Spaceflight Technology (SAST) is a member of China Aerospace Science and Technology Corporation (CASC) and comprises 21 affiliated companies. It is one of the largest suppliers of advanced aerospace technology and air defense products in China. SAST has made significant contributions to the aerospace industry of China by taking a key role in the R&D of launch vehicles, satellites, spacecrafts, deep exploration, air defense, etc. SAST is equipped with distinguished technologies in system engineering, space propulsion, guidance navigation & control (GNC), space power-source, structure material, etc.

SAST has been exploring almost 60 years in the fields of launch vehicles, satellites, multi-range air defense systems, manned spacecrafts, deep space exploration and lunar rovers. With persistent efforts of all the employees, SAST has achieved significant development, and has become one of the most competitive companies in the local and world market. It is capable of providing the one-stop solution from launching to in-orbit service. In the future, SAST will build itself into a world-class integrated aerospace industry group. SAST has the resolution to make significant contribution to science and technology, and create aerospace civilization for human beings.

Stand: 8
Space BD Inc.

Contact:
Kakato (Mas) Kanazawa
Director, Business Development
Address:
Space BD Inc.
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Nihonbashimiromachi Chuo-ku
Tokyo
Japan

Tel: +81-3-6264-7177
Mobile: +81-70-4409-2551
Mail: m.kanazawa@space-bd.com
Web: http://space-bd.com/en/

Space BD, on its utilization service and satellite launch service provider authorized by JAXA, is a one-stop shop to respond to all issues related to industrialization of space. In 2018, Space BD was selected by JAXA as the official commercial service provider in the area of satellite deployment from ISS “Kibo” module. Since then, we are providing demonstration service on ISS external and internal platform, as well as satellite launch service using both JAXA and global launch vehicles. We also extend consistent support in procurement of components from overseas for satellite developers. Moreover, Space BD has started business development in the field of education to cultivate new leadership talents. This educational program targets people of all ages ranging from pre-school education to corporate training. At Space BD, business development experts with experience in various fields approach space from different perspectives such as “Concept,” “Hardware,” “Market” to promote industrialization. Unbound by the traditional perspectives of “Technology” and “Access,” Space BD will build the foundation for businesses utilizing all available assets.
8.3 List of Sponsors

<table>
<thead>
<tr>
<th>Stand: N/A</th>
<th>AIRBUS</th>
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<tbody>
<tr>
<td>Address:</td>
<td>Airbus Defence and Space Space Systems 31 rue des Cosmonautes 31402 Toulouse Cedex France</td>
</tr>
<tr>
<td>Tel: +33 (0)5 62 19 62 19</td>
<td>Contact: Nargiz Samadova Events Manager</td>
</tr>
<tr>
<td>Web: <a href="http://www.airbus.com/space.html">www.airbus.com/space.html</a></td>
<td>Mail: <a href="mailto:nargiz.samadova@azercosmos.az">nargiz.samadova@azercosmos.az</a></td>
</tr>
</tbody>
</table>

Airbus is a global leader in aeronautics, space and related services. In 2018 it generated revenues of € 64 billion and employed a workforce of around 134,000. With cutting-edge capabilities and decades of experience, the Space Systems Business Line of Airbus has all that it takes to design, develop and operate major space systems. Around the globe commercial and institutional customers alike rely on Airbus’ leading space technology and solutions. The Airbus portfolio contains the whole range of Space products and services: mobility, environment, communications, security, space exploration, science and access to Space. From the smallest electronics parts to the full in-orbit delivery of satellites, from very-high-resolution Earth observation instruments to unprecedented deep space exploration missions, from today’s most reliable telecommunication satellites to innovative International Space Station operations – reaching for the stars is our daily business. Airbus offers the most comprehensive range of passenger airliners. Airbus is also a European leader providing tanker, combat, transport and mission aircraft, as well as one of the world’s leading space companies. In helicopters, Airbus provides the most efficient civil and military rotorcraft solutions worldwide.

<table>
<thead>
<tr>
<th>Stand: 6</th>
<th>Azercosmos</th>
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</thead>
<tbody>
<tr>
<td>Address:</td>
<td>72 U. Hajibeyli str., A21000, Baku, Azerbaijan</td>
</tr>
<tr>
<td>Contact:</td>
<td>Tel: +994 12 5650055 ext. 266</td>
</tr>
<tr>
<td>Fax: +994 12 5650066</td>
<td>Mobile: +994 55 9033586</td>
</tr>
<tr>
<td>Mail: <a href="mailto:nargiz.samadova@azercosmos.az">nargiz.samadova@azercosmos.az</a></td>
<td>Web: <a href="http://www.azercosmos.com">www.azercosmos.com</a></td>
</tr>
</tbody>
</table>

Azercosmos is the national satellite operator of Azerbaijan. The company, established with the mission to connect people around the world, provides satellite-delivered telecommunications and Earth Observation services to its customers in public and private sectors.

Azercosmos operates 3 satellites. The first, Azerspace-1, is a telecommunications satellite located at 46° East longitude and has a wide coverage area including countries in Europe, Africa, the Middle East, and Central Asia. Manufactured by Orbital Sciences Corporation and launched by Arianespace, Azerspace-1 is equipped with 36 transponders: 24 in C-band and 12 in Ku-band. Under the terms of a strategic partnership with Airbus DS, in 2014, Azercosmos took over the rights to operate and commercialize SPOT-7 (later commercialised under the title of Azeresat), a high resolution optical Earth observation satellite.

To enhance the coverage area and spectrum of services, in 2018, Azercosmos launched its second telecommunications satellite Azerespace-2 into geostationary orbit at 46° East longitude.

To conduct scientific research in the field of astrophysics, Azercosmos established the Research and Development Center.

To identify innovative startup projects and products in the space and related industries, Azercosmos conducts the NewSpace Business Acceleration Program. This program provides technological, industrial, and business mentoring and offers seed funding for early stage space startups.

### DFH Satellite Co., Ltd

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Established in May 2001 in Beijing, DFH Satellite Co., Ltd. (National Engineering Research Center of Small Satellites and Applications) is a professional aerospace company that provides solutions and service of high performance satellite for earth observation, space communication, space science experiment and new technology demonstration. Up to 2019, the company has launched 90 satellites, with over 78 of them still working in orbit, and the accumulative in-orbit lifetime is nearly 400 years. We also offer a series of related know-how transfer service, including training on satellite research and development and engineering management, mission consultation, joint designing and development.

### UAE Space Agency

**Address:**  
United Arab Emirates  
UAE Space Agency  
P.O. Box: 7133  
Abu Dhabi, United Arab Emirates  

The UAE Space Agency, the first national space agency in the region, was established in 2014, and is responsible for organizing, regulating and supporting the national space sector under federal law. This includes the complete oversight and funding of space missions such as the Mars Hope Probe, the UAE’s unmanned mission to Mars. The primary goals of the UAE Space Agency are to contribute significantly to diversification of the national economy, prepare the upcoming generation of Emiratis for leadership in the space sector through a range of capacity building programmes, and raise awareness about space sciences and STEM fields among the general public. In addition, it is responsible for expanding and enhancing the UAE’s international standing in space-related fields, and for issuing policy and laws for the space sector.
We make highly sophisticated Earth observation satellites faster than anyone else in the World. What’s more, you’ll get your first satellite images the moment you order your satellite. That’s because we can give all our customers access to the World’s most comprehensive Earth observation constellation. And we’re not just the fastest. We’re the most technically accomplished too. We manufacture using lightweight silicon carbide. Which makes your launch significantly cheaper too.

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