



Webinar #2

Space for Tourism

Mina Syriou | [European Space Agency](#)

Guest Speakers:

Mia Jafari | [Intelak Hub, Emirates Group](#)

Paras Loomba | [Global Himalayan Expedition](#)

Vassiliki Mavrokefalou | [Expedia Group](#)



Webinar's host

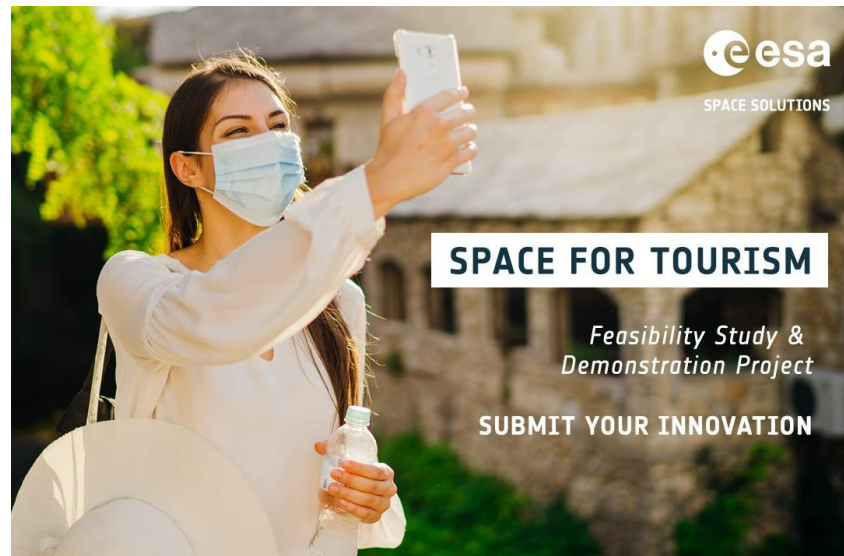


Mina Syriou
Business Applications & Partnerships
ESA Business Applications – Space Solutions
Asimina.Syriou@esa.int



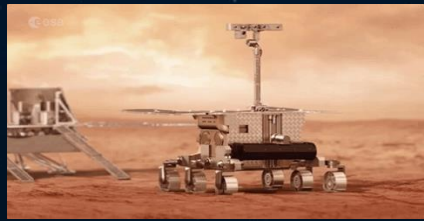
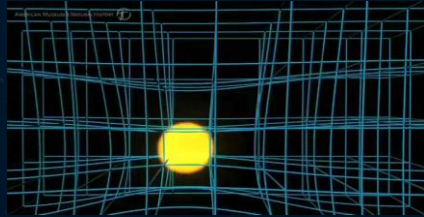
Agenda

1. Introduction
2. ESA Space Solutions
3. 'Space for tourism' call
4. Our guest speakers
5. How to Apply
6. Q&A



ESA's 4 Main Pillars

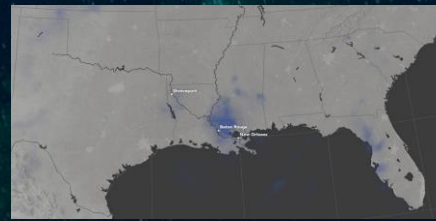
Science and Exploration



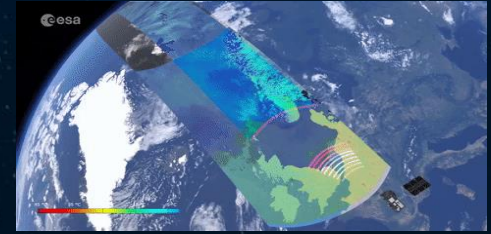
Enabling and Support



Safety and Security



Applications



ESA SPACE SOLUTIONS

The largest space innovation network in the world

- The **go-to** place for great business involving space to improve everyday life.
- Supporting European start-ups and SMEs to develop businesses **using space technology and data**.
- Offering **funding, business and technical support** to help to generate successful business and create jobs.



ESA SPACE SOLUTIONS offers



Zero-equity funding (from
€50k to €2M+ per activity)



A personalised ESA
consultant



Technical support and
commercial guidance



Tailored project
management support



Access to our international
network of ESA and partners



Access to our network
of investors



Credibility of the
ESA brand

Project web pages:
business.esa.int/projects



Space tech, users & markets

Space Technology...

-  Earth Observation
-  Satellite Navigation
-  Satellite Communication
-  Spaceflight Technologies
-  Space Weather

... coupled with...

- Big Data analytics
- VR/AR
- Artificial Intelligence
- Mega-constellations
- Crowdsourcing
- IoT
- Cybersecurity
- Blockchain
- 5G (<https://artes.esa.int/esa-5g6g-hub>)

... to serve Users & Market

-  Maritime
-  Agriculture
-  Environment
-  Healthcare
-  Financial
-  Transport
-  Education
-  Media
-  Energy
-  Aviation



SPACE SOLUTIONS



SPACE FOR TOURISM

Feasibility Study & Demonstration Project

SUBMIT YOUR INNOVATION

Downloads

- ESA Space for Tourism webinar 26.01.2022 - updated v2
- APQ_SpaceforTourism_ProjectName
- Scope - Space for Tourism.pdf

<https://business.esa.int/funding/intended-tender/space-for-tourism>

Key focus areas

1. Use of **digital and connectivity solutions** to help the sector embrace new business models required in post-COVID 19
 - Unmanned transport (automation & robots)
 - Rural tourism
 - Everywhere connectivity to travellers
 - Active engagement with rural communities
2. Seamless travel
3. Safe travel
4. Guide investments and measuring impact
5. Drive Sustainable Tourism Development



The value of space



Satellite Earth Observation (SatEO) - Monitoring and planning of infrastructure - buildings, roads, parking lots, airports. Monitoring of big events for logistics planning and monitoring - sports, festivals, big trade fairs (no monitoring of people). Identification of open air "safe" and "unsafe" areas - e.g. parks, squares, big markets, touristic spaces with crowds.



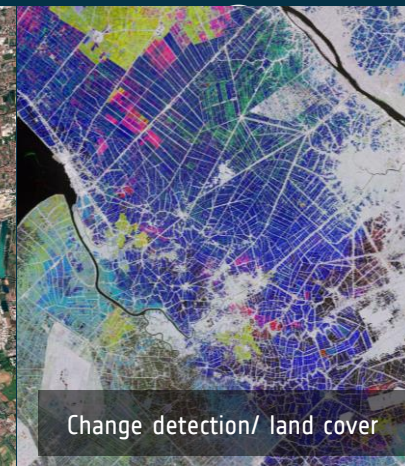
Global Navigation Satellite Systems (GNSS) - SatNav can be used track and trace tourists and provide information to search and rescue teams. Enable visitor flow-monitoring and location-based services to geo-localise points of interest in the tourist maps.



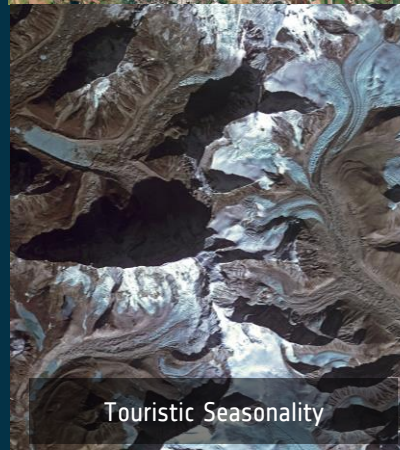
Satellite Communication (SatCom) - SatCom is essential to ensure communications whenever the terrestrial communications are absent or not reliable and to support digital solutions



Urban & rural development/
real estate



Change detection/ land cover



Touristic Seasonality

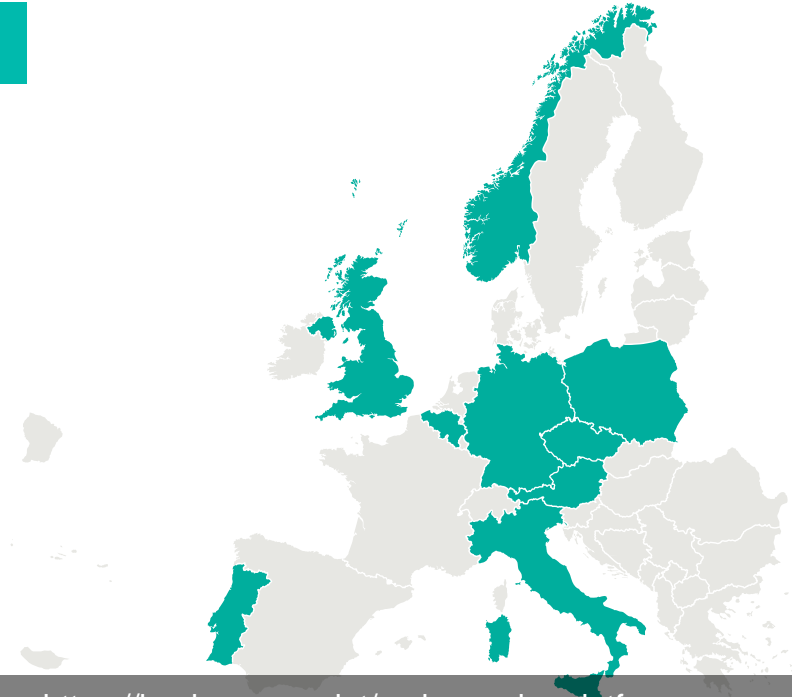


Mobility & tourism capacity



A tool at your disposal – the Ambassador Network

- Ambassadors are present in 9 countries
- They are your local interface for your ESA Space Solutions questions
- They can advise you on:
 - Preparation of the Activity Pitch Questionnaire
 - Give you an overview of ESA Space Solutions funding opportunities



<https://business.esa.int/ambassador-platforms>

Mia Jafari

Interlak Hub & Programmes Manager,
Emirates Group



Space For Tourism

Mia Jafari

About Intelak Hub

Get ready to co-create the aviation, travel and tourism landscape.

Intelak gives early and late stage start-ups access to programmes, mentorship from leading organisations and a community of like-minded individuals to launch, grow and scale their start-up.

Be part of an ecosystem dedicated to bringing the latest aviation, travel and tourism solutions to the region.



About Accelerator Cohort 6

Scales mature stage start-ups who are seeking to launch their venture in Dubai through a digital programme consisting of bespoke workshops, mentoring and facilitated collaborations with Intelak's principal and ecosystem partners.

The region's only accelerator programme that takes viable business solutions to the next level by offering start-ups growth and scaling opportunities, along with intimate access to principal partner mentoring, investors, and alumni and networking platform. The selected start-ups will have the opportunity to develop a city-wide implementation of their business solutions and exclusive visibility and pitching opportunities at Expo 2020 & GITEX Future Stars – the region's premier technology event.

Intelak

1

The virtual programme allows maximum agility and facilitates global participation.

2

Capitalise on the interconnectedness of the global aviation and tourism industry whilst using Dubai as the proof-of-concept platform for your start-up.

3

Leverage a digital alumni network of past participants for additional support, collaboration and potential business opportunities.

4

Gain curated access to Intelak's Investor Breakfasts, Founder Summits, Industry Panels and Legal and Licensing Clinics to grow your start-up in Dubai.

5

Prime exhibition space and pitch opportunity at Expo 2020 and GITEX Future Stars.

Intelak Hub Start-ups

DUBZ
powered by dnata



TRIFT

AIRSPACE
INDUSTRIAL BLOCKCHAINS

avendi

AFILA

TroopTravel
Where do we meet?



rent**2**mum

FLYT



TAIGER

BONFLITE

elves



STORAGE **i**

Look@
Be anywhere.



Right**Hear**

cargonow

dronetain
WHERE YOU MEET IS TECHNOLOGY

SAFETY LINE
Big Data applied to Aviation

Sherpa

sweep**TEQ**



GLOBETROTTERVR
travel better



FetchyFox



MobiMatter

rent**2**mum

FUNDOK

Handiscover

secretcitytrails

Bridgify
A new way to connect with your guests

ENROUTE

reko

DN

FLYT

انطلاق
INTELAK

Overview



Closing date
30th September



10 start ups
will be selected



Each start up
wins 10,000 AED



Who should Apply?

1

You have an innovative tech solution in the aviation, travel or tourism space that meets one of Intelak's challenges

2

Your business is a growth stage start-up or scale-up.

3

You are looking to expand into Dubai and implement your product or service in the city, or you are looking to have.

4

Dubai as one of your proof of concept cities.

5

Your product or service is favourable for the business environment in Dubai from a technical and legal standpoint.

6

Your business has at least 2 full-time team members.

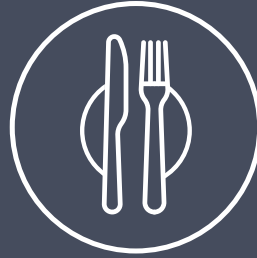
Challenges



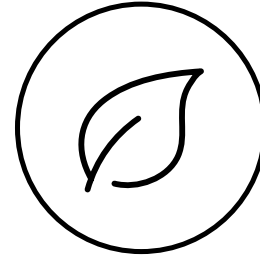
Operational
Excellence



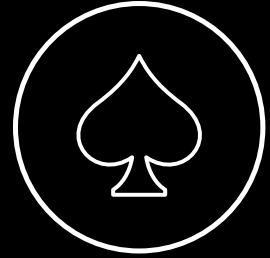
Commercial
Innovation



Customer
Experience



Sustainability



Wild Card



About Intelak Accelerator Challenges

1

Commercial Innovation:

How might we streamline booking, check-in, check-out, and all other transactions while staying in Dubai as a visitor in order to create a seamless visitor experience and to reduce transaction times and visitor/business friction?

2

Customer Experience:

How might we ensure that onboard meal quality conforms to the standards of a high-quality culinary experience for the visitors coming to or leaving Dubai so that they start/end their Dubai experience on a high note?

About Intelak Accelerator Challenges

3

Operational Excellence:

How might we empower customer facing personnel with relevant and easy to understand information, so that they can delight the visitors in Dubai with contextual and actionable information?

4

Sustainability:

How might we encourage and incentivize the eco-conscious traveler so that we contribute to initiatives such as Dubai CAN?

How might we introduce new innovative and digital solutions that will drive environmental practices in the tourism industry?

About Intelak Accelerator Challenges



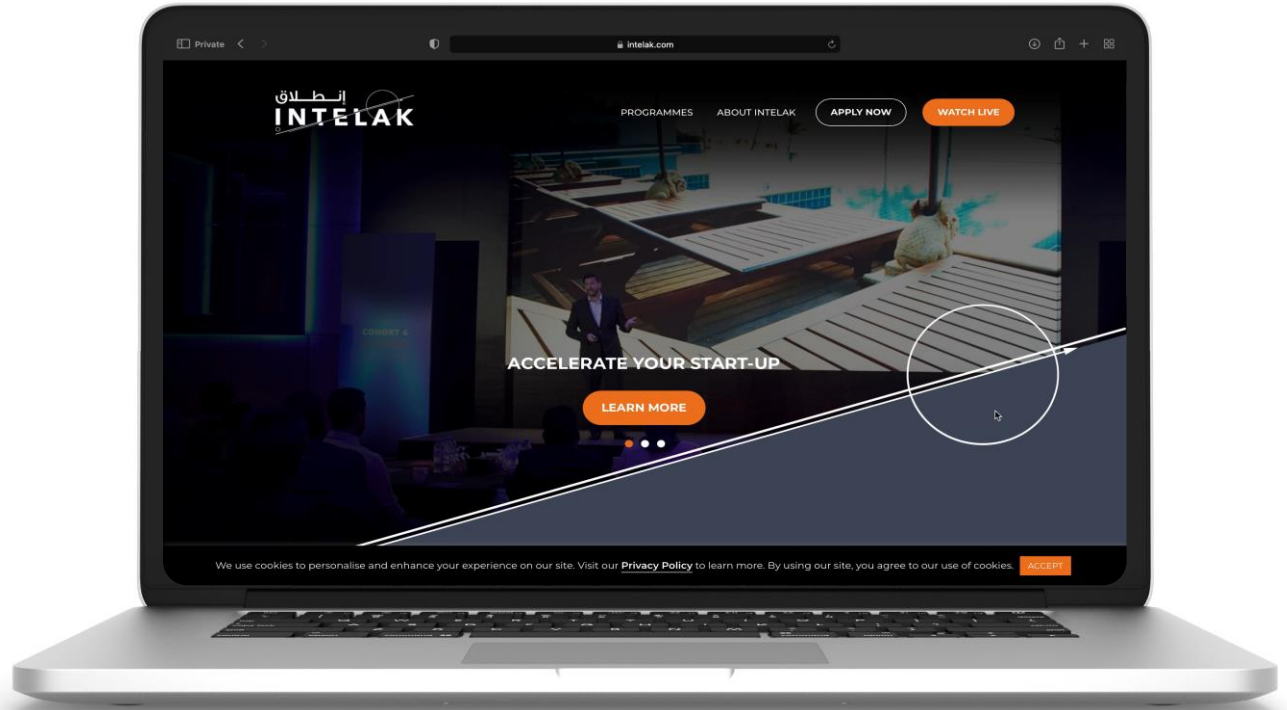
Wild Card:

How might we contribute to the enhancements of the Dubai's visitor experience?
Leverage the latest technologies for the aviation, travel & tourism sectors.

How to Apply?



Scan the QR code or visit intelak.com to apply.



Thank You



Scan the QR code or visit
intelak.com to apply.

Paras Loomba

Founder,
Global Himalayan Expedition (GHE)





**GLOBAL
HIMALAYAN
EXPEDITION**



800 million people – STILL in DARKNESS





Current Rural Tourism Problem



Lack of Basic Facilities



Lack of Education & Livelihood



Results in



Limited New Rural Destinations
“Migration of Tribes
& Lost Culture”



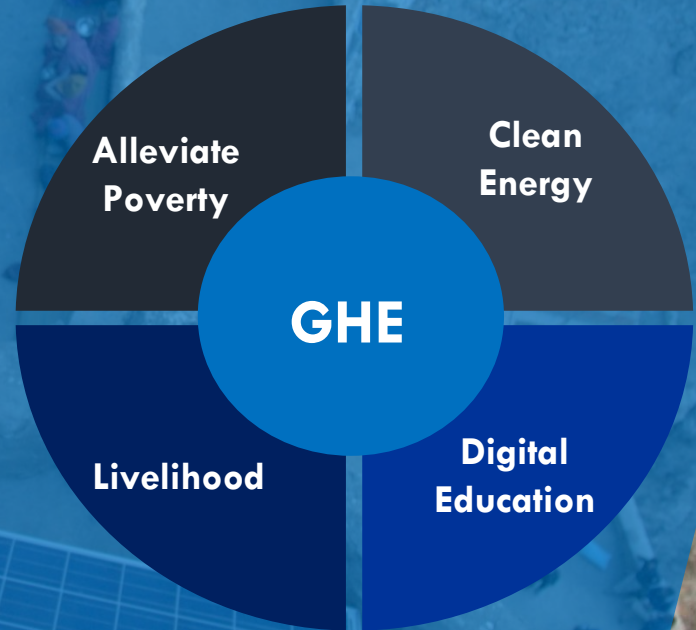
Global Himalayan Expedition

Empowering Remote Villages through Tourism



TOURISM & TECHNOLOGY AS FORCE FOR DEVELOPMENT

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS 2030



167

Villages
Electrified

100,000

Lives
Impacted

35700

Tons CO2
Offset



VISIBLE IMPACT



Harmful Kerosene Oil Lamp



Impact of a LED Light



SOLAR POWERED HEALTH CENTRES

- **Creating Solar Powered Health Centers with better medical equipments'**
- **Provide good quality Health Care to the Communities**
- **Training of the local medical staff on the installed appliances**
- **Developing a sustainability model for smooth operations of medical centres**





COMPONENTS OF A HEALTH CENTRE



Providing the Basic Health Care Infrastructure required at Health Care Centre

SOLAR POWERED HEALTH CENTRE IN LADAKH (CHANGTHANG)



ACCESS TO CLEAN COOKSTOVES

A woman with her hair in a bun, wearing a green shirt and a purple and pink striped sari, is sitting on the floor in a rustic kitchen. She is cooking over a traditional wood-burning stove. A fire is burning in the stove, and a large metal pot is placed on top of it, containing a yellow liquid. Various other kitchen items, including pots, pans, and a wooden table with more pots, are scattered around her. The walls are made of mud or plaster, and there is a window in the background.

Providing a Transformative Solution for the Rural Communities



Use of Traditional Cookstoves on Firewood that Emit Toxic Fumes



PROPOSED SOLUTIONS: CLEAN COOKSTOVE



- **80% reduction in smoke & toxic emissions**
- **50% reduced cooking time**
- **60% reduced fuel requirement**
- **50% reduction in fuel costs**
- **40% improvement in cooking efficiency**

60% reduction in CO2 and 40% reduction of Black Carbon



Empowering communities


Mountain Homestays

An initiative by Global Himalayan Expedition

Solar Powered Homestays



Astrotourism in Himalayas



Maan, Ladakh

ASTROSTAYS



Maan, Ladakh



WOMEN EMPOWERMENT

A woman with dark hair tied back, wearing a purple long-sleeved shirt, is focused on working with electrical wires. She is using a pair of wire cutters to strip the insulation from a green wire. The background shows a rustic structure with a thatched roof made of wooden poles and dried palm fronds.

Electrical training

Homestays training

A woman wearing a grey knitted sweater and a patterned headscarf is standing and pouring tea from a large, colorful, striped thermos into several small white mugs on a table. The table is covered with a patterned cloth. In the background, a man is sitting on the floor looking at his phone, and a woman in a red sweater is sitting at the table, smiling. The setting appears to be a simple, lived-in room with a colorful wooden cabinet in the background.



Life in Himalayas during Winters





Post COVID 19

“Sustainable Tourism will Increase”

- In a post COVID world, people will avoid long haul travel and **prefer to travel domestic**
- Additionally, there is a strong **inclination to visit offbeat destinations and stay in homestays**

ESA UNCLASSIFIED



Lack of Infrastructure

“No Basic Facilities”

- **The village homestays do not have access to basic health care and are most vulnerable**
- There are also no basic information and Monitoring facilities that are available at these remote locations

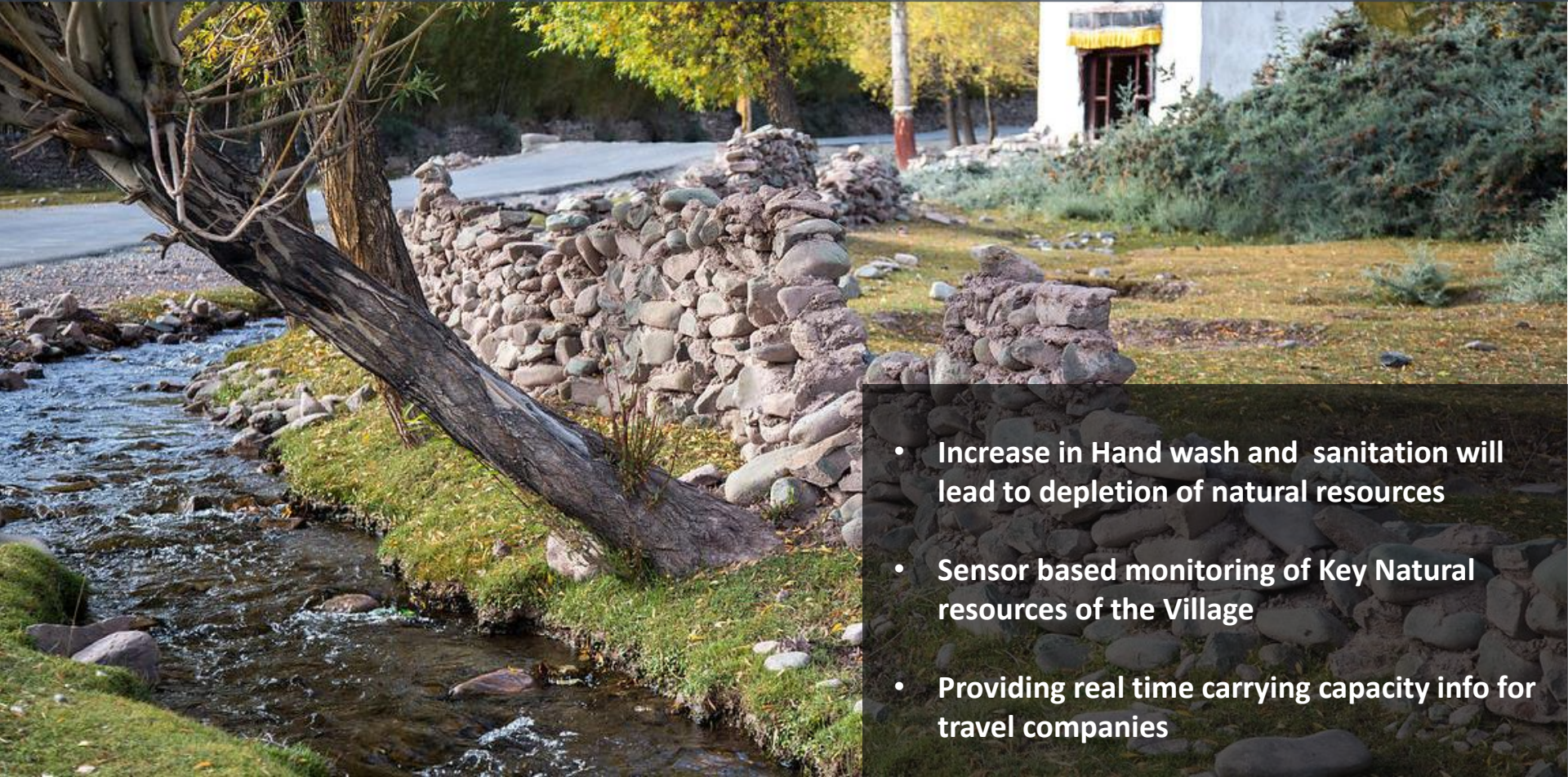


Lost Opportunity

“Zero income”

- Travelers will **demand basic facilities** at accommodations & safety net at these destinations
- A poor setup will lead to **low confidence translating into zero revenues** for these communities

Challenge 1 – Destination Natural Resource Monitoring



- Increase in Hand wash and sanitation will lead to depletion of natural resources
- Sensor based monitoring of Key Natural resources of the Village
- Providing real time carrying capacity info for travel companies

Challenge 2 – Traveler Accommodation & Safety Updates



- Availability of Safe Accommodation in remote areas will be essential post COVID
- Satellite based information on the availability of the accommodation will be crucial
- This will be like a booking engine with two way interaction between the host and traveler

Challenge 3 – Portable GPS based Health Monitoring



- Group trekking will require confidence among fellow travelers
- GPS system with integrated health monitoring system will be essential
- Will convey the vitals to the nearest hospital aiding swift rescue and action



Paras Loomba
paras@ghe.co.in

www.ghe.co.in

+91 99100 89129

Vassiliki Mavrokefalou

Director - Market Management
Lodging for Greece, Cyprus,
Bulgaria and East Adriatic,
Expedia Group





Expedia Group

Power global travel for everyone, everywhere

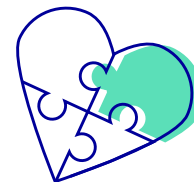
Vasiliki Mavrokefalou

Director Market Management Lodging





Expedia Group
is a family of the
world's most-loved
travel brands



You're in good company



when you partner with Expedia Group



In 2019



Property
gross bookings

\$99.6B



Flight
tickets sold

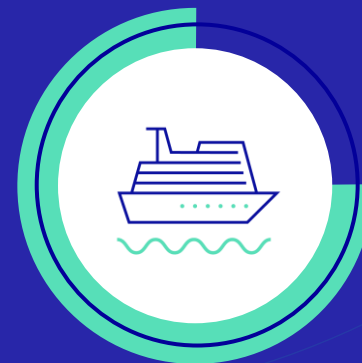
\$108M



Car
gross bookings

\$4.5B

across various brands of
Expedia Group



Cruise
gross bookings

\$1B

across the Expedia
Cruises network

Source: Expedia Group 2019 financial earnings report

© 2021 Expedia, Inc. an Expedia Group Company. All rights reserved. Confidential and proprietary

Before going anywhere, people first travel to Expedia Group



1.5 billion
monthly site
page views

20+
globally
relevant
brands

112
million

monthly unique
visitors

200+
travel
sites

70+
countries

35
languages

30
currencies

100+
million
loyalty
members

Travel is back ...

...and we are changing our approach to create successful experiences for travelers and more value for our partners



**Travel companies must
continuously adapt to remain
competitive in uncertain times.**

Remove friction from our traveler and partner journey and save them time

Help travelers make smart booking decisions and feel safe through technology

Leverage our Virtual Agent solution with existing skills or easily create your own skills to suit your business.

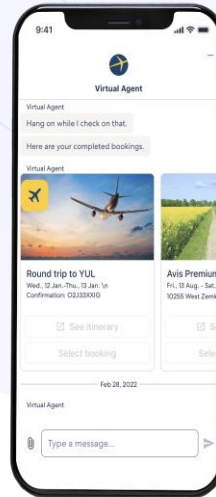
60%+

Travelers are self-servicing in chat today

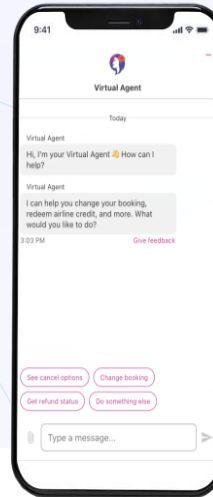
40%+

Saved in variable agent costs by enabling self-service

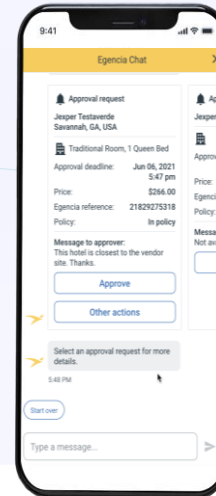
Expedia for TD Bank



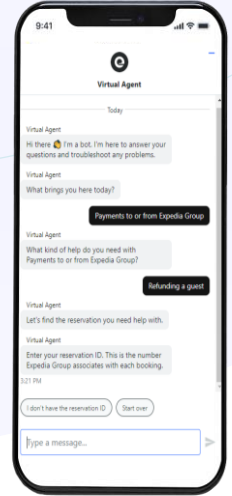
Hawaiian Airlines



Egencia



Partner Central





Designing technology to **deliver great personalized experiences** across every product and every phase of the journey

Trip
Planning

Shopping

Booking



Live for vacation rentals globally, coming soon for hotels and activities!

One place where travelers can plan, collaborate, and truly enjoy their whole trip – simplifying how travelers make their trip decisions

- ✓ Create a Trip Board
- ✓ Invite people from your group
- ✓ Add favorite properties
- ✓ Rate for preferences
- ✓ Get and add comments
- ✓ And more...

1 in 3

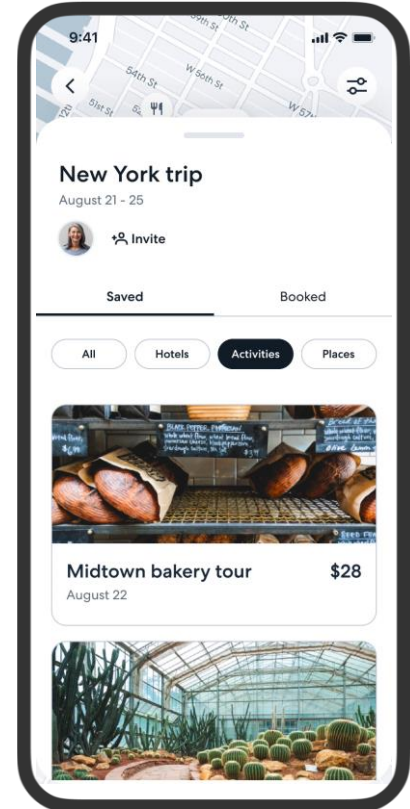
Trips booked in Vrbo originate from a Trip Board

5x

More likely to book

7x

More likely to repeat



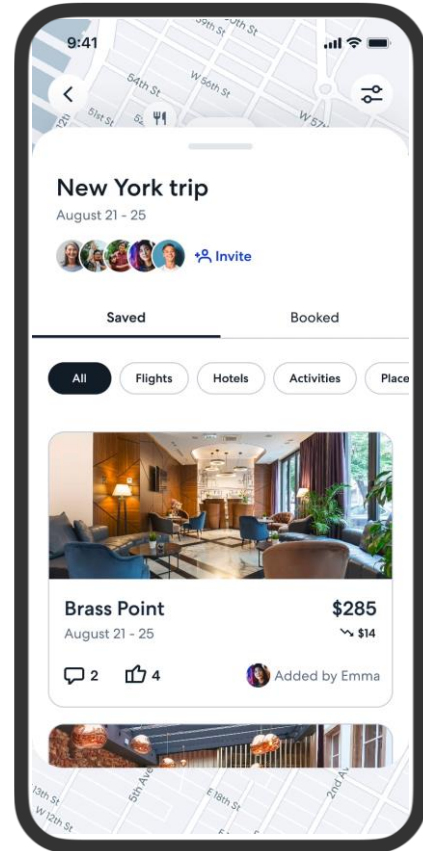


Live for hotels globally, soon for flights!

Organized room rates attributes and benefits for easier comparison, transparency and traveler control over the booking decision

- ✓ Organized attributes and benefits
- ✓ Spot pricing differences
- ✓ Easier comparison
- ✓ Personalized recommendations
- ✓ Better matching selection

By better matching customers to what they want, we are seeing customers shift to premium products





Live for flights in US (app), soon for hotels!

The right information at travelers' fingertips to give them the confidence to know when to buy

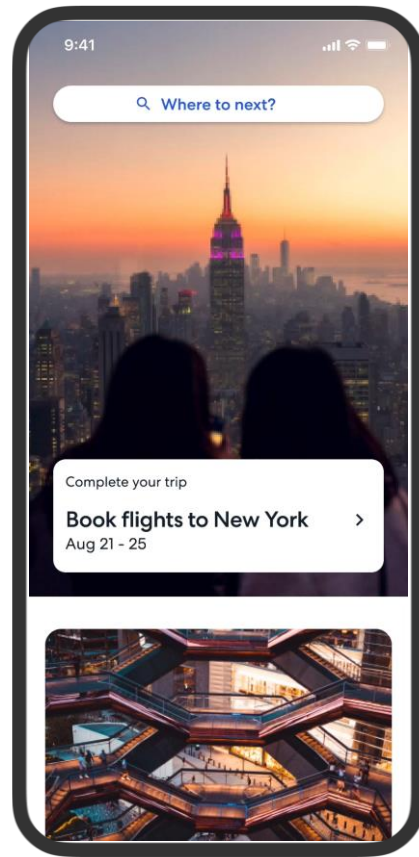
- ✓ Adds context for what may happen in the future
- ✓ Maps past and future trends predictions
- ✓ Sends alerts to keep travelers informed

100M

Searches a day

8+

Years of historical trends

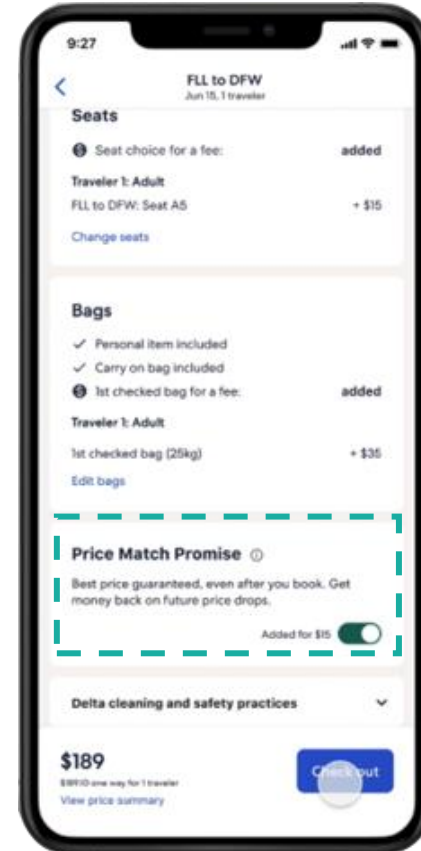


Price Match Promise



Live for flights in the US

Travelers can purchase Price Match Promise with their flight and Expedia Group **refund the price difference** if their flight price on our site decreases prior to the travel date





TM

expedia group™

How to apply



SPACE FOR TOURISM

FIND MORE DETAILS ON OUR WEBSITE

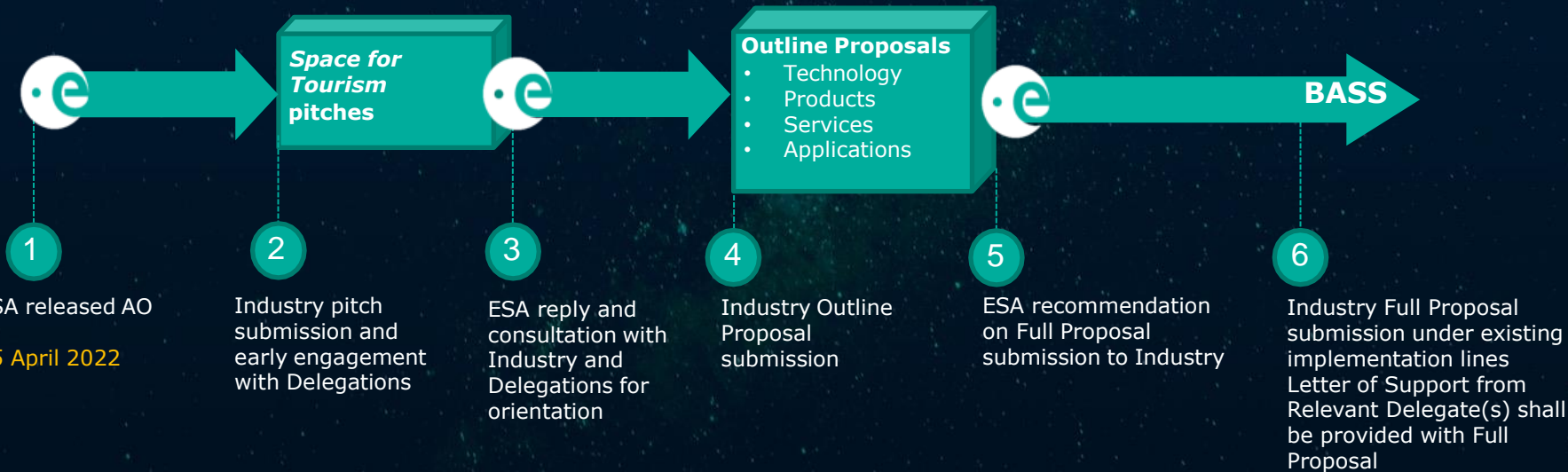


Applications rounds

- 1st batch lasting from 9 May 2022 to 1 July 2022
- 2nd batch lasting from 4 July 2022 to 30 September 2022
- 3rd batch lasting from 3 October 2022 to 30 December 2022
- 4th batch lasting from 2 January 2023 to 31 March 2023

The Call closes on **31 March 2023**

Applicants can apply **ANYTIME** up until the end of March 2023. However, we encourage companies to apply as soon as possible



ESA UNCLASSIFIED

<https://business.esa.int/funding/space-for-tourism>



European Space Agency



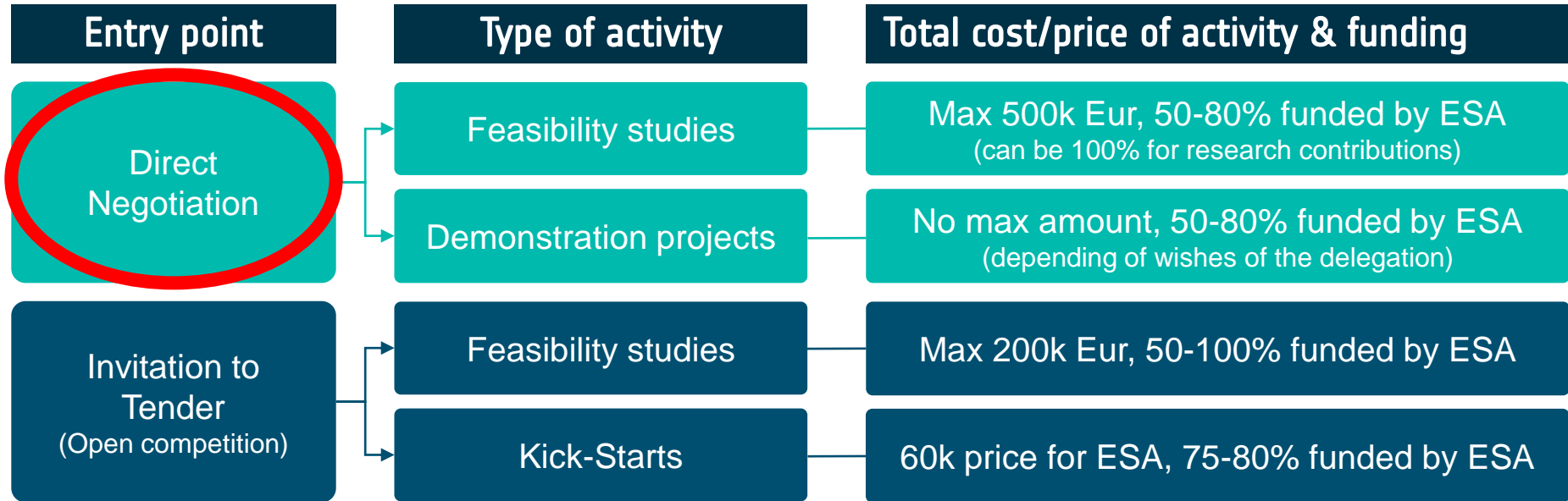
How to Apply

1. Register your team on [esa star Registration \(https://esastar-emr.sso.esa.int\)](https://esastar-emr.sso.esa.int) today! If your team is made up of more than one company or organisation, each member will need to register
2. Scroll down to the '[Downloads](#)' section of Space for Tourism webpage to download all of the official documents. Official documents include a '[Pitch](#) (APQ) [Template](#)' and a document explaining the [Scope of this opportunity](#).
3. Prepare your Pitch and submit it ASAP → <https://business.esa.int/apq-submit>
The name of the Pitch file must be [APQ_SpaceforTourism_Projectname](#)
(the words SpaceforTourism shall not be removed)
4. ESA will evaluate your Pitch. Teams whose Pitches are positively evaluated will be invited to prepare an Outline Proposal and then a Full Proposal. Teams must obtain a Letter of Authorisation from their respective National Delegation before submitting a Full Proposal. Contact details of all National Delegates can be found here: <https://business.esa.int/national-delegations>

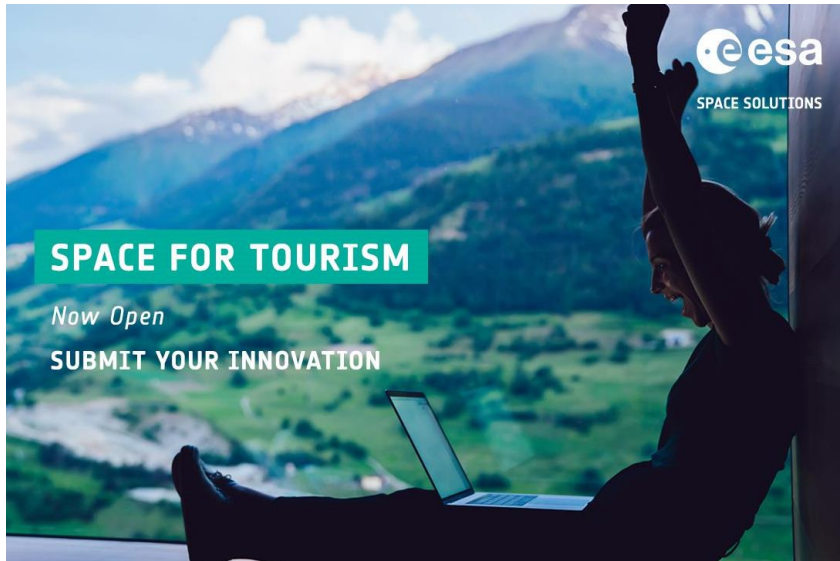
<https://business.esa.int/funding/intended-tender/space-for-tourism>



Funding schemes BASS



Where to find the information



business.esa.int

Thank you!

Q&A



<https://business.esa.int/funding/intended-tender/space-for-tourism>