



#### Welcome to the Webinar!

Before we start...

 Please keep your microphones muted during the webinar and make sure your webcam is switched off.

You can use the conversation function anytime to submit your questions. They will be addressed during the Q&A at the end of the webinar





**ESA Welcome and Introduction** 

About ESA's Space for Underwater Radiated Noise Management funding opportunity

**How to Apply** to the **funding opportunity** 

**Q&A** Session

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→ THE EUROPEAN SPACE AGENCY

## We Are European Space Agency (ESA)



#### **EUROPE'S GATEWAY TO SPACE**

**WHAT** 

23 Member States, 5000 employees

WHY

Exploration and use of space for exclusively peaceful purposes

WHERE

HQ in Paris, 7 sites across Europe and a spaceport in French Guiana

**HOW MUCH** 

€7.68 billion in 2025





#### **Business Applications: space-enabled services**



Using any space asset(s) and integrating them with terrestrial assets for the benefit of life on Earth

Space Assets...



Earth Observation



Satellite Navigation



Satellite Communication



Spaceflight Technologies



...potentially coupled with...

Big Data analytics

VR/AR

AI/ML

Mega-constellations

Drones

**Digital Twins** 

IoT

Cybersecurity

Blockchain

5G (https://artes.esa.int/esa-5g6g-hub)

...to serve Users & Markets



Maritime



Agriculture



Environment



Healthcare



**Finance** 



Transport



Education



Media



Energy



Aviation

### What ESA Space Solutions offer





Our aim is to work together to make your idea commercially viable, with:





# SOCIO-ECONOMIC IMPACT

Deliver social value and economic sustainability

# **USE OF SPACE TECHNOLOGY**

Expand the utilization of space in new markets and user communities

# INDUSTRY COMPETITIVENESS

Strengthen European Industry competitiveness on the global space and non-space markets







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## Space for URN Management funding opportunity





Opening date: 1 September

Closing date: 17 October

Objective: ESA will support the development of innovative services that leverage space technology to address the challenges posed by underwater radiated noise (URN) to the marine environment

Funding range: €50,000 - € 3 million per activity, covering 50-80% of activity costs.

Eligible Activities: Feasibility Studies and Demonstration Projects lasting 6 months to 2 years

#### The challenge





#### Impact of Underwater radiated noise on Ecosystems

- Growing environmental pressure:
  - 91% of Europe's seas are expose to ongoing shipping noise and 10% to high shipping density
  - Impulsive noise affects around 8% of European marine areas
- Noise pollution consequences: disrupting communication, navigation, and behaviour in marine species, and threatens the stability of entire ecosystems
- Efforts to monitor, regulate, and mitigate noise are increasing (IMO, EU, UK ...)
- Challenges for fully assessing the scope of URN impacts, given variability in vessel types and noise characteristics, cumulative impacts of multiple noise sources, effectiveness of mitigation measures, risk assessments considering chronic exposure knowledge gap, dose-response relationships, etc.

#### **Use Cases**



Quiet Maritime environment: Quiet ship design, voluntary certification and compliance; quiet ship operation; and quiet port initiatives

Environmental Services: URN in ESG and Digital Maritime Analytics, URN Monitoring; Risk mapping of URN impacts, and Monitoring shipping and URN impact on MPAs.

**Subsea Activity Noise Management: Construction** noise mitigation and Continuous machinery noise



For more details, the use cases can be found on the webpage. Please scroll to the bottom and check the downloads section. Document: Call Activity Description  $\rightarrow$  Objectives of the Call

#### The value of space



Satellite Communications (SatCom)



AIS supports correlation of noise emission with traffic patterns. When integrated with in situ acoustic sensors or DAS systems it can enhance URN monitoring. Satcom can also be used for real time retrieval of remote sensors.

**Satellite Earth Observation (SatEO)** 



Can be used for environmental characterization including bathymetry, sea surface temperature or wave data. EO can also be used for monitoring vessel activity in sensitive areas.

**Satellite positioning (GNSS)** 



Underpins positioning accuracy for AIS for precise modelling. It can also be used for geofencing sensitive areas to enable noise reduction measures.

#### **BASS Funding Schemes**





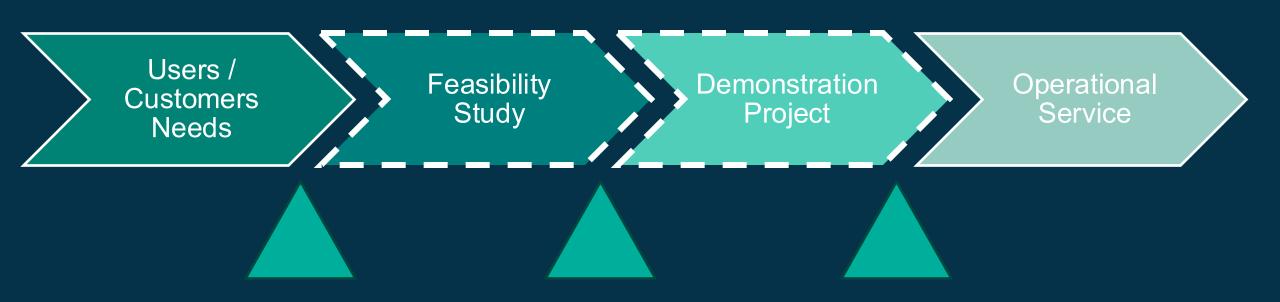
IPRs remain with companies

### **Activity Implementation**

**User Driven** 

**Business Opportunity** 





Validated Viable

Service

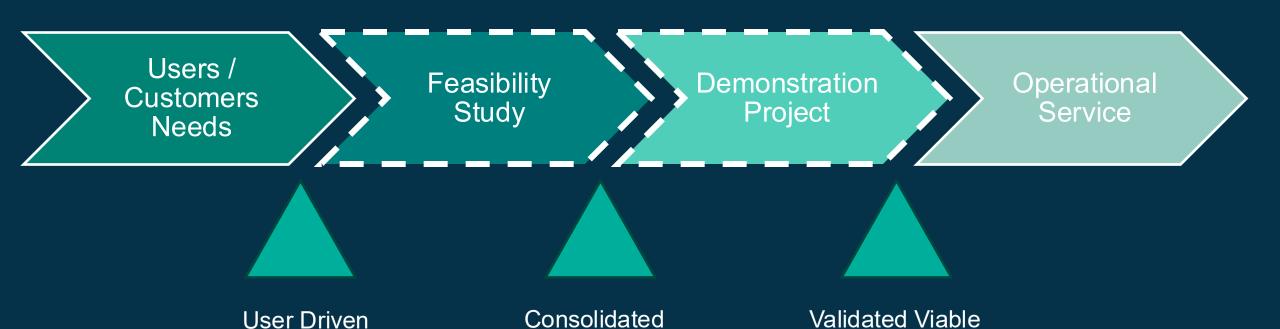
Consolidated

**Business Case** 

### **Activity Implementation**

**Business Opportunity** 





**Business Case** 

Feasibility Study

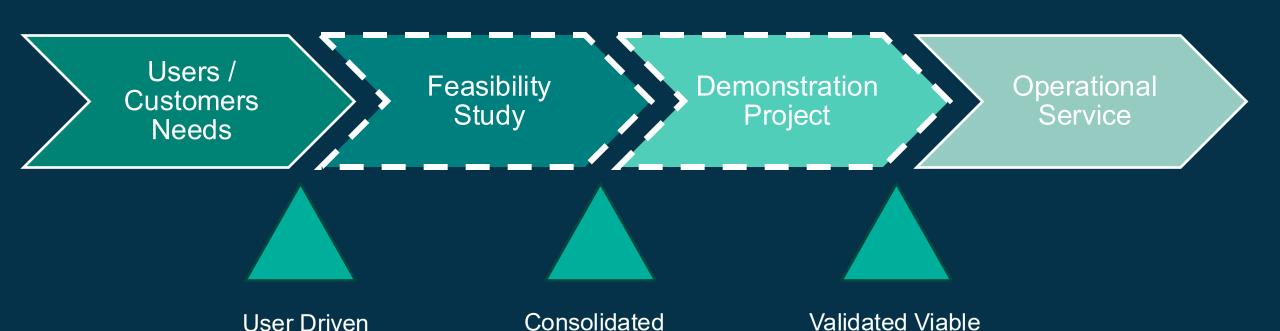
- Explore the viability of new service concepts, consolidate the user landscape and requirements
- Evaluate the economic sustainability and technical feasibility of space-based solutions to user needs

Service

### **Activity Implementation**

**Business Opportunity** 





Service

**Demonstration Project** 

Validate a technical solution and its business model

**Business Case** 

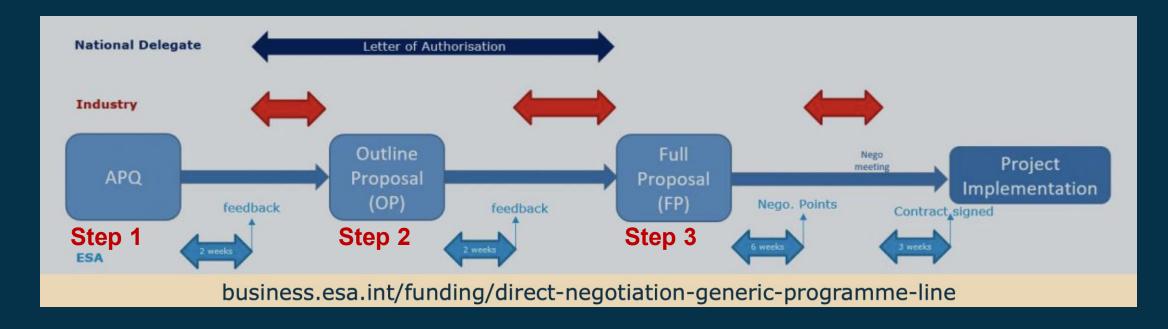
- Ensure user engagement and pilot the service
- Provide a transition towards operational activity

How to apply?



#### **How to Apply**





- Incremental procurement approach: APQ is the starting point max. 8-page document with a standard template to present WHAT, WHY, HOW
- Standard templates for proposals and deliverables before and during activity implementation
- Ambassador Platform available to guide companies in the process: <a href="https://business.esa.int/ambassador-platforms">https://business.esa.int/ambassador-platforms</a>

### **Step 1: The APQ**



Download an Activity Pitch Questionnaire here: https://business.esa.int/documents

Submit it here:

https://business.esa.int/apq-submit

ESA reviews APQs weekly with three outcomes: invitation to prepare a proposal, discussion with ESA, or rejection.

You will receive feedback on your APQ within 2 weeks of submission.

You will be assigned someone in ESA to guide you through the rest of the process



### **Step 1: The APQ**



- (WHO) Company Background Information.
- 2. (WHAT) do you want to offer your customers and what is the added value?
- 3. (WHY) Who are the target beneficiaries addressed by your offer, and what are their pains and gains
- 4. (HOW) do you intend to implement

(OPTIONAL) APQ+ for fast-track application

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	ACTIVITY PITCH QUESTIONNAIRE (APQ)
	ESA-TIAA-PO-2017-1054 - V. 3.19
pitch. It activity s	vity Pitch Questionnaire (APQ) allows you to present your business idea in a reduced, standardise helps ESA to quickly take informed decisions on next steps, pointing you to the most appropriat tream in case the APQ is considered acceptable (e.g., additional preparatory work, training, teamin ome other partners, go ahead targeting a Feasibility Study or a Demonstration Project).
Pitch Qu ESA, the extended	of incremental approach: The submission process is based on the following three stages: the Activitiestionnaire (this form), the Outline Proposal, and the Full Proposal. In case the APQ is accepted by answers to the questions of this APQ will be directly integrated in the Outline Proposal and as needed. In a similar way, the elements of the Outline Proposal, if accepted by ESA, can be ntegrated in the Full Proposal.
	Activity Pitch Questionnaire (APQ)  Outline Proposal Proposal
Prenare	your pitch:
Expl     Appl     Som     Appl	e sure you use the LATEST VERSION of the APQ template.  Inations of terminology used here can be found in the document 'Terminology used in ESA Businescations'.  Se explanations on how to prepare the APQ are available in the presentation 'ESA Business cations' - Guidelines for APQ Preparation'.
Call	se the appropriate Open or Thematic Call. For further details, visit <u>"ESA Opportunities for Open Cal"</u> - Activity:
Call.	"Please be aware, it's important to ensure you have selected the right options."
Conf Plea of re The year Your	our pitch:  act your National Delegation¹ as specific rules may apply depending on your country, se note that for a given idea, ONLY ONE APQ submission is possible (no subsequent submission issed APQ Form(s) is allowed!).  APQ has a validity of ONE YEAR: in case of no draft of Outline Proposal is submitted within one from the date of the APQ submission, the APQ will be considered by ESA as withdrawn.  APQ shall be submitted using the online web form submitter accessible at 'APQ Submit'
	se note that only PDF formats are accepted.
	nission of your Activity Pitch Questionnaire:
• ESA cour • ESA	inssion or your Activity Prich Questionnaire.  may provide this Activity Pitch Questionnaire to and discuss it with the National Delegations of the tries of your consortium.  will assess your pitch.  will provide written feedback typically within 10 working days from the date of the APQ submission.
	ails of the National Delegations can be found under:
	ess.esa.int/national-delegations  tities, please note that Greece does not support non-competitive bids, therefore Greek proposals are not admissible
under in this	

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Section AP	.1 Background	d informa	ation			available	sion of <u>Acrobat</u> for free.  for more		ich is
① AP.1.1	Idea name:								
Brand name:			Full na	ime:					
① Themat	tic market area								
Primary 1:			Subca	tegories	1:				
Primary 2:			Subca	tegories	2:				
Keywords 1:		· Key	words 2: -	-		-	Keywords 3:		
① AP.1.2	Basic compan	y informa	ition						
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Address:				Country	y:		Pho	ne:	
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More details:	Max 155 characte	any previo	ous activ	rities wi	thin	Busines			
	acters (no spaces		ub-conti	ractors	?			Г	
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Roles in Activity:	Max 360 characte	ers (no spa	ces)						

## Step 1: The APQ



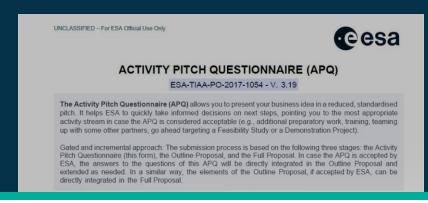
· For optimal viewing and accurate completion of the template, please download and install the latest version of Acrobat Reader, which is

available for free.

. Click on " (1) " for more information

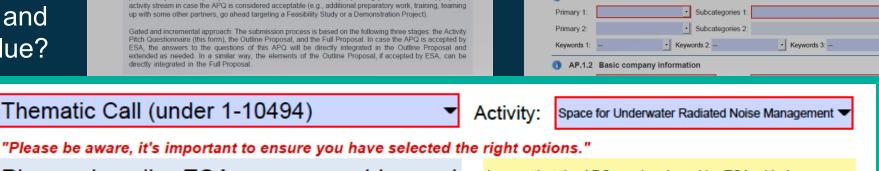
- (WHO) Company Background Information.
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- (HOW) do you intend to implement

(OPTIONAL) APQ+ for fasttrack application



Thematic Call (under 1-10494)

under in this call



Full name

Section AP.1 Background information

AP.1.1 Idea name:

I agree that the APQ can be shared by ESA with the Please describe ESA use case addressed partners of the relevant use case.

Sub	mit your pitch:
	Contact your National Delegation¹ as specific rules may apply depending on your country. Please note that for a given idea, ONLY ONE APQ submission is possible (no subsequent submission of revised APQ Form(s) is allowedl).  The APQ has a validity of ONE YEAR: in case of no draft of Outline Proposal is submitted within one year from the date of the APQ submission, the APQ will be considered by ESA as withdrawn. Your APQ shall be submitted using the online web form submitter accessible at 'APQ Submit' Please note that only PDF formats are accepted.
Acti	vity Pitch Process:
Upor	submission of your Activity Pitch Questionnaire:
	ESA may provide this Activity Pitch Questionnaire to and discuss it with the National Delegations of the countries of your consortium. ESA will assess your pitch. ESA will provide written feedback typically within 10 working days from the date of the APQ submission.
1 Cont	act details of the National Delegations can be found under:
https:	//business.esa.int/national-delegations
For Gr	reek entities, please note that Greece does not support non-competitive bids, therefore Greek proposals are not admissible

_		had any previous activitien ny previous activities and pos		ications:
Max 270 cha	racters (no sp	paces)		
① AP.1.5	Are you a	pplying with sub-contrac	tors?	
If Yes, who	are the other	entities?		
Name:		Website:	Industry:	Country:
Name:		Website:	Industry:	Country:
Name:		Website:	Industry:	Country:
Roles in Activity:	Max 360 ch	aracters (no spaces)		

#### **APQ Advise**



- 1. APQ is a critical stage
- 2. Be specific and descriptive.
- 3. Key messages:
  - Show you understand the final customer and their pains → Engage with potential customers of your solution
  - Very clear and understandable value proposition
  - 3. Clarity on how you will commercialise the development
  - 4. Clear definition on the scope of the activity, what's in, what's out
- 4. Commercial focus
- 5. You can use any satellite data, not just ESA
- 6. Check eligibility
- 7. Consult ambassadors: <a href="https://business.esa.int/ambassador-platforms">https://business.esa.int/ambassador-platforms</a>

#### **Authorisation from National Delegation**



- 1. The authorisation from the National Delegation will be required for the submission of the Full Proposal (3<sup>rd</sup> Step), thus it is a good idea to initiate a dialogue with your National Delegation early on.
- 2. The contact information of the National Delegations can be found at <a href="https://business.esa.int/national-delegations">https://business.esa.int/national-delegations</a>
- Please note that funding is open to consortiums, however, all organisations and businesses must be located in an ESA member state participating in the programme BASS
- 4. To qualify for funding, your team must be located in one of the following countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Hungary, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Sweden, Switzerland, United Kingdom, Lithuania, or Slovakia.
- 5. If your company is based in Greece, Spain, or Canada, eligibility for funding requires that your idea is related to 5G technologies or includes a significant element concerning Safety and Security.





Subscribe for Maritime opportunities



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