PARSEC

Promoting the international competitiveness of European Remote Sensing companies through Cross cluster collaboration

Guide for Applicants

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1. Overview

1.1 Background Information on PARSEC

“PARSEC - Promoting the international competitiveness of European Remote Sensing companies through Cross cluster collaboration" is an EU project which aspires to provide start-ups and SMEs with the necessary resources to develop and launch Earth Observation (EO) based products and services into the market. This will be realized through a comprehensive acceleration program, offering a total of €2.5 Million-euro equity-free funding to applicants, alongside coaching, training and market entry support. The project focuses on three emerging sectors: food, energy and environment.

Why PARSEC?

The advent of the Big Data era, spearheaded by Copernicus’ free, full and open data policy but also by the emergence of new EO business models, opens an immense opportunity for the development of innovative services and products. To fully seize this opportunity, start-ups and SMEs need access to **capital, knowledge, markets and technology**. PARSEC will provide these resources through a **holistic acceleration program**, enabling the transformation of innovative ideas into market-ready products that bring significant value to users in the food, energy and environment sectors.

In doing so, PARSEC will enable the optimum exploitation of EO data and services in support of the implementation of regional smart specialization strategies and the increased competitiveness of EU companies on the international stage.

How is the PARSEC acceleration program going to achieve its objectives?

PARSEC will launch an Open Call inviting applicants to take part in the acceleration program. The Open Call will be implemented as follows:

- In the **1st stage**, PARSEC will deploy a peer-to-peer evaluation to select **100 applicants** who will receive **seed capital (10.000€ each; terms and conditions see 3.3.1);**
- In the **2nd stage**, PARSEC will facilitate the process through which successful applicants will form **cross-border** and/or **cross-sectoral teams** (consortia of 2-4 companies where at least one of the partners is a successful beneficiary from Open Call 1 who also has to be the leader of the Consortium) and **develop innovative EO-based services** addressing challenges in the food, energy and environment sectors. The **15 consortia** demonstrating services with the highest commercial potential will be selected by a jury consisting of industrial CEOs, opinion leaders, investors, VCs and/or business angels. The selected consortia will receive additional funds (**100.000€ per consortia**) along with the opportunity to attract further venture capital on top of that.

The maximum amount to be granted to each third party in the context of project smart (i.e. for both calls) may not exceed EUR 60.000€.

In the two final stages, the teams will receive matchmaking, mentoring, coaching, investment readiness and market entry support by a pan-European team of experts. All funding for the 1st and 2nd stage will be equity- free for beneficiaries. Through this acceleration process, which offers a total of 2.5 Million Euro, PARSEC aspires to help start-ups and SMEs to create value in existing and new industrial value chains and to bring their solutions to the market. In addition, PARSEC will set up three Business Catalysts and provide

the tools for the development of new products and services. Beneficiaries will have access to the following three Business Catalysts:

- **A Big Data Toolbox** – helping companies to harness the power of big EO data.
- **An "In-situ Data Hub"** – offering access to data that can enhance or validate EO products.
- **A set of eoMALL Galleries** – acting as a "window to the market" for providers.

Areas of interest: sustainable food (including fields such as agriculture, livestock, water management etc.), energy (including fields such as oil and gas, renewable energy sources, mining etc.), environment (land, ocean, atmosphere), as well as informed policymaking, adaptation to climate change, smart cities etc.

1.2 Target Topics

PARSEC will provide SMEs from different emerging industry sectors (food, energy, environment) with the necessary resources to develop and launch EO-based services with a strong value for users and a solid business proposition.

Empowered by steady access to these resources, SMEs and start-ups will be able to effectively exploit the wealth of EO-enabled information, towards developing innovative solutions that meet concrete user needs and market trends in emerging industrial sectors: food, energy and environment. The rationale for targeting these sectors is as follows:

FOOD: Production and processing of food is one of the basic pillars of the EU economy, accounting for a turnover of €1T and employing 16% of the EU's workforce. The industry is set to grow, as the world must boost food production by 70% by 2050 to accommodate population growth and greater economic prosperity. The EU has the largest share of the global food and drinks market, but its share has dropped from 20% in 2001 to 16% in 2012. As noted by the EC, slow growth in labor productivity and added-value have decreased the competitiveness of EU's food producers. These issues should be addressed in the context of a growing interest in the link between food and health, which has changed mainstream consumption patterns by valorizing quality aspects related to good health. In this regard, EO data has a large potential role to play as a key enabling technology. **Food production is a complex *input-output problem*, for which EO offers a large and cost-effective source of information to enhance strategic and tactical decisions that increase quality and/or quantity of yields while lowering costs and environmental footprint**, e.g. generating heterogenous fertilization maps and automated fertilization application, remote disease scouting and warnings, fruit harvest scheduling to maximize fruit/wine quality, etc. On the other hand, food processing/ distribution is a logistics problem, particularly in international supply chains. **EO data, especially when paired with complementary datasets, can enable better efficiency** for solutions that promote traceability, faster delivery, lower waste, etc.

ENERGY: The global demand for energy is expected to continue to rise in the middle- and long-term, fueled by a growing world population and increasing per-capita energy use (despite savings from growing energy efficiency). Renewable energy sources (RES) are already marking the fastest rates of growth amongst the world's fuel mix, with this growth trend expected to continue for all mature renewables, including solar, wind and biofuels. **EO data is a crucial resource for both planning and management of RES projects**. EO data can be used to scout for high-potential locations for RES projects and provide highly accurate estimates of energy generation potential and thus return to investment. EO data is also useful for disaster risk management applications, to support emergency services, effectively monitor infrastructure conditions, and inform high-performant energy infrastructure projects. As such, it is recognized in the sector that EO can contribute to the optimization of renewable energy systems for power production and optimal integration of traditional and renewable energy supply systems into electric power grids. As such, **the estimated Total Addressable Market for EO downstream services in the RES**

Electricity sector amounts to approximately € 73 M and is key to achieving the EU 32% renewable energy target 2030.

ENVIRONMENT: Environmental applications were at the core of the EO sector and EC's Copernicus program since their initiation, and still **comprise the largest share of the EO market**. Remote Sensing data covering large tracts of land, bodies of water and expanse of air provide a solution that is **cost-effective and of large utility for environmental monitoring and management** (e.g. land use, weather & climate, biodiversity, moisture, biomass, etc.) at a variety of needed scales, from a field to the global scale. The commercial potential of environmental EO applications is rapidly growing thanks to several trends. Firstly, environmental issues are becoming progressively urgent with creeping climate change, as potential damage to businesses and society increases. Secondly, new directives (e.g. Common Fisheries Policy, Common Agricultural Policy, the Water Framework Directive) require sustainable approaches to exploiting natural resources and environmental stewardship in EU landscapes and aquatic environments. Finally, **consumers are showing increasing preference to sustainability purchases** and sustainability practices are **increasingly linked to higher business profitability**. In this context, EO is a valuable and unique source of environmental Big Data that drives a myriad of added-value commercial applications: effective natural resource monitoring and management tools (water quality, forestry, agriculture, etc.), disaster monitoring and mitigation tools, support to environmental life cycle analysis for infrastructure development, insurance applications (risk assessment, underwriting, damage assessment), ecological and biodiversity conservation (e.g. illegal logging detection), traceability applications, etc.

For each sector, several sub-segments can be foreseen:

- Energy: Project development, Asset monitoring
- Environment: Monitoring, Characterization
- Agrofood: Agronomic support (e.g. precision agriculture), Monitoring, Enforcement and Regulation, Market forecast

1.3 Business Catalysts

PARSEC is looking for innovators who see the potential in the designated sectors and can bridge the gaps by developing innovative solutions. PARSEC will effectively support SMEs in addressing these challenges through the development and provision of three Business Catalysts. It is highly recommended that each consortium's product/service uses at least one of the following three platforms. Business catalysts will be available for beneficiaries of stage 1 and 2.

1.3.1 Big Data Toolbox

PARSEC's Big Data Toolbox will provide direct access to pre-processed Copernicus satellite data products and derivative information layers, such as bio-physical indexes, pre-classified land cover, static and dynamic RGB image visualizations, etc. A broad selection of rasterized base-map information layers (elevation, hydrography, land-ocean masks, OSM, climate variables, demographic data, administrative units, etc.) will be available as ready-to-use inputs for the application developers along with time-series of satellite data products. These data are provided analysis-read, homogenized and pre-aggregated in multi-dimensional, spatio-temporal datacubes. A flexible front-end API, based on the open OGC WMS, WCS, and WCPS standards for data visualization, access, and analytics, will offer added-value application developers full-scale functional flexibility, with no binding to specific web development platforms or tools. The platform will be powered by Rasdaman, the leading high-performance datacube engine. Hands-on training will help to rapidly ramp up knowledge to work with these powerful standards and interfaces to establish individualized value-adding products and services. As far as clients are concerned, any standards-compliant tool can be used for accessing the multi-dimensional assets, ranging from simple map navigation (such as OpenLayers and Leaflet) over virtual globes (such as NASA WorldWind and Microsoft Cesium) and Web GIS (such as GIS and ArcGIS) to high-end analytics (such as R and python). This allows businesses to quickly set

up their algorithms and tune product appearance while remaining highly flexible for readjusting to new customer needs quickly. Algorithms and data can be adequately encapsulated so as to protect intellectual property.

The objectives of the Big Data Toolbox are (**i**) to establish an **integrated geodata platform**, based on open standards and supported by a range of standard tools, ready for use by the Open Calls for applications and services; (**ii**) to establish a **federation of Big Geo Data services** which will allow users to perform location-transparent spatio-temporal access and server-side analysis through standard interfaces (**iii**) to develop **operational work-flows and binary processors for pre-processing of EO data products** published on DIAS platforms into production-ready standard OGC datasets and further aggregation into added-value derivative EO information products, offered to service developers as OGC datacube services (**iv**) to establish **self-management of datacube services** with automated image repository scanners, image pre-processors and notification/reporting/logging sub-system (**v**) to establish **best practices on datacube access and analysis pricing**, based on the OGC datacube standards.

PARSEC's Big Data Toolbox will re-use existing components wherever possible and contribute to their further development if necessary. **The strength of this approach lies in the utilization of innovative yet well-tested tools (with strong market presence) and their integration/enhancement with other independent components.**

The PARSEC Big Data Toolbox will cooperate with a number of DIAS service providers and replicate several implementations of full-scale DIAS-to-Datacube processing work-flows customized for specific technological platforms.

1.3.2 In Situ Data Hub

The In Situ Data Hub is an aggregator of time-series data from a wide range of sources which will be acquired and saved into corresponding data structures in the tool to allow for easy retrieval by developers or other applications. The datasets will be made available publicly for anyone interested to access/download for free, to use for various purposes, such as (i) the production of value-added products, particularly in combination with satellite data via the Big Data Toolbox; (ii) validation of parameters extracted with EO techniques and algorithms; (iii) training neural networks; (iv) calibration; (v) discover insights based on big data analysis that can combine observations, time and geolocation, etc. into dashboard visualizations; (vi) services of operational monitoring.

The In Situ Data Hub will be pre-populated with measurements coming from institutional in-situ datasets hosted by major stakeholders responsible for monitoring of climate, environment and different sectors of the economy (e.g. food security), as well as open sensor measurements available on the internet either in structured formats (e.g. XML or JSON services, databases, csv or excel files) or as unstructured content such as sensor measurements in web page tables. The initial population will be based on automatic tools developed (crawlers) or datasets that could be contributed by other users. The discoverability of the In Situ Data Hub datasets will be supported by the eoMALL galleries.

1.3.3 eoMALL Galleries

eoMALL navigation is built around **a taxonomy of products and services**. The user is able to rapidly navigate to relevant products and services in this taxonomy by entering key words from challenges (pre-defined language) or user-defined terms (natural language). Once at the product level, the user is able to either find out more about the product or filter down based on suppliers or types of product (bespoke, off the shelf, online) and software. At this point, the user is able to carry out an assessment to determine whether the product is feasible in the case of a bespoke service via communication with one or more. Alternatively, the user can investigate/visualize information about off the shelf and online products. At any

stage in the process, the **user is able to communicate with one or more suppliers in a confidential manner**. Various tools support effective build-up of a system that is customizable to a specific user's interests.

From a supplier point of view, offerings are brought to the attention of users in a way that is **relevant to the user interests** and relatively impartial to the commercial clout and longevity of the supplier. Much efforts have been made to ensure that the **platform is flexible regarding supplier interactions**, from simple basic registration to the use of forms and filters to make specific offerings (bespoke services, off the shelf products, etc.) discoverable.

eoPAGES on the other hand is a brokerage platform to help potential customers find suppliers whilst service providers are able to promote their products. Suppliers' services and resources are there organized, catalogued and presented in a unified tool. eoPAGES is being designed for to make it easier for users to find the services and suppliers responding to their needs. It will be an active business-to-business website promoting the European geo-information service industry creating a meeting point between industry and market.

eoMALL and eoPAGES as an access to market tool are built on top of previous and ongoing efforts to establish a single access point for access to European EO services.

Case Study of a Hypothetical SME

SOLPOWER is a beneficiary of the PARSEC 1st Stage Open Call. The company's customers include energy traders and Transmission System Operators, which transport energy on a national/ regional level using fixed **infrastructure**. SOLPOWER currently produces power forecasts based on physical modelling and Numerical Weather Prediction (NWP) irradiation forecasts. However, uncertainty increases significantly as the prediction horizon increases.

SOLPOWER desires to adapt their models, methods, and systems to harness the predictive information available in the rapidly updated radiation forecasts based on rapidly updated satellite images, i.e. via solar spectral irradiance forecasts. The upgraded service will combine solar irradiances predictions, with meteorological forecasts and power production observations from in situ sources, to provide solar power forecasts for Europe.

Their commercial product, SOLARAYS, is a solar power forecasting module that ingests NWP data and is based on combined physical/statistical models, AI and data-driven methods. The current capabilities of SOLARAYS provide power forecasts of the order of 2 days with a reduced accuracy due to the inherent limitations of meteorological forecasting.

Through PARSEC, SOLPOWER will extend SOLARAYS by using solar irradiances produced by the Big Data Toolbox to generate rapidly updated (every 15 minutes) power short-term forecasts (0-3 hours horizon) at higher spatial resolution (5 x 5 km). This information is extremely valuable to SOLPOWER's customers, the end users who have no knowledge of EO technologies. Energy Traders, such as SME EnergiX, are active in selling, buying and re-distributing solar energy.

The cross-sectoral value chain starts from the Big Copernicus Data fed into DIAS. The data is supplied in a raw format and ingested into DIAS from where it is available to PARSEC. The Big Data Toolbox enables creating "DIAS+" products, production-ready raster imagery, and then feeds these into rasdaman datacubes to produce the next added-value level, "DIAS++". Meteorological forecasts and power production observations, having been retrieved into the In Situ Data Hub and automatically processed to an appropriate gridded format ("In Situ+"), are integrated into the datacubes.

2. PARSEC Approach: Open Call 1 – "Call for Ideas" and Open Call 2 – "Call for Consortia"

PARSEC foresees a funnel approach implemented through two Open Calls. The first Open Call, the ***"Call for Ideas"*** aims to identify the best teams across the value chain through an innovative peer-to-peer evaluation method. Through this process 100 beneficiaries (SMEs or individual entrepreneurs) will be selected. These beneficiaries will receive an array of supporting services (Matchmaking facility, Comprehensive on-line training program and a 3-day on-site bootcamp). The purpose of these services is two-fold: (i) to support start-ups and SMEs in defining and fine-tuning their ideas about new products/services, and (ii) to bring them in contact with the other PARSEC beneficiaries (namely other European players across the value chain) and thus enable them to form synergistic consortia needed for the 2nd Open Call. Beneficiaries will also receive direct financial support of 10k€ (lump sum) to cover costs related to participation (i.e. travel costs to the bootcamp, prototyping, etc.).

The second Open Call, ***"Call for Consortia",*** aims to identify products and services with high market potential. Cross-border (from different eligible countries) and/or cross-sectoral (from different sectors) consortia of 2-4 members each are invited to participate in the second call. The criteria for participation are that (i) one or more partners in each consortium have participated in the PARSEC 1st stage training program, and (ii) consortia must propose EO-based services and products that address the needs, challenges and market trends in at least one of the focus emerging industries – energy, food and/or environment. The evaluation of the second call entails the presentation in front of a jury of EO industry experts, after which 15 of the best consortia will be chosen by the jury to enter the 2nd stage. Successful consortia will receive 2nd stage support services – i.e. Investment readiness program, Coaching and Export promotion services. 2nd stage beneficiaries will also receive 100.000€ per consortium (25-50k€ per start-up/SME). **Maximum funding that a member of consortia can receive is 50k€.**

The maximum amount to be granted to each third party in the context of project smart (i.e. for both calls) may not exceed EUR 60.000€.

3. Open Call 1 – "Call for Ideas"

3.1 Applicants Eligibility

The eligible applicants for PARSEC Open Call 1 – ''Call for Ideas'' have to:

- Hold one of the following legal statuses:
  - a Company that complies with the Commission Recommendation for Small OR Medium-sized Enterprises (SMEs) 2003/361/EC[1] (see section 3.1.1);
  - a Single entrepreneur
  - a Natural person who will, at the time of signing the contract, be registered as a single entrepreneur or company that complies with the Commission Recommendation for Small OR Medium-sized Enterprises (SMEs) 2003/361/EC[1] (see section 3.1.1)
- be located in an eligible country (see section 3.1.2);
- be from the following sectors: (i) Companies from the EO value chain or companies active in PARSEC focused sectors (Energy, Food, Environment); (ii) Any other companies that can ignite innovation of the EO ecosystem.

Important notice 1: Selected beneficiaries for the PARSEC 1st stage will have to prove their registration as a legal entity in order to sign the Contract and receive the 10.000€ funding. Natural persons are eligible only in the application phase. When entering the 1st stage of PARSEC, natural persons will have to be registered as a single entrepreneur or company. During the contracting phase, the documents proving the legal status will be requested - Legal existence documents such as a Company Register, Official Gazette or other official document per country showing the name of the organization, the legal address and registration number and a copy of a document proving VAT registration (in case the VAT number does not show on the registration extract or its equivalent).

3.1.1 Definition of SMEs

An SME will be considered as such if complying with the European Commission Recommendation 2003/361/EC5[2] and the SME user guide[3]. As a summary, the criteria that define an SME are:

- Independent, partner or linked enterprises, with financial and staff figures calculated in accordance with instructions given by Recommendation 2003/361/EC to fulfil SMEs criterion.
- Headcount in Annual Work Unit (AWU) less than 250.
- Annual turnover less or equal to 50 million € OR annual balance sheet total less or equal to 43 million €.

3.1.2 Eligible countries

Participants, either SMEs, Start-ups established in the following countries and territories or natural persons that are residents of the following countries will be eligible to receive funding through Horizon 2020 grants:

a. **The Member States (MS) of the European Union (EU), including their outermost regions**;
b. **The Overseas Countries and Territories (OCT) linked to the Member States:** Anguilla, Aruba, Bermuda, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands, French Polynesia, French Southern and Antarctic Territories, Greenland, Montserrat, Netherlands Antilles (Bonaire, Curaçao, Saba, Sint Eustatius, Sint Maarten), New

[1] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:en:PDF
[2] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:en:PDF
[3] http://ec.europa.eu/regional_policy/sources/conferences/state-aid/sme/smedefinitionguide_en.pdf

Caledonia and Dependencies, Pitcairn, Saint Barthélemy, Saint Helena, Saint Pierre and Miquelon, South Georgia and the South Sandwich Islands, Turks and Caicos Islands, Wallis and Futuna Islands.

c. **The H2020 associated countries (AC):** Iceland, Norway, Albania, Bosnia and Herzegovina, North Macedonia, Montenegro, Serbia, Turkey, Israel, Moldova, Switzerland, Faroe Islands, Ukraine, Tunisia, Georgia and Armenia.

3.2 General Information

3.2.1 Important dates

- **September 20th, 2019**: Launch of PARSEC Open Call 1 – "Call for Ideas"
- **December 20th, 2019** at **17:00 CET** (Central European Time): Submission deadline for Open Call 1 – "Call for Ideas"

Any proposal submitted after **December 20th, 2019** at **17:00 CET** will be automatically rejected from the Call.

3.2.2 Project funding

Supported by the European Union (EU), PARSEC will give selected SMEs and Start-ups access to a total grant of 1.000.000€ in the Open Call 1. The 100 selected beneficiaries will receive 10.000 € as a direct financial support. For terms and conditions regarding the payment of 10.000 € see 3.3.1.

3.2.3 Means of submission

PARSEC.eval – https://evaluation.parsec-accelerator.eu/apply - a software platform intended to enable pitches submission and evaluation performed by the teams/applicants - will be the entry point for all proposals/pitches in the Open Call 1.

3.2.4 Language

English is the official language for both PARSEC Open Calls. **Submissions done in any other language will not be evaluated.**

3.2.5 Application type

Each applicant can submit only one application in the form of a 3-minute video. The video must be submitted electronically in a format of a valid YouTube link (**public or unlisted**) for video without restrictions for reviewing. The video should be a presentation of the applicants' **competencies**, their **understanding of the dynamics across the sector** and their **ambition for new products/services** to be developed. Please bear in mind that it is in the applicants' interest that the videos are of high quality, **minimum required resolution is VGA video quality (640x480). Total video duration cannot exceed 3 minutes.**

3.2.6 Legal issues

As it will be defined in the Contract template, this relation between the beneficiaries and the European Commission through the PARSEC project carries a set of obligations to the sub-projects with the EC. In addition, in the contract beneficiaries' obligations will be defined, such as attending at least to one Matchmaking event organized by PARSEC, active participation, etc.

In case any of the PARSEC Open Call 1 beneficiaries use PARSEC Social media channels, PARSEC collaboration platform or other means provided to PARSEC beneficiaries by PARSEC project, to intentionally damage PARSEC project reputation or for other reasons not related to PARSEC project, PARSEC project Consortium reserves the right to exclude this Open Call 1 beneficiary and to protect its legitimate interest through legal actions.

3.2.7 Number of applications per applicant

Each applicant can submit only **one** application.

3.3 PARSEC Services for 1st Stage Beneficiaries

PARSEC Accelerator will provide a broad range of services to its 1st stage beneficiaries, including: Financial support (the selected 100 applicants will receive 10.000 € each) and various business services like Matchmaking facilities, a comprehensive Training Program and an On-site Bootcamp. Selected business services will facilitate consortia formation and a coherent development process for preparing the applications for the PARSEC Accelerator Open Call 2.

3.3.1 Financial support

100 selected PARSEC beneficiaries will receive the total financial support of 10.000€ in two installments:

Reviews	Date	Amount	Condition	Due date
Pre-financing	M01*	5.000€ (50%)	The beneficiary is marked as physically present at the PARSEC Bootcamp event, has signed the sub-grant agreement and all contracting documents have been collected.	30 days
Final payment	M06*	5.000€ (50%)	The beneficiary has submitted its final report - the pitch for Open Call 2 presenting the idea/prototype for a product/service.	30 days

*: M0x is the x month following the date of the contract's signature

3.3.2 Matchmaking facility

Building partnerships requires trust. Therefore, PARSEC aims to bring together as many (eventual) 1st Stage beneficiaries as possible in matchmaking workshops facilitated by BWCON. The workshops aim to stimulate the creation of cross-border or cross-sectoral consortia. In general, these workshops will follow a concept that builds on the innovation method Effectuation[4] and allows participants to get to know each other, build trust and create teams around specific ideas. In order to allow all PARSEC beneficiaries to participate in at least one of the Matchmaking events, sessions will be organized both, online and on-site in different regions within the EU. All events will be announced via the official PARSEC website as well as via a dedicated PARSEC Matchmaking group on the Meetup platform.

[4] See Saras D. Sarasvathy (2008), Effectuation: Elements of Entrepreneurial Expertise (New Horizons in Entrepreneurship)

3.3.3 On-site bootcamp

As culmination of PARSEC Accelerator's matchmaking offer, a 3-day on-site Bootcamp will bring together the 100 successful applicants from Parsec Open Call 1 in Stuttgart, Baden-Württemberg. In contrast to the Matchmaking events mentioned under section 3.3.2, the Bootcamp will be **mandatory** for all 1st stage beneficiaries. In this way connections among as many entrepreneurs and teams from the PARSEC ecosystem will be ensured enabling the formation of cross-border and cross-sectoral consortia.

With regard to the overall Training Program for Parsec 1st stage beneficiaries, the aim of the event will be twofold: Firstly, the Bootcamp shall **accelerate consortia-formation** and support PARSEC teams in their preparations for 2nd stage applications. This aim will be reached by the provision of suitable formats such as Matchmaking Sessions, Teams Speed Dating, or Innovation Pitches. One clear target of the Bootcamp will, thus, be to enable networking between its participants and support the formation of a sustainable PARSEC ecosystem. Dedicated coaching and workshop slots will be offered to teams that have already found their consortium partners by the time the Bootcamp takes place. Secondly, the PARSEC consortium will use the event as a check-up for the maturity of ideas and teams in order to **validate the training portfolio** that will be offered to the teams in preparation of Open Call 2. To support this approach, participants of the Bootcamp will get the chance to provide their expectations with respect to the 1st stage Training Program during co-creative working sessions with their future coaches.

Travel costs are part of the funding that 1st stage beneficiaries will receive and will not be reimbursed as a separate expenditure.

3.3.4 Training Program for 1st stage beneficiaries

The aim of the PARSEC Training Program for 1st stage beneficiaries is to support companies in advancing their business idea into a solid business model. Key to that aim will be to develop a sound understanding who the customers of each company or potentially consortium are and to acquire the relevant know-how for building a market-ready service or product. Supporting services offered by the PARSEC Accelerator will include a variety of coaching materials the companies will be able to use independently and on their own, e. g. webinars and team spaces, as well as a sound portfolio of coaching services that will be designed in close collaboration with the Beneficiaries during the on-site PARSEC Bootcamp (see section 3.3.3). Examples for such coaching services include 1:1-(Online)-Coaching, (Online)-Courses, (Online)-Discussions, or (online) sessions for Facilitated Collegial Advice.

3.4 Open Call 1 Submission and Evaluation Process

3.4.1 Open Call 1 publication

PARSEC Open Call 1 – "Call for Ideas" will be launched on September 20th, 2019 and will be supported by:

- Guide for Applicants, this document as the main source of information
- Declaration of Honor on exclusion criteria and absence of conflict of interest
- Data Privacy Policy

Please download the relevant files and read them carefully before you submit your application video.
The submission deadline is December 20th, 2019 at 17:00 CET (Central European Time).

3.4.2 Applicants registration

Interested applicants should register at PARSEC.eval – https://evaluation.parsec-accelerator.eu/apply – a software platform that enables video submission and evaluation performed by the teams/applicants. The platform will be the entry point for all pitch videos in the Open Call 1.

3.4.3 Application process

All applicants should prepare a short video with duration of **max 3 minutes**. For Open Call 1 it is not requested to apply with a concrete idea fitting to one of the three main topics, the applicants rather have to present their **skills** and **competences**, their **understanding of the dynamics across the sector**, and their **ambition for new products/services** to be developed. The more concrete these applications are, the easier will it be for the fellow applicants to evaluate the entity. Concrete ideas will emerge as a result of matchmaking processes, collaboration and the consortia building prior to Open Call 2.

Important notice 2: Inappropriate submissions or submissions in any language other than English will be automatically rejected. In case of technical issues e.g. invalid or private video links, the applicants will receive notification to adjust the error **before the submission deadline with no time extensions**.

3.4.4 Evaluation criteria and process

PARSEC Accelerator proposes an innovative and agile evaluation method for its Open Call 1 that is tailor-made to the needs of SMEs. The method has already been successfully applied and has now been upgraded for the purpose of PARSEC. PARSEC brings the platform-based evaluation system for its Open Call 1 that includes **Peer-to-Peer (*p2p*) evaluation**, where applicants evaluate other teams and their applications. The novelty of this system is that the Applicant and the Evaluator roles are shared by the same set of people. Namely, the Applicants are at the same time Evaluators for other applications at the same call. The ranking algorithm considers not only the evaluations received by the others, but the competence in evaluating other applicants as well, because it is not only the application, but much more **the competencies of the applicants that guarantee future success on the market**. This will allow PARSEC to offer its 1st stage supporting services to the most promising teams, i.e. the teams that market players themselves define as the ones with the most potential for future commercialization.

Important notice 3: Within the peer-to-peer evaluation method, there is a specific mechanism in the algorithm that prevents skewed evaluation. Applicants will rank other applicants by being presented two of them. They will have to state which of the two they find better, but they will not give marks that could results in skewed results. Additionally, applicants will be evaluated on the quality of their ranking in relation to other applicants. According to that, if they try to skew the evaluation by ranking good applications worse than bad ones, they will be downgraded by the algorithm automatically.

This evaluation methodology is based on the platforms and algorithms that have proved as very reliable, bias-free and agile tools for the evaluation of applications submitted by SMEs at open calls. The algorithm used has an objective to form a ranking according to different criteria. In order to suppress deliberate distortions in the evaluation process intended to boost one's own application, two rankings are produced: one of the applications and the other of the applicants/evaluators and their expertise. The final ranking is a linear combination of the two.

In the case of PARSEC, the evaluation of the applications will be based upon three concrete criteria. All of them will be weighted as follows:

Nr.	Criterion	Weight
1	Previous experience and current activities	19.997%
2	Understanding of the dynamics across the value chain	30.0001%
3	Vision for new products/services	50.0029%

Each self-evaluator (SE) is given to compare two applications (A and B) (preferably not from his/her country), chosen by algorithm. Each SE has to visualize the two videos and then according to the three

criteria described previously, has to compare them “I prefer A” or “I prefer B”. The comparison process is repeated several times.
The number of evaluation comparisons required by each team depends on the total number of applications but is not expected to exceed 100. Consider that the required time for one evaluation to be made is not more than 10 minutes per evaluation, so that the total time allocated to the evaluation procedure at this stage should not exceed 17 hours in total dispersed through one month.

Important notice 4: The Applicants to PARSEC Accelerator accept that their applications processes will include evaluating other applications competing for the same funding. To provide the evaluations, the applicants agree to receive other applicants' video presentations, to watch them carefully, and to submit their feedback according to the instructions that will be provided by PARSEC Accelerator management team. **By entering the process, applicants also understand and accept that failing to provide their evaluations of other applications within the deadline set by the project management team, will automatically exclude their application from the PARSEC project.** The evaluation process will start on January 8th, 2020, lasting for approximately one month, while the amount of evaluations expected to be performed by the applicants will depend on total amount of applications received in the project.

Important notice 5: It is the **applicants’ sole responsibility to check the e-mail regularly and thoroughly** (to include all possible sub-inboxes such as promotions, social, spam, etc.), and to make sure that the firewalls, anti-spam filters and the mail servers on the mail recipient side (or by the recipient’s internet service provider and/or mail server hosting provider) are configured properly, so that the e-mail messages received either from PARSEC Accelerator team members or the auto-generated messages sent by the software platform are not blocked, deleted or bounced.

In addition to the auto-generated email reminders and the personalized email messages sent by PARSEC Accelerator team, if necessary, the PARSEC Accelerator team may undertake reasonable efforts to contact the applicants via WhatsApp, Viber, Telegram or Signal messages, if they consider this necessary, providing that the applicants can be easily found on these platforms, and that they are available online. The applicants will never be contacted via SMS messages. The applicants are aware that getting in touch with them using the **instant messaging platforms will be considered only as an act of good will** (it is not an obligation of any kind). By applying to PARSEC Open Call 1, applicants automatically agree to the rules set above. This by no means implies commitment of PARSEC Accelerator team to individually send reminders to each applicant via WhatsApp, Viber, Telegram or Signal messages. This also doesn’t release applicants from their obligation to check their emails regularly.

3.4.5 Award of projects - Open Call 1

Award criteria will be based on the ranking list as a result of the p2p community evaluation. The first best 100 projects on the ranking lists will be awarded.

3.4.6 Redress procedure

All the applicants will receive an Evaluation Summary Report (ESR).
The evaluation results will be final. Due to the nature of the evaluation process, no redress procedure is foreseen. By submitting their ~~pitch~~ application for the Open Call 1, applicants accept these conditions.

3.5 Sub-projects Execution

3.5.1 Obligatory activities

Selected beneficiaries are obligated to take part in the Matchmaking events organized by PARSEC Accelerator, either onsite or online, to actively participate and connect with other PARSEC beneficiaries

and stakeholders. Open Call 1 beneficiaries are obliged to participate in the PARSEC Bootcamp which will be held in Stuttgart, Germany.

3.5.2 Reporting

All the beneficiaries of the Open Call 1 are obliged to send their final report in the form of a pitch deck for Open Call 2 that they developed during stage one. This is applicable to all beneficiaries whether they are coordinators of newly founded consortia or partners. The deadline to submit the pitch deck in PDF format i.e. the final report of Open Call 1 is **July 10th, 2020 at 17:00 CET**. Furthermore, this pitch deck will be the precondition to receive the second installment of Open Call 1 funding. Even if beneficiaries choose not to apply for Open Call 2, they still have to submit the pitch deck in order to receive the second installment of the funds.

4. Responsibilities of Consortia Members

Beneficiaries of both Open Calls have obligations towards European Commission. They are responsible for the proper use of the funding and ensure that the recipients comply with obligations under H2020 specific requirements as described in Horizon 2020 - the Framework Program for Research and Innovation (2014-2020). The obligations that are applicable to the recipients include:

4.1 Conflict of Interest

The 3rd parties (Open Call 2 consortia members) must take all measures to prevent any situation where the impartial and objective implementation of the sub-project is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest ('conflict of interests').

They must formally notify to the Commission (via the PARSEC coordinator) without delay any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation. The PARSEC coordinator may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

If the Open Call 2 consortium member breaches any of its obligations, the Contract may be automatically terminated. Moreover, in case costs are not explicitly included in the sub-project, they may be rejected. Finally, the cost of the deliverables, which are clearly specified in the sub-project and are accepted during a review process, becomes eligible. Deliverables that are not accepted will be re-evaluated at next review. If this is the last review, the cost of these deliverables will not be paid to the sub-project.

4.2 Maintaining Confidentiality and traceability

During implementation of the sub-project and for five years after the end of the sub-project, the parties must keep confidential any data, documents or other material (in any form) that is identified as confidential at Contract signing time ('confidential information'). Beneficiaries are in charge of the management of personal data they collected during the project.

If a 3rd party requests, the Commission and the PARSEC consortium may agree to keep such information confidential for an additional period. This will be explicitly stated at the Contract.

If information has been identified as confidential during the sub-project execution or only orally, it will be considered as confidential only if this is accepted by the PARSEC coordinator and confirmed in writing within 15 days of the oral disclosure. Unless otherwise agreed between the parties, they may use confidential information only to implement the Agreement.

All parties are obliged to keep record of their activities for five years after the end of the project.

4.3 Promoting the Action and Giving Visibility to the EU Funding

The 3rd parties (Open Call 2 consortia members) must promote the sub-project, PARSEC project and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner and to highlight the financial support of the EC.

Unless the European Commission or the PARSEC coordinator requests or agrees otherwise or unless it is impossible, any communication activity related to the action (including in electronic form, via social media,

etc.), any publicity, including at a conference or seminar or any type of information or promotional material (brochure, leaflet, poster, presentation etc.), and any infrastructure, equipment and major results funded by the grant must:

- display the EU emblem
- display the PARSEC logo and
- include the following text:

For communication activities: "This project has indirectly received funding from the European Union's Horizon 2020 research and innovation program, via an Open Call issued and executed under project PARSEC (grant agreement No 824478)".

For infrastructure, equipment and major results: "This [infrastructure][equipment][insert type of result] is part of a sub-project that has indirectly received funding from the European Union's Horizon 2020 research and innovation program via an Open Call issued and executed under project PARSEC (grant agreement No 824478)".

When displayed in association with a logo, the European emblem should be given appropriate prominence. This obligation to use the European emblem in respect of projects to which the EC contributes implies no right of exclusive use. It is subject to general third-party use restrictions which do not permit the appropriation of the emblem, or of any similar trademark or logo, whether by registration or by any other means. Under these conditions, the Beneficiary is exempted from the obligation to obtain prior permission from the EC to use the emblem. Further detailed information on the EU emblem can be found on the Europa web page.

Any publicity made by the Beneficiary in respect of the project, in whatever form and on or by whatever medium, must specify that it reflects only the author's views and that the EC or PARSEC project is not liable for any use that may be made of the information contained therein.

The EC and the PARSEC consortium shall be authorized to publish, in whatever form and on or by whatever medium, the following information:

- the name of the sub-project coordinator and all consortium members
- contact address of the sub-project coordinator and all consortium members
- the general purpose of the project
- the amount of the financial contribution foreseen for the project; after the final payment, the amount of the financial contribution actually received by the sub-project
- the geographic location of the activities carried out;
- the list of dissemination activities and/or of patent (applications) relating to foreground;
- the details/references and the abstracts of scientific publications relating to foreground and, if funded within the sub-project, the published version or the final manuscript accepted for publication;
- the publishable reports submitted to PARSEC;
- any picture or any audiovisual or web material provided to the EC and PARSEC in the framework of the project.

The sub-project coordinator shall ensure that all necessary authorizations for such publication have been obtained and that the publication of the information by the EC and PARSEC does not infringe any rights of third parties.

Upon a duly substantiated request by the sub-project coordinator on behalf of any sub-project consortium member, the PARSEC consortium, if such permission is provided by the EC, may agree to forego such publicity if disclosure of the information indicated above would risk compromising the beneficiary's security, academic or commercial interests.

5. Checklist

- **Does your planned work fit with the call for proposals?**
- **Does your proposal address requested topics - EO-based products/services in emerging industries: food, energy and environment?** Check that your proposed work does indeed address requested topics.
- **Is your proposal eligible?** The eligibility criteria are given in chapter 3.1. In particular, make sure that you satisfy the minimum participation requirements.
- **Have you submitted your pitch before the deadline?** It is strongly recommended not to wait until the last minute to submit the pitch. Failure of the application to arrive in time for any reason, including network communications delays, is not acceptable as an extenuating circumstance. The time of receipt of the message as recorded by the submission system will be definitive.
- **Open Call 1 - Have you checked that the link for your pitch is valid?** The pitch must be submitted electronically in a format of a valid YouTube link for video without restrictions for reviewing and with minimum required resolution of VGA video quality (640x480).
- **Has the legal representative signed the Declaration of Honor** on exclusion criteria and absence of conflict of interest?
- Have you **virus-checked your computer**? Any file containing a virus will be automatically blocked.

6. Points of contacts

Region	Name	Contact
Belgium	**Weronika Borejko**	weronika.borejko@earsc.org
Germany	**Peter Baumann**	baumann@rasdaman.com
Greece	**Panagiota Syropoulou**	syropoulou.p@draxis.gr
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Contact person for training services	**Valentina Grillea,** **Carla Marquez Rincon**	grillea@bwcon.de Marquez@bwcon.de
Serbia and Balkan region	**Stasa Stojkov Rosic**	stasa.stojkov@biosense.rs
Rest of H2020 eligible countries	**PARSEC info team**	info@parsec-accelerator.eu
	PARSEC admin team	admin@parsec-accelerator.eu