Guidelines for applicants.
EDI 2nd open call for proposals

Closing date for proposals

Friday, 19th June 2019 at 12:00 (noon) CEST

Core consortium partners

Consortium data providers

New Data providers

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1. Introduction

This document provides a full set of information regarding the second open call for proposals for the European Data Incubator (EDI - https://edincubator.eu/). In addition to these guidelines, the applicants are invited to get acquainted with the Sub-Grantee Funding Agreement template. The Sub-Grantee Funding Agreement template is available at https://bit.ly/2HuogI4.

1.1   Background information on Big Data Value PPP (BDV-PPP)

EDI is an Innovation Action project co-funded by the European Union. The project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement No 779790.

Furthermore, EDI is part of the Big Data Value PPP [1] within a group of projects known as the Big Data Value PPP projects [2].

The Big Data Value PPP signature on 13th October 2014 was the first step towards building a thriving data community in the EU. This signature marks the commitment by the European Commission, industry and academia partners to build a data-driven economy across Europe, mastering the generation of value from Big Data and creating a significant competitive advantage for European industry, boosting economic growth and jobs.

The Big Data Value PPP commenced in 2015, starting with first projects in 2016 and it will run until 2020. Covering the multidimensional character of Big Data, the PPP activities will address technology and applications development, business model discovery, ecosystem validation, skills profiling, regulatory and IPR environment and social aspects.

The Big Data Value PPP will lead to a comprehensive innovation ecosystem for achieving and sustaining European leadership on Big Data, and for delivering maximum economic and societal benefit to Europe – its business and its citizens.

1.2   EDI General Requirements and Tracks

The objective of the EDI programme is to facilitate the uptake of Big Data tools by the start-ups whilst increasing the technical and business skills of the selected start-ups/SMEs. The final aim is to foster sustainable business incubation around Big Data.

Any project selected by EDI must be executed by a start-up or an SME and it is obliged to make use of a set of data assets for experimentation as defined in any of the tracks of this **Open Call** for proposals.

The open call will be divided in three tracks. Applicants will select one of them:

- **READY-MADE (Track 1 - Domain specific):** challenges have been defined by the EDI data providers according to the needs detected. These challenges and associated datasets are defined in the Challenge Catalogue [5]. Applicants will select the challenge to be solved from the EDI Catalogue at application stage.

- **HALF AND HALF (Track 2 - Data combination):** there is not a predefined challenge to be sorted out. This track is devoted to the discovery of new opportunities proposed by the applicants, where the use <u>of at least two different datasets</u> is <u>compulsory</u>:

  o Data set 1: One dataset provided by EDI data catalogue [3] (http://data.edincubator.eu).
  o Data set 2: Another dataset or datasets external to EDI data source/s, as long as the applicant has access and processing rights to the data in compliance with data protection regulations, and has legal permission to include them in a commercial solution.

  The applicant will select Data set 1 from EDI data catalogue and will describe the Data set 2 and the proposed solution in the Application Form.

- **FREE CHOICE (Track 3 - Bring your own data provider):** teams will be allowed to bring their own data provider with a specific challenge to be solved and specific datasets to be used for that purpose. These datasets will be described within the submission stage.
  The data provider will have to comply with the country eligibility rules (section 3.3) and follow the same rules of current EDI data providers. To sum up:
  - to register in the Data Providers application call form, as indicated in the Application Form to be filled in by the Applicant (see 1.4)
  - to sign a MoU (Memorandum of Understanding) with the University of Deusto at the time of the application and before 28 June 2019. The MoU model is available here: https://bit.ly/2T8oCX6
  - to sign the Sub-Grantee Funding Agreement in case of selection of the Applicant, in September 2019
  - Provide access to the data and assistance to the Sub-grantee if selected
  - Participate in the meetings with the Sub-grantee organised by the project and in the evaluations in the corresponding pitches and events, if selected.

1.3 EDI Approach

EDI has been conceived as a **3-phase incubation/acceleration programme**: EXPLORE > EXPERIMENT > EVOLVE, in which the selected start-ups/SMEs will be offered a set of technical and business services to develop an MVP (Minimum Viable Product) and reach commercial and/or investment agreements with data providers, corporates and/or private investors.

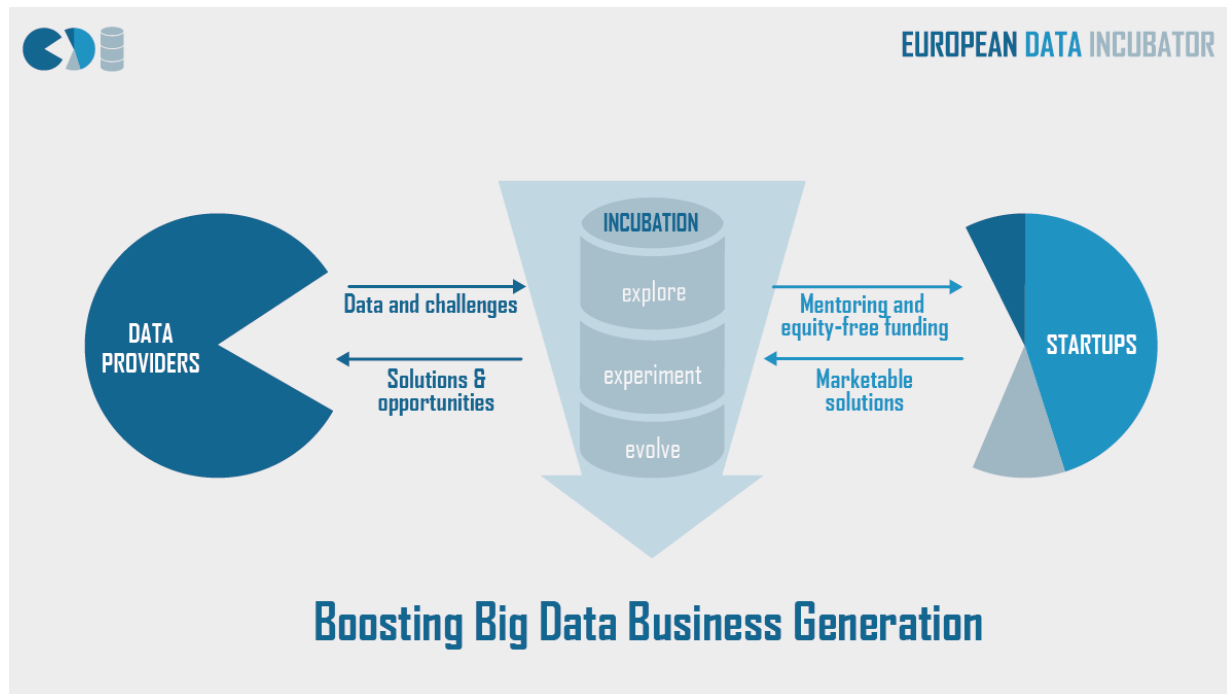The figure below shows the overall scheme of the incubation process:

FIGURE 1. OVERALL SCHEME OF THE INCUBATION PROCESS

EDI will use a funnel approach for project selection and the funding is **results-driven**, depending on specific metrics of success (KPIs and commercial deliverables) described for each phase:

- **Explore**: up to 50 projects will enter this phase (maximum 20% of these projects will belong to the 3rd track "bring your own data provider). This phase will help the start-ups to clearly define their concept of the experiment with the data providers. Initial trainings on Big Data technologies and on the data available will be organised. At the end of the phase a Datathon will be organised to prepare the first mock-ups of the applications. During the Datathon and together with a technical analysis, **start-ups/SMEs participating at Explore phase will engage in a final "demolition pitch" contest, which will select the top projects that will access the following phase (up to 17 projects).**

- **Experiment**: the objective, for the proper experimentation phase, is to develop an MVP (Minimum Viable Product) to be introduced into the market. To that aim, the up to 17 start-ups/SMEs that are invited to this phase will have access to dedicated coaches and mentors, a technical infrastructure with a set of tools ready to be used, a different set of training modules on Big Data and personalized business development support. At the end of this phase, the start-ups/SMEs will participate in a pitch contest, after which the projects with a major market potential will be invited to enter the last phase of the incubation.

- **Evolve**: up to 7 start-ups/SMEs with a solid MVP and market potential will access the last step. This phase is dedicated to building solid partnerships and detecting real investment opportunities for the top companies in the call. The projects will be encouraged to gain enough traction for next investment phase in terms of sales, prospects, users, markets and customers. Participants will

pitch their developed solution and business model in front all data providers, selected investors and the press in a Final demo day.

Each project funded will receive **up to €100k** depending on the stage reached in the incubation process under a lump sum scheme, based on the approval of different milestones or KPIs and along the funnel approach.

A graph summarizing the process is shown below:

FIGURE 2. OVERALL FUNNEL APPROACH FOLLOWED DURING THE SECOND CALL INCUBATION PROCESS.

1.4   Data Offering

The data offered by project Data Providers is available at EDI Data Catalogue [3] for those participants applying to "Track 1 - domain specific" or "Track 2 - data combination".

Applicants of "Track 3 - bring your own data provider" will be requested to complete a specific form at application stage to evaluate the appropriateness of the data provider and the dataset proposed according to the evaluation process defined in Section 6.

1.5   Data Challenges

EDI data challenges are defined in the **Challenge catalogue** [5] for those participants applying to "Track 1 - domain specific".

Applicants of "Track 2 - data combination" and "Track 3 - bring your own data provider" will be requested to complete specific information to evaluate the appropriateness of the challenge proposed.

2. CALENDAR

2.1 Proposals

- Call opening on F6S platform [8] on 20/03/2019
- Deadline for submission via FS6 Platform 19/06/2019, 12:00 (noon) CEST
- Evaluation from 19/06/2019 to 22/07/2019
- Communication of results to applicants from 22/07/2019 to 26/07/2019
- Negotiation and signature of Sub-Grantee Funding Agreements (by sub-grantees, University of Deusto, and Data Providers) from 27/07/2019 to 08/09/2019

2.2 Phase 1 – Explore

- Execution from 09/09/2019 to week 23/10/2019
- Evaluation to access Experiment: a Datathon will be organised to prepare the first mock-ups of the applications. During the Datathon and together with a technical analysis, start-ups/SMEs participating at Explore phase will engage in a final "demolition pitch" contest which will be the basis for the evaluation
- Notification of selected applicants 23/10/2019 (tentative date)
- Communication of results to applicants will be done from 24/10/2019 to 31/10/2019

2.3 Phase 2 – Experiment

- Execution from 28/10/2019 to 21/02/2020
- Evaluation to access Evolve from 24/02/2020 to 28/02/2020
- Notification of selected applicants 28/02/2020 (tentative date)
- Communication of results from 02/03/2020 to 06/03/2020

2.4 Phase 3 – Evolve

- Execution from 09/03/2020 to 24/04/2020
- Final evaluation event Evolve stage from 27/04/2020 to 30/04/2020

Dates are an initial estimation and might slightly change if agreed by EDI consortium for the benefit of the sub-grantees.

3. Beneficiaries

3.1 Types of Beneficiaries

The accepted applicants for EDI open calls are start-ups in the form of SMEs or group of individuals (that is, a start-up may be legally incorporated or not):

- **SME**: Individual projects (1 SME) of an SME/start-up legally established in an eligible country according to section 3.3.
- **Group of individuals**: When there is not a constituted SME, the applicants could be a group between 2 to 4 individuals legally established in an eligible country according to section 3.3 and with a written commitment to have set up a legally registered SME if reaching "Experiment" phase.

3.2 Definition of SME

A SME will be considered as such if accomplishing with the Commission Recommendation 2003/361/EC [6] and the SME user guide [7]. As a summary, the criteria which define a SME are:

- 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.

3.3 Eligible Countries

Only applicants legally established, and working, in the case of the individuals, in any of the following countries will be eligible:

- The Member States (MS) of the European Union (EU), including their outermost regions;
- The Overseas Countries and Territories (OCT) linked to the Member States[1] ;
- H2020 Associated countries: according to the updated list published by the EC at http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf

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[1] Entities from Overseas Countries and Territories (OCT) are eligible for funding under the same conditions as entities from the Member States to which the OCT in question is linked.

4. GENERAL INFORMATION

4.1 Means of Submission

The F6S platform will be the entry point for all proposals in Phase 1 [8] (accessible at https://www.f6s.com/edincubator) Submissions received by any other channel will be automatically discarded.

Documents required in subsequent phases will be submitted via dedicated channel, which will be indicated by EDI consortium during the sub-granted projects execution.

4.2 Language

English is the official language for EDI open calls. Submissions done in any other language will not be evaluated. English is also the only official language during the whole execution of the incubation process. This means any requested submission of deliverables will be done in English in order to be eligible.

4.3 Documentation Formats

Any document requested in any of the phases must be submitted electronically in PDF format without restrictions for printing.

4.4 Origin of the Funds

Any selected proposer will sign a dedicated Sub-Grantee Funding Agreement with the EDI project coordinator (on behalf of EDI Consortium) and the corresponding Data Provider. The funds attached to the Sub-Grantee Funding Agreement come directly from the funds of the European Project EDI, and the EDI consortium is managing the funds according to the Grant Agreement Number 779790 signed with the European Commission.

As can be seen in the Sub-Grantee Funding Agreement template [9], this relation between the sub-grantees and the European Commission through EDI project carries a set of obligations to the sub-grantees with the European Commission. It is the task of the sub-grantees to accomplish them, and of the EDI consortium partners to inform about them.

4.5 EDI and the H2020-Data Pitch Incubator

The basic information about a proposal (summary and participants) will be shared with the H2020-ICT DATA PITCH incubator project.

Double funding is not acceptable. A proposal can be submitted to both programs but once a proposal is funded by DATA PITCH or EDI previous calls, it will be withdrawn from the EDI incubator.

4.6 Number of Proposals per Applicant

Only one proposal will be accepted for funding per SME or team of individuals.

Given the fact this call is a competitive one, and the teams will focus in a specific challenge or project, **only one proposal per SME or team will be evaluated**. In the case of a multiple submission by a SME or team, only the last one received (timestamp of the system) will enter into our evaluation process, the rest being declared as non-eligible.

If the last submitted proposal is declared then non-eligible or fails to reach the thresholds of the evaluation, the other proposals submitted earlier will not be considered for evaluation in any case.

In the case of individuals:

- The same individuals forming a team will be selected for funding only once, as in the case of an SME.
- Only the last submitted proposal by the same individuals forming a team will be evaluated, as in the case of an SME.
- If an individual is taking part in several teams:
    - The members of the other teams will be informed about the participation of an individual in multiple teams.
    - The individuals participating in multiple teams will be requested to select only one proposal and will be removed from the others. This may affect the eligibility condition of the proposal, if the number of individuals goes under 2.

4.7 Funding Principle

The incubator will be based on a 3-phase process **EXPLORE > EXPERIMENT > EVOLVE**. Each phase comprises a set of activities that qualify for financial support. All the funds disbursed will be based on concrete results and not administrative justifications.

- **Open call**: This is the submission of proposals. No funding attached.
- **Explore: €5,000** attached to the successful participation in the respective call Datathon in Berlin, elaboration of a mock-up of the future solution making use of the data catalogue provided by the consortium and presentation of the overall solution in the pitch contest.
- **Experiment:** up to **€80,000** subject to the degree of accomplishment of the KPIs defined among each SME and its coach at the beginning of this phase using a set of common objective criteria, i.e. those that ensure equal opportunities for funding to all participants. The selected participants are also required to attend 2 internal events organized by the consortium in this phase in Bilbao, and to develop an MVP.
- **Evolve:** up to **€15,000** attached to the accomplishment of the KPIs defined among each SME and its coach at the beginning of this phase using a set of common objective criteria, i.e. those that ensure equal opportunities for funding to all participants. The selected participants are required to attend the final event organised by the consortium in Berlin.

Therefore, a participant could receive as **maximum €100,000** for a project.

5. SUBMISSION OF PROPOSALS

The submission will be done through the F6S platform [8] which is directly linked from EDI website [4]. This means the proposers are required to register a profile at FS6 to be able to submit a proposal.

The documents that will be submitted are:

1. **Proposal form:** an online form divided in different sections: (1) EDI Challenge, (2) Technical approach, (3) Business, (4) Team and (5) Administrative information.

For those applicants to Track 3 "bring your own data provider", an additional online form to describe the challenge, the datasets, and legal aspects will be also required.

The project proposals have to strictly adhere to the forms provided by EDI consortium via F6S platform, which defines sections and the overall length. Participants are requested to carefully read and follow the instructions in the form. Evaluators will be instructed not to consider extra material in the evaluation.

2. **Declaration of Honour**: a tick box clicked by the SME or the individuals confirming they have read the conditions and agree with the conditions defined in this document.

If the applicant discovers an error in the proposal, and provided the call deadline has not passed, the applicant may submit a new version (for this purpose, the applicant must request it to F6S team through opencall@edincubator.eu). Only the last version received before the call deadline will be considered in the evaluation.

It is strongly recommended not to wait until the last minute to submit the proposal. Failure of the proposal to arrive in time for any reason, including communications delays, automatically leads to rejection of the submission. The time of receipt of the message as recorded by the submission system will be definitive.

EDI offers a dedicated support channel available for proposers at opencall@edincubator.eu Requests or inquiries about the submission system or the call itself, received AFTER the closure time of the call will neither be considered nor answered.

6. Evaluation Process

6.1 Proposal Stage

6.1.1   Proposal Reception

Submissions will be done ONLY through F6S platform in the space enabled for EDI project [8]. A full list of proposers will be drafted containing their basic information for statistical purposes and clarity (which will be also shared with EC for transparency).

The application reception will close at 12:00 (noon) CEST on 19th June 2019. There will not be deadline extensions unless a major problem, caused by EDI and not by the proposers, makes the system unavailable.

6.1.2   Eligibility

An automatic filtering to discard non-eligible proposals will follow the shortlist below. Eligibility criteria check will verify:

   a.   the existence of a legal SME/start-up in an eligible country, or, in the case of a group of individuals, their legal residence in an eligible country,
   b.   the uniqueness of the proposal,
   c.   the non-existence of the same proposal selected by Data Pitch
   d.   the verification of not having participated in any of the previous editions of the EDI programme
   e.   the use of data proposed by EDI (except for Track 3),
   f.   the usage of Big Data tools to tackle a challenge,
   g.   the correct fulfilment of the submission form on F6S,
   h.   the link to any of the domain challenges or the data combination challenge (except for Track 3) and
   i.   the issues of multiple participation described in section 4.6.

For those proposals applying to Track 3 "bring your own data provider", a prior evaluation to evaluate the eligibility of the data provider will be carried out. For this, your data provider will need to fill in a specific questionnaire as explained in the F6S Application Form. Eligibility criteria will verify:

   j.   Challenge description
   k.   Sample datasets description
   l.   Datasets compliance with GDPR
   m. Anonymisation of the personal data
   n.   Inferring personal data
   o.   Informed consent
   p.   Ownership of data
   q.   Right of use

r. GDPR awareness

s. Infrastructure used to store the datasets at Data Provider premises.

Proposals marked as non-eligible will get a rejection letter including the reasons (a to s) for being declared as non-eligible. No further feedback on the process will be given.

6.1.3 Automatic Sorting

On a second step, the evaluation process will automatically sort the proposals according to a set of indicators monitoring their previous <u>traction and data about the proposal</u>. The proposals will be categorised in two groups for this purpose:

1. **Early stage:** SMEs with 3 or less financial years closed or groups of individuals.
2. **Established teams**: SMEs with more than 3 financial years closed.

The concrete criteria for this automatic sorting will be made public AFTER the three calls for proposals are closed. These criteria will not be public before the calls to avoid proposers sending fit-for-the-call submissions.

Proposals not passing the automatic sorting will be sent a rejection letter indicating that the proposal does not reach the internal traction indicators needed for accessing the incubator. No further feedback on the process will be given.

6.1.4 Remote Evaluation

After the automatic sorting, one shortlist will be populated. The evaluation is then split in two paths:

- Track 1 -Domain specific: the data providers of each challenge, an external expert on Big Data and a market expert will evaluate each of the applications based on four criteria **(1) challenge fit, (2) technical approach, (3) business potential and (4) team composition**.
- Track 2-Data combination and Track 3-Bring your own data provider: an internal member of the project, an external Big Data expert and a business expert will review each proposal, scoring them based on the **(1) technical approach, (2) business potential and (3) team composition**.

Evaluators

Every proposal will be assessed by at least 3 people with different profiles (technical, business). External evaluators will be part of the evaluations and, in any case, will have to sign a declaration that they have no conflict of interest. In the case of the domain specific challenges, feedback will be also gathered from the corresponding data providers.

Scoring

Reviewers will evaluate the proposals considering the above mentioned 3 or 4 criteria for the challenge. Each criterion (except for the challenge fit criterion of the domain-specific challenge which is a yes/no flag) will have a score from 0 to 5. Decimal scores may be given. For each criterion under examination, score values will indicate the following assessments:

- **0 Fail**. The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information
- **1 Very poor**. The criterion is addressed in an unsatisfactory manner.
- **2 Poor**. There are serious inherent weaknesses.
- **3 Fair**. While the proposal broadly addresses the criterion, there are significant weaknesses that would need correcting.
- **4 Good**. The proposal addresses the criterion well, although certain improvements are possible.
- **5 Excellent**. The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

A minimum score of 3 for each criterion and an overall score of 12 for the 3 criteria with a 0 to 5 score (remember that domain-specific challenges will have a yes/no flag regarding the challenge fit criterion) will be needed as a minimum threshold. Only proposals reaching all the criteria will be eligible for accessing the explore phase.

The information on the evaluation will be compiled into an Evaluation Summary Report which will be sent to applicants after being approved by EDI consortium and the evaluators

A maximum of 55 proposals will be shortlisted in this phase and up to 50 invited to sign a contract (sub-grantee agreement) and access the "explore" phase of the incubator, keeping the rest in a reserve list.

6.1.5   Draw Resolution

In the case of a draw in the final scoring, the following criteria will be used in the following order of priority:

- Higher score for business potential criterion
- Higher score for team composition criterion
- Date of submission: earlier submitted proposals go first.

6.1.6   Communication

Every applicant will receive via e-mail:

- An Evaluation Summary Report (ESR)
- A letter informing of rejection decision, invitation to negotiation and following steps or being part of the reserve list.

6.1.7 Negotiations

The objective of the negotiations is fulfilling the legal requirements between EDI consortium and every selected project of the call. The items covered will be:

■ Status information of the beneficiaries:

▫ **SMEs/start-ups**. If the applicant has been fully validated as an SME on the Beneficiary Register of the H2020 Participant Portal, the PIC number has to be provided. The following documents will be required to prove the status as an SME if the applicant has not been fully validated as an SME on the Participant Portal:

1. **SMEs check list:** signed and stamped. Available at [10].
   ▫ In the event they declare being non-autonomous: the balance sheet and profit and loss account (with annexes) for the last period for upstream and downstream organizations
2. **Status Information Form**. It includes the headcount (AWU), balance, profit & loss accounts of the latest closed financial year and the relation, upstream and downstream, of any linked or partner company.
3. **Legal existence**. Company Register, Official Journal and so forth, showing the name of the organization, the legal address and registration number and, if applicable, a copy of a document proving VAT registration (in case the VAT number does not show on the registration extract or its equivalent)
4. **Supporting documents**. In cases where either the number of employees or the ownership is not clearly identified: any other supporting documents which demonstrate headcount and ownership such as payroll details, annual reports, national regional, association records, etc.

▫ **Group of individuals**: When there is not a constituted SME, the applicants could be a group between 2 to 4 individuals:

1. A copy of the ID-card or passport of every participant in the project team will be required.
2. A proof for every participant in the project that (s)he is legally established and working in an eligible country (see section 3.3).
3. A written commitment to set up a legal SME if reaching "Experiment" phase.

■ **Bank account information**: The account where the funds will be transferred will be indicated via form signed by the SME, individuals and the bank owners. The holder of the account will be the SME or all the individuals (or the coordinator of the group on its own if allowed by the other team members).

■ **Sub-grantee funding agreement**: Signed between the EDI Consortium (represented by its coordinator Universidad de Deusto.), the corresponding data provider and the beneficiary/ies.

The request, by EDI consortium, of the documentation will be done including deadlines. Failing to meet the deadlines requested will directly end up the negotiation process and projects under the reserve list will substitute the failing applicants.
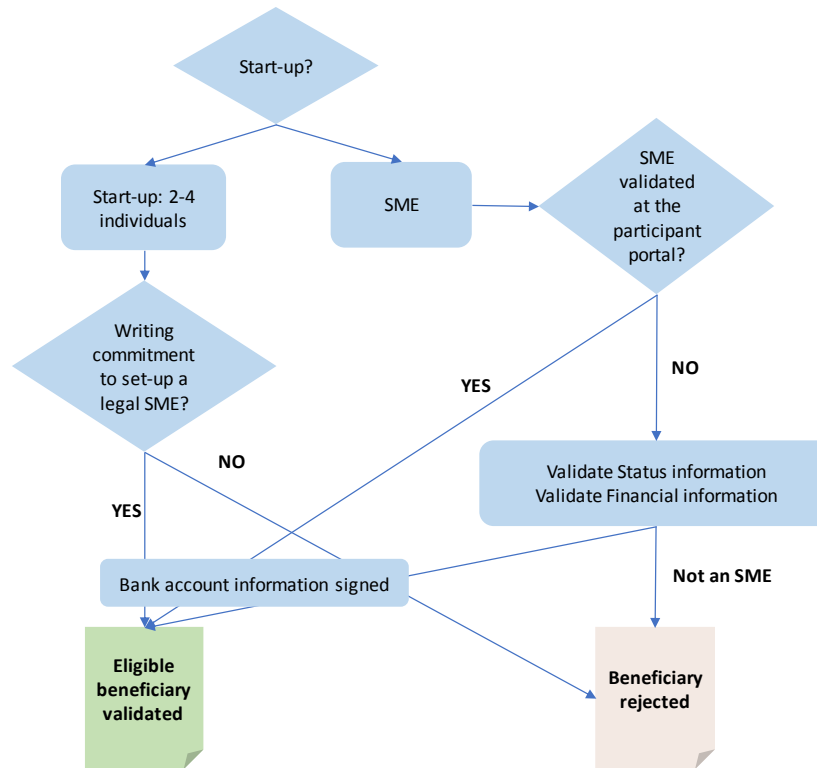
FIGURE 3. BENEFICIARIES VALIDATION PROCESS.

6.1.8 Next phase

Up to 50 projects will access 1 - EXPLORE phase, according to the procedure explained above. Access to next phase is officially granted once the Sub-Grantee Funding Agreement is signed by the EDI consortium, represented by University of Deusto, the corresponding data provider, and the sub-grantee(s).

6.2 PHASE 1 – EXPLORE

6.2.1 Submission

At this stage, a Datathon event will be held in Berlin, where the participants will have a couple of days to further develop their ideas: mock-up a solution making use of the Big Data tools put in place as well as the datasets from the providers.

The teams invited to this phase will have some time to prepare for the Datathon by participating in a webinar on the Big Data Ecosystem, organized by DEUSTO, and which will be held before the Datathon.

Training on how to prepare the pitch for the contest will be also considered.

6.2.2 Evaluation

A "demolition pitch" contest will be used to evaluate the projects that will be scored based on three main criteria:

1. **Technical quality** of the mock-up.
2. **Pitching skills** shown in the demolition pitch contest
3. **Operational capacity o**f the team.

Scoring

Reviewers will evaluate the teams according to the criteria above. Each criterion will have a score from 0 to 5. For each criterion under examination, the score values will correspond to the same assessment as in the earlier phase.

A **minimum** score of **3 for each criterion and an overall score of 12** for the 3 criteria will be needed. Only proposals reaching all the criteria will be eligible for accessing the Experiment phase.

Evaluators

Each Sub-granted project will be evaluated individually by an evaluation panel comprised by Big Data experts, data providers and consortium members, who will select the top 17 teams accessing the next phase - "Experiment". Evaluators will score the proposal individually and **complete and add comments to their scores** related to the evaluation criteria. This information will be compiled in a short **Evaluation Summary Report (ESR).**

6.2.3   Draw resolution

In the case of a draw in the final scoring, the following criteria will be used in the following order of priority:

- Higher score for team's operational capacity criterion.
- Higher score for pitching skills criterion.
- Date of submission: earlier submitted proposals go first.

6.2.4   Communication

The best start-ups/SMEs to move on to the Experiment phase will be first notified at the Datathon event. Afterwards, every Sub-granted project will receive the ESR via email and will be informed about the obtained results. This will lead to one of the following decisions:

- Invitation to access the next phase if the general thresholds are reached and the position in the ranking list is within the top 17.
- Informing about ending the process if the thresholds are not reached and the position in the raking list is not within the top 17.

Also, data providers will be informed about the proposals accessing the next phase. Individual teams will be then requested to start their legal registration as a SME in an eligible country. The legal registration documents will have to be provided for any payment at the Experiment phase to be issued.

6.2.5   Payments

All teams in the Datathon event will be awarded €5,000, for investing their resources on developing their concept and actively taking part in the Explore phase.

Teams not attending the Datathon will be automatically disqualified from the programme and will not receive the funding.

6.2.6   Next phase

The best 17 companies over the thresholds will access phase 2 – EXPERIMENT.

6.3 Phase 2 - Experiment

The following four months will be fully dedicated to the creation of a working version of the product/service designed.

The 17 selected teams will be able to officially meet the data providers face-to-face, who will accompany the respective challenge they are participating in. Coaches for all teams will be nominated. Each SME will be assigned one coach who will have regular coaching sessions with the teams regarding their development. Furthermore, they will define the features of the **Minimum Viable Product (MVP)** and coordinate the necessary resources for the MVP development. The teams will define the baseline, against which the MVP will be tested against.

6.3.1   Evaluation

Continuous follow-up

Incremental milestones will cover business related as well as technical topics, regarding the progress of open call winners towards achieving their project's assigned goals.

By the end of this stage the **17 sub-granted projects will be evaluated again according to the milestones and KPIs** determined with the assigned coaches. KPIs will be monthly revised. The participation in the internal events and the development of an MVP are also compulsory requirements.

Two documents will be used to do the follow-up:

- **Project overview**: Business and Technical Milestones + Grant Payment
- **Relevant Time Period**: Tasks & Use of Funding. Assessment will be performed by coaches remotely or at one of the face-to-face meetings.

Final evaluation

To conclude the 2-EXPERIMENT phase of the incubation process, a final evaluation of the technical and business part of each project will be done in an event in Bilbao with a similar scheme as the earlier Explore phase. The evaluation is intended to shortlist the projects and to select those accessing the Evolve phase as well as to validate the final payment of the Experiment phase. The evaluation will follow two criteria:

1. **Technical**: based on the MVP developed by the team and presented to a technical jury in the event.
2. **Business**: based on the pitch done in the event.

An expert roundtable comprised by external evaluators, mentors, coaches, Big Data experts and Data Providers will be established for the evaluation. In the first part, data science experts will do the final assessment of the SMEs' MVP on the technical level. The second part of the selection will focus on the quality of the teams' business models and their potential for growth and scalability, especially concerning cross-sector and cross-data application.

Deliverables

Compulsory deliverables that will be needed to access the following phase and receive the final payment of the phase are:

- Promotional video (3 minutes length) about the SME and their MVP. This video will be made public in different channels. It will be in English or subtitled in English.
- Document explaining the technical specification of the solution and indicating the means for accessing the MVP for a potential customer (login information, website address, link to a demo video or whatever means are needed to check the MVP exists and works)
- Individual KPI reports defined with the coach and their intermediate stage evaluations.
- Summary document of the activities performed, and progress made by the company. The template to be completed will be provided by the EDI consortium.

From this evaluation, the top 7 companies will access 3-EVOLVE phase. Good technical projects with a credible growth strategy will be selected.

Scoring

Reviewers will evaluate the teams according to the criteria above. Each criterion will have a mark from 0 to 5. For each criterion under examination, score values will correspond to the same assessment as in the earlier phase.

A **minimum** score of **3 for each of the two criteria and an overall score of 7 for the 2 criteria** will be needed. Only proposals reaching all the criteria will be eligible for accessing the 3-EVOLVE phase.

6.3.2 Communication

The best SMEs to move on to the Evolve phase will be first notified at the Final experiment phase event in Bilbao. Afterwards, every sub-granted project will receive the ESR via email and will be informed about the obtained results. This will bring one of the following decisions:

- Invitation to access the next phase if the general thresholds are reached and the position in the ranking list is within the top 7.
- Informing about ending the process if the thresholds are not reached and the position in the raking list is not within the top 7.

6.3.3   Payments

Up to €80,000 may be granted depending on the accomplishment of the KPIs defined at the beginning of this phase among each SME and its coach. Those KPIs will be revised on a monthly basis.

A first payment for the teams will be executed once the KPIs and calendar is set up. The amounts and calendar will be defined in the Sub-grantee Funding Agreement [9].

The total amount of this phase will be divided in 3 different instalments according to the calendar of payments defined in the Sub-grantee Funding Agreement.

In correlation to the teams' reaching each of their predetermined milestones, a percentage of the maximum funding of €80,000 for the experimentation phase will be disbursed to each team according to the score achieved at each checkpoint.

Proof of legal registration as an SME in an eligible country must be provided for any payment in this stage to be issued, in the case of participants that were a group of individuals during Explore phase.

6.3.4   Next phase

The best 7 companies over the thresholds will access phase 3 – EVOLVE.

6.4 Phase 3 - Evolve

The phase is dedicated to build solid partnerships and to detect real investment opportunities for the top companies in the call. Participation in major events for start-ups for promotion will be a must.

EVOLVE will start with a kick-off event online, where the teams and their coaches will define their new KPIs and milestones for this phase.

The projects will be encouraged to gain enough traction for next investment phase in terms of sales, prospects, users, markets and customers.

6.4.1   Evaluation

Demo

After the weeks of training and mentoring, a demo will take place in Berlin, where all SMEs that took part in the Evolve phase will pitch their developed solution and business model in front of data providers, selected investors and the press.

Deliverables

A **summary comprising a progress overview** of each team in the incubator will be requested from the companies. A suitable template for it will be provided by EDI consortium.

6.4.2   Payments

A payment of up to €15,000 will be done at the end of the phase should the KPIs, defined at the beginning of this phase among each SME and its coach be completed and the participation of the teams in the Final Demo Day is verified.

6.5 EDI Events

EDI will organize physical events in each of the phases for the teams involved. It will be compulsory to attend those events in person. At least one representative per team will be required in each event, although it is strongly advised that at least two people attend.

Failing to attend any of the proposed events defined at the beginning of each phase by EDI will automatically disqualify the team from EDI programme.

All the events will be informed with enough time to prepare the logistics and reservations for all the team members. An estimation of the events and places is already described on each phase of these guidelines for applicants.

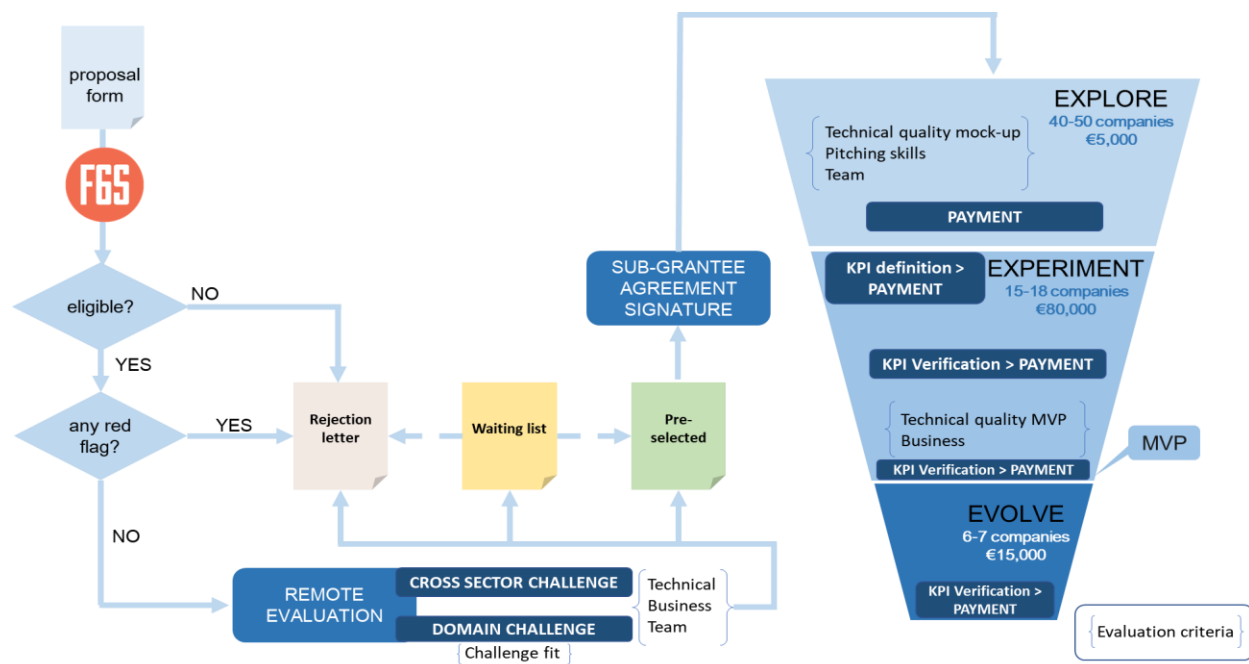## 6.6 Summary of the evaluation and payment process

FIGURE 4. SUMMARY OF THE EVALUATION AND PAYMENT PROCESSES.

7. Intellectual property rights

7.1 Background

- All the participants will confirm and declare that they are the sole creators of the software they will develop and that it is free from third party rights. Combinations of their own software plus open source existing ones will be permitted and fostered (i.e. making available a full-stack of Big Data tools ready to use).

- The start-up/SMEs will be using data with certain restrictive licenses (data owned by the data providers) combined with Open Data, other sources of data or whatever combination that might be needed. It will be the obligation of the start-up/SMEs to clearly state the kind of agreement that applies to these data. Data included from the providers in the consortium will be identified in the sub-grantee agreement and use access will be granted for SMEs and start-ups.

- The ownership of the data provided by the data providers will be always from the partner providing the data. Unless otherwise agreed, the transfer of property or extension of the use of the data, needs to be agreed between the data provider and the party(ies) interested in such exploitation through a bilateral agreement.

- By default, the right to make use of the data provided by Data Providers finalises for the start-up/SME once their participation in the acceleration process is finished.

7.2 Foreground

The property of the software or products developed by sub-granted SMEs, within the framework of the EDI open calls, will be entirely owned by them. It will be their decision to determine if any part of the software will have an open-source license or not. EDI consortium will guide the SMEs and offer the different alternatives on the software licensing making use of the guidelines published by the IPR Helpdesk of the EC[2].

Moreover, given the fact that the developments by the start-ups and SMEs will make use of third party data (data providers), the core consortium will devote efforts in **facilitating agreements between the start-ups and the data providers** to find a common workaround for the continuity of the sub-granted actions within the framework of the open calls.

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[2] IPR Management in Software Development European IPR Helpdesk, 7 April 2014

8. Technical services and infrastructure by EDI

Below the description to the infrastructure and services provided by EDI at each of the process phases.

8.1 Infrastructure

The Big Data infrastructure provided by EDI leverages on three main components, namely the **Data Catalogue**, the **Container Platform** and **the Big Data Stack**.
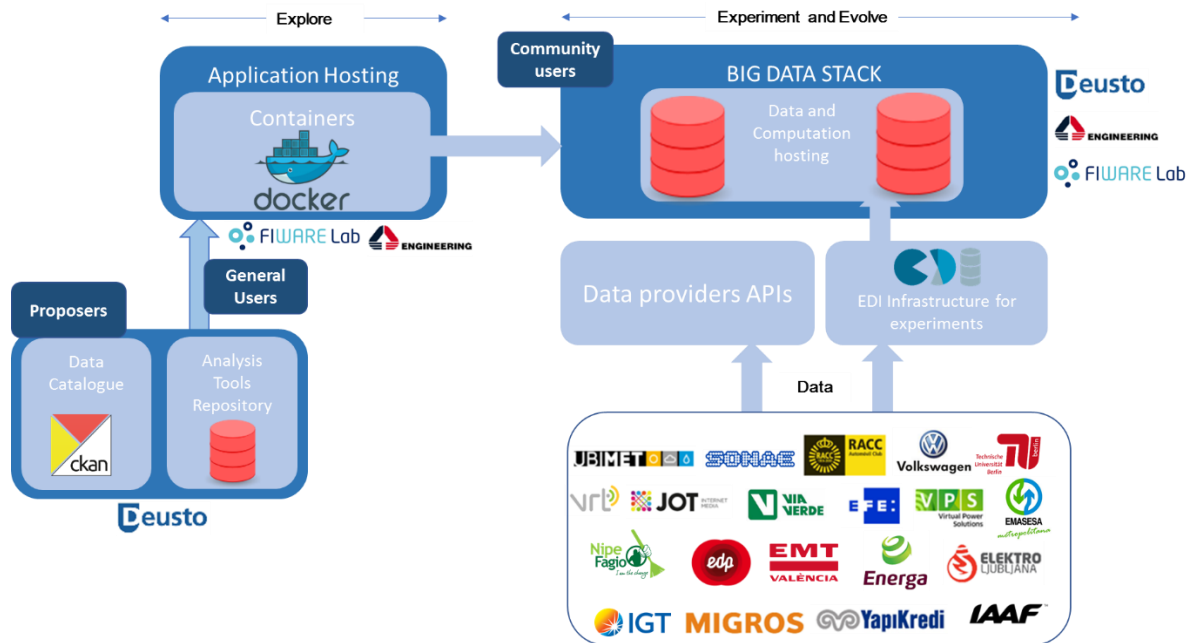

FIGURE 5. INFRASTRUCTURE AVAILABLE FOR SMES AND START-UPS.

- The **Data Catalogue** is a customized CKAN instance in which data providers can publish metadata about their data, instructions on how deal with it and a small sample of the data, allowing the candidates to be sub-granted to explore the data.
- Selected start-ups/SMEs/groups of individuals (in Explore phase) will then have access to a Trial User account at a FIWARE Lab instance **(the Container platform)** to sketch-up their first prototype based on sample data. The infrastructure at this point for selected projects will be scaled up to support 40-to-50 users and projects. The Container Platform allows sub-grantees deploying their own software or third-party software and take advantage from the FIWARE GE offering in order to execute their exploration. This Container Platform is based on the IaaS paradigm that enables Docker usage for the installation of both FIWARE GEs and additional services provided by EDI. The Container Platform allows pulling images from two different registries: the public and well-known Docker Hub and a private registry hosted by EDI in which sub-grantees could publish their own private software images. A different base of images for EDI will be created, to ease the integration of custom developments with Big Data Stack tools.
- SMEs/start-ups accessing the Experiment phase will have at their disposal the full capabilities of the platform (**Big Data Stack**) where a full data and computation environment comprised of a set

of dedicated servers especially designed for Big Data operations and data hosting. It will be a multi-tenant infrastructure for the participants where each will count with its own dedicated working space. The characteristics per server are:

- o Full root access with 1 dedicated IP address (only available to ENG and DEUSTO as managers)
- o 99,99% service level agreement
- o 1.65Tbit bandwidth
- o High-performance Intel® Xeon® E5-1650 v3 Hexa-Core Haswell processor and 128 GB DDR4 ECC RAM,
- o Two 240GB, 6Gb/s Data Centre Series SSD hard drives.

The servers will be under a leasing scheme with an EU provider that can facilitate scale-up and down the size and processing power based on the current needs of the start-ups and SMEs on a flexible way. To guarantee security and privacy issues we have determined that dedicated servers (non-virtual) will be part of our infrastructure. The management will be done by ENG.

Start-ups/SMEs that are selected from Explore to Experiment phase will continue using FIWARE Lab services. They will be promoted to Community Users and hosted in the FIWARE Lab infrastructure operated by ENG. This implies an increase of availability time and service levels (resources and support).

In some cases, they will have also access to the capabilities offered by some of the data providers, which will grant access to their own infrastructures and APIs. Data will be hosted directly in the proper EDI infrastructure or in the Data Providers environments (this will depend on the level of privacy and legal restrictions that each provider may have depending on the type of data and level of access granted).

- ▪ **Big Data Stack** comprises all tools related to Big Data processing. Within the Big Data Stack, sub-grantees will be able to apply different ETL (Extract, Transform and Load) processes using the most popular Big Data tools. As can be seen in Figure 5, the Big Data Stack is formed by 7 different layers:
    - o **Distributed Data Storage**: this layer is in charge of storing both datasets provided by data providers and intermediate and final data managed by the sub-grantees. Implemented by Hadoop HDFS.
    - o **Data Management**: the purpose of tools at this layer is to load and transport data among different processing tools, in addition to apply different transformations.
    - o **Data Processing**: this layer embraces the core tools of the Big Data Stack. Tools in this layer allow applying distributed computing, querying and indexing over datasets.
    - o **Task Scheduling:** the Big Data Stack will leverage task scheduling, e.g. through a tool like Oozie, allowing sub-grantees scheduling processing task and designing processing workflows.
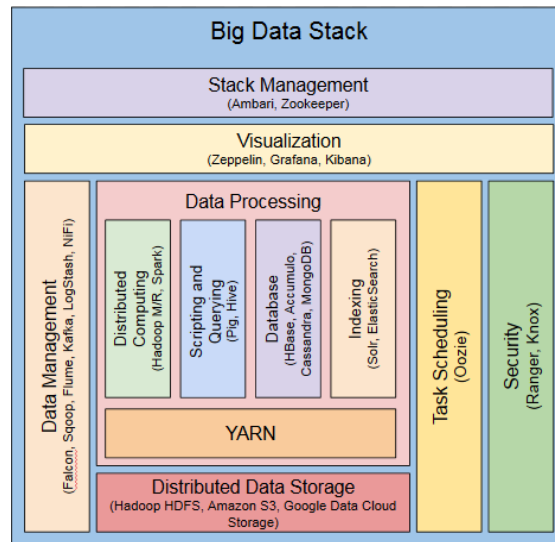
FIGURE 6. BIG DATA STACK

- o **Security:** as each sub-grantee will have its own private environment, the access to its environment must be restricted thanks to the usage of tools like Ranger and Knox.
- o **Visualization:** this layer includes different tools to allow sub-grantees visualizing data, like Apache Zeppelin, Grafana, Elastic.co Kibana or Knowage.
- o **Stack Management:** tools at this layer allow the coordination among different tools. In addition, Apache Ambari allows stack managers (DEUSTO) monitoring the usage and the status of different tools.

8.2 Technical services

The technical services and infrastructure made available will ensure that EDI offers quality services and a ready-to-use environment for the entrepreneurs. The services are mainly divided this way:

- ▪ **Training**: Including webinars about several topics such as the data ecosystem in Europe, legal aspects, data value workshops and general training on the infrastructure and tools.
- ▪ **Support**: A first and second support level for the selected projects has been planned already. Besides that, mentoring with technical experts from the data providers are expected with the selected start-ups/SMEs.
- ▪ **Hands-on events**: Starting with a Datathon in the Explore phase (Berlin) and Tech-training Days in Experiment phase (Bilbao).

8.3 Business services

The programme will provide a variety of possible business training and coaching activities during the incubation phases Explore, Experiment and Evolve. The concrete selection and scheduling will be individually adapted to each batch and its prerequisites and challenges. Nevertheless, there will be an overall scheme of business-oriented activities that will guide the services provided to start-ups and SMEs during the phases:

- **Training**: topics will include design thinking, lean management, agile methodologies, business model canvas, online marketing, PR/communications, Sales, pitch training, user experience, growth hacking. A set of onsite and webinars will be organised during the distinct phases of the incubation process
- **Fund-raising**: including a part of training on types of funding (public and private), analysis of public funding opportunities, due-diligence process, metrics and, importantly, connection with investors (corporates, VCs).
- **Coaching**: each project will be guided by a specialised coach during the Experiment and the Evolve phases. The coach will define and monitor their metrics, to follow them up monthly. Coaches will be the main contact point for the start-ups within the consortium
- **Mentors:** External mentors (for cross sectorial projects mainly) and/or data providers' mentors will set up sessions with the team (from the start of the Experiment phase), in order to help the teams develop their ideas and concepts from a business point of view.

9. References

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