

D7.2 Open Call 1 Handbook

Dissemination level: Public

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1 Executive Summary

This deliverable comprises all the information needed by SMEs to submit applications to the DEMETER Open Call #1 . DEVELOP and for the European Commission to validate the Open Call and publish the announcement in the Funding & Tenders Portal. It contains 9 annexes described below.

2 Acronyms

| | |
|-----|-----------------------------------|
| SME | Small and Medium-sized Enterprise |
| EU | European Union |

3 List of Authors and Reviewers

| Organisation | Author |
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| F6S | António Damasceno |

| Organisation | Reviewer |
|--------------|---------------|
| Mimiro | Harald Volden |
| Centria | Mikko Himanka |

4 Document scope and structure

The purpose of this document is to compile all the documents that formalize the third-party financing rules for the first DEMETER Open Call #1 - DEVELOP.

- **Annex 1: Open Call text**, which provides a summary of the information regarding the Open Call for Proposals for the DEMETER project.
- **Annex 2: Guidelines for Applicants**, which provides a full set of information regarding the Open Call for Proposals for the DEMETER project.
- **Annex 3: Application form**, an online form, temporarily available at F6S platform (<https://www.f6s.com/demeterh2020/apply>)
- **Annex 3.1: Proposal template**, a mandatory word document for applicants to prepare and submit proposals
- **Annex 4: Honour Declaration**, which declares that all conditions related to the DEMETER Open Call #1 - DEVELOP are accepted by an SME legal representative.
- **Annex 5: SME Declaration**, which evaluates the status of the SMEs participating
- **Annex 6: Bank account information**, which collects information on the applicant(s)' bank account where the DEMETER payments will be sent to.
- **Annex 7: Sub-grant Agreement Template**, which provides a template of the sub-grant agreement that the successful applicants will be requested to sign.
- **Annex 8: Template for H2020 Financial Support to Third Parties**, which contains the formal announcement to be published in the EU portal.

Annex 1: Open call text

Annex 1: Open call text

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| 6 | ORGANIZZAZIONE MONDIALE DEGLI AGRICOLTORI | WFO-OMA | Italy |
| 7 | INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS | ICCS | Greece |
| 8 | OPEN GEOSPATIAL CONSORTIUM (EUROPE) LIMITED LBG | OGCE | United Kingdom |
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| 11 | SINTEF AS | SINTEF | Norway |
| 12 | CONFEDERAZIONE NAZIONALE COLDIRETTI | Coldiretti | Italy |
| 13 | LESPROJEKT SLUZBY SRO | LESPROJEKT | Czech Republic |
| 14 | CODAN SA | CODAN S.A. | Spain |
| 15 | UNIVERSIDAD DE MURCIA | UMU | Spain |
| 16 | 13 JUL PLANTAZE AD PODGORICA | Plantaze | Montenegro |
| 17 | AVR BVBA | AVR BVBA | Belgium |
| 18 | SIVECO ROMANIA SA | SIVECO | Romania |
| 19 | TEAGASC - AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY | TEAGASC | Ireland |
| 20 | AGRICOLUS S.R.L. | Agricolus | Italy |
| 21 | ASPLAN VIAK INTERNET AS | AVINET | Norway |
| 22 | MACCARESE SPA SOCIETA AGRICOLA | Maccarese | Italy |
| 23 | CENTRIA AMMATTIKORKEAKOULU OY | CENTRIA | Finland |
| 24 | LANDBRUKETS DATAFLYT SA | Dataflow | Norway |
| 25 | DNET LABS DOO NOVI SAD | DNET Labs | Serbia |
| 26 | F6S NETWORK LIMITED | F6S | United Kingdom |
| 27 | FENADEGAS FEDERACAO NACIONALDAS ADEGAS COOPS FCRL | FENADEGAS | Portugal |
| 28 | AGROPRODUKT-SINKOVIC DOO | SINKOVIC | Serbia |

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| 29 | INFORMATION CATALYST FOR ENTERPRISE LTD | ICE | United Kingdom |
| 30 | IDEATRONIK SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA | IDEATRONIK | Poland |
| 31 | ARIETE FATTORIA LATTE SANO SPA | Latte Sano | Italy |
| 32 | INDATA LLC | Indata | Georgia |
| 33 | INESC TEC - INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTADORES, TECNOLOGIA E CIENCIA | INESC TEC | Portugal |
| 34 | UBIWHERE LDA | Ubiwhere | Portugal |
| 35 | ELLINIKOS GEORGIKOS ORGANISMOS - DIMITRA | ELGO-DIMITRA | Greece |
| 36 | M2XPERT GMBH & CO KG | M2XPERT | Germany |
| 37 | MIMIRO AS | MIMIRO | Norway |
| 38 | PULVERIZADORES FEDE SL | FEDE | Spain |
| 39 | ODIN SOLUTIONS S.L. | OdinS | Spain |
| 40 | PROSPEH, POSLOVNE STORITVE IN DIGITALNE RESITVE DOO | PROSPEH | Slovenia |
| 41 | FEIRMEOIRI AONTUITHE NA HEIREANN IONTAObIATHE TEORANTA LBG | THE IFA | Ireland |
| 42 | PROBOT OY | PROBOT | Finland |
| 43 | INSTYTUT CHEMII BIOORGANICZNEJ POLSKIEJ AKADEMII NAUK | PSNC | Poland |
| 44 | INSTITUTO NACIONAL DE INVESTIGAÇÃO AGRARIA E VETERINARIA | INIAV | Portugal |
| 45 | ITC - INOVACIJSKO TEHNOLOSKI GROZD MURSKA SOBOTA | ITC | Slovenia |
| 46 | RO TECHNOLOGY SRL | ROTECH | Italy |
| 47 | GEORGIAN FARMERS ASSOCIATION | GFA | Georgia |
| 48 | FUNDACION TECNALIA RESEARCH & INNOVATION | TECNALIA | Spain |
| 49 | UNIVERSITY COLLEGE CORK - NATIONAL UNIVERSITY OF IRELAND, CORK | Tyndall | Ireland |
| 50 | UDRUZENJE PROIZVODJACA GROZDJA I VINA SA OZNAKOM GEOGRAFSKOG POREKLA SREM - FRUSKA GORA | SREM | Serbia |
| 51 | UNIVERZITET DONJA GORICA PODGORICA | UDG | Montenegro |
| 52 | WIELKOPOLSKI OSRODEK DORADZTWA ROLNICZEGO W POZNANIU | WODR | Poland |
| 53 | ASOCIATIA PRODUCATORILOR DE PORUMB DIN ROMANIA | APPR | Romania |
| 54 | UNIVERSIDAD POLITECNICA DE MADRID | UPM | Spain |
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| 57 | TRONDELAG FORSKNING OG UTVIKLING AS | TFoU | Norway |

| Participant number | Participant organisation name | Short name | Country |
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The DEMETER project, co-funded from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 857202, foresees as an eligible activity the provision of financial support to third parties, as a mean to achieve its own objectives.

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Funding scheme: Innovation action (IA) | Theme: H2020-DT-2018-2020¹
 Start date of project: 01 September 2019 | Duration 42 months

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List of acronyms

Table 2: List of Acronyms

| | |
|------|--|
| EC | European Commission |
| EU | European Union |
| SME | Small and Medium-sized Enterprise |
| IoT | Internet of Things |
| CAP | Common agricultural policy |
| FMIS | Financial Management Information System |
| APP | Application |
| API | Application programming interface |
| REST | Representational state transfer |
| IACS | Integrated Administration and Control System |
| GDPR | General Data Protection Regulation |

1 Introduction

This document provides information regarding the first Open Call for Proposals for the DEMETER project (also referred as Open Call #1 - DEVELOP). All associated Annexes must be additionally considered for the submission of a Proposal.

DEMETER organise this first open call to engage SMEs in the development, integration, and interoperability of their technological product/service into the DEMETER enabler HUB.

1.1 Information on DEMETER project

The DEMETER Project is a large-scale deployment of farmer centric interoperable smart farming-IoT based platforms delivered through a series of 20 pilots across 18 countries (15 States in the EU). Involving 60 partners, DEMETER adopts a multi-actor approach across the value chain (demand and supply), with 25 deployment sites, 6,000 farmers and over 38,000 devices and sensors being deployed and participants involved come from different production sectors (dairy, meat, vegetables, fruit and arable crops), production systems (conventional and organic) and different farm sizes and types, optimising the data analysis obtained across multiple farms.

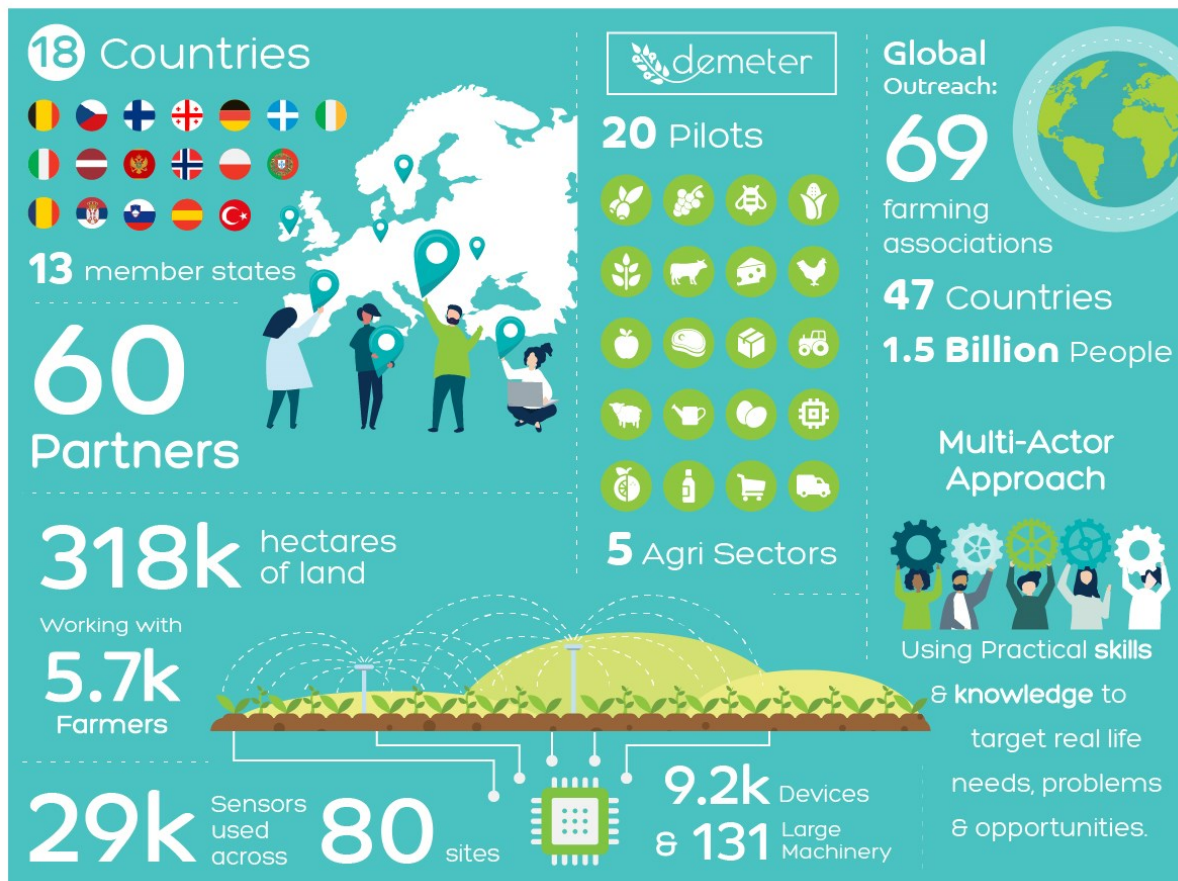


Figure 1: DEMETER in figures

DEMETER is demonstrating the real-life potential of advanced standards-based interoperability between IoT technologies by adapting and extending existing standards into an over-arching Agricultural Information Model, concurrently ensuring security, privacy and business confidentiality across the full value chain in multiple agri-food operational environments. DEMETER is encompassing a multi system and multi data source integration considering not only IoT but legacy systems, open data, geographical and satellite information, and in general will provide an open and interoperable

data integration model. DEMETER displays how an integrated approach to business modelling and user acceptance can support sustainable farming and food production systems, provide safe food and support farmers in their decision-making in 'doing more with less'.

DEMETER is bringing new business opportunities on the farm and in the wider agri-food economy, while concurrently contributing to the safeguarding of Europe's precious natural resources.

DEMETER's goal is the creation of a secure and sustainable European IoT technology and business ecosystem whose impact could be transformative in the EU food and agriculture sector, and potentially across the world.

2 Open Call #1 – DEVELOP

2.1 Objective

The DEMETER Open Call #1 - DEVELOP aims to attract and engage Startups/ SMEs with technology products that can be implemented within the Agro-business. DEMETER will fund the activities of integration and interoperability of those technology solutions, and improvement of their innovation level. Such solutions will enlarge and enrich the pool of technology offers/ options of DEMETER towards the co-creation of particular solutions to overcome end-users needs and challenges.

2.2 Main characteristics

The financial support provided within the Open Call #1 - DEVELOP, addresses individual SMEs aiming to integrate their technologies within DEMETER ecosystem as shown in the next table.

Table 3: DEMETER Open Call #1 - DEVELOP main characteristics

| | |
|--|---|
| Open call timeframe | From the 16 th of September 2020 to the 18 th of November 2020, at 17:00 CET |
| DEVELOP Activities to be funded | Reshape SME technology in order to integrate and make it interoperable with DEMETER platform. |
| Duration of activities | 6 months for development and integration activities 19 months of service maintenance activities Total: 25 months |
| Budget per project | Up to €30.000 (lump sum) per SME |
| Milestones/ payments | Sprints of 2-months with evaluation of sprint results. Payments are associated with respective results and divided by 30% + 30% + 40% (lumpsum base, based on deliverables and outcomes). |
| Evaluation | Meeting with DEMETER assigned person (depending on the technology expertise required to evaluate results) at the end of each sprint. |
| Number of SMEs to be selected | Around 8 to 12 |

2.3 Topics/Challenges

Applicants must submit their proposals for one of the five topics below.

Table 4: Description of topic #1


|  | Topic #1 Soil workability and humidity monitoring | | |
|---|---|-------------------|----------------------------------|
| Challenge | To be able to enter a field to do a work, machine need to find a ground strong enough to support the weight of them. That is the reason why the prediction of soil workability is so important. Otherwise, farmers are going to fields and have to come back to farm because the ground is still too wet and therefore increasing the cost and the environmental impact. Soil humidity after rain to predict possibility of work in fields enabling better planting, application and harvest but also reducing cost of machinery. | | |
| Requirements | <u>Geographical</u> : EU coverage. | | |
| Minimum deliverables required | 1st Sprint (M2) | 2nd Sprint (M4) | 3rd Sprint (M6) |
| | -Presentation | -Feasibility test | -Proof of concept with one pilot |
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture | | |
| Expected outcome | Increase the precision of soil humidity leading to: -improving uptime for machinery. -minimizing soil compaction. -improving efficiency of pesticide and nutrient application. | | |

Table 5: Description of topic #2



|  | Topic #2 Interoperable Geo Tagged Photo APP | | |
|---|---|--|--|
| Challenge | Farmers use to provide information to public administrations for several reasons. Paying Agencies dealing with CAP funds request many information from them in order to pay the subsidies. CAP post 2020 forces paying agencies to monitor the entire territory for agro-environmental and CAP performance checks where Sentinel images are not enough. Then all EU Member States are going to request to the farmers specific Geo tagged photos with specific metadata requested to them in order to conclude the monitoring phase for the whole territory, including small parcels, or crops difficult to being identified by satellite images. In order to facilitate information provision from farmers to FMIS or to Paying Agencies directly, it is being requested a Geo tagged photos APP using a common open API interface based on REST protocol to demonstrate DEMETER interoperability enabler for FMIS. The GeoTagged APP should interoperate with DEMETER Field Book, FMIS interfaces, IACS post 2020 deployed in EU Member States using same REST Open API defined in DEMETER. | | |
| Requirements | <u>Technology readiness level:</u> 7 or higher <u>Source code availability:</u> Open source <u>Standards:</u> API REST <u>Programming language:</u> Android, IOS, or multi mobile Platforms (Cordoba, Xamarin). <u>Security:</u> Considering GDPR and authentication mechanisms <u>Minimum geographical coverage:</u> Spain and Ireland <u>Other:</u> Infographics, without specific language menus (to be used by farmers all over Europe) | | |
| Minimum deliverables required | 1st Sprint (M2) -Presentation. -Requirements, UML definitions. -Multi Actor Approach sessions participation for co-creation and requirements definition. | 2nd Sprint (M4) -Operational test of Geotagged Photos APP with FMIS prototype provided by DEMETER partners. | 3rd Sprint (M6) -Deployment of an integration test. |
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture and FMIS Framework 2) Webinar about Farmers needs and Data Sharing Legal Requirements 3) SW Component definition with harmonized API description for REST | | |
| Expected outcome | Geotagged Photos APP addressing API REST definition provided by DEMETER. <ul style="list-style-type: none"> • To facilitate decreasing time for delivery information requested from public administration. • To increase the content and quality of data for DSS in FMIS. | | |

Table 6: Description of topic #3


|  | Topic #3 ISOBUS enabler | | |
|---|---|--|-----------------------------------|
| Challenge | <p>Interoperability is one of the key challenges in agriculture, where interconnection between heterogeneous hardware and software systems plays a key role. The farmers are using machinery coming from different vendors, with their internal systems from another vendor (or multiple vendors covering different processes); which makes it hard to collect the data about machinery and integrate it with farmers systems.</p> <p>The goal is to enable different protocols and standards in the agri-food domain, talk to each other, by enabling machinery to interoperate with other machines and platforms. This would be possible if existing state of the art protocols for machinery (ISOBUS protocol stack) are analysed and appropriate software mapping mechanisms developed to enable collection and communication over ISOBUS protocol stack. The final outcome should be interoperability Gateway software component that implements ISOBUS protocol to cover both technical interoperability defining integration of hardware and software, and semantic interoperability by ensuring that standardised data formats are supported.</p> <p>Unfortunately the global agricultural industry has struggled to achieve a basic goal: make it easy for the various systems that a grower wants to use in their business “talk to each other” when it comes to a shared data format. eliminate the major pain points to broad use of precision agriculture data by easily enabling interoperability between different software and hardware applications. The proposed technology will enable interoperability between different agriculture hardware, tools, and systems without any deep knowledge about the ISOBUS protocol.</p> | | |
| Requirements | <p><u>Technology readiness level</u>: 6 or higher <u>Source code availability</u>: Open source <u>Standards</u>: ISOBUS stack:</p> <ul style="list-style-type: none"> -ISO 11783-3: Data Link Layer with PGN handling -ISO 11783-5: Network Management with any amount of working sets -ISO 11783-6: UT Working Set with AUX-N, Multilanguage and multi-mask support -ISO 11783-7: Application Layer with the data-handling -ISO 11783-10: Task controller client (TC-BAS, TC-GEO and TC-SC) - ISO 11783-12: Diagnostic Services with Level-1 data - ISO 11783-13: File Server client <p><u>Programming language</u>: .NET, JAVA <u>Data management</u>: ISO 11783-10 ISOXML Tag <u>Intellectual property rights</u>: General Public License (GPL) <u>Other</u>: Experience in the transport domain, software development (API, edge)</p> | | |
| Minimum deliverables required | 1st Sprint (M2) -Specification of the requirements and the interoperability architecture for new DEMETER building block. | 2nd Sprint (M4) -Implemented and validated API. | 3rd Sprint (M6) -Final report. |

| | |
|--------------------------------------|--|
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture 2) Technical support, infrastructure access. 3) In-site evaluation in one pilot during 2 nd stage. 4) Mentoring. |
| Expected outcome | Improved interoperability between different equipment and systems. Improved communication efficiency for legacy machinery. |

Table 7: Description of topic #4

|  | Topic #4 Blockchain-based solutions for agricultural applications | | |
|---|--|-------------------|--------------------------------------|
| Challenge | The need of traceability in agriculture domain is well-know and it could be applied in numerous scenarios from simple supply chain monitoring, procurement tracking, crop and food production, insurance, to land registration and payment of services. The main challenge of the existing blockchain-based implementations is that they still suffer from traditional challenges such as a lack of or poor infrastructure, failures of interoperability, and what is most important the ability to easily integrate in an existing farmer system. Blockchain offers independently verifiable data storage and processing capabilities, perfectly suited to multi-stakeholder environments without centralised control/power over the system. The interoperability and traceability challenge should be addressed by providing the high TRL Systematic traceability blockchain component, which is already well tested and used in commercial services. The component should implement DEMETER defined semantic model, documented step-by-step integration manual and expose service online which in few steps could lead to integration of the component with any agri-food vertical. | | |
| Requirements | <p><u>Technology readiness level</u>: 6 or higher</p> <p><u>Source code availability</u>: Open Source blockchain platform</p> <p><u>Standards</u>: Standards for document creation and management, electronic signature etc. (PaDES/XaDES/eIDAS etc..)</p> <p><u>Programming language</u>: Open API required, along with Software Development Kits / Libraries for at least 3 of the most popular programming languages: JavaScript, Python, C#, Java, React, Angular, Swift.</p> <p><u>Security</u>: Banking-grade</p> <p><u>Geographical</u>: Based in Europe</p> <p><u>Data management</u>: Built-in data storage and querying features, without requirement for translation/middleware layer.</p> <p><u>Intellectual property rights</u>: Open source</p> <p><u>Other</u>: REST API interfaces. Possibility to deploy private blockchain if needed, with no scalability issues.</p> | | |
| Minimum deliverables required | 1st Sprint (M2) | 2nd Sprint (M4) | 3rd Sprint (M6) |
| | -Requirements definition | -Integration test | -Deployment and evaluation in pilots |
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture 2) Technical support 3) Infrastructure access | | |
| Expected outcome | At least 1 functional prototype of a blockchain-based solution for agricultural applications developed (traceability, commodity trading, machinery/vehicles/equipment management, ...) | | |

Table 8: Description of topic #5

|  | Topic #5 DEMETER Business process integration (BPM) | | |
|---|---|---|---|
| Challenge | Farm management implies using a range of data sources and creating actions based on the analysis of the collected data. A coherent and streamlined creation of actions and monitoring of their execution is of great importance to medium size and large agriculture companies to ensure efficient utilization of the work force and the company assets while contributing positively to overall success of the company. The application of a BPM in agriculture helps in separate the logical layer from the technical implementation (i.e., the process modelling and the software application development) which will ensure efficient sharing of data between business processes in real time with business processes integration. This integration allows setting a basis for planning each step of production process, optimal usage of all resources, defining work orders, defining products shipping plan, setting a marketing budget etc. Data are in many cases used as triggers for the next production process thus providing fluently activities workflow. The interoperability needs to be ensured in a workflow, that will be defined as a sequence of activities (and transactions) that must be performed; the actors responsible for specific activities; data that have to be sent, received and shared (between actors and/or workflows); and the format to use for the messaging. | | |
| Requirements | <u>Technology readiness level:</u> 6 or higher <u>Standards:</u> REST interfaces, Data integrations standards. <u>Programming language:</u> Java, Python, .NET. or other widely used languages could be used. <u>Data management:</u> NGSI-LD <u>Intellectual property rights:</u> GPL licence is most welcomed to boost the usage of the component, but other proprietary licenses could be also proposed. | | |
| Minimum deliverables required | 1st Sprint (M2) -Analysis of business processes to be integrated. -Business process modelling. | 2nd Sprint (M4) -Integration plan for a few selected business processes defined. | 3rd Sprint (M6) -Implementation and validation of a few selected business processes with integration to DEMETER framework. |
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture 2) Pilot site. 3) Technical details for business integration. | | |
| Expected outcome | Improved workforce utilization. Improved operation efficiency. Resource usage optimization. | | |

2.4 Submission and selection process

Submission to the DEMETER Open Call #1 - DEVELOP will be enabled on the 16th of September 2020 and will end on the 18th of November 2020, at 17:00 CET. Below are presented the current tentative dates for the different phases. The opening and closing dates can be subject to change in case of any modifications in the project's schedule.

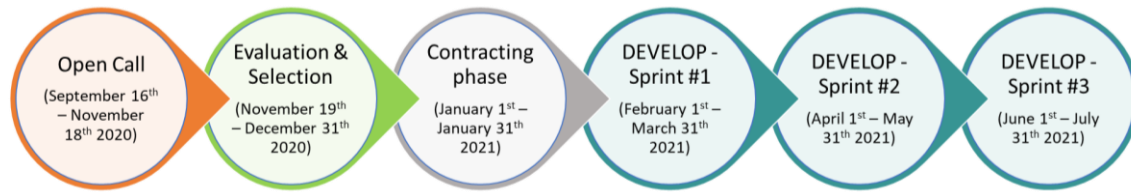


Figure 2 DEMETER Open Call #1 - DEVELOP timeline

3 Additional Information

3.1 Open Call Additional Material

Open Call supported material:

- **Annex 1: Open Call text**, this document
- **Annex 2: Guidelines for Applicants**,
- **Annex 3: Application form**, an online form, temporarily available at F6S platform (<https://www.f6s.com/demeterh2020/apply>)
- **Annex 3.1: Proposal template**, a mandatory word document for applicants to prepare and submit proposals
- **Annex 4: Honour Declaration**, which declares that all conditions related to the DEMETER Open Call #1 - DEVELOP are accepted by an SME legal representative.
- **Annex 5: SME Declaration**, which evaluates the status of the SMEs participating
- **Annex 6: Bank account information**, which collects information on the applicant(s)' bank account where the DEMETER payments will be sent to.
- **Annex 7: Sub-grant Agreement Template**, which provides a template of the sub-grant agreement that the successful applicants will be requested to sign.
- Frequently Asked Questions & answers published at the DEMETER project's website (<https://h2020-demeter.eu/>).

3.2 Contacts

The DEMETER consortium will provide information to the applicants via the F6S blog, so that the information (question and answer), will be visible to all participants.

- Online Q&A: <https://www.f6s.com/demeterh2020/discuss>
- Apply via: <https://www.f6s.com/demeterh2020/apply>
- F6S support team: support@f6s.com
- More info at: <https://h2020-demeter.eu/>

For extraordinary communication need, please contact the Help Desk: opencalls@h2020-demeter.eu

4 References

ⁱ H2020 Call Objective H2020-DT-2018-2020 TOPIC: Agricultural digital integration platforms, <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/dt-ict-08-2019>

Annex 2: Guidelines for Applicants

Annex 2: Guidelines for Applicants

DEMETER Open Call #1 – DEVELOP

Closing Date for Proposals:

Wednesday, 18th of November 2020, at 17:00 CET

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| 3 | INTRASOFT INTERNATIONAL SA | INTRA | Luxembourg |
| 4 | EMPRESA DE TRANSFORMACION AGRARIA SA | TRAGSA | Spain |
| 5 | JOHN DEERE GMBH & CO. KG*JD | JD | Germany |
| 6 | ORGANIZZAZIONE MONDIALE DEGLI AGRICOLTORI | WFO-OMA | Italy |
| 7 | INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS | ICCS | Greece |
| 8 | OPEN GEOSPATIAL CONSORTIUM (EUROPE) LIMITED LBG | OGCE | United Kingdom |
| 9 | ATOS SPAIN SA | ATOS SPAIN SA | Spain |
| 10 | FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V. | Fraunhofer | Germany |
| 11 | SINTEF AS | SINTEF | Norway |
| 12 | CONFEDERAZIONE NAZIONALE COLDIRETTI | Coldiretti | Italy |
| 13 | LESPROJEKT SLUZBY SRO | LESPROJEKT | Czech Republic |
| 14 | CODAN SA | CODAN S.A. | Spain |
| 15 | UNIVERSIDAD DE MURCIA | UMU | Spain |
| 16 | 13 JUL PLANTAZE AD PODGORICA | Plantaze | Montenegro |
| 17 | AVR BVBA | AVR BVBA | Belgium |
| 18 | SIVECO ROMANIA SA | SIVECO | Romania |
| 19 | TEAGASC - AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY | TEAGASC | Ireland |
| 20 | AGRICOLUS S.R.L. | Agricolus | Italy |
| 21 | ASPLAN VIAK INTERNET AS | AVINET | Norway |

| Participant number | Participant organisation name | Short name | Country |
|--------------------|---|--------------|----------------|
| 22 | MACCARESE SPA SOCIETA AGRICOLA | Maccarese | Italy |
| 23 | CENTRIA AMMATTIKORKEAKOULU OY | CENTRIA | Finland |
| 24 | LANDBRUKETS DATAFLYT SA | Dataflow | Norway |
| 25 | DNET LABS DOO NOVI SAD | DNET Labs | Serbia |
| 26 | F6S NETWORK LIMITED | F6S | United Kingdom |
| 27 | FENADEGAS FEDERACAO NACIONALDAS ADEGAS COOPS FCRL | FENADEGAS | Portugal |
| 28 | AGROPRODUKT-SINKOVIC DOO | SINKOVIC | Serbia |
| 29 | INFORMATION CATALYST FOR ENTERPRISE LTD | ICE | United Kingdom |
| 30 | IDEATRONIK SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA | IDEATRONIK | Poland |
| 31 | ARIETE FATTORIA LATTE SANO SPA | Latte Sano | Italy |
| 32 | INDATA LLC | Indata | Georgia |
| 33 | INESC TEC - INSTITUTO DE ENGENHARIA DE SISTEMAS E COMPUTADORES, TECNOLOGIA E CIENCIA | INESC TEC | Portugal |
| 34 | UBIWHERE LDA | Ubiwhere | Portugal |
| 35 | ELLINIKOS GEORGIKOS ORGANISMOS - DIMITRA | ELGO-DIMITRA | Greece |
| 36 | M2XPERT GMBH & CO KG | M2XPERT | Germany |
| 37 | MIMIRO AS | MIMIRO | Norway |
| 38 | PULVERIZADORES FEDE SL | FEDE | Spain |
| 39 | ODIN SOLUTIONS S.L. | OdinS | Spain |
| 40 | PROSPEH, POSLOVNE STORITVE IN DIGITALNE RESITVE DOO | PROSPEH | Slovenia |
| 41 | FEIRMEOIRI AONTUITHE NA HEIREANN IONTAObIATHE TEORANTA LBG | THE IFA | Ireland |
| 42 | PROBOT OY | PROBOT | Finland |
| 43 | INSTYTUT CHEMII BIOORGANICZNEJ POLSKIEJ AKADEMII NAUK | PSNC | Poland |
| 44 | INSTITUTO NACIONAL DE INVESTIGAÇÃO AGRARIA E VETERINARIA | INIAV | Portugal |
| 45 | ITC - INOVACIJSKO TEHNOLOSKI GROZD MURSKA SOBOTA | ITC | Slovenia |
| 46 | RO TECHNOLOGY SRL | ROTECH | Italy |
| 47 | GEORGIAN FARMERS ASSOCIATION | GFA | Georgia |
| 48 | FUNDACION TECNALIA RESEARCH & INNOVATION | TECNALIA | Spain |
| 49 | UNIVERSITY COLLEGE CORK - NATIONAL UNIVERSITY OF IRELAND, CORK | Tyndall | Ireland |
| 50 | UDRUZENJE PROIZVODJACA GROZDJA I VINA SA OZNAKOM GEOGRAFSKOG POREKLA SREM - FRUSKA GORA | SREM | Serbia |
| 51 | UNIVERZITET DONJA GORICA PODGORICA | UDG | Montenegro |
| 52 | WIELKOPOLSKI OSRODEK DORADZTWA ROLNICZEGO W POZNANIU | WODR | Poland |

| Participant number | Participant organisation name | Short name | Country |
|--------------------|--|------------|---------|
| 53 | ASOCIATIA PRODUCATORILOR DE PORUMB DIN ROMANIA | APPR | Romania |
| 54 | UNIVERSIDAD POLITECNICA DE MADRID | UPM | Spain |
| 55 | FUNDACION CENTRO DE TECNOLOGIAS DE INTERACCION VISUAL Y COMUNICACIONES VICOMTECH | VICOM | Spain |
| 56 | VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V. | VITO | Belgium |
| 57 | TRONDELAG FORSKNING OG UTVIKLING AS | TFoU | Norway |
| 58 | NAPIERALA RYSZARD | RNapierala | Poland |
| 59 | FRACKOWIAK MACIEJ | Frackowiak | Poland |
| 60 | ZOETIS BELGIUM SA | ZOE BEL | Belgium |

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List of acronyms

| | |
|------|--|
| API | Application programming interface |
| APP | Application |
| AWU | Annual Work Unit |
| BPM | Business Process Integration |
| CAP | Common agricultural policy |
| DSS | Decision Support System |
| EC | European Commission |
| ERS | Evaluation Report Summary |
| EU | European Union |
| FMIS | Financial Management Information System |
| GDPR | General Data Protection Regulation |
| GPL | General Public License |
| IACS | Integrated Administration and Control System |
| IoT | Internet of Things |
| ISO | International Organization for Standardization |
| NDA | Non-Disclosure Agreement |
| OCT | Overseas Countries and Territories |
| PDF | Portable Document Format |
| REST | Representational state transfer |
| SME | Small and Medium-sized Enterprise |
| TRL | Technology Readiness Level |
| VAT | Value-Added Tax |

1 Introduction

This document provides a full set of information regarding the first Open Call for Proposals, also referred as Open Call #1 - DEVELOP, for the DEMETER project. All associated Annexes must be additionally considered for the submission of a Proposal.

DEMETER organise this first open call to engage SMEs in the development, integration, and interoperability of their technological product/service into the DEMETER's enabler HUB.

1.1 Context

Agriculture is a major component of Europe's economy, and the diversity of challenges it faces is addressed by a set of European policies. In addition to Europe's common agricultural policy (CAP), policies address a whole range of issues, from food (FOOD2030) to bioeconomy (BioEconomy strategy, jointly updated in 2018 by DG Research and Innovation, DG Agriculture and Rural Development, DG Environment, DG Maritime Affairs, and DG Industry and Entrepreneurship). The increasing importance of digitally engineered solutions to support farmers is also reflected in the Digital Single Market strategy which focuses on three main pillars, including '**the right environment for networks and services**' and 'ensuring that the European economy takes full advantage of what digitisation offers'. This has been complemented, in April 2018, by the adoption of the communication 'Towards a common European data space'ⁱⁱ, key steps towards the creation of a common data space in Europe - a seamless digital area with the **scale that will enable the development of new products and services based on data**. In parallel, important changes have been introduced in the H2020 programme in 2018 to **boost impact**. One of these changes is the introduction of **focused areas**; of particular importance is the 'Digitising and transforming European Industry and Service' (DT), which highlights the **importance of facilitating and demonstrating the benefits of increased adoption of digital enablers** in vertical domains. Furthermore, the farming context benefits from an active European Innovation Partnerships, EIP-AGRI, providing a focal point for streamlining innovation in a coherent approach.

This rich policy context is set at a time where **digital transformation applied in the agriculture domain faces very specific challenges**. On the one hand, it can build on a wide array of digital technologies, Internet of Things, Big Data, Artificial Intelligence, Robotics. Together, these enable increased automation, more precise control on production itself. But most of all, they deliver the ability to collect more and more data – from a maze of sensors and applications. This ability is not yet fully at the service of farmers, even if the problem of sharing and exchanging data in agriculture has been studied for a long time. Future Farm (Sorensen, et al.) says that farmers need to **manage a lot of information in order to make economic and environmental sound decisions**. Such process is very labour intensive due the fact that most parts have either to be executed manually, and/or require farmers use different tools to manage monitoring and data acquisition on-line in the field.

1.2 DEMETER project

1.2.1 DEMETER's ambition

With no common European data space existing for the agricultural sector and ever more data relevant to farmers being generated by sensors/IoT devices, farm equipment, production systems and reporting mechanisms, industry players have seized the opportunity to build their own proprietary data spaces that are not interoperable. This forces **agricultural data consumers** to relate to a multitude of different systems, data models and user interfaces in order to access data they need to support their increasingly complex decision making. It has also undermined the potential of farmers as **data producers** to fully benefit from the economic potential of the data they generate. DEMETER's ambition is to facilitate and speed-up the deployment of **interoperable data driven smart farming solution providing decision support and control systems for the agricultural sector that empower farmers** to take better decisions, allowing them to harness the full value of their own data and

knowledge as well as those shared with others, therefore improving the functioning of the agricultural knowledge and innovation systems and fostering the DSM based on innovation in the sector. Taking into account that ‘better’ is a word that can take on multiple meanings that are always context-dependent. One farmer may want to improve its irrigation planning, while another may need to increase milk quality with respect to criteria set by a cooperative.

DEMETER aims to put digital means at the service of farmers

- **using a human-in-the-loop model** that constantly focuses on mixing human knowledge and expertise with digital information
- **focusing on interoperability as the main digital enabler**, extending the **coverage of interoperability** across data, services, platforms M2M communication, and online intelligence but also human knowledge, and the **implementation of interoperability** by connecting farmers, advisors and providers of ICT solutions and machinery
- transforming the sector by building the solution on an array of digital technologies: Internet of Things, Earth Observation, Big Data, Artificial Intelligence, and of digital practices: cooperation, mobility and open innovation.

These choices have been made working with DEMETER’s large user base (**more than 5000 farmers**) and extensive piloting coverage (**20 pilots across 18 countries** – Belgium, Czech Republic, Finland, France, Georgia, Germany, Greece, Ireland, Italy, Montenegro, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Spain, Turkey, United Kingdom).



Figure 1: DEMETER in figures

1.2.2 DEMETER’s objectives

To empower farmers and farmer cooperatives to a) better exploit their *existing operational context*, i.e. the platforms, machinery, sensors they have, to extract new knowledge on which they can improve their decisions and b) *ease* the acquisition, evolution and update of their context by focusing their investments where these are needed, based on their goals measured by key performance indicators (KPIs) that they select, **DEMETER defined 6 objectives.**

Objective 1

Analyse, adopt, *enhance existing* (and if necessary *introduce new*) **Information Models** in the agri-food sector easing data sharing and interoperability across multiple Internet of Things (IOT) and Farming Management Information Systems (FMIS) and associated technologies. Use the information models to create a basis for trusted sharing / exposure of data between farmers.

Benefits: enable connection from different platforms, sensors, information sources and proprietary (to the farmer / cooperative) knowledge through a DEMETER services model.

Objective 2

Build **knowledge exchange mechanisms**, delivering an Interoperability Space for the agri-food domain, presenting technologies and data from different vendors, ensuring their interoperability, and using (and enhancing) a core set of open standards (adopted across all agri-food deployments thereby) coupled with carefully-planned security and privacy protection mechanisms (also addressing business confidentiality).

Benefits: ease the deployment of novel solutions based on different platforms, sensors, information sources using the new information models from Objective 1. Ease the uptake of future (not yet developed) services, data sources, technologies by farmers, with the Interoperability Space allowing the farmers and relevant other stakeholders to increase the range of choices for the most appropriate combination of tools from different suppliers in order to support their expected innovation, limiting the vendor lock-in. Allow the combination of existing systems / machinery with new technologies.

Objective 3

Empower the farmer, as a prosumer, to gain control in the data-food-chain by identifying and demonstrating a series of new IoT-based, data-driven, business models for profit, collaboration and co-production for farmers and across the value chain, leading to disruptive new value creation models.

Benefits: introduce the benefits of data ownership to farmers as a valuable source of income and knowledge sharing

Objective 4

Establish a **benchmarking mechanism** for agriculture solutions and business, targeting end-goals in terms of productivity and sustainability performance of farms, services, technologies, and practices based on a set of key performance indicators that are relevant to the farming community.

Benefit: ease the comparison between competing services, machineries, sensors, platforms prior to acquisition

Objective 5

Reverse the relationship with suppliers, through an innovative model in which **suppliers are responsible** for ensuring that a final solution is optimal to the farmer's existing context and expressed needs.

Benefits: ease the adoption of technologies by farmers, by decreasing the burden of the choices and clarifying the responsibility model, linked to needs and performance improvements defined by the farmers.

Objective 6

Demonstrate the impact of digital innovations across a variety of sectors and at European level.

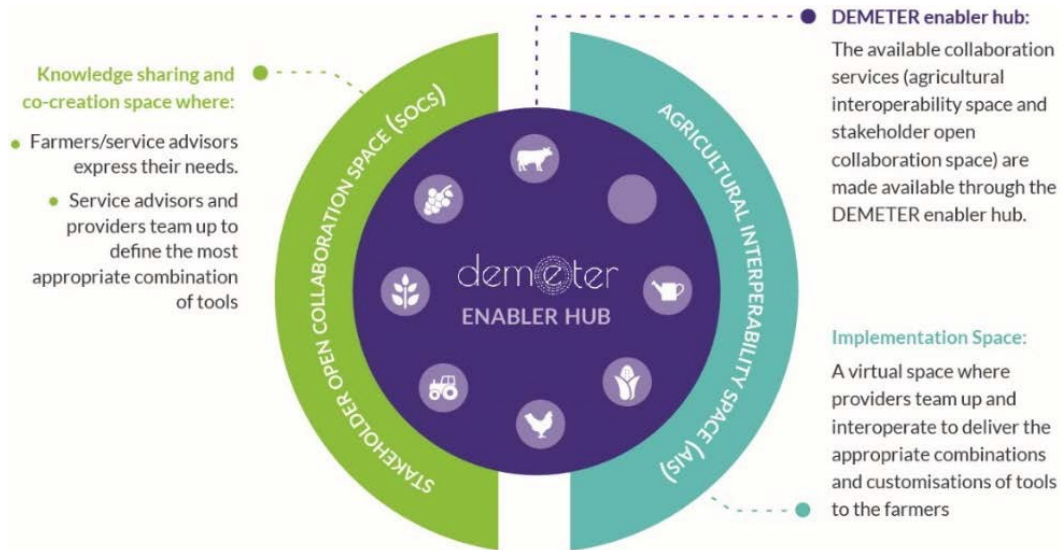
Benefits: ease and streamline mechanisms for all stakeholders, with clearly identified incentives to participate in a sustainable and value creation ecosystem. Structure collaboration channels in a security and privacy aware approach.

These 6 objectives are delivered by a combination of human and digital solutions, concretely deployed through:

- The **DEMETER Stakeholders Open Collaboration Space (SOCS)** whose focus is on **resolving the needs of the farmers** using a structured process that converts an individual need or the most relevant / shared need from a set of needs to a **challenge**. A challenge is then resolved through a unique **co-creation process**, in which farmers, service advisors and providers can select, together, the most appropriate set of tools, devices, components, data sources etc taking into account the existing ones already deployed at the farmers and the farmer-defined improvement goals. The SOCS also includes a wide range of features that, together, deliver the knowledge sharing and improvement process, structuring the **human-in-the-loop dimension of DEMETER**. The SOCS is strongly inspired by the EIP Agri Social Spaces and Operational Groups, operating as a set of defined activities for multiple actors implemented through physical meetings, workshops, hackathons etc and supported by a dedicated online platform.
- The **DEMETER Agricultural Interoperability Space (AIS)**, whose focus is on **delivering** a full set of interoperability mechanisms to actually **deploy** the solution. DEMETER does not define completely new interoperability mechanisms, but uses (and extends) a wide range of pre-existing mechanisms at sensor, data and service levels
- The **DEMETER Enabler HUB**, which centralises the full description of all the components, devices, services, data sources, platforms etc that are accessible for deployment. The HUB provides, on the one side, the harmonised description that enables each component to be used in the co-creation mechanism, and on the other side its uptake in different deployment through the full set of DEMETER enabled interoperability mechanisms. The DEMETER Enabler HUB importantly includes the **mechanisms** to ensure interoperability with components provided through other initiatives, such as IOF2020, DATABIO HUB, AFAR Cloud, Smart AgriHub etc.

A fundamental pillar of the DEMETER strategy is that it reverses the existing relationship from farmers to suppliers. Indeed, in addition to the complexity of non-interoperable solutions, farmers also face the challenge of *choosing between different solutions* without a clear logic between benefits, features and economic models. Nor do they know, a priori, whether new extensions will be compatible with their current solutions, in effect limiting their access to digital improvements. The DEMETER **co-creation mechanism** reverses this relationship: it transfers the responsibility to the suppliers, as the co-creation mechanism requires suppliers to understand the need, identify which other suppliers to work with, analyse the existing solution already deployed at the farmer(s) and propose, either alone or as a pool of suppliers, the appropriate solution.

To **incentivise farmers, service advisors and suppliers** to participate to this co-creation mechanism, DEMETER defines a complete governance for this relationship that clarifies financial retributions, channels to farmers etc. In addition to actively promoting this to farmers, service advisors and suppliers, DEMETER implements two open calls during the lifetime of the project to encourage new challenges to test the DEMETER concept from the initial expression of a need through to the deployment of the best solution.



A high-level overview of DEMETER is provided in the figure above. Its key benefits being to connect a human focused interaction space, on the left with the actual digital implementation space. This is a key benefit of DEMETER, ensuring that it remains fully human centric and human driven – delivering digital enablers that are fully aligned to the needs expressed by the farmers, and based on the knowledge and wisdom captured through structured mechanisms.

2 Call for proposals

2.1 Objectives

The DEMETER Open Call #1 - DEVELOP aims to attract and engage SMEs with technology products that can be implemented within the Agro-business. DEMETER will fund the activities of integration and interoperability of those technology solutions, and improvement of their innovation level. Such solutions will enlarge and enrich the pool of technology offers/ options of DEMETER towards the co-creation of particular solutions to overcome end-users needs and challenges.

2.2 Main characteristics

The Open Call #1 - DEVELOP, addresses individual SMEs aiming to integrate their technologies within DEMETER ecosystem as shown in the next table.

| | |
|--|--|
| Open call timeframe | From the 16 th of September 2020 to the 18 th of November 2020, at 17:00 CET |
| DEVELOP Activities to be funded | Reshape SME technology in order to integrate and make it interoperable with DEMETER platform. |
| Duration of activities | 6 month for development and integration activities 19 months of service maintenance activities Total: 25 months |
| Budget per project | Up to €30.000 (lump sum) per SME |
| Milestones/ payments | 3 sprints of 2-months with evaluation of sprint results. Payments are associated with respective results and divided by 30% + 30% + 40% (lumpsum base, based on deliverables and outcomes). |
| Evaluation | Meeting with DEMETER assigned person (depending on the technology expertise required to evaluate results) at the end of each sprint. See detailed information on section 4 of this document. |
| Number of SMEs to be selected | Around 8 to 12 |

2.3 Topics/ Challenges

Applicants must submit their proposals for one of the five topics below.

Table 2: Description of topic #1


|  | Topic #1 Soil workability and humidity monitoring | | |
|---|---|-------------------|----------------------------------|
| Challenge | To be able to enter a field to do a work, machine need to find a ground strong enough to support the weight of them. That is the reason why the prediction of soil workability is so important. Otherwise, farmers are going to fields and have to come back to farm because the ground is still too wet and therefore increasing the cost and the environmental impact. Soil humidity after rain to predict possibility of work in fields enabling better planting, application and harvest but also reducing cost of machinery. | | |
| Requirements | <u>Geographical</u> : EU coverage. | | |
| Minimum deliverables required | 1st Sprint (M2) | 2nd Sprint (M4) | 3rd Sprint (M6) |
| | -Presentation | -Feasibility test | -Proof of concept with one pilot |
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture | | |
| Expected outcome | Increase the precision of soil humidity leading to: -improving uptime for machinery. -minimizing soil compaction. -improving efficiency of pesticide and nutrient application. | | |

Table 3: Description of topic #2



|  | Topic #2 Interoperable Geo Tagged Photo APP | | |
|---|---|--|--|
| Challenge | Farmers use to provide information to public administrations for several reasons. Paying Agencies dealing with CAP funds request many information from them in order to pay the subsidies. CAP post 2020 forces paying agencies to monitor the entire territory for agro-environmental and CAP performance checks where Sentinel images are not enough. Then all EU Member States are going to request to the farmers specific Geo tagged photos with specific metadata requested to them in order to conclude the monitoring phase for the whole territory, including small parcels, or crops difficult to being identified by satellite images. In order to facilitate information provision from farmers to FMIS or to Paying Agencies directly, it is being requested a Geo tagged photos APP using a common open API interface based on REST protocol to demonstrate DEMETER interoperability enabler for FMIS. The GeoTagged APP should interoperate with DEMETER Field Book, FMIS interfaces, IACS post 2020 deployed in EU Member States using same REST Open API defined in DEMETER. | | |
| Requirements | <u>Technology readiness level:</u> 7 or higher <u>Source code availability:</u> Open source <u>Standards:</u> API REST <u>Programming language:</u> Android, IOS, or multi mobile Platforms (Cordova, Xamarin). <u>Security:</u> Considering GDPR and authentication mechanisms <u>Minimum geographical coverage:</u> Spain and Ireland <u>Other:</u> Infographics, without specific language menus (to be used by farmers all over Europe) | | |
| Minimum deliverables required | 1st Sprint (M2) -Presentation. -Requirements, UML definitions. -Multi Actor Approach sessions participation for co-creation and requirements definition. | 2nd Sprint (M4) -Operational test of Geotagged Photos APP with FMIS prototype provided by DEMETER partners. | 3rd Sprint (M6) -Deployment of an integration test. |
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture and FMIS Framework 2) Webinar about Farmers needs and Data Sharing Legal Requirements 3) SW Component definition with harmonized API description for REST | | |
| Expected outcome | Geotagged Photos APP addressing API REST definition provided by DEMETER. <ul style="list-style-type: none"> • To facilitate decreasing time for delivery information requested from public administration. • To increase the content and quality of data for DSS in FMIS. | | |

Table 4: Description of topic #3

|  | Topic #3 ISOBUS enabler | | |
|---|---|--|-----------------------------------|
| Challenge | <p>Interoperability is one of the key challenges in agriculture, where interconnection between heterogeneous hardware and software systems plays a key role. The farmers are using machinery coming from different vendors, with their internal systems from another vendor (or multiple vendors covering different processes); which makes it hard to collect the data about machinery and integrate it with farmers systems.</p> <p>The goal is to enable different protocols and standards in the agri-food domain, talk to each other, by enabling machinery to interoperate with other machines and platforms. This would be possible if existing state of the art protocols for machinery (ISOBUS protocol stack) are analysed and appropriate software mapping mechanisms developed to enable collection and communication over ISOBUS protocol stack. The final outcome should be interoperability Gateway software component that implements ISOBUS protocol to cover both technical interoperability defining integration of hardware and software, and semantic interoperability by ensuring that standardised data formats are supported.</p> <p>Unfortunately the global agricultural industry has struggled to achieve a basic goal: make it easy for the various systems that a grower wants to use in their business “talk to each other” when it comes to a shared data format. eliminate the major pain points to broad use of precision agriculture data by easily enabling interoperability between different software and hardware applications. The proposed technology will enable interoperability between different agriculture hardware, tools, and systems without any deep knowledge about the ISOBUS protocol.</p> | | |
| Requirements | <p><u>Technology readiness level</u>: 6 or higher <u>Source code availability</u>: Open source <u>Standards</u>: ISOBUS stack:</p> <ul style="list-style-type: none"> -ISO 11783-3: Data Link Layer with PGN handling -ISO 11783-5: Network Management with any amount of working sets -ISO 11783-6: UT Working Set with AUX-N, Multilanguage and multi-mask support -ISO 11783-7: Application Layer with the data-handling -ISO 11783-10: Task controller client (TC-BAS, TC-GEO and TC-SC) - ISO 11783-12: Diagnostic Services with Level-1 data - ISO 11783-13: File Server client <p><u>Programming language</u>: .NET, JAVA <u>Data management</u>: ISO 11783-10 ISOXML Tag <u>Intellectual property rights</u>: General Public License (GPL) <u>Other</u>: Experience in the transport domain, software development (API, edge)</p> | | |
| Minimum deliverables required | 1st Sprint (M2) -Specification of the requirements and the interoperability architecture for new DEMETER building block. | 2nd Sprint (M4) -Implemented and validated API. | 3rd Sprint (M6) -Final report. |

| | |
|--------------------------------------|--|
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture 2) Technical support, infrastructure access. 3) In-site evaluation in one pilot during 2 nd stage. 4) Mentoring. |
| Expected outcome | Improved interoperability between different equipment and systems. Improved communication efficiency for legacy machinery. |

Table 5: Description of topic #4



|  | Topic #4 Blockchain-based solutions for agricultural applications | | |
|---|--|-------------------|--------------------------------------|
| Challenge | The need of traceability in agriculture domain is well-know and it could be applied in numerous scenarios from simple supply chain monitoring, procurement tracking, crop and food production, insurance, to land registration and payment of services. The main challenge of the existing blockchain-based implementations is that they still suffer from traditional challenges such as a lack of or poor infrastructure, failures of interoperability, and what is most important the ability to easily integrate in an existing farmer system. Blockchain offers independently verifiable data storage and processing capabilities, perfectly suited to multi-stakeholder environments without centralised control/power over the system. The interoperability and traceability challenge should be addressed by providing the high TRL Systematic traceability blockchain component, which is already well tested and used in commercial services. The component should implement DEMETER defined semantic model, documented step-by-step integration manual and expose service online which in few steps could lead to integration of the component with any agri-food vertical. | | |
| Requirements | <p><u>Technology readiness level</u>: 6 or higher</p> <p><u>Source code availability</u>: Open Source blockchain platform</p> <p><u>Standards</u>: Standards for document creation and management, electronic signature etc. (PaDES/XaDES/eIDAS etc..)</p> <p><u>Programming language</u>: Open API required, along with Software Development Kits / Libraries for at least 3 of the most popular programming languages: JavaScript, Python, C#, Java, React, Angular, Swift.</p> <p><u>Security</u>: Banking-grade</p> <p><u>Geographical</u>: Based in Europe</p> <p><u>Data management</u>: Built-in data storage and querying features, without requirement for translation/middleware layer.</p> <p><u>Intellectual property rights</u>: Open source</p> <p><u>Other</u>: REST API interfaces. Possibility to deploy private blockchain if needed, with no scalability issues.</p> | | |
| Minimum deliverables required | 1st Sprint (M2) | 2nd Sprint (M4) | 3rd Sprint (M6) |
| | -Requirements definition | -Integration test | -Deployment and evaluation in pilots |
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture 2) Technical support 3) Infrastructure access | | |
| Expected outcome | At least 1 functional prototype of a blockchain-based solution for agricultural applications developed (traceability, commodity trading, machinery/vehicles/equipment management, ...) | | |

Table 6: Description of topic #5

|  | Topic #5 DEMETER Business process integration (BPM) | | |
|---|---|--|--|
| Challenge | Farm management implies using a range of data sources and creating actions based on the analysis of the collected data. A coherent and streamlined creation of actions and monitoring of their execution is of great importance to medium size and large agriculture companies to ensure efficient utilization of the work force and the company assets while contributing positively to overall success of the company. The application of a BPM in agriculture helps in separate the logical layer from the technical implementation (i.e., the process modelling and the software application development) which will ensure efficient sharing of data between business processes in real time with business processes integration. This integration allows setting a basis for planning each step of production process, optimal usage of all resources, defining work orders, defining products shipping plan, setting a marketing budget etc. Data are in many cases used as triggers for the next production process thus providing fluently activities workflow. The interoperability needs to be ensured in a workflow, that will be defined as a sequence of activities (and transactions) that must be performed; the actors responsible for specific activities; data that have to be sent, received and shared (between actors and/or workflows); and the format to use for the messaging. | | |
| Requirements | <u>Technology readiness level:</u> 6 or higher <u>Standards:</u> REST interfaces, Data integrations standards. <u>Programming language:</u> Java, Python, .NET. or other widely used languages could be used. <u>Data management:</u> NGSI-LD <u>Intellectual property rights:</u> GPL licence is most welcomed to boost the usage of the component, but other proprietary licenses could be also proposed. | | |
| Minimum deliverables required | 1st Sprint (M2) -Analysis of business processes to be integrated. -Business process modelling. | 2nd Sprint (M4) -Integration plan for a few selected business processes defined. | 3rd Sprint (M6) -Implementation and validation of a few selected business processes with integration to DEMETER framework. |
| Resources provided by DEMETER | 1) Webinar about DEMETER Architecture 2) Pilot site. 3) Technical details for business integration. | | |
| Expected outcome | Improved workforce utilization. Improved operation efficiency. Resource usage optimization. | | |

2.4 Timeline

Submission to the DEMETER Open Call #1 - DEVELOP will be enabled on the 16th of September 2020 and will end on the 18th of November 2020. Below are presented the current tentative dates for the different phases. The opening and closing dates can be subject to change in case of any modifications in the project's schedule.

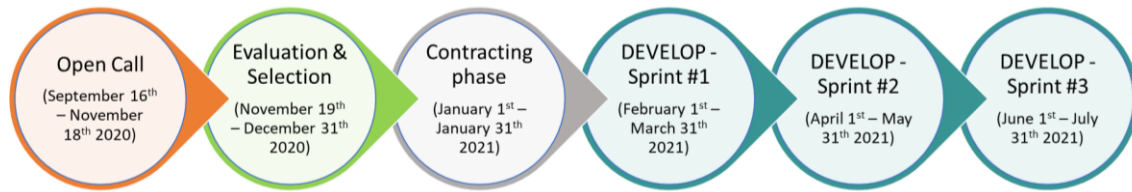


Figure 2: DEMETER Open Call #1 - DEVELOP timeline

After Sprint #3, the selected SMEs will provide maintenance services for a period of 19 months, to insure the functioning of the implemented and integrated solution within the DEMETER project lifetime, at no additional cost.

3 Eligibility criteria

All applicants will have to abide to all general requirements described in this section to be considered eligible for DEMETER Open Call #1 - DEVELOP.

Therefore, please read this section carefully.

3.1 Beneficiaries

DEMETER invites SMEs with technology products or services that can be implemented within the agro-business sector, responding to one of the five topics/challenges defined on section 2 of this document.

3.1.1 Type of beneficiaries

The target audience of this call are SMEs. An SME will be considered as such if complying with the European Commission Recommendation 2003/361/EC¹ and the SME user guide². As a summary, the criteria which define an SME are:

- a) Independent (not linked or owned by another enterprise), in accordance to Recommendation 2003/361/EC.
- b) Headcount in Annual Work Unit (AWU) less than 250.
- c) Annual turnover less or equal to €50 million OR annual balance sheet total less or equal to €43 million.

Start-ups that do not have yet annual turnover or balance sheets are also considered eligible given that they fulfil the criteria (a) and (b) of section 3.1.1 at submission time.

In case an SME is awarded, it will remain eligible even if, at a certain point during the execution of DEMETER activities, it does not fulfil criteria (b) or (c) of section 3.1.1.

Please note that a signed version of **Annex 4: Honour Declaration** and **Annex 5: SME Declaration** are mandatory for a proposal submission.

In addition, the following condition apply:

- The applying SMEs should not:
 - have convictions for fraudulent behaviour, other financial irregularities, unethical or illegal business practices.
 - have been declared bankrupt or have initiated bankruptcy procedures.

¹ European Commission Recommendation 2003/361/EC.

<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:en:PDF>

² SME definition: Please check "User guide to the SME definition" available at <https://op.europa.eu/s/n3t1>

- be under liquidation or an enterprise under difficulty accordingly to the Commission Regulation No 651/2014, art. 2.18
- be excluded from the possibility of obtaining EU funding under the provisions of both national and EU law, or by a decision of both national or EU authority
- Proposals from Linked SMEs³ must demonstrate that there is no risk of double funding. The fundamental principle underpinning the rules for public expenditure in the EU states that no costs for the same activity can be funded twice from the EU budget, as defined in the Article 111 of Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation. In the case of proposals submitted by linked SMEs, all must clearly state the differences between them including but not limited to, technical aspects, market strategy and team composition, so that it remains no doubt that there is no risk of double funding. In order to properly assess these concerns DEMETER may assign all proposals to the same set of evaluators and, should any doubt remain, exclude all proposals.

3.2 Eligible countries

Only SMEs legally established in any of the following countries (hereafter collectively identified as the “Eligible Countries”) are eligible:

- The Member States (MS) of the European Union (EU), including their outermost regions;
- The Overseas Countries and Territories (OCT) linked to the Member States⁴;
- H2020 associated countries (those which signed an agreement with the Union as identified in Article 7 of the Horizon 2020 Regulation): according to the updated list published by the EC⁵;

The UK applicants are eligible under the conditions set by the EC for H2020 participation at the time of the deadline of the call.

3.3 Language

English is the official language for DEMETER Open Call #1 - DEVELOP. Submissions done in any other language will not be evaluated. English is also the only official language during the whole execution of the DEMETER programme. This means any requested submission of deliverables will be done in English in order to be eligible.

3.4 Multiple submission

Only one proposal will be accepted for funding per SME.

In the case of a multiple submission, only the last one received (timestamp of the system) will enter into the 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.

³ Please check the definition of Linked SME at “User guide to the SME definition” available at <https://op.europa.eu/s/n3t1> and include the relevant information in annex 5

⁴ 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.

⁵ https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf

3.5 Topics

Applicants must submit their proposals for one of the five topics/ challenges below, exhaustively detailed in section 2.3 of this document:

1. Soil workability and humidity monitoring
2. Interoperable Geo Tagged Photo APP
3. ISOBUS enabler
4. Blockchain-based solutions for agricultural applications
5. DEMETER Business process integration (BPM)

3.6 Documentation format

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

3.7 Submission system

Only proposals submitted through the Open Call submission tool (F6S platform) at <https://www.f6s.com/demeterh2020/apply> and within the Call duration will be accepted. Proposals submitted by any other means, will not be evaluated. Only the documentation included in the application will be considered by evaluators. It will be composed by a form with administrative questions to be completed directly in the platform, the Annex 3.1: Proposal template, the Annex 4: Honour Declaration, and Annex 5: SME Declaration. The information provided should be actual, true and complete and should allow the assessment of the proposal.

The regular functioning of the F6S platform limits to one application submission per F6S user in each call. If an F6S user wishes to submit more than one application, for example on behalf of different SMEs, the F6S user should request support from the F6S support team (support@f6s.com) at least 10 days prior the open call deadline.

3.7.1 Data protection

In order to process and evaluate applications, DEMETER will need to collect Personal and Industrial Data. F6S Network Limited, as partner of the DEMETER project, will act as Data Controller for data submitted through the F6S platform for these purposes. The F6S platform's system design and operational procedures ensure that data is managed in compliance with The General Data Protection Regulation (EU) 2016/679 (GDPR). Each applicant will accept the F6S terms to ensure coverage. Please note that DEMETER requests the minimum information needed to deliver the evaluation procedures or the DEVELOP activities.

Annexes 6: Bank account information, and 7: Sub-grant Agreement Template, are provided for reference and will only be requested if the SME is selected.

Please refer to <https://www.f6s.com/terms> to check F6S platform data privacy policy and security measures.

3.8 Deadline

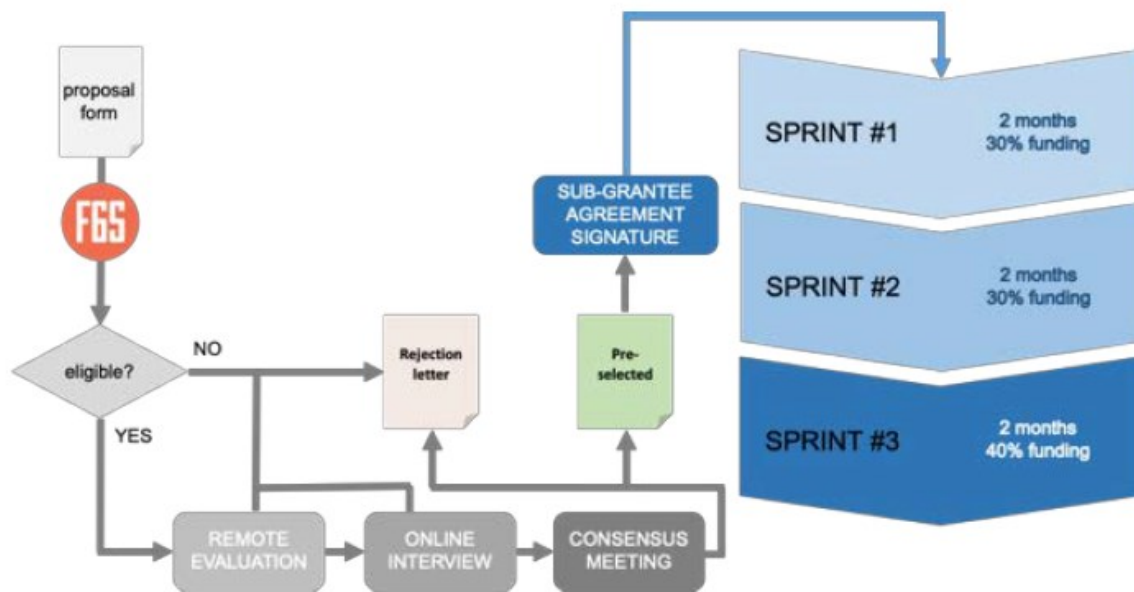
Only proposals submitted before the deadline will be accepted. After the call closure no additions or changes to received proposals will be taken into account. The deadline for this call is November 18th 2020, at 17:00 CET.

3.9 Absence of conflict

Applicants shall not have any actual or/and potential conflict of interest with the DEMETER selection process and during the whole project. All cases of conflict of interest will be assessed case by case. In particular, applicants cannot be DEMETER Consortium partners or affiliated entities nor their employees or co-operators under a contractual agreement.

4 Evaluation process

The evaluation process is shown in the following diagram:



Each of the stages will have a set of criteria to access the next stage but also to raise the obligation from DEMETER Consortium on the financial support. The following paragraphs provide a detail set of procedures and criteria at the time of evaluating and awarding the financial support to the SMEs.

4.1 Evaluation criteria

1. Proposals reception: via F6S.
2. Eligibility filter: An automatic filtering to discard non-eligible proposals will follow the short list. Eligibility check will verify that applicants should be registered in an EU Member State or a Horizon 2020 associated country.
3. Remote evaluation: After the eligibility filter, the final shortlists for evaluation will be created. Then, the proposals will be given to the external evaluators bound by confidentiality agreement. Every proposal will be evaluated by two different experts. The criteria for evaluation will be:
 - Excellence & innovation (40% weighting).
Appropriateness of the project scope addressing one of the open call topics/challenges and respective requirements. Quality, credibility, and clarity of project description. Interoperability level of the proposed solution. Innovation degree. Project outcomes and respective measurement. Potential impact.
 - Expertise and excellence of the proposed team (30% weighting).

Appropriateness of skills, expertise, and experience available within the team.
Complementarity of the participants.

- Project planning and value for money (30% weighting)
Quality, effectiveness and clarity of project activities, structure, and timing.
Appropriateness of deliverables, milestones and means of verification.
Appropriateness of expected costs and resources assigned to the project.

The experts will score each award criterion on a scale from 0 to 5 (decimal and centesimal point scores may be given):

- 0 = Proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.
- 1 = Poor: criterion is inadequately addressed or there are serious inherent weaknesses.
- 2 = Fair: proposal broadly addresses the criterion, but there are significant weaknesses.
- 3 = Good: proposal addresses the criterion well, but a number of shortcomings is present.
- 4 = Very good: proposal addresses the criterion very well, but a small number of shortcomings is present.
- 5 = Excellent: proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

For each section, the minimum threshold is 3 out of 5 points. The default overall threshold, applying to the sum of the three individual scores with the corresponding weight each, is 12. That means if a proposal receives less than 3 in one criterion or less than 12 in the overall score it is automatically rejected. At the end of this phase the proposals will be ranked in 5 different lists, one per targeted topic/challenge.

4. Online interview and consensus meeting: Evaluators will gather in a teleconference meeting to talk with the top 5 ranked proposal of each list defined in the previous step. During this teleconference applicants will start by doing a pitch of their project concept, followed by Q&A. This will be an opportunity for evaluators to cover any doubts that they may had about the written application as well as about the commitment and engagement of applicants towards participating in DEMETER ecosystem. At the end of the meeting, the applicants will leave, and evaluators will share, compare and revised (if necessary) their scores aiming to have a consensus about respective proposal.
5. Final ranking: At the end of the evaluation process, the proposals will be ranked in five different lists, one per targeted topic/challenge. The criteria for the ranking of the proposals will be semi-automatic following the rules below:
 - Rule 1: The proposals will be ranked based on their overall score.
 - Rule 2: In case following Rule 1 there are proposals in the same position, priority will be given to proposals that have higher score on the Excellence & innovation award criterion.
 - Rule 3: In case following Rule 2 there are proposals in the same position, priority will be given to proposals that have higher score on the Expertise and excellence of the proposed team innovation award criterion.
 - Rule 4: In case following Rule 3 there are proposals in the same position, priority will be given to the number of women participating in the team.
6. Selection: The selection of the proposals will follow the rules below:

- Rule a): First, the top ranked proposal per list will be selected.
- Rule b): Secondly, the proposals with higher scores, independently of the targeted topic/challenge, will be selected until reaching the available funding.

However, the DEMETER consortium is not obliged to select the highest scoring proposal where it has objective grounds for objecting to the participant if, for example commercial competition issues or strategic issues to balance technologies between the different platforms available in DEMETER become apparent during the evaluation process. In this case the choice may pass, to the next ranked proposal.

7. The DEMETER consortium will then formally approve a list of proposals within the limits of the available funding.
8. Approval by European Commission prior to contracting: The list of selected projects will be submitted to the European Commission for final screening.
9. Communication of Results: Every applicant will receive via e-mail:
 - An Evaluation Summary Report (ESR)
 - A letter informing of rejection decision or invitation to negotiation and following steps.

The consortium may conclude that there are not enough proposals with an adequate quality (indicated by their evaluation scores meeting or exceeding specific pre-defined thresholds), in which case it will make no selection or select fewer proposals than the cascaded funding budget allows. This conclusion is obligatory if not enough proposals score above the threshold given on the bespoke evaluation form.

4.2 Negotiation

4.2.1 Contract Preparation

After the Open Call evaluation conclusion and projects selection, the DEMETER coordinator will start the contract preparation in collaboration with the selected proposals' coordinators. Contract preparation will go via an administrative and financial checking (and potentially into technical or ethical/security negotiations) based on evaluators' comments. On a case by case approach, a phone call or teleconference may be needed for clarification.

The objective of the contract preparation is fulfilling the legal requirements between DEMETER consortium and every beneficiary of the call. The items covered will be:

- Inclusion of the comments (if any) in the Evaluation Summary Report of the proposals and mapping to the Sub-grant agreement (contract).
- To validate the status information of the SME, the following documents will be required:
 - SMEs declaration: signed and stamped. In the event the applicant declares being nonautonomous, the balance sheet and profit and loss account (with annexes) for the last period for upstream and downstream organizations should also be provided.
 - Status Information Form. In case this is not a start-up, 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. In case it is a start-up, legal document of the official founding date.
 - Legal existence. Company Register, Official Gazette or other official document per country showing the name of the organisation, 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).
- In cases where the number of employees and/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. In case it is a start-up, legal document of the official founding date and declaration of ownership.
 - SME Bank account information: The account where the funds will be transferred will be indicated via a form signed by the SME legal representative and the bank representative. The account should be a business bank account of the SME.

It should be emphasised that each SME should provide at contract preparation time a valid VAT⁶. Failure to provide the VAT number will automatically result in proposal rejection.

The request, by DEMETER consortium, of the above documentation will be done within deadlines. In general, the sub-project negotiation should be concluded within 2 weeks. An additional week may be provided by the DEMETER coordinator in case of a significant reasoning. In case negotiations have not been concluded within the above period, the proposal is automatically rejected and the next proposal in the reserve list is invited.

4.2.2 Contract Signature

At the end the negotiation phase, the sub-grantee funding agreement will be signed between the DEMETER Consortium represented by its coordinator (WIT) and the beneficiary SME.

Please note:

- The sub-grantee funding agreement/contract will cover the complete 3 phases: Sprint #1, Sprint #2 and Sprint #3. No additional sub-grantee will be signed.
- The sub-grantee funding agreement will automatically expire at the end of each phase - Sprint #1, Sprint #2 and Sprint #3- without any further notice from the DEMETER consortium, in case the SME does not enter or qualify for the next phase or if the SME is not considered eligible any more or if the declaration of honour has been violated.

4.3 Appeal procedures

If, at any stage of the evaluation process, the applicant considers that a mistake has been made or that the evaluators have acted unfairly or have failed to comply with the rules of this DEMETER Open Call #1 - DEVELOP, and that her/his interests have been prejudiced as a result, the following appeal procedures are available.

A complaint should be drawn up in English and submitted by email to: opencalls@h2020-demeter.eu. Any complaint made should include:

- contact details,
- the subject of the complaint,

⁶ To be checked at European Commission services such as http://ec.europa.eu/taxation_customs/vies/

- information and evidence regarding the alleged breach.

Anonymous complaints or those not providing the mentioned information will not be considered. Complaints should also be made within five (calendar) days since the evaluation results are presented to the applicants. As a general rule, the DEMETER Team will investigate the complaints with a view to arriving at a decision to issue a formal notice or to close the case within no more than twenty days from the date of reception of the complaint, provided that all required information has been submitted by the complainant. Where this time limit is exceeded, the DEMETER Team will inform the complainant by email.

Please note:

- This procedure is concerned only with the evaluation and/or eligibility checking process. The DEMETER Team will not call into question the scientific or technical judgement of appropriately qualified experts.
- A re-evaluation will only be carried out if there is evidence of a shortcoming that affects the final decision on whether to fund it or not. This means, for example, that a problem relating to one evaluation criterion will not lead to a re-evaluation if a proposal has failed anyway on other criteria.
- The evaluation score following any re-evaluation will be regarded as definitive. It may be lower than the original score.

4.4 Activities evaluation

The DEVELOP activities are divided in 3 sprints of 2 month each.

Milestones & Deliverables

The selected SMEs will have defined milestones and deliverables in their submitted proposals. These are the basis for monitoring and evaluating their work progress during the execution of the DEVELOP activities. The milestones and deliverables will be evaluated at the end of each sprint.

A remote review will take place after each sprint to evaluate the progress of the SMEs. One week before each review, the SMEs should submit their milestones and deliverables. The review will be remote via a teleconference platform (e.g. Skype or WebEx). The SMEs will make a short presentation of the work done, analyse the progress and answer questions from the experts.

After the review, the SMEs will receive a review report, including comments and potential recommendations. The report will also state if the deliverables are accepted or not.

- On acceptance of the deliverables, the SME will be requested to submit a financial statement F2 (template will be provided) requesting the voucher of the corresponding sprint.
- Payments will be released no later than thirty (30) natural days after the notification by the Contractor.
- On rejection of any of the deliverables, or in case of not satisfactory review, the SME will be requested to continue to the next sprint without receiving the corresponding voucher. The rejected deliverables may be (re-) submitted at the next sprint review, hence qualifying for its payment, if and when said deliverable is approved.

Participation in events

During the 3 sprints, the selected SMEs should participate in various types of events (audio calls, video calls, webinars, online trainings, virtual conferences, etc..) organized or suggested by the DEMETER consortium, to support the integration of their solution into DEMETER's platform, extend their knowledge on the DEMETER project, on agri-food user needs, agri-food related technologies and agri-food market. Each SME should be available to participate in a minimum of 6 remote events per sprint, and in one face to face event in Europe during one of the 3 sprints.

After Sprint #3, the selected SMEs will provide maintenance services for a period of 19 months, to insure the functioning of the implemented and integrated solution within the DEMETER project lifetime, at no additional cost.

5 Financial support provided

5.1 Financial support

The maximum amount of direct funding that an SME may receive via DEMETER is 30.000 EUROS via any mean.

DEMETER funding is results-driven, provided as vouchers in a lump sum way. As such, there is no need for a traditional administrative-justification system (e.g. counting hourly dedication or calculating workload), but getting the funding is associated with the full achievement of the relevant milestone.

Selected SMEs will become part of DEMETER DEVELOP activities and will go through an exhaustive sequential process which will last 6 months and will be composed of 3 phases called sprints. Payments will be done in 3 instalments (30% + 30% + 40%) based on concrete results, deliverables and review of each sprint.

Summary of funding:

| DEVELOP Phase | Duration | Funding | Example (€30k) |
|---------------|----------|---------|----------------|
| Sprint #1 | 2-months | 30% | €9.000 |
| Sprint #2 | 2-months | 30% | €9.000 |
| Sprint #3 | 2-months | 40% | €12.000 |

Detailed payment schedule and payment conditions will be settled in the Sub-grant Agreement.

5.2 Origin of funds

Any selected proposer will sign a dedicated Sub-Grantee Funding Agreement with the DEMETER project coordinator (on behalf of DEMETER Consortium). The funds attached to the Sub-Grantee Funding Agreement come directly from the funds of the European Project DEMETER, and the DEMETER consortium is managing the funds according to the Grant Agreement Number 857202 signed with the European Commission.

As will be indicated in the Sub-Grantee Funding Agreement, this relation between the sub-grantees and the European Commission through DEMETER 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 DEMETER consortium partners to inform about them.

6 Preparation and submission

The submission will be done through the F6S platform (<https://www.f6s.com/>) which is directly linked from DEMETER website. The applicants are required to register a profile at F6S to be able to submit a proposal. The documents that will be submitted are:

- Application form: administrative questions to be completed directly in the F6S platform. In addition, some general questions for statistic purpose and tick boxes to be clicked by the third parties confirming they have read the conditions and agree with the conditions defined in this document.
- Annex 3: Proposal description: document in PDF format containing the description of the project. It will include different sections: (1) Overview of the proposal, (2) Excellence/Innovation, (3) Expertise and Excellence of the proposed team, (4) Project Planning and value for money.
- Annex 4: Honour Declaration
- Annex 5: SME Declaration

The project proposals must strictly adhere to the template provided by DEMETER 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. Additional material, which has not been specifically requested in the online application form, will not be considered for the evaluation of the proposals. Data not included in the proposal will not be taken into account.

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.

7 Communication flow

7.1 General communication procedure

The SME contact point should:

- Provide any notice be in writing to the DEMETER project coordinator;
- Notify immediately any change of persons or contact details to the DEMETER coordinator. The address list shall be accessible to all concerned.

8 Responsibility of beneficiaries

The selected SMEs are indirectly beneficiaries of European Commission funding. As such, 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 Programme for Research and Innovation (2014-2020). The obligations that are applicable to the recipients include⁷:

8.1 Conflict of interest

The beneficiary SMEs must take all measures to prevent any situation where the impartial and objective implementation of the DEVELOP activities is compromised for reasons involving economic

⁷ The obligations described here are not binding and may be modified, refined or additional obligations may be inserted during the sub-project negotiation if needed.

interest, political or national affinity, family or emotional ties or any other shared interest ('conflict of interests').

They must formally notify to the DEMETER 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 DEMETER coordinator may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

If the sub-contract member breaches any of its obligations, the sub-contract may be automatically terminated. Moreover, costs may be rejected.

8.2 Data protection and confidentiality

During implementation of the DEVELOP activities and for four years after the end of the DEVELOP activities, the parties must keep confidential any data, documents or other material (in any form) that is identified as confidential at sub-contract signing time ('confidential information').

If a beneficiary SME requests, the Commission and the DEMETER consortium may agree to keep such information confidential for an additional period beyond the initial four years. This will be explicitly stated at the sub-contract.

If information has been identified as confidential during the sub-project execution or only orally, it will be considered to be confidential only if this is accepted by the DEMETER 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.

The SME may disclose confidential information to the DEMETER consortium and to the selected reviewers, who will be bounded by a specific Non-Disclosure Agreement.

8.3 Promoting the action and give visibility to the EU funding

The beneficiary SMEs must promote the DEVELOP activities, the DEMETER 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 DEMETER 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:

(a) display the EU emblem;

(b) display the DEMETER logo and

(c) include the following text:

- For communication activities: "This project has indirectly received funding from the European Union's Horizon 2020 research and innovation programme under project DEMETER (grant agreement No 857202)".
- 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 programme under project DEMETER (grant agreement No 857202)".

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 pageⁱⁱⁱ.

Any publicity made by the beneficiary SME 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 DEMETER project is not liable for any use that may be made of the information contained therein.

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

- the name of the beneficiary SME;
- contact address of the beneficiary SME;
- the general purpose of the project;
- the amount of the financial contribution foreseen for the project; after the final payment, and the amount of the financial contribution actually received;
- 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 DEMETER project, the published version or the final manuscript accepted for publication;
- the publishable reports submitted to DEMETER;
- any picture or any audio-visual or web material provided to the EC and DEMETER in the framework of the project.

The beneficiary SME shall ensure that all necessary authorisations for such publication have been obtained and that the publication of the information by the EC and DEMETER does not infringe any rights of third parties.

Upon a duly substantiated request by the SME coordinator on behalf of any SME member, the DEMETER 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.

8.4 Financial audits and controls

The European Commission (EC) will monitor that DEMETER beneficiaries and the beneficiary SME comply with the conditions for financial support to third parties such as set out in Annex 1 of the DEMETER grant agreement and may take any action foreseen by the grant agreement in case of noncompliance vis à vis the beneficiary concerned.

Moreover, the EC may at any time during the implementation of the DEMETER project and up to 5 (five) years after the end of the DEMETER project, arrange for financial audits to be carried out, by external auditors, or by the EC services themselves including the European Anti-Fraud office (OLAF).

The audit procedure shall be deemed to be initiated on the date of receipt of the relevant letter sent by the EC. Such audits may cover financial, systemic and other aspects (such as accounting and management principles) relating to the proper execution of the grant agreement. They shall be carried out on a confidential basis.

The beneficiary SME shall make available directly to the EC all detailed information and data that may be requested by the EC or any representative authorised by it, with a view to verifying that the grant agreement is properly managed and performed in accordance with its provisions and that costs have been charged in compliance with it. This information and data must be precise, complete and effective.

The beneficiary SME shall keep all sub-project deliverables and the originals or, in exceptional cases, duly authenticated copies – including electronic copies – of all documents relating to the sub-project contract for up to five years from the end of the project. These shall be made available to the EC where requested during any audit under the grant agreement.

In order to carry out these audits, the beneficiary SME shall ensure that the EC's services and any external body(ies) authorised by it have on-the-spot access at all reasonable times, notably to the subproject applicant offices, to its computer data, to its accounting data and to all the information needed to carry out those audits, including information on individual salaries of persons involved in the project. They shall ensure that the information is readily available on the spot at the moment of the audit and, if so requested, that data be handed over in an appropriate form.

On the basis of the findings made during the financial audit, a provisional report shall be drawn up. It shall be sent by the EC or its authorised representative to the beneficiary concerned, which may make observations thereon within one month of receiving it. The Commission may decide not to take into account observations conveyed or documents sent after that deadline.

The final report shall be sent to the beneficiary concerned within two months of expiry of the aforesaid deadline. On the basis of the conclusions of the audit, the EC shall take all appropriate measures which it considers necessary, including the issuing of recovery orders regarding all or part of the payments made by it and the application of any applicable sanction.

The European Court of Auditors shall have the same rights as the EC, notably right of access, for the purpose of checks and audits, without prejudice to its own rules.

In addition, the EC may carry out on-the-spot checks and inspections in accordance with Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities.

9 Intellectual property rights (IPR)

Applicants will remain the sole owners of their respective IPR and retain the IPR to their respective solutions.

The DEMETER consortium itself will not retain an equity stake in any applicant's company, nor will it retain any IPR. However, the DEMETER consortium will be granted the right to make internal use of any IPR applicants produce as part of their DEMETER DEVELOP Activities for a period of three years after the conclusion of the DEMETER project.

Each evaluator and consortium partner will sign a non-disclosure agreement (NDA) before receiving access to the Database of proposals in order to protect the intellectual property of the applicants.

However, DEMETER and the European Commission may ask participants who have received funding to present their work as part of public relations and networking events in order to showcase the benefits of the DEMETER project.

10 Schedule

Submission to the DEMETER Open Call #1 - DEVELOP will be enabled on the 16th of September 2020 and will end on the 18th of November 2020, at 17:00 CET. Below are presented the current tentative dates for the different phases. The opening and closing dates can be subject to change in case of any modifications in the project's schedule.

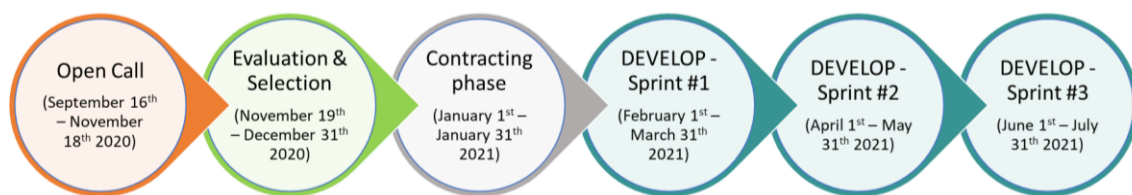


Figure 3: DEMETER Open Call #1 - DEVELOP timeline

11 Checklist

1) Does your planned work fit with the call for proposals? Check that your proposed work does indeed address one of the topics open in this call.

2) Is your proposal eligible? The eligibility criteria are given in chapter 3 “Proposal Eligibility Criteria”.

3) Budgetary limits. Check that you comply with any budgetary limits as expressed in chapter 5 “Financial support provided”. Any proposal not meeting the eligibility requirements will be considered ineligible and will not be evaluated.

4) Is your proposal complete? Have you completed all mandatory questions?

5) Does your proposal fulfil the requested information? Proposals should be precise, concise and must answer to requested information, which are designed to correspond to the applied evaluation. Omitting requested information will almost certainly lead to lower scores and possible rejection.

6) Have you maximised your chances? There will be strong competition. Therefore, edit your proposal tightly, strengthen or eliminate weak points.

7) Have you submitted your proposal before the deadline? 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 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.

8) Have you provided the necessary annexes?

9) Do you need further advice and support? You are strongly advised to communicate with the DEMETER team via the DEMETER online Q&A.

12 Contacts

The DEMETER consortium will provide information to the applicants via the F6S blog, so that the information (question and answer), will be visible to all participants.

- Online Q&A: <https://www.f6s.com/demeterh2020/discuss>
- Apply via: <https://www.f6s.com/demeterh2020/apply>
- F6S support team: support@f6s.com
- More info at: <https://h2020-demeter.eu/>
- For extraordinary communication need, please contact the Help Desk: opencalls@h2020-demeter.eu

13 References

ⁱ H2020 Call Objective H2020-DT-2018-2020 TOPIC: Agricultural digital integration platforms, <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/dt-ict-08-2019>

ⁱⁱ European Commission Communication, Towards a common European data space, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0232&from=EN>

ⁱⁱⁱ REGULATION (EU) No 1290/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)" and repealing Regulation (EC) No 1906/2006

EUROPEAN COMMISSION, Directorate-General for Communications Networks, Content and Technology, "Guidance note on financial support to third parties under H2020", Annex K. "Actions involving financial support to third parties", http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016_2017/annexes/h2020-wp1617-annex-k-fs3p_en.pdf

Annex 3: Application form



DEMETER (H2020)

EMPOWERING FARMERS [Edit](#)

Your application is hidden. Only Admins and Team Members can see it

[Make Visible](#)

Overview

About DEMETER (H2020)

Funding

Want to expand your team?

[CREATE TEAM](#)

Questions 

DEMETER OPEN CALL #1 - DEVELOP

The DEMETER Project is a large-scale deployment of farmer centric interoperable smart farming-IoT based platforms delivered through a series of 20 pilots across 18 countries (15 States in the EU). Involving 60 partners, DEMETER adopts a multi-actor approach across the value chain (demand and supply), with 25 deployment sites, 6,000 farmers and over 38,000 devices and sensors being deployed and participants involved come from different production sectors (dairy, meat, vegetables, fruit and arable crops), production systems (conventional and organic) and different farm sizes and types, optimising the data analysis obtained across multiple farms.

The DEMETER Open Call #1 - DEVELOP aims to attract and engage Startups/ SMEs with technology products that can be implemented within the Agro-business. DEMETER will fund the activities of integration and interoperability of those technology solutions. Such solutions will enlarge and enrich the pool of technology offers/ options of DEMETER towards the co-creation of particular solutions to overcome end-users needs and challenges.

Please visit h2020-demeter.eu/ for more information on the DEMETER project.

Demeter is a Horizon 2020 project (857202) supported by the European Union.

APPLICATION FORM

This application form has the following mandatory sections:

SECTION 1: Proposal identification

SECTION 2: Topic/ challenge selection

SECTION 3: Proposal description

SECTION 4: Administrative data

Documents to be reviewed when preparing the application:

Annex 2: Guidelines for Applicants, defining the Open Call Terms & Conditions

[LINK TO DOCUMENT](#)

Annex 3.1: Proposal Template, to ensure that the important aspects of your planned work are clearly measurable with respect to the evaluation criteria.

[LINK TO DOCUMENT](#)

Annex 4: Honour Declaration, which declares that all conditions related to the DEMETER Open Call #1 - DEVELOP are accepted by an SME legal representative

Annex 5: SME Declaration, which evaluates the status of the participating SME

[LINK TO DOCUMENT](#)

If you have any questions, don't hesitate to ask them on the online Q&A page (www.f6s.com/demeterh2020/discuss) or for extraordinary communication need, please contact the DEMETER Open Call Help Desk: opencalls@h2020-demeter.eu.

Failure to provide the required information in all sections will result in disqualification.

Up to 30.000 EUR and a vibrant ecosystem await you. Good luck!

SECTION 1: PROPOSAL IDENTIFICATION

1 **Proposal Title ***

100

2 **Proposal Acronym ***

20

SECTION 2: TOPIC / CHALLENGE SELECTION

3 **There are five different topics/ challenges that you can choose from to apply to DEMETER. Please choose one. ***

Select One ▼

SECTION 3: PROPOSAL DESCRIPTION

Please upload your proposal in Portable Document Format (pdf)

4 **Upload proposal (Max file size 30MB.) ***

Use the official template available at: [\(LINK TO DOCUMENT\)](#)

Applicants using other kind of template/ document will be automatically ineligible.

CHOOSE A FILE

SECTION 4: ADMINISTRATIVE DATA

5 **SME Name ***

The official name of the SME

6 **Country ***

Country of registration

7 **VAT number**

8 **Incorporation year**

9 **Contact person full name ***

Contact person for the proposal and coordination of the project

10 **Contact person email address ***

11 **Contact person phone number ***

In rare but urgent situations, we need to quickly get in touch with your team. (Include country code)

12 **Finance contact name**

Person to respond to finance-related matters (If the finance contact is not the coordinator)

13 **Finance contact email**

14 **Finance contact phone number**

15 **Please upload the "Annex 4: Honour Declaration" properly fill-in and signed (Max file size 30MB.) ***

You may download the document here: [LINK TO DOCUMENT](#)

CHOOSE A FILE

16 **Please upload the "Annex 5: SME Declaration" properly fill-in and signed (Max file size 30MB.) ***

You may download the document here: [LINK TO DOCUMENT](#)

CHOOSE A FILE

17 **Acceptance of the Data Privacy Policies ***

I accept the data privacy policy as detailed in Annex 2

18 **Acceptance of the DEMETER open call conditions ***

Full call documents available at h2020-demeter.eu/

We have reviewed and accept the terms and conditions

19 **How did you hear about DEMETER? ***

News/media

Social media

Event

E-mail

F6S

European Commission portal

Referral

Other

Are you done? Click below to finalize



Annex 3.1: Proposal template



PROPOSAL TEMPLATE

DEMETER Open Call #1 – DEVELOP

Version of 06/08/2020

Please use this template to prepare your proposal. It has been organised to ensure that the important aspects of your planned work are clearly measurable with respect to the evaluation criteria. Sections 1 to 4 each correspond to an evaluation criterion (see the Guide for Applicants document for details: [LINK TO DOCUMENT](#))

The structure of this template must be followed when preparing your proposal. Applicants using other kind of template/ document structure will be automatically ineligible.

Only proposals that successfully address all the required aspects will have a chance of being funded.

Please take advantage of the different communication instruments offered by the DEMETER Consortium (i.e. info webinars, help-desk, online Q&A, and FAQ section in the website) to receive feedback on any questions you may have before submitting your proposal.

The **page limit for full proposal is 8 pages** (Not including cover page, table of content page and the Ethical/Security Checklist). Please also respect the limits indicated in each section. All tables and eventual figures must be included within this limit. The allowed font type is “Calibri” and the minimum font size is 11 points. The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm.

If you attempt to upload a proposal longer than the specified limit, excess pages will be made invisible, and will not be taken into consideration by the experts.

Please delete this page when submitting the proposal

Delete the guidance text in blue in each section.



DEMETER Open Call #1 – DEVELOP

Acronym of your proposal

Full title of your proposal

Date of submission:

SME logo (If any)



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1 OVERVIEW OF THE PROPOSAL (MAXIMUM 1 PAGE)

Indicate by ticking the corresponding box which topic/ challenge you are applying for.

Table 1: Topic/ Challenge selection

| Topic/ Challenge | Topic/ Challenge addressed in the proposal |
|--|--|
| Soil workability and humidity monitoring | |
| Interoperable Geo Tagged Photo APP | |
| ISOBUS enabler | |
| Blockchain-based solutions for agricultural applications | |
| DEMETER Business process integration (BPM) | |

1.1 *Executive summary*

Justify your selection briefly and describe your proposal.

Maximum 350 words

Text style to be used



2 EXCELLENCE/INNOVATION (MAXIMUM 4 PAGES)

- Describe the overall project idea and objectives within the scope of the call in a credible and clear way, addressing the challenge proposed in the selected topic. Include the alignment to the DEMETER's vision and objectives and the way the proposed solution intends to be integrated in DEMETER's platform. Identify the technical challenges and barriers expected to be solved. Identify the technology readiness level of the proposed solution and its benefits for end-users.
- Justify your project outcomes (which should be clear, measurable, and realistic) and how they will generate added-value with respect to DEMETER's vision and objectives.
- Define the potential socio-economic impact of your solution
- Explain the exploitation potential of your project.

Text style to be used



3 EXPERTISE AND EXCELLENCE OF THE TEAM (MAXIMUM 1 PAGE)

Summarise the SME team involved in the project in the table below. Notice that the people included in the proposal must be later involved in the execution.

Table 2: Proposed Team

| Name of the person | Role in the project | Link to LinkedIn profile or equivalent | Entity (If applies) |
|--------------------|---------------------|--|---------------------|
| | | | |
| | | | |
| | | | |

Add lines as required

- Please provide a short summary of the relevant experience of each team member. Include previous project references relevant to the proposal, products, publications, participation in conferences, collaborations, community projects, etc. Link to evidence of these records will be appreciated as they will help evaluators to assess the team experience and skills (e.g. GITHUB, LinkedIn...).
- Justify why the team has the required knowledge to assure a successful project execution.

Text style to be used



4 PROJECT PLANNING AND VALUE FOR MONEY

4.1 PROJECT ACTIVITIES AND MILESTONES (MAXIMUM 1 PAGE)

Notice that the DEVELOP activities have three phases (sprints), of 2-month each, to progress in the development and integration of the proposed solution. Take this into account to align this with your planning.

4.1.1 Main activities of the project

Describe the activities that will take place in your project from the technical point of view. Break down your work to work packages and tasks and provide timing of the different activities and components. This section should answer the question “how are we going to implement the project to reach the defined objectives?”

Text style to be used

4.1.2 Milestones & Deliverables

Please list the main milestones of the project.

Table 3: Milestones

| Milestone or Deliverable Number | Milestone/Deliverable description | Means of verification | Deadline (From M1 to M6) |
|---------------------------------|-----------------------------------|-----------------------|--------------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Add lines as required

Check the minimum deliverables for each topic in the section 2.3 of the Annex 2: Guidelines for Applicants



4.2 VALUE FOR MONEY (MAXIMUM 1 PAGE)

Please indicate the number of person-months (full-time equivalent) of people involved in the project in the table below for the 6 months of project:

Table 4: Person-month & Personnel costs

| Name of the person | Person-month (PM) | Monthly rate in Euros (MR) (Actual cost only) | Direct personnel costs (PMxMR) |
|--------------------|-------------------|--|--------------------------------|
| | | | |
| | | | |
| | | | |
| Total | | | |

Add lines as required

Notice that a PM is a metric for expressing the effort of a person dedicated full time in one month. Provide a description of expected costs and the requested total contribution using the table.

Table 5: Total budget

| Item | Amount (€) |
|---|------------|
| Direct personnel costs (a) | |
| Other direct cost (Equipment) (b) (Depreciation cost only) | |
| Other direct cost (Software licenses) (c) | |
| Other direct cost (Travel expenses) (d) | |
| Other direct cost (Others) (e) | |
| Indirect costs (0,25 x (a +b +c +d+e)) | |
| Total | |



ANNEX: Ethical/Security Checklist

ETHICAL ISSUES TABLE

| | YES |
|---|--------|
| Informed Consent | |
| • Does the proposal involve children? | |
| • Does the proposal involve patients or persons not able to give consent? | |
| • Does the proposal involve adult healthy volunteers? | |
| • Does the proposal involve Human Genetic Material? | |
| • Does the proposal involve Human biological samples? | |
| • Does the proposal involve Human data collection? | |
| Research on Human embryo/foetus | |
| • Does the proposal involve Human Embryos? | |
| • Does the proposal involve Human Foetal Tissue / Cells? | |
| • Does the proposal involve Human Embryonic Stem Cells? | |
| Privacy | |
| • Does the proposal involve processing of genetic information or personal data (e.g. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction) | |
| • Does the proposal involve tracking the location or observation of people? | |
| Research on Animals | |
| • Does the proposal involve research on animals? | |
| • Are those animals transgenic small laboratory animals? | |
| • Are those animals transgenic farm animals? | |
| • Are those animals cloned farm animals? | |
| • Are those animals nonhuman primates? | |
| Research Involving Developing Countries | |
| • Use of local resources (genetic, animal, plant etc) | |
| • Benefit to local community (capacity building i.e. access to healthcare, education etc) | |
| Dual Use | |
| • Research having direct military application | |
| • Research having the potential for terrorist abuse | |
| ICT Implants | |
| • Does the proposal involve clinical trials of ICT implants? | |
| I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL | YES/NO |



Ethics

If you have entered any ethics issues in the ethical issue table, you must:

- submit an ethics self-assessment, which:
 - describes how the proposal meets the national legal and ethical requirements of the country or countries where the tasks raising ethical issues are to be carried out;
 - explains in detail how you intend to address the issues in the ethical issues table, in particular as regards:
 - research objectives (e.g. study of vulnerable populations, dual use, etc.)
 - research methodology (e.g. clinical trials, involvement of children and related consent procedures, protection of any data collected, etc.)
 - the potential impact of the research (e.g. dual use issues, environmental damage, stigmatization of particular social groups, political or financial retaliation, benefit-sharing, malevolent use, etc.).
- provide the documents that you need under national law (if you already have them), e.g.:
 - an ethics committee opinion;
 - the document notifying activities raising ethical issues or authorizing such activities

⚠ *If these documents are not in English, you must also submit an English summary of them (containing, if available, the conclusions of the committee or authority concerned).*

⚠ *If you plan to request these documents specifically for the project you are proposing, your request must contain*

Security

Please indicate if your project will involve:

- Activities or results raising security issues;.....(YES/NO)
- 'EU-classified information' as background or results:(YES/NO)
- Any potential “dual use” of results:(YES/NO)

Annex 4: Honour Declaration

Applicant Declaration of Honor

Title of the proposal: _____

On behalf of _____ (Company name)
 established in _____ (Official SME address), SME VAT
 number _____,¹ represented for the purposes of signing and submitting the proposal and the
 Declaration of Honor by _____ (Name of legal representative),
 By signing this document, I declare that

- 1) I have the power of legally binding the above mentioned SME on submitting this proposal.
- 2) The above mentioned SME has not submitted any other proposal under DEMETER Open Call #1 - DEVELOP. In case the above mentioned SME has submitted more than one proposals in this Open Call, all associated proposals will be automatically excluded from the evaluation process.
- 3) I and the above SME that I legally represent are fully aware and duly accept all DEMETER rules and conditions as expressed in DEMETER Open Call documents and all Annexes, and will fully respect any evaluation decision and proposal selection under DEMETER DEVELOP activities.
- 4) The information included in the Annex 5: SME Declaration document is true and legally binding.
- 5) All provided information in this declaration is true and legally binding.

SME Legal representative Contact Information:

| | |
|--------------------------------|--|
| Title (Mr, Mrs, Dr.) | |
| Name | |
| Surname | |
| Position in the company | |
| Full Address | |
| Country | |
| Email Address | |
| Telephone | |
| Mobile | |
| Signature and stamp | |

¹ VAT is mandatory during the contract preparation. Failure providing of a valid VAT of the specific SME will result in automatic rejection of the proposal.

Declaration of Honor on exclusion criteria and absence of conflict of interest

By signing this declaration of honour, I declare that all provided information below is true and legally binding both for me and for the SME that I legally represent:

1. I declare that the mentioned SME is not in one of the following situations:
 - a) it is bankrupt or being wound up, is having its affairs administered by the courts, has entered into an arrangement with creditors, has suspended business activities, is the subject of proceedings concerning those matters, or is in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
 - b) it or persons having powers of representation, decision making or control over it have been convicted of an offence concerning their professional conduct by a judgment which has the force of res judicata;
 - c) it has been guilty of grave professional misconduct proven by any means which the contracting authority can justify including by decisions of the European Investment Bank and international organizations;
 - d) it is not in compliance with its obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which it is established or with those of the country of the contracting authority or those of the country where the contract is to be performed, to be proved by the deliverance of official documents issued by the local authorities, according to the local applicable rules;
 - e) it or persons having powers of representation, decision making or control over it have been the subject of a judgment which has the force of res judicata for fraud, corruption, involvement in a criminal organization or any other illegal activity, where such illegal activity is detrimental to the Union's financial interests;
 - f) is subject to an administrative penalty for being guilty of misrepresenting the information required by the contracting authority as a condition of participation in a grant award procedure or another procurement procedure or failing to supply this information or having been declared to be in serious breach of its obligations under contracts or grants covered by the Union's budget.
2. I declare that the natural persons with power of representation, decision-making or control over the above-mentioned SME are not in the situations referred to in a) to f) above;
3. I declare that:
 - a) Neither myself or any person that I know is subject to a DEMETER conflict of interest;
 - b) I have not made false declarations in supplying the information required by participation in the Open Call of DEMETER Project or does not fail to supply this information;
 - c) I am not in one of the situations of exclusion, referred to in the abovementioned points a) to f).
 - d) I am aware and fully accept all DEMETER condition and rules as expressed in DEMETER Open Call documents Annex 1, Annex 2, Annex 3, Annex 3.1, Annex 4, Annex 5, Annex 6 and Annex 7.
4. I certify that the SME that I represent:
 - is committed to participate in the abovementioned project;
 - has stable and sufficient sources of funding to maintain its activity throughout its participation in the above-mentioned project and to provide any counterpart funding necessary;
 - has or will have the necessary resources as and when needed to carry out its involvement in the above-mentioned project.

| | |
|---|-------------------------------------|
| Full name: [REDACTED] | Signature and stamp (if applicable) |
| On behalf of SME: [REDACTED] | |
| Done at (place) [REDACTED] the (day) [REDACTED] (month) [REDACTED] (year) | |

Annex 5: SME Declaration



Declaration on information on the SME qualification

Precise identification of the applicant enterprise

Name or Business name

Address (of registered office)

Registration / VAT number

Names and titles of the principal director(s)

Type of enterprise (see explanatory note)

Tick to indicate which case(s) applies to the applicant enterprise:

- Autonomous enterprise In this case the data filled in the box below result from the accounts of the applicant enterprise only. Fill in the declaration only, without annex.
- Partner enterprise Fill in and attach the annex (and any additional sheets), then complete the declaration by copying the results of the calculations into the box below.
- Linked enterprise

Data used to determine the category of enterprise

Calculated according to Article 6 of the Annex to the Commission Recommendation 2003/361/EC on the SME definition.

| Reference period (*) | | |
|----------------------|----------------------|--------------------------|
| Headcount (AWU) | Annual turnover (**) | Balance sheet total (**) |
| | | |

(*) All data must be relating to the last approved accounting period and calculated on an annual basis. In the case of newly-established enterprises whose accounts have not yet been approved, the data to apply shall be derived from a reliable estimate made in the course of the financial year

(**) EUR 1 000.

Important:

Compared to the previous accounting period there is a change regarding the data, which could result in a change of category of the applicant enterprise (micro, small, medium-sized or big enterprise).

- No
- Yes (in this case fill in and attach a declaration regarding the previous accounting period).

Signature

Name and position of the signatory, being authorised to represent the enterprise:

I declare on my honour the accuracy of this declaration and of any annexes thereto.

Done at

Signature

EXPLANATORY NOTE ON THE TYPES OF ENTERPRISES TAKEN INTO ACCOUNT FOR CALCULATING THE HEADCOUNT AND THE FINANCIAL AMOUNTS

I. TYPES OF ENTERPRISES

The definition of an SME¹ distinguishes three types of enterprise, according to their relationship with other enterprises in terms of holdings of capital or voting rights or the right to exercise a dominant influence².

Type 1: Autonomous Enterprise

This is by far the most common type of enterprise.

It applies to all enterprises which are not one of the two other types of enterprise (partner or linked).

An applicant enterprise is autonomous if it:

- does not have a holding of 25%³ or more in any other enterprise,
- and is not 25%³ or more owned by any enterprise or public body or jointly by several linked enterprises or public bodies, apart from some exceptions⁴,
- and does not draw up consolidated accounts and is not included in the accounts of an enterprise which draws up consolidated accounts and is thus not a linked enterprise⁵.

Type 2: Partner Enterprise

This type represents the situation of enterprises which establish major financial partnerships with other enterprises, without the one exercising effective direct or indirect control over the other. Partners are enterprises which are not autonomous, but which are not linked to one another.

The applicant enterprise is a partner of another enterprise if:

¹ Henceforth in the text, the term "Definition" refers to the Annex to Commission Recommendation 2003/361/EC on the definition of SMEs.

² Definition, Article 3

³ In terms of the share of the capital or voting rights, whichever is higher is applied. To this percentage should be added the holding in that same enterprise of each enterprise, which is linked to the holding company (Definition, Article 3 paragraph 2)

⁴ An enterprise may continue being considered as autonomous when this 25% threshold is reached or exceeded, if that percentage is held by the following categories of investors (provided that those are not linked with the applicant enterprise):

- a) public investment corporations, venture capital companies, individuals or groups of individuals with a regular venture capital investment activity who invest equity capital in unquoted businesses ("business angels"), provided the total investment of those business angels in the same enterprise is less than EUR 1 250 000,
- b) universities or non-profit research centres,
- c) institutional investors, including regional development funds,
- d) autonomous local authorities with an annual budget of less than EUR 10 million and less than 5000 inhabitants.

(Definition, Article 3 paragraph 2, second sub-paragraph)

⁵ - If the registered office of the enterprise is situated in a Member State which has provided for an exception to the requirement to draw up such accounts pursuant to the Seventh Council Directive 83/349/EEC of 13 June 1983, the enterprise should nevertheless check specifically whether it does not meet one or other of the conditions laid down in Article 3 paragraph 3 of the Definition.

- There are also some very rare cases in which an enterprise may be considered linked to another enterprise through a person or a group of natural persons acting jointly (Definition, Article 3 paragraph 3).

- Conversely, there are very few cases of enterprises drawing up consolidated accounts voluntarily, without being required to do so under the Seventh Directive. In that case, the enterprise is not necessarily linked and can consider itself only a partner.

To determine whether the enterprise is linked or not, in each of the three situations it should be checked whether or not the enterprise meets one or other of the conditions laid down in Article 3 paragraph 3 of the Definition, where applicable through a natural person or group of natural persons acting jointly.

- it has a holding or voting rights equal to or greater than 25% in the other enterprise, or the other enterprise has a holding or voting rights equal to or greater than 25% in the applicant enterprise,
- the enterprises are not linked enterprises within the meaning defined below, which means, among other things, that the voting rights of one in the other do not exceed 50%,
- and the applicant enterprise does not draw up consolidated accounts which include the other enterprise by consolidation, and is not included by consolidation in the accounts of the other enterprise or of an enterprise linked to it⁵.

Type 3: Linked Enterprise

This type corresponds to the economic situation of enterprises which form a group through the direct or indirect control of the majority of the voting rights (including through agreements or, in certain cases, through natural persons as shareholders), or through the ability to exercise a dominant influence on an enterprise. Such cases are thus less frequent than the two preceding types.

In order to avoid difficulties of interpretation for enterprises, the Commission has defined this type of enterprise by taking over – wherever they are suitable for the purposes of the Definition – the conditions set out in Article 1 of Council Directive 83/349/EEC on consolidated accounts⁶, which has been applied for many years.

An enterprise thus generally knows immediately that it is linked, since it is already required under that Directive to draw up consolidated accounts or is included by consolidation in the accounts of an enterprise which is required to draw up such consolidated accounts.

The only two cases, which are however not very frequent, in which an enterprise can be considered linked although it is not already required to draw up consolidated accounts, are described in the first two indents of endnote 5 of this explanatory note. In those cases, the enterprise should check whether it meets one or other of the conditions set out in Article 3 paragraph 3 of the Definition.

II. THE HEADCOUNT AND THE ANNUAL WORK UNITS⁷

The headcount of an enterprise corresponds to the number of annual work units (AWU).

Who is included in the headcount?

- The employees of the applicant enterprise,
- persons working for the enterprise being subordinate to it and considered to be employees under national law,
- owner-managers,
- partners engaging in a regular activity in the enterprise and benefiting from financial advantages from the enterprise.

Apprentices or students engaged in vocational training with an apprenticeship or vocational training contract are not taken into account in the headcount.

How is the headcount calculated?

⁶ Seventh Council Directive 83/349/EEC of 13 June 1983, based on Article 54(3)(g) of the Treaty and concerning consolidated accounts (OJ L 193, 18/7/1983, p. 1), as last amended by Directive 2001/65/EC of the European Parliament and of the Council (OJ L 283, 27/10/01, p. 28).

⁷ Definition, Article 5.



One AWU corresponds to one person who worked full-time in the enterprise in question or on its behalf during the entire reference year. The headcount is expressed in AWUs.

The work of persons, who did not work the entire year, or who worked part-time - regardless of its duration - and seasonal work is counted as fractions of AWU.

The duration of maternity or parental leaves is not counted.

ANNEX TO THE DECLARATION CALCULATION FOR THE PARTNER OR LINKED TYPE OF ENTREPRISE

Annexes to be enclosed if necessary

- Annex A if the applicant enterprise has at least one partner enterprise (and any additional sheets)
- Annex B if the applicant enterprise has at least one linked enterprise (and any additional sheets)

Calculation for the partner or linked type of enterprise⁸ (see explanatory note)

| Reference period ⁹ : | | | |
|--|-----------------|---------------------|-------------------------|
| | Headcount (AWU) | Annual turnover (*) | Balance sheet total (*) |
| 1. Data ⁹ of the applicant enterprise or consolidated accounts (copy data from box B(1) in annex B ¹⁰) | | | |
| 2. Proportionally aggregated data ⁹ of all partner enterprises (if any) (copy data from box A in annex A) | | | |
| 3. Added up data ⁹ of all linked enterprises (if any) – if not included by consolidation in line 1 (copy data from box B(2) in annex B) | | | |
| Total | | | |

(*) EUR 1 000.

The data entered in the "Total" row of the above table should be entered in the box "Data used to determine the category of enterprise" in the declaration.

⁸ Definition, Article 6 paragraphs 2 and 3

⁹ All data must be relating to the last approved accounting period and calculated on an annual basis. In the case of newly-established enterprises whose accounts have not yet been approved, the data to apply shall be derived from a reliable estimate made in the course of the financial year (Definition, Article 4).

¹⁰ The data of the enterprise, including the headcount, are determined on the basis of the accounts and other data of the enterprise or, where they exist, the consolidated accounts of the enterprise, or the consolidated accounts in which the enterprise is included through consolidation.



ANNEX A Partner enterprises

For each enterprise for which a 'partnership sheet' has been completed (one sheet for each partner enterprise of the applicant enterprise and for any partner enterprises of any linked enterprise, of which the data is not yet included in the consolidated accounts of that linked enterprise), the data in the 'partnership box' in question should be entered in the summary table below:

BOX A

| Partner enterprise (name / identification) | Headcount (AWU) | Annual turnover (*) | Balance sheet total (*) |
|---|-----------------|---------------------|-------------------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| Total | | | |

(*) EUR 1 000.

(attach sheets or expand the present table, if necessary)

Reminder:

This data is the result of a proportional calculation done on the 'partnership sheet' for each direct or indirect partner enterprise.

The data entered in the "Total" row of the above table should be entered in line 2 (regarding partner enterprises) of the table in the Annex to the declaration.



PARTNERSHIP SHEET

1. Precise identification of the applicant enterprise

Name or Business name

Address (of registered office)

Registration/VAT number¹¹

Names and titles of the principal director(s)¹²

2. Raw data regarding that partner enterprise

| Reference period | | | |
|------------------|-----------------|---------------------|-------------------------|
| | Headcount (AWU) | Annual turnover (*) | Balance sheet total (*) |
| Raw data | | | |
| (*) EUR 1 000. | | | |

Reminder: These raw data are derived from the accounts and other data of the partner enterprise, consolidated if they exist. To them are added 100% of the data of enterprises which are linked to this partner enterprise, unless the accounts data of those linked enterprises are already included through consolidation in the accounts of the partner enterprise¹³. If necessary, add "linkage sheets" for the enterprises which are not yet included through consolidation.

3. Proportional calculation

- a) Indicate precisely the holding¹⁴ of the enterprise drawing up the declaration (or of the linked enterprise via which the relation to the partner enterprise is established) in the partner enterprise to which this sheet relates:

.....

Indicate also the holding of the partner enterprise to which this sheet relates in the enterprise drawing up the declaration (or in the linked enterprise):

.....

- b) The higher of these two holding percentages should be applied to the raw data entered in the previous box. The results of this proportional calculation should be given in the following table:

'Partnership box'

| Percentage: | Headcount (AWU) | Annual turnover (*) | Balance sheet total (*) |
|-----------------------------|-----------------|---------------------|-------------------------|
| Proportional results | | | |
| (*) EUR 1 000. | | | |

These data should be entered in Box A in Annex A.

¹¹ To be determined by the Member State according to its needs

¹² Chairman (CEO), Director-General or equivalent.

¹³ Definition, Article 6 paragraph 3, first sub-paragraph

¹⁴ In terms of the share of the capital or voting rights, whichever is higher. To this holding should be added the holding of each linked enterprise in the same enterprise (Definition, Article 3 paragraph 2 first sub-paragraph).



ANNEX B Linked enterprises

DETERMINE THE CASE APPLICABLE TO THE APPLICANT ENTERPRISE:

- Case 1:** The applicant enterprise draws up consolidated accounts or is included by consolidation in the consolidated accounts of another enterprise. (Box B(1))
- Case 2:** The applicant enterprise or one or more of the linked enterprises do not establish consolidated accounts or are not included in the consolidated accounts. (Box B(2)).

Please note: The data of the enterprises, which are linked to the applicant enterprise, are derived from their accounts and their other data, consolidated if they exist. To them are aggregated proportionally the data of any possible partner enterprise of that linked enterprise, situated immediately upstream or downstream from it, unless it has already been included through consolidation¹⁵.

CALCULATION METHODS FOR EACH CASE:

In case 1: The consolidated accounts serve as the basis for the calculation. Fill in Box B(1) below.

Box B(1)

| | Headcount (*) | Annual turnover (**) | Balance sheet total (**) |
|--------------|---------------|----------------------|--------------------------|
| Total | | | |

(*) Where in the consolidated accounts no headcount data appears, the calculation of it is done by adding the data from the enterprises to which the enterprise in question is linked.

(**) EUR 1 000.

The data entered in the "Total" row of the above table should be entered in line 1 of the table in the Annex to the declaration.

Identification of the enterprises included through consolidation

| Linked enterprise (name / identification) | Address (of registered office) | Registration / VAT number (*) | Names and titles of the principal director(s) (**) |
|--|-----------------------------------|----------------------------------|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |

¹⁵ Definition, Article 6 paragraph 3, second sub-paragraph



| | | | |
|--------------|--|--|--|
| Total | | | |
|--------------|--|--|--|

(*) To be determined by the Member State according to its needs

(**) Chairman (CEO), Director-General or equivalent.

Important: Partner enterprises of such a linked enterprise, which are not yet included through consolidation, are treated like direct partners of the applicant enterprise. Their data and a 'partnership sheet' should therefore be added in Annex A.

In case 2: For each linked enterprise (including links via other linked enterprises), complete a "linkage sheet" and simply add together the accounts of all the linked enterprises by filling in Box B(2) below.

Box B(2)

| Enterprise No.: | Headcount (AWU) | Annual turnover (**) | Balance sheet total (**) |
|------------------------|------------------------|-----------------------------|---------------------------------|
| 1. (*) | | | |
| 2. (*) | | | |
| 3. (*) | | | |
| Total | | | |

(*) attach one "linkage sheet" per enterprise

(**) EUR 1 000.

The data entered in the "Total" row of the above table should be entered in line 3 (regarding linked enterprises) of the table in the Annex to the declaration.



LINKAGE SHEET

(only for linked enterprises not included by consolidation in Box B)

1. Precise identification of the applicant enterprise

Name or Business name

Address (of registered office)

Registration/VAT number¹⁶

Names and titles of the principal director(s)¹⁷

2. Data on enterprise

| Reference period | | | |
|------------------|-----------------|---------------------|-------------------------|
| | Headcount (AWU) | Annual turnover (*) | Balance sheet total (*) |
| Total | | | |

(*) EUR 1 000.

These data should be entered in Box B(2) in Annex B.

Important: The data of the enterprises, which are linked to the applicant enterprise, are derived from their accounts and their other data, consolidated if they exist. To them are aggregated proportionally the data of any possible partner enterprise of that linked enterprise, situated immediately upstream or downstream from it, unless it has already been included through consolidation¹⁸.

Such partner enterprises are treated like direct partner enterprises of the applicant enterprise. Their data and a 'partnership sheet' have therefore to be added in Annex A.

¹⁶ To be determined by the Member State according to its needs

¹⁷ Chairman (CEO), Director-General or equivalent.

¹⁸ If the data of an enterprise are included in the consolidated accounts to a lesser proportion than the one determined under Article 6 paragraph 2, the percentage rate according to that article should be applied (Definition, Article 6 paragraph 3, second sub-paragraph).

Annex 6: Bank account information

Annex 7: DEMETER Sub- grant Agreement Template



Open Call Beneficiary Agreement

Agreement Number: DEMETER-OC1-2020/ 



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 857202

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Contracting parties

WATERFORD INSTITUTE OF TECHNOLOGY (WIT), established in CORK ROAD, WATERFORD, Ireland, VAT number: IE9503034A, represented for the purposes of signing the Agreement by VP Research, Innovation & Graduate Studies, Mark White, legal representative of WIT.

Hereinafter referred as the “Contractor”

Of the one part,

[COMPANY_NAME], a SME organized under the laws of [COUNTRY], established in [LEGAL_ADDRESS], with VAT number [VAT_NUMBER], duly represented by [LEGAL_REPRESENTATIVE], [LEGAL_REPRESENTATIVE_POSITION],

Hereinafter referred as the “Beneficiary”

Hereinafter collectively referred as the “Contracting Parties”

HAVE AGREED to the following terms and conditions including those in the following Annexes, which form an integral part of this DEMETER Open Call #1 - DEVELOP Beneficiary Agreement (hereinafter referred as the “Contract”):

General Provisions

The European Commission (hereinafter referred as the “EC”) and the Contractor, as a member of the DEMETER consortium, have signed the Grant Agreement no 857202 for the implementation of the project “Building an Interoperable, Data-Driven, Innovative and Sustainable European Agri-Food Sector” (Acronym: DEMETER) within the framework of the Programme H2020-DT-2018-2020/H2020-DT-2018-2.

The Beneficiary has received the favourable resolution by the external evaluators and therefore is entitled to receive funding and services according to the terms and conditions set out under this Beneficiary Agreement and in accordance with the Annex 2: Guidelines for Applicants.

This Contract aims at defining the framework of rights and obligations of the Contracting Parties.

The Funding received by the Beneficiary is property of the EC. The Contractor is mere holder and managers of the funds.

Article 1 – Entry into force & Termination of the contract

1.1 Entry into force

This Contract shall enter into force on the day of its signature by the last Contracting Party. The Contractor shall sign this contract, only after all of the following documents have been received from the Beneficiary:

- The original signed Declaration of Honour (as given in Annex 4 of this Contract);
- *SME Declaration* form (as given in Annex 5 of this Contract);
- Copy of ID-card or Passport of legal representative(s) of the SME;
- Copy of the original Extract of SME registration;
- Proof of VAT registration;
- Bank Information Form (as given in Annex 6 of this Contract).

All documents shall be sent to the Contractor first via email to the following address: jmullowney@tssg.org, while the Annexes 1, 2, 3 and 3.1 of this Contract will also be sent as originals, via regular mail, to the following address:

Jonathan Mullowney
TSSG, ArcLabs Research & Innovation Building,
WIT, West Campus, Carriganore,
Waterford, X91 P20H, Ireland

The Beneficiary is solely responsible for the accuracy of all data provided to the Contractor.

1.2 Contract Termination

- This Contract covers all three phases (sprints) of DEMETER DEVELOP activities and the following service maintenance phase of 19 months.
- At the end of the aforementioned phases sprint #1, sprint #2 and sprint #3, an evaluation of the Beneficiary projects' progress will take place as fully described in Annex 2 "Guidelines for Applicants".
- In case the evaluators of the Beneficiary projects' progress do not receive or accept any due deliverable, at the end of the sprint #3 phase, this Contract is automatically terminated, and the Beneficiary fully accepts that no additional payments related to the phase of the missing or not accepted deliverable will be made by the Contractor.
- This Contract also terminates in the event of unjustified withdraw by the Beneficiary of the current fulfilment of its Contract obligations. "Unjustified withdraw" covers any situation out of "Force Majeure" qualification which determines the absence of performance of the Beneficiary contractual obligations. In this particular case, it entitles the Contractor the right to claim the Beneficiary the full refund of all payments made to the Beneficiary up to date.

Article 2 – Obligations and Responsibilities of the Beneficiary

The obligations and responsibilities of the Beneficiary are defined in detail in the Annex 2 - Guidelines for Applicants.

Additionally, the Beneficiary shall take every necessary precaution to avoid any risk of conflict of interest relating to economic interests, political or national affinities, personal or any other interests liable to influence the impartial and objective performance of the Project. In case the Beneficiary is involved in a conflict of interest or in a risk of conflict of interest, the Beneficiary must formally notify this situation to the Contractor without delay and immediately take all the necessary steps to rectify this situation.

Article 3 – Breach of Contractual obligations

In the event of the breach of the contractual obligations by the Beneficiary, the Contractor reserves the right to claim the Beneficiary the full refund of all payments made to the Beneficiary up to date.

The breach of the contractual obligations by the Beneficiary shall be determined by the DEMETER Consortium or DEMETER Project Coordinator. Not participation in the Activities (unless in the case of Force Majeure) or participating in the Activities in a manner which intentionally disrupts the Activities, shall be deemed as breach of the contractual obligations by the Beneficiary. The provision of false or misleading declarations by the Beneficiary or any unsolved situation of conflict of interest also constitute examples of breach of contractual obligations by the Beneficiary.

Article 4 – Financial contribution and financial provisions

4.1 Maximum financial contribution

The maximum financial contribution to be granted by the Contractor to the Beneficiary shall not exceed the amount of Thirty Thousand Euros (30,000€).

4.2 Distribution of the financial contribution

The financial contribution to be granted to the Beneficiary shall be calculated and distributed in accordance with the provisions of the Annex 2: Guidelines for Applicants.

In any case, the financial grant to be paid will always be subject to:

- A favourable resolution by the evaluators and DEMETER project responsible for assessing the Project in each of the phases;
- Reception and acceptance of the relevant Financial Statement (F1, F2, and F3) of the beneficiary;
- The Beneficiary Bank Account (Annex 6) matches the Financial Statement Bank Account;
- The availability of funds in Contractor bank account during the relevant payment period
- Payments to the Beneficiary will be made by the Contractor. In particular:
 - The Contractor reserves the right to withhold the payments in case the Beneficiary does not fulfil with its obligations and tasks as per Annex 2 - Guidelines for Applicants;
 - Banking and transaction costs charged by any of the banks related to the handling of any financial resources made available to the Beneficiary by the Contractor shall be covered by the holder of the bank account which originated the cost. This means that the Contractor bears the cost of transfers charged by its bank and the Beneficiary bears the cost of transfers charged by its bank.;
- Payments will be released no later than thirty (30) natural days after the notification by the Contractor;
- The Beneficiary is responsible for complying with any tax and legal obligations that might be attached to this financial contribution.

4.3 Payments schedule

The payment schedule is directly linked to the relevant phase of the Project as per the Guidelines for Applicants (Annex 2).

| Expected date of payment | Amount | Condition / Event | Linked Phase |
|--------------------------|------------------|---|--------------|
| May 2021 | Up to 9.000 EUR | Successful review of all due deliverables Participation in 6 remote events | Sprint #1 |
| July 2021 | Up to 9.000 EUR | Successful review of all due deliverables Participation in 6 remote events | Sprint #2 |
| September 2021 | Up to 12.000 EUR | Successful review of all due deliverables Participation in 6 remote events | Sprint #3 |

The Beneficiary is entitled to receive exclusively those payments allocated to each specific phase of the Project provided that the conditions under Article 4.2 are met.

Article 5 – Liability of the Beneficiary

Neither the Contractor nor the EC can be held liable for any acts or omissions of the Beneficiary in relation to this Contract. At the same time, the Beneficiary is responsible for any act or omission that causes damage to the Contractor, the Data Provider, and/or the EC in relation to this Contract.

The Beneficiary shall bear sole responsibility for ensuring that their acts within the framework of this Contract do not infringe third parties' rights. There is no joint liability between the Contracting Parties.

Article 6 – Confidentiality

With respect to all information of whatever nature or form as is disclosed between the Contracting Parties in connection with the Project and identified in writing as confidential, the terms of this Article shall apply.

The Contracting Parties agree that such information is communicated on a confidential basis and its disclosure may be prejudicial to the owner of the information.

Article 7 – Force Majeure

“Force Majeure” shall mean, any unforeseeable exceptional situation or event beyond the Contracting Parties control, which prevents either of them from fulfilling any of their obligations under the Agreement, which was not attributable to error or negligence on their part and which proves to be inevitable in spite of the exercising all due diligence.

Any default of a service, defect in equipment or material or delays in making them available, unless they stem directly from a relevant case of force majeure, as well as labour disputes, strikes or financial difficulties cannot be invoked as force majeure.

The Contracting Parties shall take the necessary measures to limit any damage due to force majeure. They shall do their best to resume the implementation of the action as soon as possible.

No Contracting Party shall be considered to be in breach of its obligations and tasks if such breach is caused by Force Majeure. A Contracting Party will notify the other Contracting Party of any Force Majeure as soon as possible. In case the Beneficiary is not able to overcome the consequences of Force Majeure within 10 (ten) days after such notification, the Contractor will decide accordingly including the termination of the Contract.

Article 8 – Information and communication

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 Contractor, DEMETER consortium or EC are not liable for any use that may be made of the information contained therein.

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

- the name of the Beneficiary;
- contact address of the Beneficiary;

- the general purpose of the project;
- the amount of the financial contribution of the EC.

The Beneficiary shall ensure that all necessary authorizations for such publication have been obtained and that the publication of the information by the Contractor, DEMETER Consortium or EC does not infringe any rights of third parties.

Upon a duly substantiated request by the Contractor on behalf of the Beneficiary, 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.

Article 9 – Data protection

9.1 Data protection obligations

The Contracting Parties have the obligation to abide by the Regulation (EU) 2016/679 (General Data Protection Regulation – GDPR) of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data.

The processing of personal data shall be carried out lawfully, fairly and in a transparent manner, collected for specified purposes and adequate, relevant and limited to what is necessary in relation to the purposes for which it is processed.

The Beneficiary will use and process the data only for the purposes of this Contract and during the length of the Contract. Any unauthorised use is forbidden. In any event, neither the Contractor nor the Data Provider will be held responsible for any abusive use of data incurred into by the Beneficiary.

The Beneficiary shall not to try to re-identify anonymised data. In the event that re-identification occurs, the Beneficiary commits not to use such data.

The Beneficiary shall delete, at the end of this Contract, the data to which the Beneficiary has been granted access during the incubation process, except where an agreement is entered into with the Data Provider.

9.2. New data produced

The Beneficiary acknowledges that he/she will be the “data controller” of any new dataset of piece of personal information that the Beneficiary may produce in the course of the DEMETER project.

Article 10 – Financial audits and controls

The EC may, at any time during the implementation of the Project and up to five years after the end of the DEMETER project (foreseen for 28 February 2023), arrange for financial audits to be carried out, by external auditors, or by the EC services themselves including the European Anti-Fraud office (OLAF), on the Beneficiary. The audit procedure shall be deemed to be initiated on the date of receipt of the relevant letter sent by the EC. Such audits may cover financial, systemic and other aspects (such as accounting and management principles) relating to the proper execution of the Grant Agreement. They shall be carried out on a confidential basis.

The Beneficiary shall make available directly to the EC all detailed information and data that may be requested by the EC or any representative authorised by it, with a view to verifying that the Grant Agreement is properly managed and performed in accordance with its provisions and that costs have

been charged in compliance with it. This information and data must be precise, complete and effective.

The Beneficiary shall keep the originals or, in exceptional cases, duly authenticated copies – including electronic copies - of all documents relating to the Contract until 2028. These shall be made available to the EC where requested during any audit under the Grant Agreement.

In order to carry out these audits, the Beneficiary shall ensure that the EC's services and any external body(ies) authorised by it have on-the-spot access at all reasonable times, notably to the Beneficiary's offices, to its computer data, to its accounting data and to all the information needed to carry out those audits, including information on individual salaries of persons involved in the project. They shall ensure that the information is readily available on the spot at the moment of the audit and, if so requested, that data be handed over in an appropriate form.

On the basis of the findings made during the financial audit, a provisional report shall be drawn up. It shall be sent by the EC or its authorised representative to the beneficiary concerned, which may make observations thereon within one month of receiving it. The EC may decide not to take into account observations conveyed or documents sent after that deadline. The final report shall be sent to the beneficiary concerned within two months of expiry of the aforesaid deadline.

On the basis of the conclusions of the audit, the EC shall take all appropriate measures which it considers necessary, including the issuing of recovery orders regarding all or part of the payments made by it and the application of any applicable sanction.

The European Court of Auditors shall have the same rights as the EC, notably right of access, for the purpose of checks and audits, without prejudice to its own rules. In addition, the EC may carry out on-the-spot checks and inspections in accordance with Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the EC in order to protect the European Communities' financial interests against fraud and other irregularities.

Article 11 – Amendments

Amendments or changes to this Contract shall be made in writing and signed by the duly authorized representative of the Contracting Parties. Nevertheless, In the event the EC modifies the conditions, the Contractor will amend the Contract accordingly.

Article 12 – Language

This contract is drawn up in English, language which shall govern all documents, notices, meetings and processes relative thereto.

Article 13 – Applicable Law

This Contract shall be construed in accordance with and governed by the laws of Belgium.

Article 14 – Settlement of disputes

If the Contracting Parties are unable to resolve a dispute amicably, such dispute will be finally settled under the Rules of Arbitration of the International Chamber of Commerce by three (3) arbitrators in Brussels.

Each of the Contracting Parties to the dispute shall appoint one (1) arbitrator and the two (2) arbitrators so appointed shall elect the presiding arbitrator. Should a Party to the dispute which

should appoint an arbitrator fails to do so within fourteen (14) days of the delivery of the written notice to do so from the other Party to the dispute or should the appointed arbitrators fail to reach agreement on the presiding arbitrator within fourteen (14) days after their appointment, such arbitrator shall be appointed in accordance with the Rules upon request of any of the Parties to the dispute.

The seat of arbitration shall be Brussels.

The Contracting Parties agree that the language of the arbitration, including oral hearings, written evidence and correspondence, shall be English.

A duly rendered arbitration award shall be final and binding on the Contracting Parties to the dispute. Each Contracting Party to the arbitration conducted in accordance with this section hereof shall bear its own expenses incurred in connection with such arbitration, including fees of its legal counsels. All other costs and expenses shall be apportioned between the Contracting Parties to the arbitration in accordance with the decision of the arbitrators.

Nothing in this Contract shall limit the Contracting Parties right to seek injunctive relief or to enforce an arbitration award in any applicable competent court of law.

AS WITNESS:

The Contracting Parties have caused this Contract to be duly signed by the undersigned authorized representatives in two (2) copies:

| | |
|--|--|
| <p>For WIT (the Contractor) Mr Mark White Vice President Signature</p> <p>Done at XXXXXXXX_____ on DD/MM/201Y</p> | <p>For [SME/Individual Entrepreneur_NAME] (the Beneficiary) Mr/Ms [NAME SURNAME] [POSITION_IN_COMPANY] Signature</p> <p>Done at _____ on DD/MM/201Y</p> |
|--|--|

Annexes

Annex 8: Template for H2020 Financial Support to Third Parties

TEMPLATE for FP7 Competitive Calls and H2020 Financial Support to Third Parties

To publish a call on the Participant Portal (PP), the Project Officer must send to the PP team at least the following information:

| | |
|-------------------------------------|---|
| | Information to be provided by the project consortium |
| Call title: | DEMETER Open Call #1 – DEVELOP interoperable technology proposals in the area of Agri-Food |
| Full name of the EU funded project: | Building an Interoperable, Data-Driven, Innovative and Sustainable European Agri-Food Sector |
| Project acronym: | DEMETER |
| Grant agreement number: | H2020-857202 |
| Call publication date: | <i>16 September 2020</i> |
| Call deadline: | <i>18 November 2020 at 17:00 (Brussels time)</i> |
| Expected duration of participation: | <i>6 months for development and integration activities 19 months of service maintenance activities Total: 25 months</i> |
| Total EU funding available: | 300.000€ |
| Submission & evaluation process: | <p>The goal of DEMETER Open Call #1 - DEVELOP, is to attract and engage Startups/ SMEs with technology products for the agri-food sector that can be integrated within the DEMETER enabler HUB.</p> <p>DEMETER Open Call #1 - DEVELOP, will select around 8 to 12 SMEs to develop and integrate their solutions in a 6-months period of time divided by 3 sprints of 2-months each.</p> <p>The maximum amount of funding that each SME may receive is 30.000€.</p> <p>Submissions are available via: https://www.f6s.com/demeterh2020/apply</p> <p>The evaluation process comprises an eligibility check and a remote evaluation based on the following criteria:</p> <ul style="list-style-type: none"> • Excellence & innovation (40% weighting). • Expertise and excellence of the proposed team (30% weighting). • Project planning and value for money (30%) |

| | |
|----------------------|---|
| | weighting) |
| Further information: | Details available at http://h2020-demeter.eu/ |
| Task description: | <p>DEMETER aims to empower farmers and farmer cooperatives to a) better exploit their existing operational context, i.e. the platforms, machinery, sensors they have, to extract new knowledge on which they can improve their decisions and b) ease the acquisition, evolution and update of their context by focusing their investments where these are needed, based on their goals measured by key performance indicators (KPIs) that they select.</p> <p>The selected SMEs in the DEMETER Open Call #1 – DEVELOP will improve the innovation level of their technology product/service, integrate and make it interoperable with DEMETER platform, to enlarge and enrich the pool of technology offers/ options of DEMETER, overcoming end-users needs and directly addressing one of the following topics/challenges:</p> <ol style="list-style-type: none"> 1. Soil workability and humidity monitoring 2. Interoperable Geo Tagged Photo APP 3. ISOBUS enabler 4. Blockchain-based solutions for agricultural applications 5. DEMETER Business process integration |