

ZDMP: Zero Defects Manufacturing Platform



ZDMP

Guidance for Applicants

OPEN CALL 2

Abstract

This document is the Guidance for Applicants for the ZDMP project Open Call 2. It should be used by the applicants to understand all the features, requirements, and information about the ZDMP Open Calls. Information contained herein should be considered as the authoritative source.

Grant Agreement:
825631



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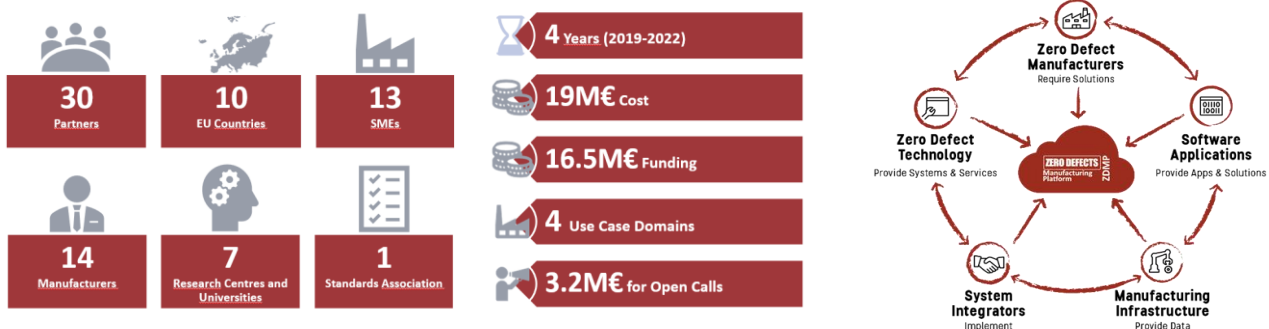
1 Introduction

This guide is designed to support applicants through the submission process for the second of two separate Zero Defect Manufacturing Platform (ZDMP) Horizon 2020 Open Calls. It is intended to be the main source of information for Open Call 2, and unless otherwise informed via the ZDMP/Call website and/or mails to registered submitters, its contents should be deemed authoritative.

If there are questions regarding the application process following reading this document, please refer to information available on www.zdmp.eu/calls and associated pages.

What is ZDMP?

ZDMP is a project funded by the H2020 Framework Programme of the European Commission running from January 2019 until December 2022. It initially engaged 30 partners (Manufacturers, Technology Providers, Consultants and Research Institutions) from 11 countries with a 31st Company, Industry 4 Factory Solutions (i4FS) joining during 2020. i4FS is a company formed by several members specifically for ZDMP's post project exploitation of the ZDMP platform. ZDMP will provide an extendable platform to support factories to help them reach a goal of zero defects with a focus on product and production quality assurance.



ZDMP Aims & Objectives

The main ZDMP objectives are:

- To provide an Industry 4.0 (I4.0) Platform for developing zero-defect solutions
- To ensure the quality of the product along the value chain of the manufacturing process by deploying advanced modelling, detection, inspection, and predictive techniques
- To provide developers a runtime platform including environment, marketplace, and service framework
- To deliver core Industrial IoT support of data acquisition, interoperability, and analytics supported by orchestration, monitoring and autonomous computing
- To ensure outstanding process quality, through equipment, resource, and energy efficiency, by deploying novel AI based solutions

2 Overview of the Open Calls

Headline Information

The ZDMP Open Calls consists of **two separate calls** consisting of a total of €3.2million. This Guidance for Applicants is for Open Call 2 only (Open Call 1 has closed). All applicants to Open Call 1 (including winners and those on the Reserve List) are encouraged to apply again for Call 2.

Open Call 2	
Opens	2nd August 2021
Closes	5pm CET, 1st October 2021
Total funding amount (approx.)	€2.2 million
Funding range (per sub-project)	€50-150K
Sub-project start	January 2022
Project duration	9 months (Fixed Duration)
No. of sub-projects awarded	Approximately 20

Note: All times are CET. Deadlines will be strictly adhered to. Any submissions past the deadline will not be considered.

Why join the ZDMP Open Calls?

Joining the ZDMP Open Calls will benefit you in a range of ways:

- You will receive between €50-150K funding and support to develop new services/products
- You will own what you produce and will be able to exploit outcomes across your business (see Section 5)
- You will have the opportunity to develop new, working relationships with businesses in the Industry4.0 domain
- You will have access to a new sales channel through the ZDMP Marketplace provided via partner i4FS

3 Eligibility

Are you eligible to join the Open Calls?

This section provides a summary of the eligibility criteria. For a full list of the eligibility criteria please see Annex 1.

To submit a proposal to the ZDMP Open Call:

- The call bidder, or lead partner if there are two organisations, must be a qualifying SME, and be the predominant partner in the bid. The SME must be established in an EU Member State, Associated Country or the UK, as defined in EU Law: EU Recommendation 2003/361 and be eligible for participation in H2020 programmes (Please be sure to check the link EU eligible countries list here: http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cp/h2020-hi-list-ac_en.pdf)
- Must have no substantial formal business partnership with any ZDMP partner (eg a predominantly- or wholly-owned subsidiary or affiliate – NB Customer / supplier relationships are not considered as partnerships). Even if this is true and it was greater than 3 years ago then this is also not considered a problem
- Must not be proposing to make a direct profit from the Open Call funding
- Must be a financially stable, legal entity

The funding is primarily intended for single entities, however where bids adequately justify their reasoning, consortia of no more than 1 further entity and bids involving subcontracting (to no more than one other entity) will also be accepted.

All applicants, including multiple or subcontracted entities, will at proposal time be required to state their financial viability and if they win they will complete the European Union [financial viability check](#) and ZDMP reserves the right not to award funding if the viability check raises questions. ZDMP also reserves the right to solicit any other document that allows ZDMP to assess the financial health of the SME and its sustainability during and after the accelerator period.

Third Parties receiving financial support through the ZDMP Open Call programme will not become party to the ZDMP Grant Agreement (signed between the project and the EC)

Target Audience

The following types of organisations are especially targeted to participate in the call:

- EU SMEs (including micro-SMEs)
- EU technology providers and software developers (including start-ups)
- EU manufacturing and supply chain companies
- EU Research Institutes, Universities, and Large Organising supporting SMEs or the target of SME activity

Eligible Types of Applications

- Single Applicant – single entities meeting all eligibility criteria may apply for funding
- Small Consortia – a small consortium of a maximum of two eligible organisations may apply for funding. For example, one Manufacturing company of any size may partner with one SME Technology/Software Provider, or two SME Software Providers / Manufacturers may jointly apply. The SME must be the lead partner in all Consortia bids and be the dominant party.

4 Qualifying Activities

General Information

- Funding Amount per Sub-project: 50,000 to 150,000 Euros
- Experiment Duration for all Sub-projects: 9 months (fixed)

Activity Areas

Open Call 2 consists of three broad activity areas:

- Develop
- Integrate
- Validate

Call 2 is mainly focussed on ZDMP Applications – zApps, although projects with a focus on the ZDMP Platform and components are not excluded.

Proposals should focus directly on a single area of activity, but ZDMP recognizes that minor inclusion of other activity areas may sometimes occur naturally in a sub-project.

Sub-projects will be awarded across all three areas dependent on the number and quality of proposals received in each activity area.

Activity Area 1: Develop

Sub-projects for the development of digital manufacturing applications and solutions for Industry4.0 via the ZDMP platform.

These are sub-projects that develop new applications or solutions that can be integrated into and/or provided via the ZDMP platform. They should consist of novel combinations generally using several existing ZDMP components with existing components or services that you provide. The aim is to extend the functionalities and offerings of the ZDMP platform and marketplace as well as your business, by providing easy-to-use applications for Industry4.0 end-users needing zero-defect solutions.

In this type of sub-project the focus is on:

- Developing new Design-time / Run-time zero-defect smart manufacturing applications/solutions that can be integrated with/made available through the ZDMP Platform and/or Marketplace
- Developing new, easy-to-use AI/Machine Learning applications/solutions potentially utilising new/upgraded algorithms for zero-defect smart manufacturing processes
- Development/Extension of existing ZDMP applications (zApps) which are open-source to provide added value to the platform and/or to reach new Industry4.0 domains (outside of ZDMP pilot domains – Automotive/Electronics/Machine Tools/Construction)

Any application developed must be substantially different from those developed within the ZDMP project.

Aim: To create new applications/solutions for the enhancement of the ZDMP platform, to provide new services to Industry4.0 and to give the opportunity to sub-project participants to build high quality applications by leveraging existing functionalities and capabilities within the ZDMP platform and your own businesses. The application should be fully working and potentially marketable at the end of the activity with no or minimal technical work. You should avoid any repetition of zApps already developed within the ZDMP project (see www.zdmp.eu/technologies).

Target Audience: SME / Start-up technology providers, software developers

Technical Note: All new and/or extended applications will need to be ZDMP platform compliant and be able to connect with ZDMP Core Components (Portal, Marketplace, Service & Message Bus, Application Runtime, Secure Installation, Communication & Authentication and potentially Storage). Further details:

- Application Runtime (Mandatory) – This is the platform where the zApps must be deployed
- Portal (Specifically the DashButton) coupled with Secure Authentication (Both Mandatory) - The use of the Dash Button is the single-sign on component for ZDMP and also provides a common visual entry point into installed ZDMP applications.
- Secure Installation and Marketplace (Mandatory) - This is used to deploy zApps, so although it is not being integrated with as such, a manifest file needs to be provided which is then used for installation from the ZDMP Marketplace
- API Gateway (Mandatory) - If any backend is exposed, this should be performed via the API Gateway. If they want to call any existing ZDMP component or zApp, this should be done via the gateway
- Message Bus (Advised) - Typically this is needed to access other ZDMP components although it may not be needed in every zApp dependent on functionality
- Storage (Optional) - if any kind of storage is needed, then where possible the ZDMP storage should be used – however, in many scenarios they may not be possible since an existing technology basis may already have its own storage

Activity Area 2: Integrate

Sub-projects to extend the ZDMP offering by connecting ZDMP with external platforms, ecosystems and in-house technology

The focus for this activity area is on:

- The integration of existing 3rd Party zero-defect smart manufacturing Design-time and Run-time applications / components / services with the ZDMP Platform
- The integration/interoperability of third-party ecosystems and platforms, including SMEs / Manufacturers with micro in-house specific platforms, with the ZDMP platform
- The integration of existing ZDMP open-source applications (zApps) and/or components with third party processes / components / tools / services in new manufacturing domains/scenarios

Aim: To extend ZDMP platform functionality by integrating with existing applications, components, services, or platforms. You should avoid any repetition of zApps already developed within the ZDMP project (see www.zdmp.eu/technologies).

Target Audience: SME technology providers / software developers, and/or companies of any size from either the manufacturing or supply chain domains that provide applications, platforms or solutions

Technical Note: The integration of applications and components and 3rd Party platforms must use the ZDMP API Gateway and Secure Authentication

In a typical scenario, and if only an existing application is integrating to ZDMP by calling some components then only the ZDMP API Gateway and Secure Authentication

However, since some aspects of integration move into the territory of ‘development’ – all the observations mentioned above under ‘Development’ also apply

Activity Area 3: Validate

Sub-projects for validation and/or testing of ZDMP applications (zApps) and components in digital manufacturing domains

The focus for this activity area is on:

- Functional Validation of ZDMP applications and/or components InCloud and/or OnPremise – eg workflows, UI, integration with other ZDMP applications and/or components, algorithms, data acquisition
- Scenario Validation: Deploy and run ZDMP applications and/or components in a range of smart manufacturing domains/scenarios – eg ‘real-world’ validation using real-world data, zApp security
- Technical Validation of ZDMP applications and/or components – a list of zApps is available on www.zdmp.eu/technologies
- Performance Testing of ZDMP applications and/or components in a range of smart manufacturing domains/scenarios – eg AI model prediction & result testing, security, data acquisition & ingestion
- Usability Testing of ZDMP applications and/or components InCloud and/or OnPremise

Aim: To test and validate ZDMP applications and/or components in additional use cases / domains / environments (Cloud vs Premises) in order to ensure the quality of ZDMP offerings to the broader community of end-users.

Target Audience: SME technology providers or software developers and/or companies of any size from the wider manufacturing domain.

Technical Note: ZDMP provides an Experimentation Facility (see www.zdmp.eu/exp-facility) which can be used by a maximum of 2 sub-projects for validation and testing purposes.

5 Online Submission Process

Official Language

The official language of the Open Call is English. All applications must be submitted in English in all their mandatory parts, in order to be eligible. Otherwise, the entire application will be rejected. If any non-mandatory parts of the application are submitted in a language other than English, these parts of the proposal will not be evaluated, but the proposal may still be eligible.

Submission Platform

All applications are only to be submitted online via the F6S submission platform www.f6s.com/zdmp/apply. This can also be accessed from www.zdmp.eu/calls. Submissions received in any other way will not be evaluated.

Submitters will need to register their organisation on the F6S platform before being able to complete the online submission form.

Submission Support

To support the submission process, ZDMP also provides the following submission support pathway:

- Downloadable Call documentation, including this Guidance For Applicants and the Proposal Template www.zdmp.eu/resources
- General project (www.zdmp.eu) and pilot use cases information (www.zdmp.eu/use-cases)
- Links to ZDMP zApp and zComponent technical information – www.zdmp.eu/technologies and www.zdmp.eu/documentation. For an initial review of zComponents please also view our blogs: www.zdmp.eu/blogs
- Two question-and-answer webinars - see www.zdmp.eu/calls-webinar for details
- An online Frequently Asked Questions page (FAQs) – www.zdmp.eu/calls-faq
- A dedicated email submission support hotline – zdmp-opencall@zdmp.eu (response around 2 working days)

It should be emphasized that the ‘route’ to a successful submission is to follow the submission support pathway above. This means first understand the Call; second take time to learn about ZDMP, ZApps and zComponents; next attend/watch a support webinar; then review the Call 1 FAQs; and finally ask any questions only if necessary.

In addition, take note of Annex 5: FAQs from Open Call 1 of this document which contains questions asked during Call 1 the answers to which should be useful to you.

Submission Rules

When completing the submission template/form, please follow these rules:

- You may apply more than once (eg to the different sub-project types), but only the highest-ranking proposal will be funded (one award per applicant / consortium only). Note if a single party is part of two or more consortium, then provided the other partners are different, they could potentially win more than once. If the two proposals contain the same partners they can win only once”
- You may apply to Open Call 2 even if you applied, or won, in Call 1
- Answer each question. If a question does not apply to your case, explain briefly why

- Be clear and concise and respect the instructions about the length of each answer. Where applicable, use bullet points instead of full sentences or descriptive paragraphs
- Write for an informed audience that is familiar with the general Industry4.0 context, but not with the particulars of your business or market
- Visual elements (eg images, figures, tables, graphics...etc) can be included but care should be taken due to the limits on the proposal lengths
- Do not include any links to external documents to answer a question. Each proposal must be self-contained and describe everything ZDMP should know about your idea
- The proposal must comply with all eligibility requirements
- Stick exactly to the page requirements and do not 'bend' the rules given in the template – for example do not delete cover/back pages, shrink/change recommended fonts, exceed page lengths etc. Reviewers are explicitly asked to take notice of this and ignore content which falls outside the permitted parameters

Required Documentation

The following is the list of documents you need to provide at application time, which can be uploaded to the online submission platform on www.f6s.com/zdmp

- A completed online submission document including upload of the proposal template (see [www.zdmp.eu/resources for template download](http://www.zdmp.eu/resources-for-template-download))
- The proposal template includes an Ethics Statement and a Declaration of Honour which need to be completed before uploading. NOTE: submission of the proposal template automatically indicates your acceptance of the Declaration of Honour, there is no need to sign it directly
- Administrative information: Registration on the F6S portal

If you are proposing to use any 3rd Party facilities, equipment, tools, services or data as part of your project you will need to provide one of the recognised statements listed below to prove that you have legitimate access to and rights to use those items. These statements will only be requested if you are a winning proposal and must be provided during the workplan development and contracting phase (prior to sub-project start):

- For sub-project type 2 proposals ONLY: A statement showing the existing relationship and rights of access to the platform/service which you propose to integrate with ZDMP. Acceptable statements include one of the following:
 - Copy of an existing contract.
 - A Memorandum of Understanding (MoU) signed by the legal entity representing the platform/service
 - An email from a relevant person within the legal entity owning (or anyway representing) the platform/service stating that the applicant has access to the platform/service
 - A self-signed statement by the legal entity owning (or anyway representing) the platform/service stating that the applicant has access to the platform/service
- For proposals including the use of third-party datasets that are NOT Open Access or provided by ZDMP ONLY: A statement showing an existing relationship with the data owner and a right of access and use them. Acceptable statements include one of the following:
 - Copy of an existing contract
 - A Memorandum of Understanding signed by the legal entity owning the data

- An email from a relevant person within the legal entity owning data stating the right to access such data
- For proposals requiring access to 3rd party industrial facilities not provided by ZDMP User partners or the ZDMP Experimentation Facility ONLY: A statement showing an existing relationship and a right of access to the industrial facility. Acceptable statements include one of the following:
 - Copy of an existing contract
 - A Memorandum of Understanding signed by the legal entity owning the industrial facility
 - An email from a relevant person within the legal entity showing the right to access the industrial facility for the purposes of the sub-project

6 Selection and Evaluation Process Overview

Applications meeting the eligibility criteria (See Annex 1) will be evaluated by one internal (ie from the ZDMP consortium) and one external expert evaluator. Evaluators will use the evaluation criteria (See Annex 2) to submit an evaluation report for each proposal via the F6S submission platform. Only those proposals that are finally selected will receive feedback in the form of their final evaluation score and where relevant ZDMP edited comments; all other proposals will receive a standard rejection email. Any subsequent requests for feedback will simply be pointed to this G4A statement,

Where evaluator scores are divergent, proposals will be mediated by the Open Call Steering Committee and a final decision reached and documented by them. Proposals will be ranked according to final evaluation score within the three qualifying activity areas. Sub-projects will be awarded according to rank in each qualifying activity area, dependent on the number and quality of proposals, and in alignment with ZDMP project priorities and objectives to, for example, avoid multiple sub-projects in the same domain and activity area or those with overly similar outcomes or which use the same zComponents/zApps. Once the provisional winners have been selected, ZDMP will publish the outcome of the Open Calls within one month of the end of the evaluation and selection period at www.zdmp.eu/calls.

Proposals failing to reach the threshold, or those which met the threshold but were not awarded, will receive a standard rejection email as per those proposals failing the eligibility check. No other forms of feedback will be provided and ZDMP will not operate an evaluation appeals procedure. However, if applicants feel that submissions procedures were not followed correctly, an opportunity to contact ZDMP via email within one week of the evaluation results being announced will be provided. Any such procedural issues raised in this way will be addressed by the Open Call Steering Committee whose decision shall be final.

Proposals awarded funding will receive a copy of their final evaluation score and, as determined by ZDMP, may also be provided with edited evaluation comments where those comments would be of benefit in the development of the sub-project workplan for that proposal.

Selection and Evaluation for Call 2 will occur during October and November 2021.

7 Sub-project Obligations & Support from ZDMP

Winning Proposals

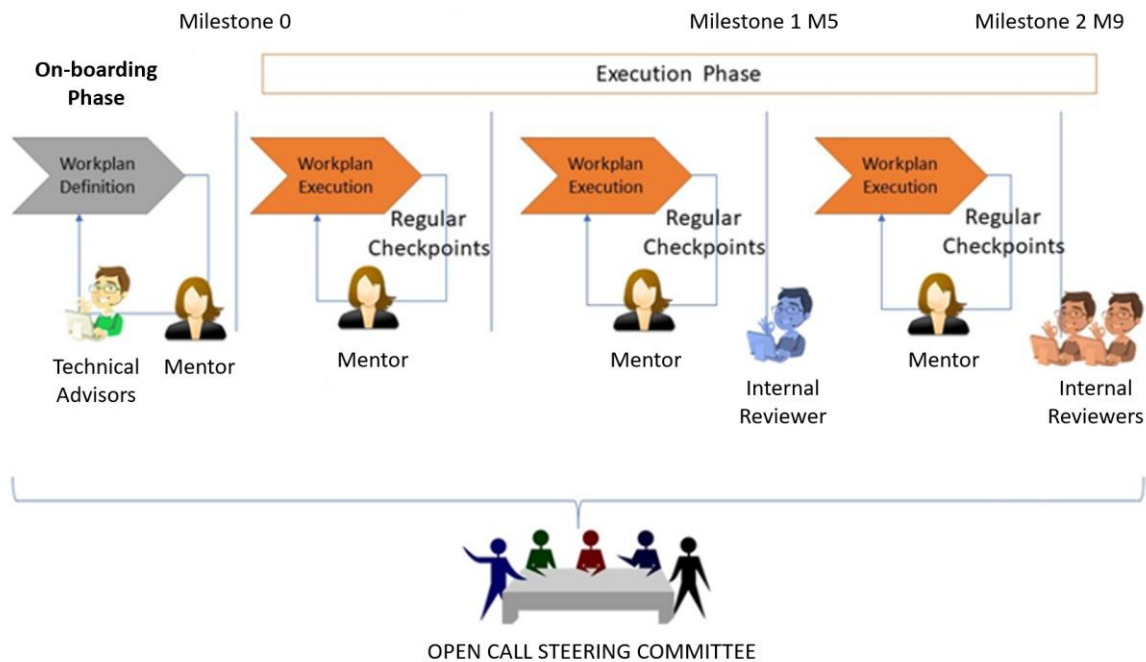
If an application is awarded funding, a period of contracting and workplan development will be entered with the submitter. Contracts will only be signed once the workplan has been finally approved by ZDMP. Contracts will cover only the period of the sub-project (always fixed at 9 months). New contracts must be drawn up and agreed between i4FS (the ZDMP platform management company) and the Open Call winners to cover post-project exploitation and requirements.

There is a single contract for all Open Call winners (See Annex 4) which is not negotiable. In limited and exceptional cases, determined solely at ZDMP Open Call Steering Committee discretion, there may be specific minimal adjustments according to the exact nature of the individual sub-projects permitted if this is clearly visible at proposal time or could be inferred.

The IPR and Exploitation conditions addressed in the Open Call winner contract should be carefully evaluated by the applicants.

Upon funding being awarded, the applicant will be notified at approximately 2 weeks from final approval and will be asked to provide a workplan within a maximum 2 weeks of notification. If this is not provided, or in general winners are un-responsive, at ZDMP's sole discretion the award can be withdrawn and another proposal selected according to previously stated criteria. A workplan template will be available to winners on www.zdmp.eu/resources.

ZDMP will nominate an Mentor from within the project with whom you will collaborate over workplan development (and on-going sub-project support - see Figure 1).



Figure

1: Sub-project Support & Monitoring

ZDMP will assist the development of workplans where required by answering process queries and facilitating conversations with ZDMP technical or user partners if requested. The Open Call Steering Committee will review the workplans to ensure that they are accurate, measurable, and achievable, and provide feedback where necessary, iterating until final approval is reached. This process should take no longer than two weeks, after which, if there is no agreement then the funding award may be withdrawn at ZDMPs discretion.

The workplan will include the requirement to produce regular progress reports according to the following general schedule:

- D1. Requirements Specification (Report) – M2
- D2. Setup (Demonstration) – M3
- D3a. Implementation (Mid Project) (Demonstration) – M5
- D3b. Implementation (Final) (Demonstration) – M8
- D4a. Execution and Validation (Report) – M8
- D4b. Execution and Validation (Demonstration) – M8
- D5. Exploitation Plan and Dissemination Results (Report) – M9
- D6. Additional Activity (Report) – M9 (if applicable)

Sub-project progress will be assessed via a series of Milestones defined as follows:

- **Milestone 1: M5 Review: All deliverables due up to M5**
 - D1. Requirement's specification
 - D2. Sub-project setup
 - D3. Sub-project implementation
- **Milestone 2: M9 Review: All deliverables due after M5**
 - D4. Sub-project execution and validation
 - D5. Exploitation plan and sub-project results
 - D6: Open Deliverable (where relevant) (For Project with the Open Task 6)

Sub-project continuation and payments will be dependent upon successfully meeting the relevant Milestones. Reports will be used to evaluate the current level of activity, progress towards targets and outcome implementation. Progress will be assessed against the targets, indicators and outcomes as agreed in the workplan and lumpsum payments may be withheld if progress is insufficient.

Reports on Sub-project results and outcomes (in the form of the Milestone 3 deliverable report – see Section 6 below) must be provided free of charge to anyone for one year after the end of the ZDMP project available on the ZDMP platform.

Sub-projects will be required to complete an end-of-project satisfaction and feedback survey.

ZDMP or the European Commission may ask you to present your work as part of ZDMP project meetings, public relations, dissemination and/or networking events. If you will incur in travel costs for these activities (maximum 2), they will be considered a claimable cost within the award envelope.

Additional Documentation

Once a sub-project has been notified of selection, confirmation of the below must be submitted within 2 weeks:

- Financial Viability Self-check (available on https://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/applying-forfunding/register-an-organisation/financial-capacity-check_en.htm)

Note: ZDMP reserves the right to request any other document that allows ZDMP to assess the financial health of the lead SME and its sustainability during and after the accelerator period and the right to decline funding where financial viability cannot be assured.

8 Sub-project Regulations

Funding

Funding will be provided on the following basis:

- The total financial support awarded to sub-project winners will be according to the standard IA funding rate for each bidding organization (eg 70% applied to profit companies and 100% to non-profit organizations)
- 70-80% of the Open Call funding is for eligible SMEs only, including consortia or sub-contract bids
- Consortia are subject to the same funding restrictions as govern standard IA funding rates for bidding organizations
- Sub-contracted parties will typically be funded at 100% by the sub-project beneficiary, however, this would be as agreed between those parties and the sub-project beneficiary. Regardless, the sub-project beneficiaries will only be funded according to standard IA funding rates. Further clarity is pending from the EU Project Officer on this point and any updates will be posted on the ZDMP website

The funding can only be spent on costs as detailed in the original proposal and workplan which would primarily be on personnel costs. Expenditure on some equipment may be possible but ZDMP would anticipate that most bidders would have this and so this exception would need to be justified and the costs should follow participants normal practices (eg depreciation and then only for the project duration).

Subcontracting of technical work is allowed provided it is included in the proposal and then only to one additional party to a maximum value of around 20% with suitable justification. This call does not accept expenditure on consumables or travels and if undertaken should be part of the bidders normal business expenses. Subcontracting to other supporting parties (eg for marketing, training, or legal support) is not allowed. Indirect expenditure – overheads (including office space, office infrastructure, admin staff, printing and photocopying, heating, electricity etc.) is calculated as 25% of the total direct costs.

Synergies with other sources of funding, including other Horizon 2020 projects, are encouraged if the grants are used for complementary, not overlapping purposes and double-funding of this sort is not permitted and if you are selected, you will be asked to confirm this.

Payments

Payments will be dependent on progress, which will be assessed against the targets, indicators and outcomes as agreed in the workplan (see Section 7). Lumpsum payments may be withheld if progress is insufficient. This will be determined by the Open Call Steering Committee in conjunction with project mentors. Sub-projects awarded funding will receive lumpsum payments, as presented in Figure 2.

Open Call 2 Payment Schedule

1st payment	Lumpsum payment of 50% of total award Within 45 days of signing contracts
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	Subject to agreed workplan
2nd payment (Milestone 1)	Lumpsum payment of 15% of total award Within 45 days of M5 deliverables and milestone approval Subject to successful mid-project review and agreement of Coordinator
3rd payment (Milestone 2)	Lumpsum payment of 20% of total award Within 45 days of approval of M9 deliverables and milestone approval Subject to successful project completion and agreement of Coordinator
4th payment	Lumpsum payment of 15% of total award Subject to the EU having provided sufficient payments noting that this is unlikely to happen until approximately 6-12 months after ZDMP completion

Figure 2: Open Call 2 Payment Schedule

Intellectual Property Rights (IPR) and Exploitation

The following conditions applies to all relevant sub-projects:

- Sub-project winners will own the outputs of their Open Call activity (eg zApps, Components, validation results, testing methodologies, and/or integrated services) and will be free to exploit them across their business
- Where relevant, sub-projects will host outputs on the ZDMP Marketplace free of charge, both for the third party and for the ZDMP project, for one year after the end of the project with any Marketplace sales generating revenue for the sub-project’s business and commission for the ZDMP Marketplace
- Applicable sub-project software outputs must be exploited through i4FS Marketplace exclusively (zComponents, zApps) for one year after the end of the project. This limitation only affects the availability of the output in other marketplaces; other modalities of exploitation are allowed (eg the Sub-project Party can use the zApp they have produced in their business to improve the quality of its processes or products or for existing customers)
- Following that, relevant sub-project outputs will need to be hosted for one year after the end of the ZDMP project on the ZDMP platform. Ongoing hosting will be subject to bilateral negotiations where all costs will need to be part of the hosting agreements between the sub-project parties and i4FS (the management company for the ZDMP platform post-project)
- Validation results (eg test reports) must be provided free of charge to anyone for a limited period after the end of the project

Detailed IPR conditions relating to individual ZDMP components can be reviewed on www.zdmp.eu/ipr-for-subcalls

9 Technical Information

Detailed technical information is available on www.zdmp.eu/technologies by viewing/following links to the zComponents, zApps, and Open API sections.

An overview of the ZDMP environment is given Figure 3. This shows the architecture for technical components as well as actors and data sources involved.

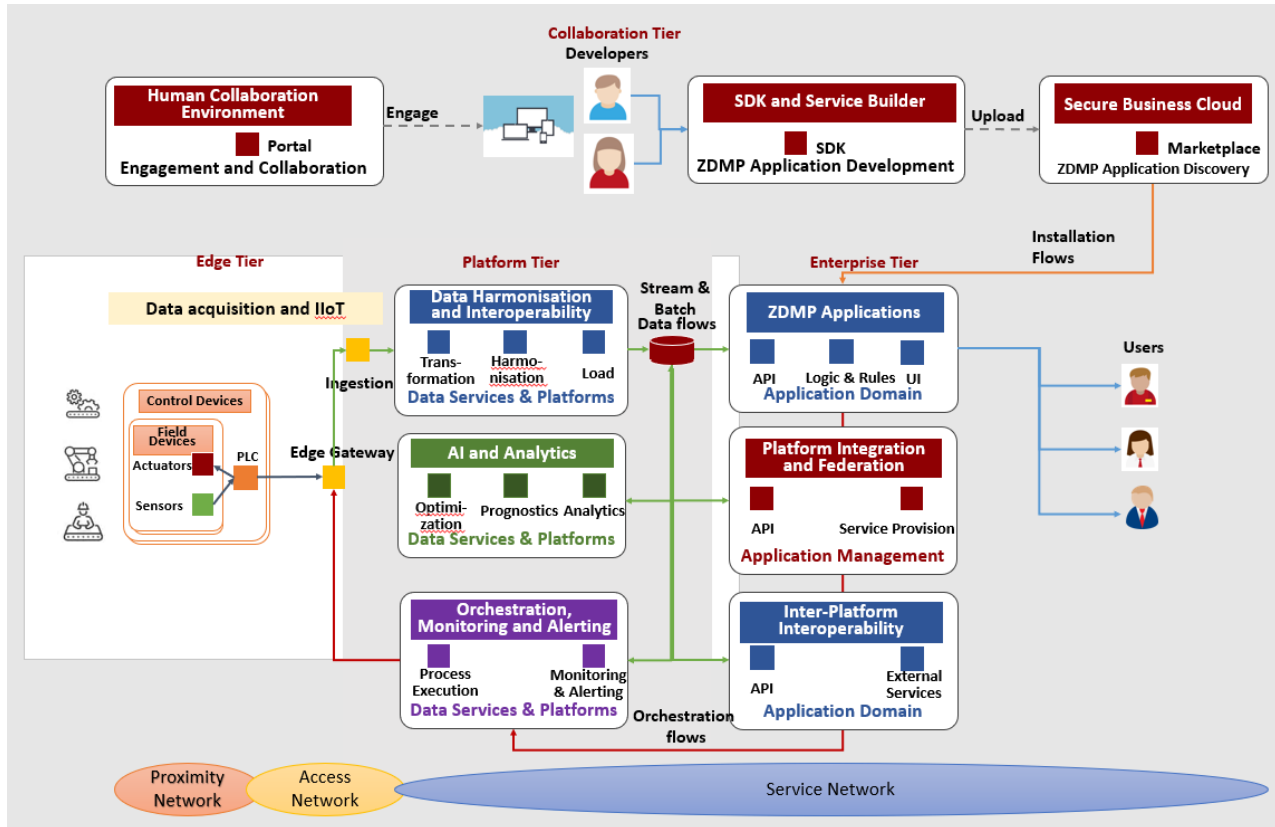


Figure 3: ZDMP Architecture / Environment

zApps & zComponents

ZDMP consists of a series of software components (zComponents) (See Figure 4) which can be used were relevant to combine into new ZDMP Applications (zApps) or integrated with 3rd Party components / tools / services. The ZDMP platform and zComponents can be deployed OnPremises or InCloud (or both). zApps are detailed in the technologies section of the website but are not expected to be used within Open Call 2 except in Activity Area 3 (Validate). When creating or integrating zApps/zComponents in Actviity Area 1 (Develop) or 2 (Integrate), take care not to significantly overlap with ZDMP zComponents/zApps already developed by ZDMP.

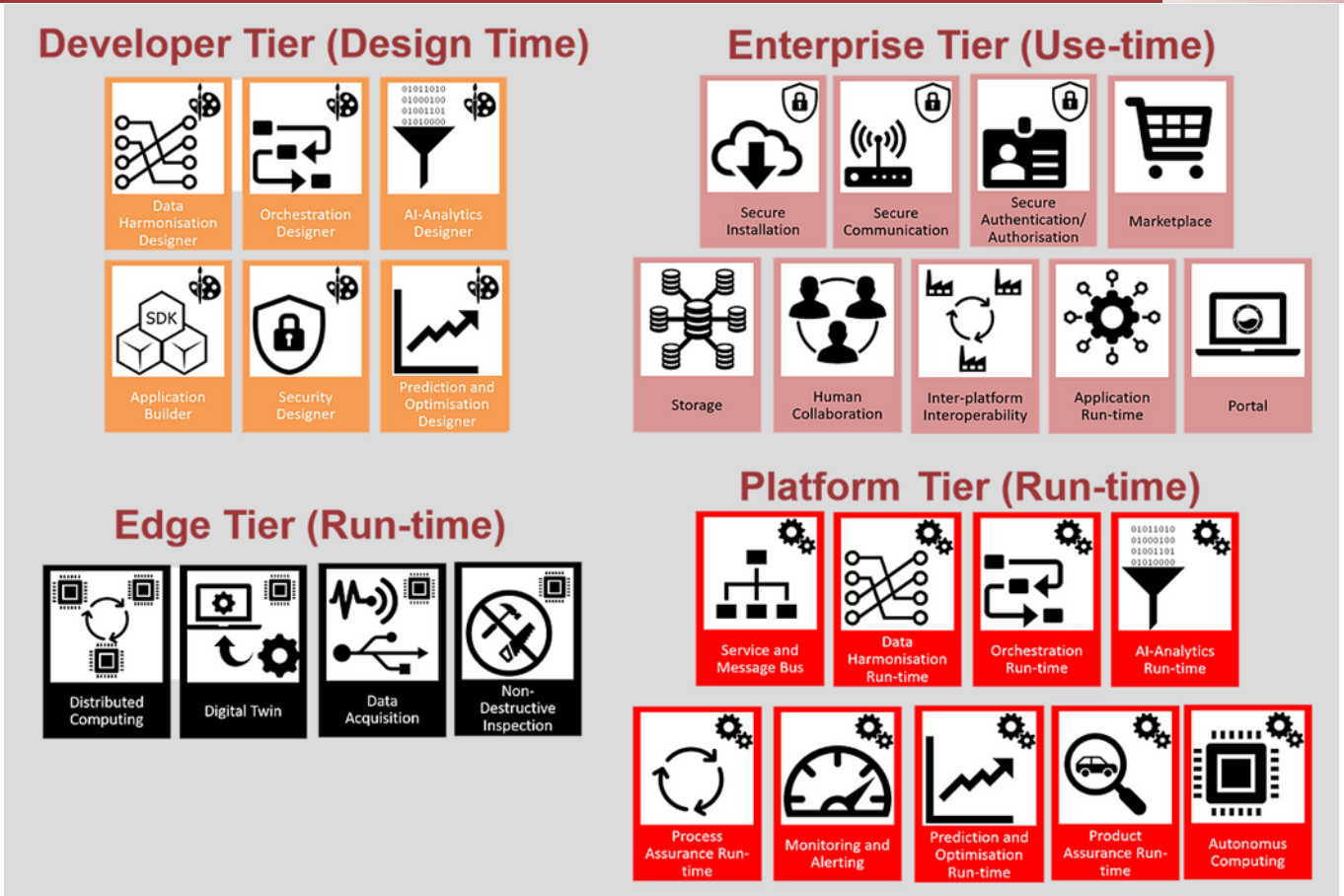


Figure 4: ZDMP Components

Experimentation Facility

An open facility with industrial equipment (ie production lines, machines and devices) where Industry 4.0 services and ZDMP modular software components can be tested and validated to ascertain their functionalities and capability, is available to sub-projects. A maximum of 2 sub-projects proposing to use the experimentation facility will be funded in Call 2. For more information on this facility please visit www.zdmp.eu/exp-facility.

10 Useful Links and Contacts

Submission Platform:

www.f6s.com/zdmp/apply

The *only* place to submit your proposal

Contact:

zdmp-opencall@zdmp.eu

The *only* email address to use for questions about the Open Call (Approximately 48 hour response time)

Information and Documents:

www.zdmp.eu

ZDMP home page

www.zdmp.eu/calls

Information and links about the Open Call, including the promo video

www.zdmp.eu/resources

All the documents relating to the Open Call, including the Guidance for Applicants and the Proposal Template

www.zdmp.eu/technologies

High-level technical description of ZDMP components (zComponents) and existing ZDMP Applications (zApps)

www.zdmp.eu/documentation &
software.zdmp.eu/docs/

Detailed technical information on the ZDMP zComponents

www.zdmp.eu/calls-faq

Answers to commonly asked questions about the Open Call

www.zdmp.eu/calls-webinars

Register here to attend our monthly application Support webinars and ask the ZDMP Team any questions you may have

www.zdmp.eu/ipr-for-subcalls

Information on IPRs for ZDMP zComponents

www.zdmp.eu/exp-facility

Information about the experimentation facility that ZDMP provides for Open Call projects

Annex 1: Eligibility Criteria

To be eligible to apply for cascade funding through the Open Calls, applicants must pass a series of eligibility tests. All proposals will be initially screened for eligibility by members of the Open Call Steering Committee as well as by checklist on the F6S submission form. Proposals failing to meet these criteria will not be considered for evaluation. The criteria have been defined as follows:

- Proposal addresses primarily one of the Qualifying Activity areas and clearly fits with EU and ZDMP project objectives. This will be assessed based on responses in the relevant sections of the online submission forms
- Proposal does not (heavily) duplicate existing ZDMP components, planned testing/validation activities, or zApps produced during ZDMP Pilot projects. This will be assessed by comparison between proposed actions and existing ZDMP activity
- Use of the Experimentation Facility where relevant (max. 2 projects)
- Proposal adheres to EC/H2020 standards of transparency, equality, conflicts of interest, confidentiality, GDPR and ethics. This will be assessed based on responses in the relevant sections of the online submission forms
- Proposal is from an SME, and if with another Partner/subcontractor, it is orientated towards that SME, and where all entities are established in an EU Member State, Associated Country, or the UK, as defined in EU Law: EU Recommendation 2003/361 and is eligible for participation in H2020 programmes - Guidance on the associated countries can be found here: (http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf)
- The proposer is a financially stable, legal entity. Initially, this will be assessed based on applicant self-declaration on the F6S submission form. Subsequently, those applicants awarded cascade funding will be asked to complete the European Union financial viability check during contracting. It shall be at the sole discretion of the Open Call Steering Committee to identify and potentially eliminate financially insecure partners below a certain viability score as applied equally across all such Open Call winners
- Must have no substantial formal business partnership with any ZDMP partner (eg a predominantly- or wholly-owned subsidiary or affiliate – NB Customer / supplier relationships are not considered as partnerships). This will be assessed based on self-declarations in the relevant sections of the online submission. Even if this is true and it was greater than 3 years ago then this is also not considered a problem
- Consortia or sub-contract proposals must have the lead partner as a qualifying SME and consist of no more than 2 partners total

Annex 2: Evaluation Criteria

Evaluation criteria consist of three main areas: Excellence / Impact / Implementation. Each area contains a number of sub-criterion which will be scored from 0 to 5 (including half points), as follows:

- 0 = Void. Proposal fails to address the criteria or cannot be judged due to missing/incomplete information
- 1 = Poor: The criteria are addressed in an inadequate manner, or there are serious inherent weaknesses
- 2 = Fair: While the proposal broadly addresses the criteria, there are significant weaknesses
- 3 = Good: The proposal addresses the criteria well, although improvements would be necessary
- 4 = Very good: The proposal addresses the criteria very well, although certain improvements are still possible
- 5 = Excellent: The proposal successfully addresses (nearly) all relevant aspects of the criteria in question

Each sub-criterion score will be multiplied by the weighting percentage shown for each of the three qualifying activity areas. Then sub-criterion scores will be summed, averaged, and weighted to provide an overall score for that area. Scores for each area will be summed to give a total proposal score.

Criteria	Sub-criterion	Weighting by Activity Area
Excellence Threshold score: 3 Criteria Weight: 30%	How feasible and clearly defined are the sub-project's objectives, outcomes and Key Performance Indicators (KPIs)? (Are the objectives, outcomes and KPIs specific, measurable, achievable, realistic, and timely?)	Create: 15% Integrate: 15% Validate: 15%
	How clearly aligned is the sub-project to ZDMP project objectives and outcomes?	Create: 15% Integrate: 15% Validate: 15%
	To what extent does the state-of-the-art in the proposal indicate a cutting-edge understanding of the domain?	Create: 10% Integrate: 10% Validate: 5%
	To what extent does the proposal contain a high-level of innovation?	Create: 20% Integrate: 15%

	(Innovative proposals include, for example: Novel validation and testing methodologies, novel application to Industry sectors, integration of different technologies, creating new zero-defect solutions, creative use/validation of existing ZDMP components/services, creative application of new/cutting-edge technologies, innovative contributions to standardisation etc.)	Validate: 10%
	To what extent does the sub-project intend to make effective use of ZDMP components or services (including where relevant, the ZDMP Experimentation Facility)? (This includes using them to create new zApps or new platform components or, and/or testing and validating existing zApps or ZDMP components, and/or using the Experimentation Facility if applicable)	Create: 20% Integrate: 25% Validate: 40%
	To what extent will the proposed technological developments be able to produce added value? (Is the sub-project a catalyst for future technologies or technological developments?)	Create: 20% Integrate: 20% Validate: 15%
<p>Impact</p> <p>Threshold score: 3</p> <p>Criteria Weight: 40%</p>	To what extent and how effectively does the proposal address a 'real-world' and/or concrete zero-defect manufacturing challenge/issue?	Create: 25% Integrate: 25% Validate: 35%
	How clearly presented is the impact of the sub-project on the wider Industry4.0 landscape or related paradigm? (Well described includes the detail, depth and extent of the impact of the sub-project output across all relevant or associated I4.0 areas, eg use of generic IOT, cyber physical systems, data analytics, standards...etc)	Create: 20% Integrate: 20% Validate: 20%
	How clearly described is the usefulness, usability and/or functionality of the sub-project's output for ZDMP project partners and/or end-users?	Create: 20% Integrate: 20% Validate: 15%
	How clearly defined is the market potential of the sub-project's output in the long-term, and is the proposed sub-project output able to be transferred to ZDMP Marketplace? For validation sub-projects, how clearly defined is the contribution the validation results will make towards developing ZDMP components for market readiness?	Create: 20% Integrate: 20% Validate: 15%
	How clearly described is the exploitation strategy?	Create: 15%

	(This includes differentiation, dissemination, business strategy, and/or future deployment of validated components in manufacturing scenarios)	Integrate: 15% Validate: 15%
<p>Implementation</p> <p>Threshold score: 3</p> <p>Criteria Weight: 30%</p>	How suitable are the capabilities of the proposing organisation to undertake the sub-project? (Capability includes describing infrastructure, availability of resources, equipment etc to be used)	Create: 20% Integrate: 20% Validate: 20%
	To what extent does the proposal include a commitment to providing own resources and/or additional funding? (Own resources includes providing own data in particular)	Create: 20% Integrate: 20% Validate: 25%
	How skilled and experienced is the proposing team? (Evidence of the suitability of the skills of the organisation/personnel involved in the proposal, including where relevant previous projects/grants, stage of growth, management track record, publications...etc)	Create: 10% Integrate: 10% Validate: 10%
	To what extent is the proposed implementation plan and/or validation methodology robust? (Robust means specific, measurable, achievable, realistic and timely)	Create: 20% Integrate: 20% Validate: 20%
	To what extent does the proposal include an appropriate allocation and justification of costs (personnel / equipment / indirect costs)?	Create: 15% Integrate: 15% Validate: 15%
	How well described is the IPR intent for sub-project outputs?	Create: 10% Integrate: 10% Validate: 5%
	Please rate the use and/or understanding of industry and/or software standards and the credibility of any possible contribution to standardisation described in this proposal.	Create: 5% Integrate: 5% Validate: 5%

Annex 3: Further Submission Information

Your proposal should be created only according to the ZDMP proposal template as downloaded from www.zdmp.eu/resources. This should be saved as a PDF file and uploaded to the F6S submissions platform. **ALL applications MUST be made via this submissions platform: www.f6s.com/zdmp/apply** and not by any other means

You will also be asked for general information and declarations including:

General Information

1. Sub-project type (Activity) that your proposal is addressing.
2. Are you applying as a Single Applicant or a Consortium?
3. Where did you hear about the ZDMP Open Call?
4. What country is the main applicant registered in?
5. What country is the second applicant registered in? (if relevant)
6. Have you been involved with an EC H2020 project previously?
7. How many employees does your organisation have?

Declarations

8. Declaration that all parties in the proposer team are legal, solvent business entities, established in the EU, Associated Countries or the UK, and eligible for Horizon 2020 funding.
9. Declaration that there is no known conflicts of interest between this proposer and any member of the ZDMP Consortium.

Annex 4: Example Contract

If funding is awarded for a sub-project, the submitter will be asked to submit a series of documents including.

- Confirmation of SME status
- Bank account information
- European Union Financial Viability Check results
- Final Workplans

During negotiations, the ZDMP team will work with the SME to finalize a workplan for the sub-project. Receiving any amount of funding from ZDMP requires the SME to set and achieve a set of deliverables as detailed in the workplan and signed off in the contract.

Contract

Once the applicant is validated as an SME and has negotiated the workplan with ZDMP, they will be asked to sign a contract to formally join the ZDMP sub-projects. An example contract can be seen below but may be subject to further revision.

ZDMP SUB-GRANT AGREEMENT

PROJECT TITLE: **WINNER PROPOSAL NAME**,
[WINNER PROPOSAL ACRONYM]

Instituto de Desenvolvimento de Novas Tecnologias (UNINOVA), VAT N° 501797173, *Campus da FCT/UNL, Quinta da Torre, 2829-516 Caparica, Portugal*, represented by Virgílio Machado (President of the Administrative Board) and João Carlos Lima (Member of the Administrative Board), acting as Coordinator of the consortium concerning the project "Zero Defects Manufacturing Platform" (hereinafter referred to as "ZDMP") hereinafter referred to as the "*Coordinator*" of the **one part**,

and **[Institution]**, non-profit/private association, VAT N°: **XXXXXXXX**, established in **[Address]**, **[Country]**, represented by **[XXXXXXXX]**, President of the Board and **XXXXXXXX**, Member of the Board, or their authorised representative, hereinafter referred to as the "*Subcall Party*" on the **other part**,

WHEREAS

The European Commission (hereinafter referred to as the "*EC*") and the *Coordinator* on behalf of the consortium have signed the Grant Agreement N° 825631 for the implementation of ZDMP project within the Horizon 2020 Programme of the European Union.

The ZDMP project provides, in accordance with the financial support of the Third Parties, duly selected.

Within the ZDMP project an Open Call for proposals was launched and after the evaluation process "**WINNER PROPOSAL NAME**" (**WINNER PROPOSAL ACRONYM**), from **WINNER PROPOSAL INSTITUTION**, was selected to be funded.

This preamble and annexes herein enclosed are an intrinsic part of this ZDMP *sub-grant agreement*.

It is agreed as follows:

Article 1. Purpose of the sub-grant agreement

The *Subcall Party* shall carry out activities as described under Annex A of this agreement hereinafter enclosed related to (hereinafter referred to as the "Subproject") within the frame of ZDMP and under the conditions laid down both in Grant Agreement and in this ZDMP *sub-grant agreement*.

Article 2. Start date and duration of the project

The activities provided under Annex A shall be conducted from **1st January 2022** (hereinafter referred to as the "*start date*") to **30th September 2022** (hereinafter referred to as the "*end date*"). It will be subject to the terms and conditions set out in this *sub-grant agreement*.

Article 3. Maximum financial costs and contribution

The maximum costs that will be incurred by the *Subcall Party* in compliance with the financial rules of Horizon 2020, as provided by the Article 5 herein, shall be **EUR XXXXX (XXXXX EURO)**.

The maximum financial contribution of the *Coordinator* to the *Subcall Party* shall be **EUR XXXXX (XXXX EURO)**.

If the costs claimed by the *Subcall Party* and accepted by the *Coordinator* are lower than those as above provided, the contribution will be modified accordingly. If the costs claimed are greater, these additional costs shall not be funded.

Article 4. Obligations of the Subcall Party

The *Subcall Party* shall conduct the activities described under the Annex A, and, if required by the *Coordinator*, during the *Project* the *Subcall Party* shall:

- Participate at meetings organised by the Consortium
- Attend webinars that will be put at their disposal for business development, investment readiness and technical implementation of the *Project*

During the *Project*, the *Subcall Party* shall provide the following deliverables, whose detailed description is contained in the Annex A:

- D1. Requirements Specification (Report) – M2
- D2. Setup (Demonstration) – M3
- D3a. Implementation (Mid Project) (Demonstration) – M5
- D3b. Implementation (Final) (Demonstration) – M8
- D4a. Execution and Validation (Report) – M8
- D4b. Execution and Validation (Demonstration) – M8
- D5. Exploitation Plan and Dissemination Results (Report) – M9
- D6. Additional Activity (Report) – M9 (if applicable)

Any deliverable required by this *sub-grant agreement* shall be in English.

At least one party involved in the *Project* shall attend the kick-off and intermediate (if applicable)/final review meetings of the *Projects*.

These meetings are organized by the Open Call Steering Committee to evaluate the work performed and to eventually move the *Project* to the next stages of the contract or present

its final results. During the events, the participating party shall present the current results of the *Project* and the possible plan for the next phase if applicable.

Article 5. Payment arrangements

1. The contribution of the *Subcall Party* shall be paid as follows with the understanding that final payments are dependent on EU funds being received by the contracting party:

Open Call 1 & 2 Payment Schedule	
1st payment	Lumpsum payment of 50% of total award Within 45 days of signing contracts Subject to agreed workplan
2nd payment	Lumpsum payment of 15% of total award Within 45 days of M5 deliverable approval Subject to successful mid-project review and agreement of Coordinator
3rd payment	Lumpsum payment of 20% of total award Within 45 days of approval of M9 deliverables Subject to successful project completion and agreement of Coordinator
4th payment	Lumpsum payment of 15% of total award Subject to the EU having provided sufficient payments noting that this is unlikely to happen until approximately 6-12 months after ZDMP completion

2. The bank account of the *Subcall Party* to which all payments of the financial contribution of the *Contracting Authority* shall be made is:

- Name of the account: (WINNER ACCOUNT NAME)
- Address of the account holder: (WINNER ACCOUNT ADDRESS)
- Name of the bank: (WINNER BANK NAME)
- Address of the bank: (WINNER BANK ADDRESS)
- IBAN number: (WINNER IBAN)
- SWIFT/BIC number: (WINNER SWIFT)

3. The final financial contribution to the *Subcall Party* shall be paid by the *Coordinator* subject to the following dispositions:

- A favourable resolution by ZDMP Open Call Steering Committee following assessment of the Project Mentor.
- The costs claimed by the *Subcall Party* shall comply with the financial provisions established within the legal base of the Horizon 2020, as especially those described under the document " Annotated Model Grant Agreement" (http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf)

- The *Coordinator* shall be entitled to withhold the payments in case the *Subcall Party* does not fulfil with its obligations.
- Reasonable Banking and transaction costs related to the handling of any financial resources transferred to the *Subcall Party* by the *Coordinator* shall be covered by the *Subcall Party*.
- Financial reports should be made using the template provided by the *Coordinator*.

Article 6. Communications

1. Any legal communication or request concerning this *sub-grant agreement* shall identify the nature and details of the request or communication and be submitted to the following addresses:

For the *Coordinator*: **Instituto de Desenvolvimento de Novas Tecnologias** – see address in first page.

For the *Subcall Party* – see address in first page

2. For legal information or documents to be transferred by e-mail, the following addresses shall be used:

For the *Coordinator* (send to both emails): pass@uninova.pt
mjl@uninova.pt

For the *Subcall Party*: (TO BE PROVIDED)

3. In case of refusal of the notification or absence of the recipient, the *Subcall Party* is deemed to have been notified on the date of the latest delivery, if notification to the *Subcall Party* has been sent to one of the addresses mentioned in paragraphs 1 and 2 and to their legal representative.

4. All communication shall be in English.

Article 7. Confidentiality

The *Subcall Party* shall comply with the confidentiality obligations set out in Article 36 described in H2020 Programme, AMGA – Annotated Model Grant Agreement in the following link:

https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf.

Article 8 - Personal data protection

1. Processing of personal data by the Contracting Party

Any personal data included in this Contract shall be processed pursuant to the EU General Data Protection Regulation (GDPR) on the protection of natural persons with regard to the processing of personal data and on the free movement of such data.

Such data shall be processed solely for the purposes of the performance, management and monitoring of this Contract by the Contracting Party acting as data controller.

The data may also be sent to persons or bodies responsible for monitoring or inspections in application of EU law, including other members of the ZDMP consortium.

The *Subcall Party* can exercise the rights of access, rectification, consent revocation, erasure, restriction, objection or portability by contacting the data controller (the *Contracting Party*). (DPO email: dpo@unl.pt).

2. Processing of personal data by the *Subcall Party*

In the event that the *Subcall Party* receives any personal data (as defined by the GDPR) from the Contracting Party, it shall ensure that it fully complies with the provisions of the GDPR and only deals with the data to fulfil its obligations under the Contract. The Expert shall not attempt to re-identify the data subjects to which the data relates and commits not to make any unauthorised use of personal data.

The *Subcall Party* may only act under the supervision of the data controller identified above. This is the case in particular for determining why personal data should be processed, what categories of data may be processed, who will have the right to access the data, and how the data subject may exercise its rights.

The *Subcall Party* must put in place appropriate technical and organisational security measures to address the risks inherent to data processing and:

- (a) Prevent unauthorized people from accessing computer systems that process personal data, and especially the:
 - (i) Unauthorized reading, copying, alteration or removal of storage media
 - (ii) Unauthorized data input, disclosure, alteration, or deletion of stored personal data
 - (iii) Unauthorized use of data-processing systems by means of data transmission facilities
- (b) Ensure that a data-processing system's authorized users can access only the personal data to which its access right refer;
- (c) Record which personal data have been communicated by the *Subcall Party*, when and to whom;
- (d) Ensure that personal data being processed on behalf of third parties can be processed only in the manner prescribed by the Contracting Party;
- (e) Ensure that, during communication of personal data and transport of storage media, the data cannot be read, copied or deleted without authorization;
- (f) Design its organisational structure in a way that meets data protection requirements.

Article 9. Intellectual Property Rights (IPR) and Exploitation

The following condition applies to all relevant sub-projects:

- Sub-project winners will own the outputs of their Open Call activity (eg zApps, components, validation results, testing methodologies, and/or integrated services) and will be free to exploit them across their business
- Where relevant, sub-projects will host outputs on the ZDMP Marketplace free of charge, both for the third party and for the ZDMP project, for one year after the end of the project with any Marketplace sales generating revenue for the sub-project's business and commission for the ZDMP Marketplace
- Applicable subcall software results must be exploited through i4FS Marketplace exclusively (zComponents, zApps) for one year after the end of the project. This limitation only affects availability of the result in other marketplaces; other modalities of exploitation are allowed (eg the Subcall Party can use the zApp they have

produced in their business to improve the quality of its processes or products or existing customers)

- Following that, sub-project outputs will need to be hosted for one year after the end of the ZDMP project on the ZDMP platform
- Ongoing hosted will be subject to bilateral negotiations where all costs will need to be part of the hosting agreements between the sub-project parties and the i4FS (the management company for the ZDMP platform post-project)
- Validation results (eg test reports) must be provided free of charge to anyone for a limited period after the end of the project.

Article 10. Information and communication

The *Subcall Party* shall, throughout the duration of the *Project*, take appropriate measures to engage with the public and the media about the *Project* and to highlight the financial support provided by ZDMP. In all information and communication activities, the *Subcall Party* shall refer to ZDMP, using its logo and website in any communication material.

In addition, the *Subcall Party* shall respect the provisions of the Article 38 established in H2020 Programme, AGA – Annotated Model Grant Agreement in the following link:

https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga.en.pdf .

The subcall party is obliged to make a dissemination web page(s) within 1 month to describe the projects for at least a general technical reader. It should be updated throughout the project duration until project end. It should link back to the ZDMP website. Accept that ZDMP will similarly link to this landing page.

Article 11. Subproject duration extension conditions

Unforeseen delays to sub-projects once running, resulting from external factors beyond the control of the sub-project team can, in exceptional circumstances and by agreement between the ZDMP Coordinator and Subcall Party, lead to a reasonable extension in the duration of the experimentation period beyond the original end date.

However, if the Subproject is in Call 2, and would require a delay of more than 2 months, the Subproject will be cancelled. In this case, milestones met and work completed will be paid, and no further work will be expected and no further payments will be made.

All projects last exactly 9 months and follow the 9 month payment schedule accordingly unless the project is formally extended in which case the penultimate payment would be within 45 days at the end of the project and after the approval of M9 deliverable.

Article 12. Termination of sub-grant agreement obligations

The *Coordinator* may terminate this *sub-grant agreement* in case of any substantial breach of the obligations of the *Subcall Party* arising from this Agreement.

The termination shall be effective after the communication notified to the *Subcall Party*.

Article 13. Limitations of contractual liability

The liability of either Party for any breach of this Agreement, or arising in any other way out of the subject-matter of this Agreement, shall not extend to incidental indirect or consequential damages or losses, including (without limitation) any loss of profits, loss of goodwill, loss of revenue, loss of data, loss of contracts or opportunity, whether direct or indirect, even if the party bringing the claim has advised the other of the possibility of those losses, or if were within the other party's contemplation.

Subject to the applicable law, the maximum limit of a Party's liability, whether in contrast, tort, negligence, breach of statutory duty or otherwise shall not exceed a sum equal to once time the aggregate of the contribution received by the *Subcall Party* under this Agreement. Such a limitation shall not be applicable in case of wilful act or gross negligence of *Subcall Party*.

Article 14. Applicable law and competent court

This *sub-grant agreement* shall be construed in accordance with and governed by the discipline of the Programme Horizon 2020 and the laws of Belgium.

The parties shall endeavour to settle their disputes amicably. All disputes arising out of or in connection with this agreement, which cannot be solved amicably, shall be finally settled by the ZDMP EXEC.

Article 15. Entry into force of the sub-grant agreement

This *sub-grant agreement* shall enter into force after its signature by the *Subcall Party* and the *Coordinator*, on the day of the last signature and shall be retrospective from the date of the start of the project.

<u>For the <i>Subcall Party</i></u>	<u>For the <i>Coordinator</i></u>
[NAME OF COMPANY]	Prof. Virgílio Cruz Machado
[NAME OF PROJECT],	President of the Administrative Board
[ACRONYM OF PROJECT]	Date:
Date:	Signature:
Signature:	

Contact Information

[Contact name]
 [Organisation]
 [Telephone]
 [E-Mail]

[Contact name]
 UNINOVA
 +351 21 294 85 10
 [E-Mail]

[Contact name]
 UNINOVA
 +351 21 294 85 10
 [E-Mail]

Enclosures:

Annex "A" Workplan

Annex 5: FAQs from Open Call 1

About my project

Question	Answer
Can you advise about which type of application you are looking for?	Unfortunately, we are unable to advise on individual applications.

F6S Platform

Question	Answer
Once registered, I cannot fill in the forms without creating a team, but it seems this 'creating a team' steps are for startups and this is not our case	<p>The F6S platform defaults to 'team' and 'start-up', unfortunately there is no way of changing that.</p> <p>"start-up" is the wording F6S uses for "companies" in a general sense.</p> <p>You need to "create a team" in order to apply - meaning create a "start-up profile" and add people to it.</p>

Administration

Question	Answer
Must project duration be exactly 9 months?	Yes, all project will be exactly 9 months. You may finish earlier but the schedule in terms of payments, deliverable review will be exactly the same. You may not finish later than 9 months.
Can you please clarify whether large/mid-cap enterprises (as defined in EU Law) are eligible for the Call?	Large/Mid-cap organisations are permitted to apply, but only as the junior partner in a small consortium of a maximum of two partners. The consortium should be led by an SME, in other words, the large/mid-cap organisation (and/or academic/research institute) must be in a clear supporting role only. Hence a consortium could consist of, for example, an SME manufacturing/supply chain company (lead) and a large/mid-cap technology provider, or an SME technology company (lead) and a large/mid-cap manufacturer.
Can consortium partners be from the same country or do they have to be transnational?	Consortium partners can be from the same or from different (H2020 eligible) countries, there is no restriction.
Our SME is from "Country A". Is our SME eligible to apply?	<p>The Guidance for Applicants states that "The call bidder, or lead partner if there are two organisations, must be a qualifying SME, and be the predominant partner in the bid. The SME must be established in an EU Member State, Associated Country or the UK, as defined in EU Law: EU Recommendation 2003/361 and be eligible for participation in H2020 programmes (see Annex 1 for eligible countries list)"</p> <p>Associate countries are also eligible; these are listed at https://ec.europa.eu/info/sites/info/files/research_and_innovation/strategy_on_research_and_innovation/documents/ec_rtd_h2020-association-agreement.pdf</p>
Our company manufactures "Product A". Are we eligible?	As long as the concept of zero defect manufacturing is the focus, the domain is not relevant.
<p>If we build a small consortia, in which "Research organisation A" participates as a supporting partner, do we receive direct funding or do we, the "Research organisation A", need to be subcontracted?</p> <p>We are thinking in engaging an end-user from the industry as lead, so in that way "Research organisation A" can participate as a technology supporting role. Would it be ok?</p>	<p>All H2020 rules apply. With two partners and you being a research organisation, they would need to be the lead SME (70% funding) and you could participate as either a second beneficiary or a sub-contractor.</p> <p>For example: assuming you are a 100% partner in H2020 then as a second beneficiary you would be 100% funded. As a sub-contractor this would be down to the lead SME but they would only receive a maximum of 70% funding.</p> <p>Vice versa the same notions of a H2020 sub-contractor apply in that they are responsible for a very focused non-action role for the beneficiary, rather than a second participant.</p> <p>There are pros and cons and in all cases it will be down to the evaluators to judge the merits of each case.</p>
Is it possible I can win multiple times in 1 subcall?	<p>It is possible you could win multiple times in the following cases:</p> <p>a) You bid as a single SME and you bid within a consortium and both win</p> <p>b) You bid in two (or more) consortiums provided the other partners are different.</p>

	<p>If you make two bids as a single SME, or two bids with the same consortium in each case you can win only once.</p> <p>The proposed projects for multiple bids must be entirely different from each other (you can not win twice for the same project/project outcomes)</p>
Is it possible I can win in both subcalls?	Yes. There are no dependences between subcalls
Is there a minimum project financial dimension requested to access the call?	As specified in the guide for applicants and the website, the range is €50-150K of funding.
What happens if I have already received funding from H2020? Is there a cap?	Synergies with other sources of funding, including other Horizon 2020 projects are encouraged if the grants are used for complementary, not overlapping purposes, and double-funding of this sort is not permitted. There is no cap.
During project development: can I replace my company with a new one that is currently being set up?	In principle no. Checks, evaluations and selections are done on the basis of the company which exists at the time of the call.
We have the commitment of a manufacturing company that will support us and will use the final solution in its production environment. This company will not be a beneficiary, but it will provide us a Letter of Support (LoS) to state their commitment in supporting us. How can we provide the evidence of their commitment and their support in the proposal, since we cannot attach any additional document (the LoS)?	This is detailed in the Guidance for Applicants (G4A) available on the website – section 5.5. Listed there are the acceptable documentation to prove a Relationship. We will only request this proof if you are selected as a winner and only during the workplan and contracting phase.
Can project cost be less than 50k?	No
There is the possibility to apply with a 2nd applicant, respectively to include a sub-contractor. Is there the possibility to have both a 2nd applicant and a subcontractor?	No there may be a max. of two parties.
What minimum TRL is expected at the beginning and at the end of the project?	There are no TRL targets defined by ZDMP. The project is an Innovation Action (IA) in EU H2020 terms, thus this should give inspiration to the type of activities expected. It is also industry and SME targeted. In general terms IAs are at the higher end of the TRL scale
Is ZDMP an I4MS project?	No.

Proposal Template

Question	Answer
In the single sections it is asked for detailed tech description of our work max. 20 pages (two times), however in the general instruction for proposal writing the text is limited to fewer pages in total. Which is true?	20 pages relates to the workplan length you need to make if you win funding. You should obey all page limits within the Proposal Template.
Could you explain in more detail what is the meaning of "Number of employees in RTD"?	RTD = Research, Technology, Development. A rough estimate on the number of FTEs you have working in these fields.

Business

Question	Answer
What is the business model of the platform?	<p>Where relevant, sub-projects will host outputs on the ZDMP Marketplace free of charge, both for the third party and for the ZDMP project, for one year after the end of the project, with any Marketplace sales generating revenue for the sub-project's business and commission for the ZDMP Marketplace.</p> <p>Applicable sub-project software outputs must be exploited through i4FS Marketplace exclusively (zComponents, zApps) for one year after the end of the project. This</p>

	<p>limitation only affects the availability of the output in other marketplaces; other modalities of exploitation are allowed (eg the Sub-project Party can use the zApp they have produced in their business to improve the quality of its processes or products or for existing customers)</p> <p>In addition, relevant sub-project outputs will need to be hosted for one year after the end of the ZDMP project on the ZDMP platform. Ongoing hosting will be subject to bilateral negotiations where all costs will need to be part of the hosting agreements between the sub-project parties and i4FS (the management company for the ZDMP platform post-project)</p>
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Funding

Question	Answer
In the applications with two partners, is it 50-150k€ per partner or for the total project?	The funding is between €50,000 - €150,000 in total (not per partner).
Is the funding for research centres the same as other H2020 projects?	Yes. Funding is provided at 70% of costs for profit organisations and 100% of costs for non-profit organisations as is normal for H2020 Innovation Actions.
Do we need to provide a proof for the rest of 30% of funding needed? If yes, what kind of proves you expect?	<p>The sub-projects are 70% funded through a lumpsum funding mechanism based on achieving milestones laid out in the workplan and contract, so there is no heavy tracking of time sheets.</p> <p>You need to ensure that the other 30% always comes from additional resources, not cash.</p>
Is there any cost estimate for the ZDMP components?	In terms of existing components for the Open Call, they are all free to use and most are open source.
Is there a maximum amount to be granted per partner (% of total budget of subproject)? For example: If we apply to the first type (Activity Area 1 – Develop) with a consortium of two partners: 1 SME (leader) and 1 Research technology center. There is a maximum amount of participation regarding the financial contribution for any of both partners: SME and/or research center?	Please read guidelines for applicants section 8 – notably “70-80% of the Open Call funding is for eligible SMEs only, including consortia or sub-contract bids”
Is there a minimum revenue our company needs to show, in order to be eligible?	No.
Is there a minimum number of employees our company needs to have in order to be eligible?	No.
We need to make some machines of the client connected. It requires equipment investment (sensors, industrial computers, etc.). Is it covered by the call?	<p>From Guidance for Applicants, Section 8:</p> <p>“The funding can only be spent on costs as detailed in the original proposal and workplan which would primarily be on personnel costs. Expenditure on some equipment may be possible but ZDMP would anticipate that most bidders would have this and so this exception would need to be justified and the costs should follow participants normal practices (eg depreciation and then only for the project duration).”</p>
Could we include the use of cloud services, AWS for instance, as eligible for "Equipment costs"?	Yes
I would need to get access to a SW component with license costs. Can these costs be integrated as "equipment cost", while being a SW equipment and not a machine?	This can be considered and are in essence "equipment".
Horizon projects allow in-kind contributions including working hours. Is it true for this Open Call? To what extent? Can we commit 30% of hours at zero rates?	There is no restriction on this in the Guidance for Applicants (G4A) hence this is allowed according to the general modalities of EU contracts.

Technical

Question	Answer
Can you provide technical information about ZDMP components?	Visit the ZDMP website for technical information https://www.zdmp.eu/technologies
How can we login to your platform in order to examine and to understand where we can carry out implementations?	For now, there is no need to login into any platform. You may access the documentation for the different components on www.software.zdmp.eu . There you can find out what the features are for each component and access related information. You can experiment with this to create your own implementations.
To what extent will the new projects get access to the already existing ZDMP components (e.g. APIs, SDK) and, if commercial systems of the partners are used, will the new projects will get access to those systems or will they have to be purchased.	In essence everything is open to you. There are some IPR parameters in place and statements related to this are available online. Most of the technology is open source but a few are not and specific explanations for these are available. In general, sub-projects will have full access during the project and afterwards, if there is a commercial application, you can find out more about IPR requirements here - www.zdmp.eu/ipr-for-subcalls
How can we know which components currently needs an upgrade?	Most components will need an upgrade because it is a continuous development project and they will also need upgrading after the project ends. Not all of these applications/components are commercial grade software. Different applications/components are at different levels of maturity and that is why we have included the validation task to help determine that.
The development track of the ZDMP project is specifically for the development of a product for the ZDMP ecosystem? That is to say, whatever app/software/hardware that is to be developed must be a zApp/zComponent and therefore must be fully integrated with the rest of the ZDMP environment?	Not at all. Of course we hope it would be part of the wider ecosystem – for example availability on the marketplace – but it doesn't need to support the existing use cases. However, in general it is anticipated that some ZDMP components would be used, architecture considered etc.
Is it possible to make an UI using desktop technology or only web-tech contained in a Docker?"	There are no technical limitation or restrictions and you should use the appropriate technology that is right for your particular bid and which makes it attractive to evaluators
Where can I find more information about use cases?	D2.3-Industry Scenarios and Use Cases: https://c53c19bc-6460-4dea-a74f-97b851e7af75.filesusr.com/ugd/851c99_d14de73247554e578cf2f8f5bab2c17b.pdf
As a percentage or absolute number: how much of the budget can be spent for engineering work coming from a third party?	For a subcontractor who is only supporting the main party for incidental activities, then the SME must be in the lead so I would imagine 20-30% but this will depend on the project and the assessment of the evaluators.
How does the integration of ZDMP components work? It says that they are open source but if we integrate them in our product during the process of development, can we use them free of charge moving forward with the development of our product?	Most ZDMP components are open source – but not all. Details of the IPR governing applications/components can be found on https://www.zdmp.eu/ipr-for-subcalls We advise you to check the IPR for any applications/components you intend on using. In the case that the component is not open source, you would need to reach an agreement with the component provider both for the work carried out during the project (to be done at the time of contracting) and again subsequently for future use/development after the project has ended.
Do we have to integrate and improve the software of this component or just develop our solution/ product and the possible expansion of the component will be executed by other parties?	This is down to you to propose and evaluators will take their judgement.
Do we need to apply any ZDPM components if we want to further develop our product and test it in the new domain? If we do not take any components of ZDMP are we eligible to apply to Activity Area 3?	In theory everything is possible. However, you should review the questions in the proposal template and the evaluation criteria in annex 2 of the guidance for applicants as these indicate how the proposal will be evaluated and what we are looking for. Activity Area 3 is mainly concerned with validating/testing ZDMP applications/components, and as such we would hope that there will be applications/components that are suitable for you to use - but it is not mandatory and you may be able to make a strong case for not using zdmp components. Whatever you decide, your proposal will be evaluated against the criteria we have published.

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