KYKLOS 4.0

An Advanced Circular and Agile Manufacturing Ecosystem
based on rapid reconfigurable manufacturing process and
individualized consumer preferences

Annex 1:
Open Call #2 Guidelines for Applicants
July 2022

Table of Contents

List of Figures

List of Tables

1 Introduction

This document is the Guidelines for Applicants for the KYKLOS 4.0 - Open Call #2 and provides a full set of information and rules for participation in the open call, as well as an overview of the funding programme. All associated annexes must be additionally considered for the submission of a proposal.

1.1 Context

The KYKLOS 4.0 project is organising this second open call with the objective of increasing the outreach of its value proposition and onboarding projects to support in its validation. The KYKLOS 4.0 - Open Call #2 will fund small consortia of 2-3 partners to develop innovative manufacturing solutions and implement it in a pilot experiment in a manufacturing environment. The consortia will have to adopt one or more services from the KYKLOS 4.0 project, which must be integrated and validated in the experiment. The proposed solutions must contribute to improving manufacturing processes, but also have a clear contribution to circular manufacturing.

1.2 The KYKLOS 4.0 project

KYKLOS 4.0 aims at providing an ecosystem that creates and supports the configurations, methodologies, production techniques, decisions and actions at all different levels and stages of the equipment manufacturing value chain to achieve the goals of:

- Increased energy efficiency.

- Reduction of raw material through to the second use of parts or material (including waste from manufacturing process).

- Customer centricity.

- On-demand manufacturing to best meet the Industry 4.0 objectives of operational excellence, where mass customization and personalization have become the norm.

KYKLOS 4.0 will thus allow to increase production efficiency, reduce waste, boost competitiveness and lower costs for European manufacturers, particularly for SMEs.

The project will deliver an advanced configuration framework and state-of-the-art production paradigm, embedding key technologies into a unified platform ecosystem to manage live product innovation. This involves a set of intelligent tools for real-time analytics and prediction, and recommender systems, further integrated into the KYKLOS 4.0 configuration environment.

Thus, the KYKLOS 4.0 ecosystem will create favourable conditions for the rapid reconfiguration of manufacturing processes, to continuously follow a circular manufacturing framework and the individualised consumer/customised products demands.

More specifically, the KYKLOS 4.0 project will create a holistic production ecosystem in the form of an advanced service platform for manufacturing stakeholders. This collaboration platform will extract customer needs, after-sales information and any data deemed relevant for identified production needs and will incorporate this data to product specification and design. Participating stakeholders (e.g., customers, manufacturers, suppliers, software vendors, etc.) will have the ability to (semi-) automatically enter a virtual – agent based – marketplace where needs, captured by the factory and

expressed through a shared, high level and machine understandable format, will be matched with offers, described in the same language.

Figure 1 represents the KYKLOS 4.0 collaboration platform that applicants should consider when proposing solutions to use or extend the collaboration platform.

Additional details on the KYKLOS 4.0 project, including the vision, objectives, technologies, and ongoing pilots can be found on the project website.

As part of the KYKLOS 4.0 vision, the project offers through two open calls up to €2M for SMEs and manufacturing companies to carry out manufacturing experiments using the technologies and services from the KYKLOS 4.0 ecosystem.
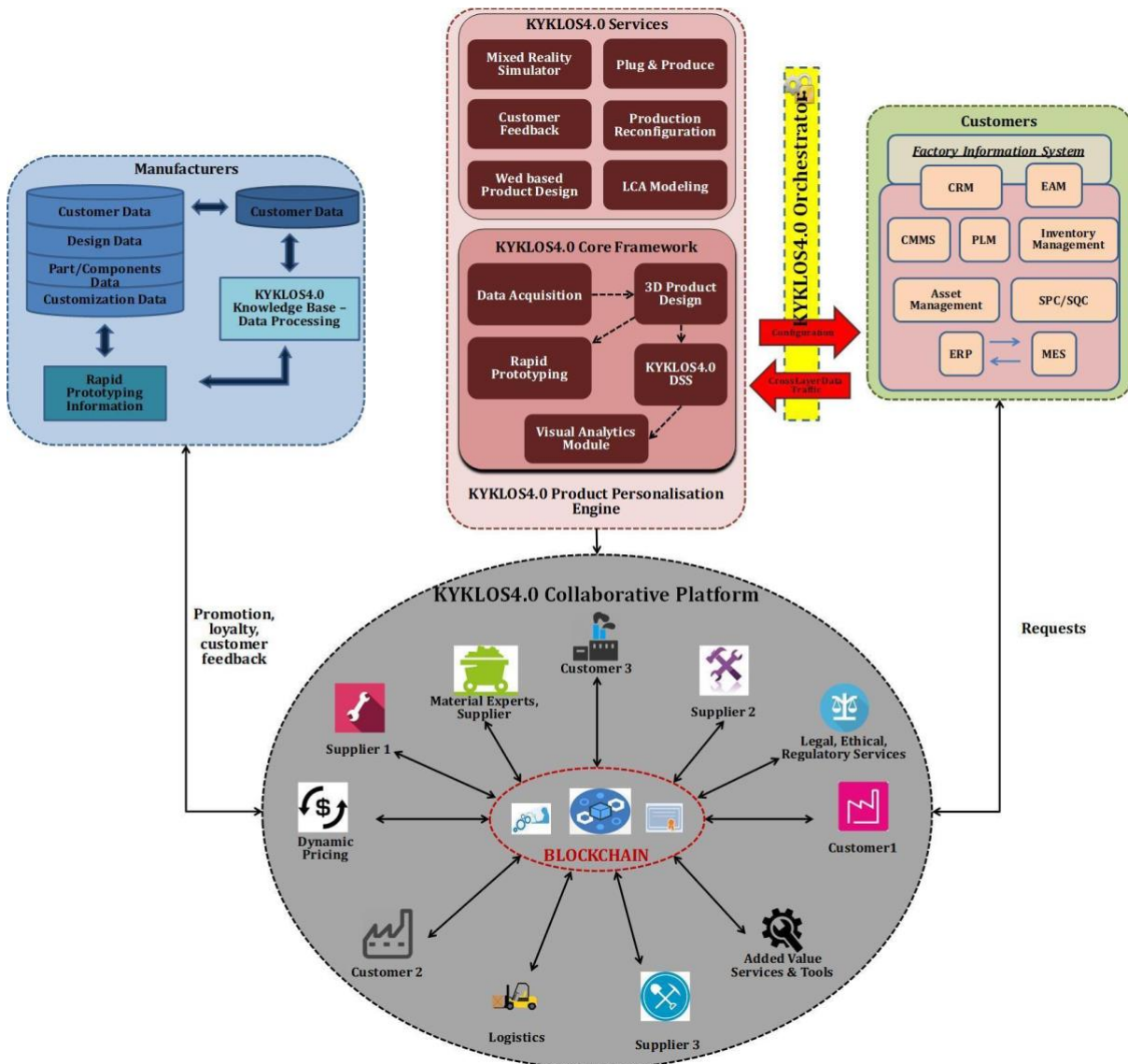

Figure 1. KYKLOS 4.0 collaborative platform

2 KYKLOS 4.0 call for proposals

2.1 Objectives

The objective of the KYKLOS 4.0 - Open Call #2 is to fund SMEs and manufacturing companies to carry out manufacturing experiments using the services and technologies from the KYKLOS 4.0 project.

The open call invites consortiums of 2-3 partners (led by an SME) to submit a proposal for the development of an innovative solution(s) for a manufacturing scenario in which they will have to carry out a pilot experiment in a manufacturing environment.

The proposed solution and respective manufacturing scenario must adopt one or more services and respective components selected from the KYKLOS 4.0 project, which should be integrated and validated as part of the defined experiment. These services (see Annex 1.1) can be integrated alongside the consortium partners' existing technological solutions.

The adoption and integration of KYKLOS 4.0 services and components will contribute to the objective of validation in real world scenarios the KYKLOS 4.0's value proposition: manufacturing-driven services and digital components to increase manufacturing circularity and production efficiency.

2.2 Main characteristics

The main characteristics of the KYKLOS 4.0 - Open Call #2 are as follows:

Table 1. Details of the KYKLOS 4.0 Open Call #2

Item	Details
Eligible applicants	Consortia of 2-3 partners, legally established in a EU Member State or H2020 Associated Country, led by an SME (technology provider/ integrator) and an industrial manufacturing company. The third partner must be an SME.
Open call time frame	27 July 2022 to 12 October 2022 (17:00 CEST).
Activities to be funded	Development of innovative manufacturing solutions and implementation of a pilot using KYKLOS 4.0 services and technological components.
Duration of activities	Eight (8) months, divided in three stages: Planning (1 month), Implementation (6 months), and Commercialisation and Business Sustainability (1 month).
Budget per project	Up to €150.000 (lump sum) per project. Maximum financial support per partner of €60.000.

Item	Details
Evaluation of proposals	Single stage remote evaluation by external experts.
Number of proposals to be selected	Minimum of 14 projects.
Milestones/ payments	The activities are divided into three stages: ● Planning stage (1 month): consortia will be required to further plan their pilot experiment, define implementation KPIs, discuss the adoption of KYKLOS 4.0 services and integration of components in their work. ● Implementation stage (6 months): implement the pilot experiment as defined in the planning phase; validate the KYKLOS 4.0 services and components. ● Commercialisation and Business Sustainability stage (1 month): develop a commercialisation and business plan for their manufacturing solution. Payments are associated with the successful delivery of results at the end of each stage, divided as 30% + 40% + 30%.

2.3 Proposal requirements and services

Proposals are required to describe a solution and manufacturing scenario that adopts KYKLOS 4.0 services and components. The services are grouped into two main categories - (1) **Smart Design** and (2) **Product Optimisation** - and are supported on several technological components developed within the KYKLOS 4.0 project. These services will ultimately integrate the KYKLOS 4.0 marketplace, which centralises the full description of the services and respective technological components that are to be used. Detailed information on the services and respective components is provided in Annex 1.1.

The defined scenario must describe the 'as-is' (*current*) and 'to-be' (*future*) situation, detailing the current state of manufacturing processes in the industrial partner and the expected future state of processes having deployed the developed solution and integrated the selected KYKLOS 4.0 services and technologies. The scenario must also clearly describe the contribution to circular manufacturing, validated through the experiment.

The validation of the services must follow specific guidelines that will be made available to the awarded projects by KYKLOS 4.0, focusing on items related to usability, interoperability, and circularity. Funded projects will be required to integrate the developed solutions as part of the KYKLOS 4.0 marketplace.

The project will have to include and work toward achieving one or more KPIs defined by the KYKLOS 4.0 project, to be selected by the applicant according to the nature of their project (see Annex 1.1, section 5). Such KPIs address sustainability and circularity and will focus on, among others, waste reduction, resource consumption reduction, and machine life). These will be further discussed and

refined during the Planning stage. Other project specific KPIs should be provided by the applicant with a clear rationale and justified targets.

The open call will prioritise proposals that are able to demonstrate the applicability of the scenario and/ or services in multiple manufacturing and industrial environments. Furthermore, experiments should clearly demonstrate the role of the circular economy within the manufacturing domain in their activities.

2.4 Funding scheme

A total of €3,000,000 has been budgeted for the two KYKLOS 4.0 open calls. For the KYKLOS 4.0 - Open Call #2, **€2.1 M is available**, which will fund a minimum of **14 projects**.

Proposals will be eligible to receive financial support up to €150.000 (for a consortium of three partners), with a limit of €60.000 per applicant. Consortia of two partners are also eligible. KYKLOS 4.0 will fund 70% of the project costs. The remaining costs are to be covered by the awarded beneficiaries. Funds are provided in lump sum format.

KYKLOS 4.0 will fund third-parties' activities along the project duration. This includes the following types of activities: project management, product/ service development, tests and demonstrators, business development/ internationalisation activities, and project mentoring (available in each of the three implementation stages). The type of costs that may be reported include human resources, other direct costs, subcontracting (<20%) and indirect costs (25% of personnel and other direct costs).

The financial support will be negotiated with each project after the evaluation and selection process and before the contract signature. The basis for negotiation is the amount requested by each proposal. **Activities that are already funded by other grants cannot be funded by KYKLOS 4.0**.

The funding will be disbursed to beneficiaries according to three stages of the funding programme: (1) Planning, (2) Implementation and (3) Commercialisation & Business Sustainability. At the end of each stage, beneficiaries will be required to submit a report. The funding will be disbursed upon approval of the report.

NOTE: Third parties receiving financial support from KYKLOS 4.0 through the open call will not become part of the KYKLOS 4.0 Grant Agreement (GA). The KYKLOS 4.0 GA will not need to be amended to include the selected beneficiaries.

2.5 Timeline

The KYKLOS 4.0 Open Call #2 opens **27 July 2022 and closes on 12 October 2022 at 17h00 CEST** (Brussels time). Proposals must be submitted via F6S: https://www.f6s.com/kyklos4.0opencall02.

As soon as the open call closes, the KYKLOS 4.0 project will initiate the evaluation and selection phase, consisting of an internal and external evaluation. The internal evaluation will check all submitted proposals against the defined eligibility criteria. Any proposal not meeting the criteria will be notified and receive a rejection letter. Eligible proposals will move on to the external evaluation phase, where proposals will be reviewed by external evaluators. The top ranked proposals will be notified to enter the contract preparation and signature phase. All other proposals, including those that do not meet the threshold or are kept in a reserve list, will be notified.

Upon completion of the contract preparation, the projects begin their implementation phase, divided into three stages:

- Planning (1 month)
- Implementation (6 months)
- Commercialisation & Business Sustainability (1 month)

Figure 2 represents the timeline of the KYKLOS 4.0 Open Call #2, including all steps and stages from submission up to the sub-project implementation.
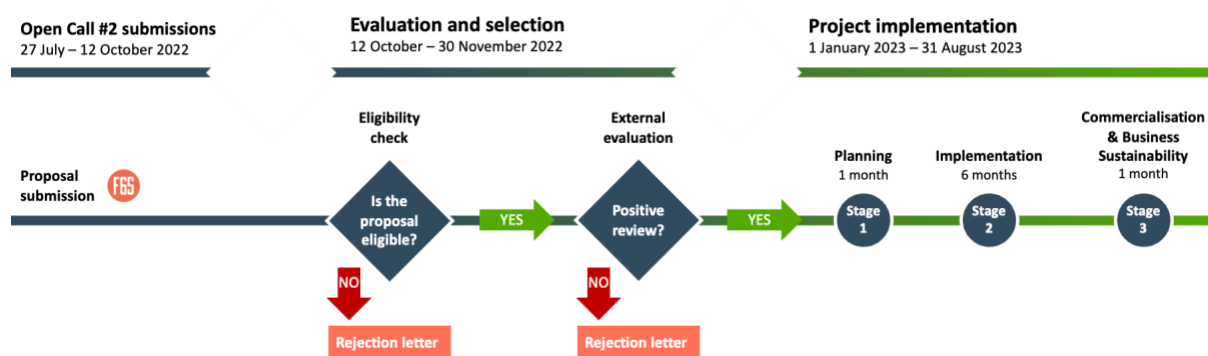

Figure 2. KYKLOS 4.0 Open Call #2 timeline – from submission to implementation

Note: The dates indicated in Figure 2 *may change due to unforeseen events and situations. Therefore, these are an indication of what is initially expected; the dates are to be confirmed by the KYKLOS 4.0 team along the process and are not restrictive.*

3 Eligibility criteria

The KYKLOS 4.0 project invites organisations active in the digital manufacturing domain to establish a consortium of up to three entities (led by an SME) and submit proposals for the development of an innovative manufacturing scenario and solution in which they will have to carry out an experiment in a manufacturing environment.

All applicants will have to abide by the general requirements described in this section to be considered eligible to participate in KYKLOS 4.0 - Open Call #2. The eligibility check will verify that:

- Submissions are only made through the F6S platform at the specific KYKLOS 4.0 - Open Call #2 page and by the defined deadline: https://www.f6s.com/kyklos4.0opencall02/apply.
- Applicants are from an eligible H2020/ Associated country.
- Applicants have not been funded under the KYKLOS 4.0 - Open Call #1 funding programme.
- Proposals and all requested documents are provided only in the English language.
- The proposal description is submitted according to the guidelines and template provided.
- A complete proposal is submitted, including the requested administrative data and any mandatory supporting documents specified in the open call (provided in the application link).

A proposal is only considered eligible if its content corresponds specifically to the objectives of the KYKLOS 4.0 - Open Call #2, including the specific eligibility conditions set out in the relevant parts of the Guidelines of Applicants. The eligibility check enables the establishment of a shortlist of proposals to be evaluated.

3.1   Applicants and consortium eligibility

The target applicants of this open call are consortia consisting of 2-3 entities, including at least one (1) SME and one (1) industrial manufacturing partner. Specifically:

- The consortium submitting a proposal must be led by an SME (*see definition of SME according to the Commission Recommendation 2003/361/EC; complementarily, check also the User Guide to the SME definition*).
- The lead SME must be a technology developer and/or integrator.
- The industrial partner must host the implementation of the experiment, where the selected manufacturing scenario must be set up and the developed solution must be demonstrated and validated.
- A third partner (must be an SME) may participate to support technology adoption or increase impact.
- The consortium consists of a minimum two (2) partners and a maximum of three (3) partners.
- Consortium partners may come from the same or different countries provided that they are legal entities established and based in one of the EU Member States or an H2020 Associated country, as defined in the H2020 rules for participation.

In addition, the following conditions apply:

- Start-ups that do not have yet annual turnover or balance sheets are also considered eligible provided they are (1) independent (in accordance with Commission Recommendation 2003/361/EC) and (2) have a headcount in Annual Work Unit (AWU) of less than 250.
- In case an SME is awarded a sub-granted project, it will remain eligible even if, at a certain point during the project implementation, it does not (1) have a headcount in Annual Work Unit (AWU) of less than 250; or (2) has an annual turnover equal to or less than €50 million or an annual balance sheet total less or equal to €43 million.
- Participating entities should not have been convicted for fraudulent behaviours, other financial irregularities, unethical or illegal business practices.
- Participating entities are not under liquidation or are an enterprise under difficulty according to the Commission Regulation No 651/2014 (Article 2.18).

All participating partners should have a valid VAT at the time of the contract preparation. A valid PIC number is also recommended for the purposes of reporting.

NOTE: A signed and valid version of **Annex 4: Declaration of Honour** (for all partners), **Annex 5: Consortium Declaration of Honour** (signed by all partners) and **Annex 6: SME Declaration** (for all SME partners) is mandatory. This documentation will be requested if the proposal is selected for funding and must be provided to KYKLOS 4.0 to proceed with the signing of the sub-grant agreement.

3.2   Eligible countries

Only applicants 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 States.

- H2020 Associated countries (those that signed an agreement with the European Union as identified in Article 7 of the Horizon 2020 Regulation): according to the updated list published by the European Commission (EC).
- Entities from the UK are eligible under the conditions set by the EC for H2020 participation at the time of the deadline of the open call.

Please note that only individuals who are residents in an eligible H2020 country will be considered eligible (including those participating on behalf of SMEs and other legal entities). If one or more members from any consortium partner fail to meet these criteria, the proposal will be considered ineligible.

3.3 Proposal eligibility

The following proposal eligibility criteria also apply to applicants (consortium):

- Proposals must have a **clear European dimension** (according to Annex K requirements)**, facilitate digital manufacturing-based innovation,** and contribute towards European Union digitization, **targeting clear economic and societal impact**.

- Proposals must address the domain of digital manufacturing and clearly propose an innovative **manufacturing scenario** and solution in which they will have to carry out an experiment in a manufacturing environment. The scenario must be addressed by developing a solution that **adopts one or more services selected from the KYKLOS 4.0 platform** (see Annex 1.1), which should be integrated and validated as part of the defined experiment. These services can be integrated alongside the consortium partners' existing technological solutions.

- **Each applicant may submit up to two (2) proposals to the KYKLOS 4.0 Open Call #2 (in the same or different consortia).** In case more than two proposals are submitted, the first two proposals submitted (according to the system timestamp) by the applicant will be those considered.

- **Applicants may participate in a maximum of one (1) sub-granted project**. Applicants that have been funded in the KYKLOS 4.0 Open Call #1 are not eligible to participate in the KYKLOS 4.0 Open Call #2, even with different partners and/or a different proposal.

- **Applicants may re-submit to the KYKLOS 4.0 Open Call #2 a proposal (modified to the context of this call) that was not funded in Open Call #1.** However, it is **mandatory** to provide this information in the resubmission and clearly explain the improvements that were made.

NOTE: the regular functioning of the F6S platform limits to one application submission per F6S user in each open call. If an F6S user wishes to submit more than one application, the F6S user should request support from the F6S support team (support@f6s.com) cc`ing opencalls@kyklos40project.eu at least **10 days** before the open call deadline.

3.4 Financial eligibility

Each consortium partner may receive a maximum of €60.000, while the consortium may receive up to €150,000, depending on the budget assigned to each partner (with a €60.000 limitation).

KYKLOS 4.0 will fund 70% of the project costs, with each sub-granted project being eligible to receive up to €150.000 per project (i.e., maximum requested funding). The remaining costs must be covered by the awarded beneficiaries.

The open call aims to fund SMEs with limited experience in H2020 and FSTP programmes. So that organisations do not accumulate funding, there is a €100.000 maximum limit for companies receiving FSTP from the Smart Anything Everywhere and I4MS initiatives. Therefore, entities that have already received or are receiving FSTP from these initiatives, must account for that value in their budget.

3.5   Language

English is the official language for the KYKLOS 4.0 - Open Call #2. Submissions done in any language other than English will not be eligible or evaluated. English is the only official language during the whole implementation of the KYKLOS 4.0 funding programme. This means that any requested submission of documentation and deliverables will be done in English to be eligible.

3.6   Absence of conflict

Applicants must not have any actual or/and potential conflict of interest with the KYKLOS 4.0 selection process and during the whole project. All cases of conflict of interest will be assessed case by case. Applicants cannot be KYKLOS 4.0 consortium partners or affiliated entities nor their employees or co-operators under a contractual agreement.

3.7   Documentation format

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

4   Proposals: submission, evaluation, and negotiation process

Proposals submitted to the KYKLOS 4.0 - Open Call #2 are submitted in a single stage and evaluated in one step, as presented in Figure 3.
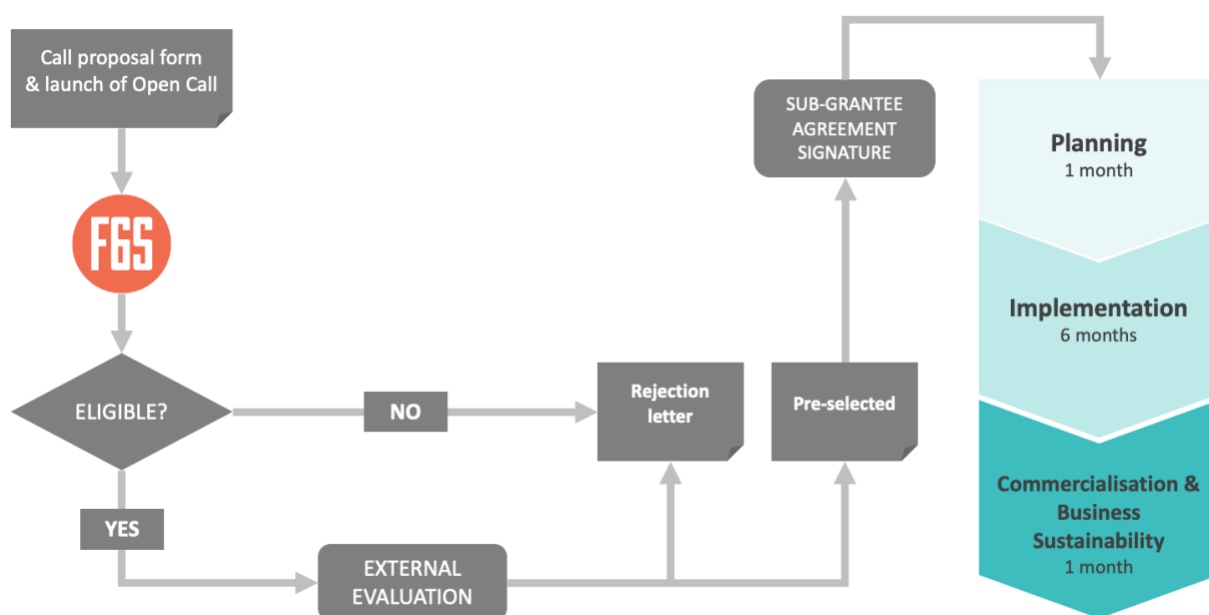
Figure 3. KYKLOS 4.0 - Open Call #2 submission and evaluation process

4.1 Proposal preparation and submission

The KYKLOS 4.0 - Open Call #2 submission process will follow the steps that are listed in the present section. Applicants that wish to submit a proposal must be registered on the F6S platform or should register at the KYKLOS 4.0 F6S page (https://www.f6s.com/kyklos4.0). The F6S platform will be the central interface for managing the proposals during the open call. A full list of applicants will be prepared containing their basic information for statistical purposes and clarity, which will be also shared with the European Commission for transparency.

The timeline for submission of proposals is **27 July 2022 to 12 October 2022 (17:00 CEST)**. The deadline will not be extended unless a major problem with the F6S platform makes the system unavailable. In case an extension is provided, all applicants will be notified via the F6S platform.

The following steps must be followed when preparing and submitting a proposal:

- Applicants are required to apply online and answer all mandatory questions at: https://www.f6s.com/kyklos4.0opencall02/apply.
- The documentation/ information to be submitted are:
  - Application form: includes the administrative questions to be completed directly on the F6S platform: https://www.f6s.com/kyklos4.0opencall02/apply.
  - Selection of the **service sub-category** that your proposal will address (on the application form and technical proposal). Please note that the open call aims to address all sub-categories and therefore there is a **maximum number of proposals** that will be awarded for each sub-category (see Table 2).
  - Annex 2.1 - Technical proposal, submitted as a PDF only, describing the project. It is structured into multiple mandatory sections. The template is available for download. **NOTE: The technical annex details the mandatory items to be addressed.**
  - General questions for statistical purposes.

- Tick boxes for the applicants to confirm that they have read and agree with the conditions defined in this Guidelines for Applicants and the open call.
- Applicants are recommended to become familiar with the Annex 4 - Declaration of Honour (all partners), Annex 5 - Consortium Declaration of Honour (all partners) and Annex 6 - SME Declaration (partners that are SMEs). These documents must be provided if the consortium is selected and are mandatory to finalise the contract and enter the funding programme.
- Applicants that do not accept the terms and conditions and do not submit the required information will not be eligible.
- Additional recommendations:
  - Be specific and concise. Selected questions have a limited number of characters.
  - It is highly recommended to **submit your proposal before the deadline**. If the applicant identifies an error in their proposal, and provided the call deadline has not passed, the applicant may request the KYKLOS 4.0 team to re-submit the proposal. **However, KYKLOS 4.0 cannot guarantee a timely resubmission in case the request for resubmission is not received by the KYKLOS 4.0 team with at least 48 hours' notice before the call deadline.**

NOTE: Failure to submit the proposal on time, for any reason, including network delays or working from multiple browsers or multiple browser windows, is not acceptable as an extenuating circumstance. The time of receipt of the proposal as recorded by the system will be definitive.

4.1.1 Selection of the service sub-category

The objective of the open call focuses on applicants' definition of a manufacturing scenario and development of a solution that adopts one or more services selected from the KYKLOS 4.0 platform, which should be integrated and validated as part of their experimental activities.

KYKLOS 4.0 aims to address all five sub-categories of services and therefore will fund a minimum and maximum number of proposals per sub-category (Table 2). When preparing a proposal, the applicant should select the main service (from a total of 17) their proposal will address, which are associated to one of five sub-categories. Note that the minimum number of proposals implies having been evaluated above the defined evaluation score thresholds.

Table 2. KYKLOS 4.0 services, sub-category of services and number of proposals to be funded

SERVICE CATEGORY	SUB-CATEGORY	PROPOSALS TO BE APPROVED
SMART DESIGN	Personalised product specification	Minimum 2; maximum 3
	Optimization of Additive Manufacturing design	Minimum 2; maximum 3
PRODUCTION OPTIMISATION	Maintenance optimisation	Minimum 6; maximum 7
	Advanced support for production	Minimum 2; maximum 3
	Resource use monitoring and optimization	Minimum 2; maximum 3

4.2   Proposal evaluation and selection

The evaluation of proposals is carried out by the KYKLOS 4.0 consortium with the support of independent experts. The KYKLOS 4.0 consortium ensures that the process is fair and in line with the principles outlined in the European Commission's rules on proposal submission and evaluation.

4.2.1   Step 1: Checking of proposal eligibility

Eligibility to participate in the funding programme is initially verified against eligibility criteria that is checked by the KYKLOS 4.0 Open Call Management Board (OCMB). A proposal may be declared ineligible or inadmissible at any stage. The check will verify:

- Submissions have been made ONLY through the F6S platform and by the defined deadline.
- Applicants are legal entities established in an eligible H2020 country, as defined in section 3.2.
- The proposal, including the F6S application form and all requested and mandatory information and documents, are fully completed and provided in the English language only.

A proposal is only considered eligible it its content corresponds to the objectives of the KYKLOS 4.0 - Open Call #2, including the specific eligibility conditions defined in the relevant sections of this Guidelines for Applicants. The eligibility filter enables the creation of a shortlist of proposals to be evaluated in the next step of the evaluation process.

Proposals marked as non-eligible (for not meeting one or more of the eligibility criteria) will receive a rejection letter with a justification. **No additional feedback on the process will be given**.

4.2.2   Step 2: External evaluation

Proposals that have been considered eligible will move on to the external evaluation phase. The external evaluation will be done remotely and with support of the F6S platform.

Each proposal is evaluated by two independent experts according to criteria defined by the KYKLOS 4.0 partners. Experts are selected based on their knowledge of the KYKLOS 4.0 - Open Call #2 topics and general experience in the evaluation of proposals (e.g., Horizon 2020, FSTP programmes).

The experts will evaluate each proposal according to five criteria (Table 3).

Table 3. KYKLOS 4.0 - Open Call #2 evaluation criteria

Criteria	Evaluation sub-criteria description
Criterion 1 | CONCEPT *Weight: 25%*	- Alignment of the proposal with the KYKLOS 4.0 project. - Quality and feasibility of the proposed general and specific objectives. - Quality and novelty of the proposed manufacturing scenario and solution, proposed experiment, and integration of KYKLOS 4.0 services and components. - Level of innovation and technological challenges/ barriers addressed. - Quality and innovation of the proposed outputs/ results.

Criteria	Evaluation sub-criteria description
Criterion 2 | IMPACT *Weight: 25%*	● Overall impact of the project and socio-economic benefits for the manufacturing industry. ● Industrial relevance of the project and market potential of the solution (outputs). ● Contribution to circular manufacturing and circular economy. ● Quality of the commercialisation and business strategy, including activities during the project and post-project to commercialise the solution and ensure its sustainability. ● Quality of the project's proposed promotional activities.
Criterion 3 | **IMPLEMENTATION** *Weight: 25%*	● Design and feasibility of the proposed experiment. ● Quality and feasibility of the proposed work plan. ● Relevance and description of the milestones and KPIs. ● Partners' activities in the work plan. ● Presentation of barriers/ risks that might affect the work plan.
Criterion 4 | **CONSORTIUM** *Weight: 15%*	● Knowledge and technical capacity of the consortium and its partners, including individual descriptions. ● Roles and complementarity of the consortium. ● Gender balance in the consortium. ● Motivation to carry out the project.
Criterion 5 | **RESOURCES** *Weight: 10%*	● Allocation and justification of resources (person-months and other costs) to the project. ● Distribution of resources among consortium partners.

Each criterion will be scored between 0 and 5. For each criterion, score values will indicate the following assessments:

● **0**: The proposal fails to address the criterion or cannot be judged due to missing or incomplete information.

● **1 - Poor**: The proposal addresses the criterion in an inadequate manner or there are significant weaknesses.

● **2 - Fair**: The proposal addresses the criterion broadly, but there are still several weaknesses.

● **3 - Good**: The proposal addresses the criterion well, but improvements are necessary.

● **4 - Very good:** The proposal addresses the criterion very well, but some improvements are still possible.

● **5 - Excellent**: The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

The threshold for each criterion is three (3). The overall score threshold is three (3) considering the final weighted average score. This indicates that if a proposal scores less than 3 in any criterion or an

overall weighted score less than 3, the proposal is automatically rejected. As the final score is a weighted average, scores may be a decimal.

Each evaluator will record his/her individual assessment of each proposal using an Individual Evaluation Report (ISR). The evaluators will then hold a consensus meeting to prepare a single consensus Evaluation Summary Report (ESR) for each proposal, representing opinions and scores on which the evaluators agree and which they will sign. A member of the KYKLOS 4.0 Open Call Management Board (OCMB) will support this process.

Experts perform evaluations on an individual basis, not as representatives of their employer, their country, or any other entity. They are required to be independent, impartial, and objective. All experts are required to sign a contract, which includes a declaration of confidentiality and absence of conflict of interest. Any known conflict of interest will be immediately communicated to the KYKLOS 4.0 OCMB. Experts are also bound by strict confidentiality regarding the evaluation process and during the evaluation process.

4.2.3 Step 3: Ranking of proposals

At the end of the evaluation process (Step 2), all proposals will be ranked in a single list. The primary rule for ranking proposals will be based on their overall weighted average score (summary of criterion 1 to 5 considering defined criterion weights), while considering the minimum and maximum number of proposals per service sub-category (Table 2) to be selected. In case there are an insufficient number of proposals for all service sub-category (total or that have not met the threshold), the top-ranked proposals from the other categories will be selected.

In the case there are proposals in the same position, tie-breaks will be addressed by giving priority to the proposals with the highest score in specific criteria, considering the following order:

- Criterion 2 - Impact
- Criterion 1 - Concept
- Criterion 3 - Implementation
- Criterion 4 - Consortium
- Criterion 5 - Resources

After applying these tie-break rules, if there are proposals in the same position, priority will be given to those with a share of women and men in the consortium that is closer to 50/50, following H2020 guidelines on gender equality.

The KYKLOS 4.0 OCMB reserves the right to organise additional interviews with selected applicants to clarify questions regarding submitted proposals and to support in the evaluation process.

4.2.4 Redress process

An applicant may submit a request for redress if they believe the results of the eligibility checks have not been correctly applied, or if they feel that there has been a shortcoming in the application of the rules of the KYKLOS 4.0 - Open Call #2. Requests for redress must:

- Be received within three (3) working days from the reception of (1) a rejection letter considering the proposal as non-eligible or (2) the ESR information letter.

- Indicate the subject of the complaint and clearly describe it, with arguments/ evidence that sustain the complaint.
- Be sent by the entity's legal representative that has also submitted the proposal.

In case a request for redress is received, the KYKLOS 4.0 OCMB will examine the applicant's complaint. The OCMB will review the complaint and will recommend an appropriate course of action. If there is clear evidence of a shortcoming that could affect the eventual funding decision, it is possible that all or part of the proposal will be re-evaluated. Please note:

- This procedure is concerned only with the eligibility/ evaluation organisation process. The OCMB will not question the scientific or technical judgement of the expert evaluators applied in evaluating the proposals.
- A re-evaluation will only be carried out if there is evidence of a shortcoming that affects the final decision on whether to fund the proposal or not.
- The evaluation score following any re-evaluation will be regarded as definitive. It may be lower than the original score.
- Anonymous or incomplete complaints will not be considered.
- Only one request for redress per proposal will be considered by the OCMB.

4.3 Sub-project negotiation

At the end of the external evaluation phase, up to 14 proposals[1] will be selected, and five (5) additional proposals will remain in a reserve list in case a selected proposal fails to sign the sub-grantee agreement. Proposals placed in the reserve list will be notified of this decision. All proposals will receive an acceptance or rejection letter together with their evaluation report.

4.3.1 Step 1: Contract preparation and negotiation

After the external evaluation phase is concluded, the KYKLOS 4.0 OCMB will start the contract preparation phase in collaboration with the coordinators of the selected sub-granted projects. The objective of the contract preparation is to fulfil the legal requirements between the KYKLOS 4.0 consortium and each beneficiary of the open call.

Contract preparation will run through an administrative and financial check (and potentially into technical or ethical/security negotiations) based on evaluators' comments. Depending on the contract preparation of each sub-project, a phone call or teleconference may be required and organised to clarify and pending questions.

The legal requirements for the selected entities are provided hereafter.

- Inclusion of the comments (if any) of the proposal's ESR into the workplan and sub-grant agreement (contract).
- **Declaration of Honour (Annex 4)**: signed and stamped document. A declaration must be provided by all partners of the consortium.

---

[1] Number of proposals funded can be higher than 7 if the total funding requested from the first 10 ranked proposals is below the €1.5 million allocated to the KYKLOS 4.0 Open Call #2.

- **Consortium Declaration of Honour (Annex 5)**: signed and stamped by all partners of the consortium.
- Validation of the status information of the participating SME, where the following documents will be required:
    - **SME Declaration (Annex 6):** signed and stamped. In the event the applicant declares being non-autonomous, the balance sheet and profit and loss account (with annexes) for the last period for upstream and downstream organisations 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.
- **Bank account information (Annex 8):** The account where the funds will be transferred will be indicated via a form signed by the main beneficiary's legal representative and the bank representative. The account should be a business bank account of the beneficiary.

Each participating entity should provide at contract preparation time a valid VAT[2]. Failure to provide a valid VAT number will automatically result in exclusion from the contract preparation.

The request of the above listed documentation by the KYKLOS 4.0 consortium will be sent to the sub-grant project representatives, including deadlines by which information and documentation should be sent. In case the required documentation and negotiations have not been concluded within the defined deadlines, the proposal is automatically rejected and the next proposal in the reserve list is invited to initiate the contract preparation.

4.3.2 Step 2: Contract signature

At the end of the contract preparation and negotiation phase, the sub-grant agreement (Annex 3) will be signed between the KYKLOS 4.0 consortium represented by its coordinator (TECNALIA), also acting as the Treasurer, and the lead beneficiary in representation of the contracting parties. The sub-grant agreement lays out the contractual obligations, including the work plan to be implemented during the KYKLOS 4.0 funding programme.

---

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

5 KYKLOS 4.0 funding programme: implementation, technical support, and reporting

The KYKLOS 4.0 funding programme associated with the open call will run for up to eight months (Figure 4), organised into three stages, each with specific objectives. At the end of each stage, the sub-granted project is expected to produce a report with the results of the work carried out.
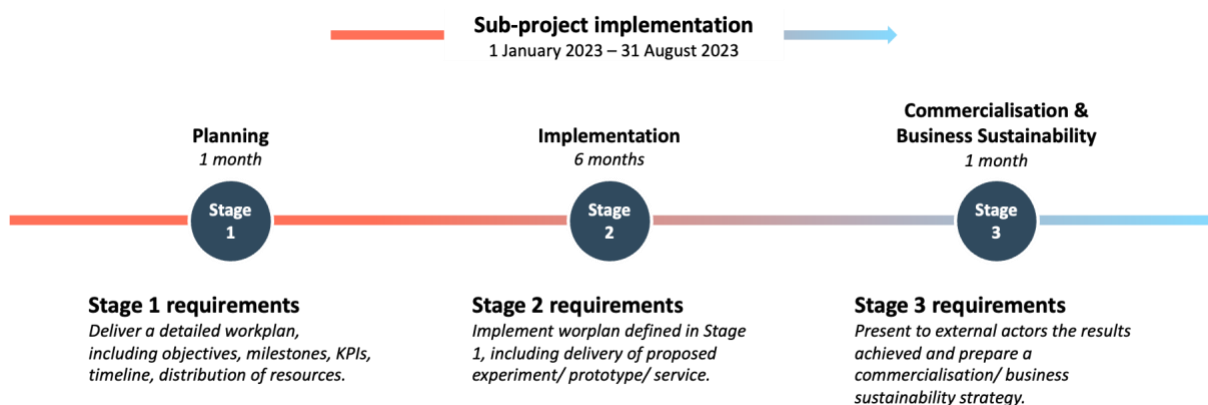

Figure 4. Summary of sub-project implementation stages of the funding programme

Table 4 outlines the schedule, objectives, reporting requirements, technical support, and payment plan for each stage of the funding programme.

Table 4. KYKLOS 4.0 - Open Call #2 payment and reports schedule

KYKLOS 4.0 FUNDING PROGRAMME	
Stage 1 - Planning	
Duration	1 month (M1): 1 January 2023 - 31 January 2023 *(tentatively)*
Objectives	Review the work plan, including specific objectives, KPIs, timeline, and integration and validation of the selected KYKLOS 4.0 service and respective components.
Reporting & meeting requirements	● Report R1 - Detailed [*project acronym*] implementation plan (to be submitted by the last day of M1). The report must address: 　○ Detailed specific objectives and project outcomes/ results. 　○ Specific aspects on the integration and validation plan of the KYKLOS 4.0 service and respective components. 　○ KYKLOS 4.0 KPIs to be addressed. ● Participate in an online review meeting with representatives of KYKLOS 4.0 to assess the report R1 (*only if requested by the KYKLOS 4.0 OCMB*).
Support	Technical support to discuss KYKLOS 4.0 components functionalities, requirements, and integration process.
Payment	30% of total budget

KYKLOS 4.0 FUNDING PROGRAMME	
Stage 2 - Implementation	
Duration	6 months (M2-M7): 1 February 2023 - 31 July 2023 *(tentatively)*
Objectives	- Implement the work plan as defined in Stage 1, including executing the experiment. - Integrate, test, and validate the selected KYKLOS 4.0 service and respective components. *Validation is also done by a separate survey.* - Work towards the achievement of the objectives, milestones, and KPIs. - Reflect on the barriers or challenges identified in digital manufacturing processes.
Reporting & meeting requirements	- Report R2 - [*Project acronym*] experiment report (*to be submitted by the last day of M7*). The report must address: - Details on the technical implementation of the experiment. - Review of the solution and results achieved. - Review of the integration and validation of KYKLOS 4.0 service and components. - Challenges and barriers associated with the service/ components. - Provision of input to two surveys: one related to validation of the KYKLOS 4.0 services; another related to circular economy. - Participate in an online review meeting (*month 5*) to present the status of the experiment activities. - Participate in an online review meeting (*month 7, end of experiment stage*) to present results and assess the report R2.
Support	Regular technical support to monitor and help in the KYKLOS 4.0 components' functionalities, requirements, and integration process. Follow-up on achievement of KYKLOS 4.0 KPIs.
Payment	40% of total budget
Stage 3 - Commercialisation & Business Sustainability	
Duration	1 month (M8): 1 August 2023 - 31 August 2023 *(tentatively)*
Objectives	- Present results achieved in relevant events, online and/ or face-to-face. - Develop a commercialisation and business sustainability plan. - Identify potential customers and investors; establish initial contacts.
Reporting & meeting requirements	- Report R3 - [*Project acronym*] commercialisation and business sustainability report (*to be submitted by the last day of M8*). The report must address: - Business plan for the solution and commercialisation approach; integration in the KYKLOS 4.0 platform. - Final elements of the technical implementation of the experiment (if applicable)

KYKLOS 4.0 FUNDING PROGRAMME	
	● Participate in an online review meeting (*month 8*) to present results and assess the report (*only if requested by the KYKLOS 4.0 OCMB*).
Support	● Business support in identifying opportunities (e.g., additional funding opportunities) and actors (e.g., investors) to support the commercialisation and the business strategy. ● Technical support as needed to finalise pending implementation activities.
Payment	30% of total budget

The sub-project consortium must submit to the KYKLOS 4.0 OCMB the report corresponding to each stage by the last day of the respective stage, as defined in Table 4, unless otherwise indicated by the KYKLOS 4.0 OCMB. A review will be held between 10 to 20 calendar days after the end of the stage so that the sub-granted project consortium can present their work (as reported in the respective report) and provide answers to questions from the KYKLOS 4.0 OCMB.

Payments associated with each stage will be disbursed pending the approval of the respective report, and successful achievement of milestones and KPIs defined in the sub-granted project work plan.

6 Additional information for applicants

6.1 Support to applicants

For additional information about the KYKLOS 4.0 - Open Call #2 check the Frequently Asked Questions (FAQs) document available at: https://kyklos40project.eu/open-call-02/.

For further information on the open call, namely regarding the eligibility rules, the information that is to be provided in the application form, or if you encountered technical issues with the application form, contact opencalls@kyklos40project.eu.

6.2 Timeline

Table 5 presents the indicative timeline during which each phase of the KYKLOS 4.0 - OC #2 will take place. The dates may change due to unforeseen events and situations. Therefore, these are an indication of what is initially expected; the dates are to be confirmed by the KYKLOS 4.0 team along the process and are not restrictive.

Table 5. Summary of the KYKLOS 4.0 - Open Call #2 timeline

Phase	Indicative timeline
Call publication	27 July 2022
Call deadline	12 October 2022 (17h00 CEST, Brussels time)
Evaluation period	12 October - 30 November 2022
Notification of results	30 November 2022
Contracting and signature of sub-grant agreement	1 December - 31 December 2022
Stage 1	1 January 2023 - 31 January 2023 (1 month)
Stage 2	1 February 2023 - 31 July 2023 (6 months)
Stage 3	1 August 2023 - 31 August 2023 (1 month)

6.3 Intellectual property rights

The results and IPR developed by the sub-granted project will be the exclusive property of the contracting parties. Any technologies (and other foreground) provided by KYKLOS 4.0 will remain the property of the KYKLOS 4.0 partners that provided them. The sub-granted project contracting parties and relevant KYKLOS 4.0 partners are free to discuss and agree any complementary IPR ownership that should be defined in a separate agreement.

6.4   Responsibilities of beneficiaries

The selected entities are indirectly beneficiaries of European Commission funding. Therefore, they are responsible for the appropriate use of the funding and must comply with obligations under H2020 specific requirements as described in Horizon 2020. A selection of the obligations that are applicable to the recipients are summarised in the sections below. Applicants are requested to review the sub-grant agreement (template) for full details on responsibilities they will be required to adhere to.

6.5   Conflict of Interest

Beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the project is compromised for any reason and must inform the KYKLOS 4.0 OCMB immediately should a conflict arise.

6.6   Promoting the action and give visibility to the EU funding

The beneficiaries must promote the sub-project, the KYKLOS 4.0 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 European Commission.

Any communication or publication of the beneficiaries must clearly indicate that the project has received funding from the European Union via the KYKLOS 4.0 project, therefore displaying the EU and project logo on all printed and digital material, including websites and press releases.

6.7   Data protection

To process and evaluate proposals, KYKLOS 4.0 will need to collect personal and industrial data. F6S Network Limited (F6S) 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 KYKLOS 4.0 requests the minimum information needed to deliver the evaluation procedures or the implementation of the funding programme. Please refer to https://www.f6s.com/terms to check F6S platform data privacy policy and security measures.

7   Contact information

The KYKLOS 4.0 consortium will only provide information to applicants via the F6S platform or communications from opencalls@kyklos40project.eu.

More information at: https://kyklos40project.eu/open-call-02/

Apply via: https://www.f6s.com/KYKLOS4.0opencall02/apply

Open call support team: opencalls@kyklos40project.eu (Open call questions only)

F6S support team: support@f6s.com (F6S platform issues only)