KYKLOS 4.0 - Open Call #1

Information webinar

25 March 2021 | 15h00 – 16h00 CET

Thank you for joining today.

The webinar will start in a few minutes.

Please make sure that you have your microphone and video turned off.

The webinar will be recorded and publicly disseminated; the slides presented will be made available after the webinar.

Welcome. Before we start:

- Rename yourself to first, last name and entity you represent. It will be easier to identify you during the Q&A.

- There will be a specific slot dedicated to Q&A. If you have a question, please use the "Raise Hand" tool. If we miss your signal, you can indicate you have a question in the chat box.

- The moderator will go through the raised hands and asks participants to turn on their microphones to ask their questions. Please wait for your turn.

- Make sure that you have your microphone and video turned off during the presentation.

Today's agenda

1. KYKLOS 4.0 project overview

2. KYKLOS 4.0 – Open Call #1

3. Tips when preparing a proposal

4. Q&A

KYKLOS 4.0 Project Overview

Jason Mansell Rementeria

TECNALIA

KYKLOS 4.0 Factsheet

KYKLOS

KYKLOS 4.0	An Advanced Circular and Agile Manufacturing Ecosystem based on rapid reconfigurable manufacturing process and individualized consumer preferences
Project Number	872570
Starting Date	01/01/2020
Project Duration	48 months
Call (part) Identifier	H2020-DT-2019-1
Topic	Digital Manufacturing Platforms for Connected Smart Factories
Budget	€19.227.110

KYKLOS 4.0 Consortium

| NO	PARTICIPANT	SHORT NAME	COUNTRY	TYPE
1	FUNDACION TECNALIA RESEARCH & INNOVATION	TECNALIA	ES	RI
2	MAGGIOLI SPA	MAGG	IT	LE
3	CENTRO DI RICERCHE EUROPEO DI TECNOLOGIE DESIGN E MATERIALI	CETMA	IT	RI
4	TWI ELLAS ASTIKI MI KERDOSKOPIKI ETAIREIA	TWI	GR	RI
5	JOTNE EPM TECHNOLOGY AS	Jotne	NO	SME
6	F6S NETWORK LIMITED	F6S	UK	SME
7	FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.	FOKUS	DE	RI
8	EUROPEAN DIGITAL SME ALLIANCE	DIGITAL SME	BE	NPO
9	CENTRE INTERNACIONAL DE METODES NUMERICS EN ENGINYERIA	CIMNE	ES	RI
10	CIRTES SRC	CIRTES	FR	SME
11	ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS	CERTH	GR	RI
12	GFT ITALIA SRL	GFT	IT	SME
13	KONNEKT ABLE TECHNOLOGIES LIMITED	KT	IE	SME
14	ADVANTIC SISTEMAS Y SERVICIOS SL	ADSYS	ES	SME
15	UNIVERSIDAD POLITECNICA DE MADRID	UPM	ES	UNI
16	PDM E FC PROJECTO DESENVOLVIMENTO MANUTENCAO FORMACAO E CONSULTADORIALDA	PDMFC	PT	SME
17	ENGINEERS FOR BUSINESS IPIRESIES TECHNOLOGIAS KAI MICHANIKIS ANONIMI ETAIRIA	EfB	GR	SME
18	ALGOSYSTEMS ANONIMI TECHNIKI EMPORIKI ETAIRIA PLIROFORIKIS AUTOMATISMON KAI METROLOGIAS	ALGOSYSTEMS	GR	SME
19	UNIVERSIDADE DE COIMBRA	UC	PT	UNI
20	INNOV-ACTS LIMITED	INNOV-ACTS	CY	SME
21	SOFTWARE IMAGINATION & VISION SRL	SIMAVI	RO	LE
	END USERS			
22	ASTILLEROS DE SANTANDER SA	AST	ES	LE
23	GE MEDICAL SYSTEMS ISRAEL LTD	GRC	IL	LE
24	VESTEL ELEKTRONIK SANAYI VE TICARET ANONIM SIRKETI	VESTEL	TR	LE
25	PRO MEDICARE SRL	Pro Medicare	IT	SME
26	DIAD GROUP SRL	DIGRO	IT	LE
27	AGROTIKOS PTINOTROFIKOS SYNETERISMOS IOANNINON "I PINDOS"	PINDOS	GR	LE
28	CONTINENTAL AUTOMOTIVE ROMANIA SRL	CONT	RO	LE
29	KANFIT3D LTD	KANFIT3D	IL	SME

Rationale

Manufacturing companies **consume** high amounts of energy as well as **natural resources** in their product-making processes:

- The respective amounts and overall costs of product making are increasing
- EU energy prizes are continuously increasing
- Raw materials price trend is ascending, increasing short term volatility
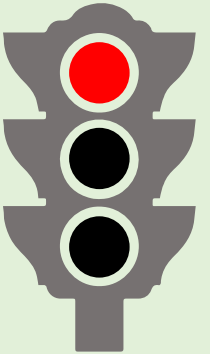
Optimizing the manufacturing processes becomes "a must" to ensure **sustainability**
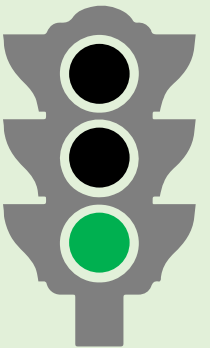
KYKLOS 4.0 Briefly

KYKLOS 4.0 aims at providing a **Technology Ecosystem** which creates and supports the configurations, methodologies, production techniques, decision and actions at all different levels and stages of the manufacturing value chain so as to achieve:

- **Increased energy efficiency**
- **Decreased use of raw materials (second use o parts or materials)**
- **Customer-centricity**
- **On-demand manufacturing**

Meeting Industry 4.0 objectives:

- **Operational excellence**
- **Mass customization and personalization**
- **Increasing efficiency**
- **Reducing waste**
- **Boosting competitiveness**

KYKLOS 4.0 Circular Manufacturing Framework

KYKLOS

KYKLOS 4.0 will deliver an advanced configuration variants' framework and state-of-the-art production paradigm, embedding **key technologies** into a unified platform Ecosystem to **manage live product innovation**
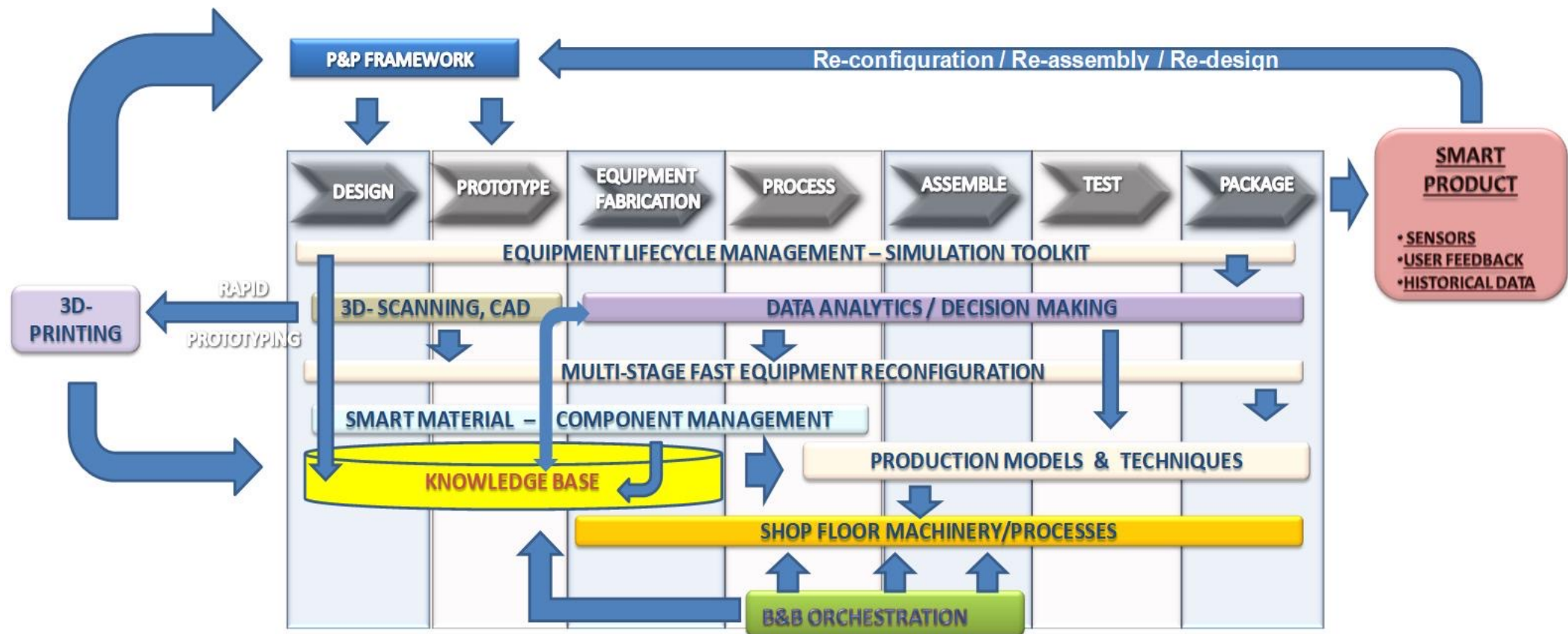
KYKLOS 4.0 Objectives

KYKLOS

The following set of objectives are set, covering the project's **scientific and technological aspects** throughout its duration as well as the **exploitation of the project's results** after its end:

01 Decentralized Interoperable Agent-Based B2B Marketplace Platform

02 Virtual Production Line Orchestration Module & Interoperative Fog Architecture Framework

03 Continuous Deep Learning Toolkit for Operational Metrics

04 Tailored Circular Manufacturing and Mass Customization Services

05 Big Data Aggregation and Integrated DSS for Optimizing Production Capacity

06 KYKLOS 4.0 Auditing Mechanisms

07 Product Data Management

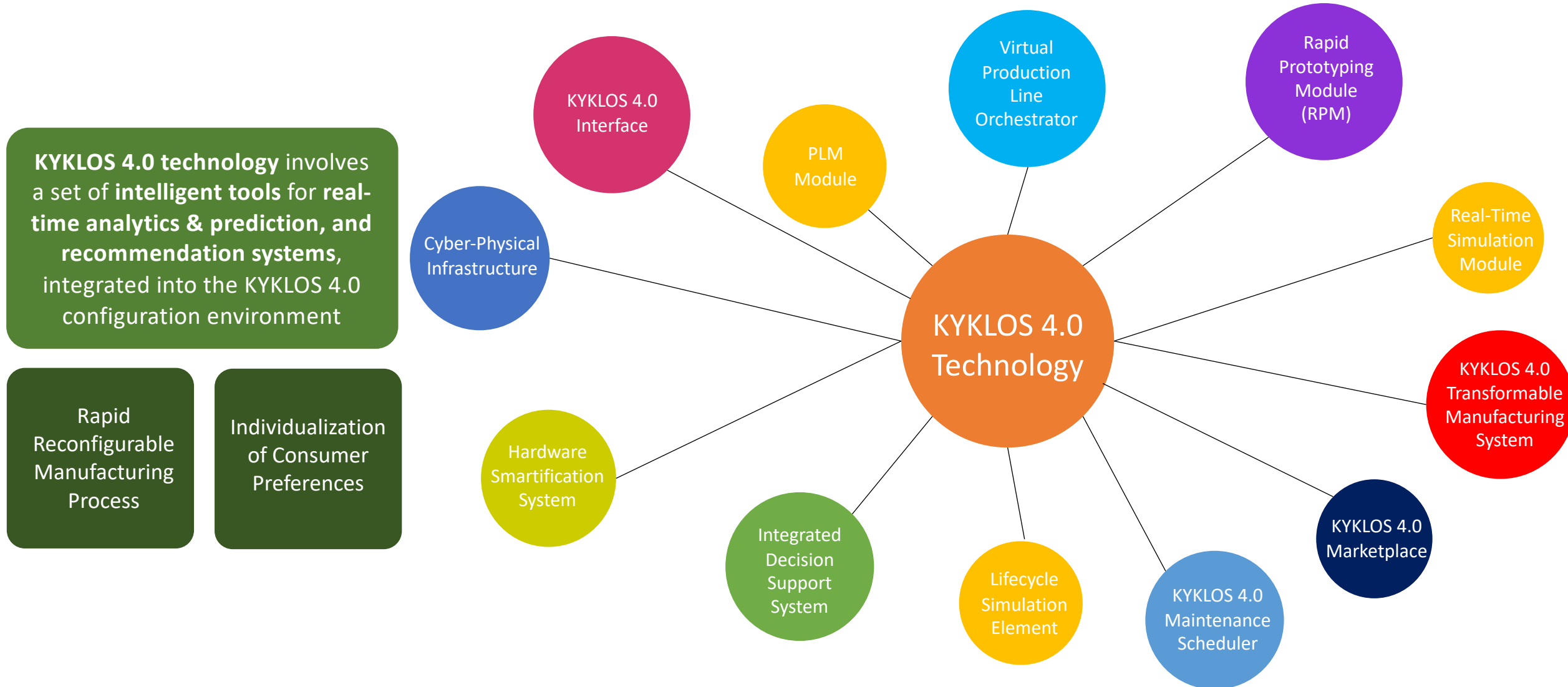**08** Product Life Cycle Monitoring / Customer Feedback

09 KYKLOS 4.0 Production Line "Smartification" System

10 Additive Manufacturing Simulation Modules

11 KYKLOS 4.0 Vulnerability Assessment

KYKLOS 4.0 Technology & solutions

KYKLOS 4.0 technology involves a set of **intelligent tools** for **real-time analytics & prediction, and recommendation systems**, integrated into the KYKLOS 4.0 configuration environment

Rapid Reconfigurable Manufacturing Process

Individualization of Consumer Preferences

KYKLOS 4.0 Interface

PLM Module

Virtual Production Line Orchestrator

Rapid Prototyping Module (RPM)

Cyber-Physical Infrastructure

Real-Time Simulation Module

KYKLOS 4.0 Technology

KYKLOS 4.0 Transformable Manufacturing System

Hardware Smartification System

Integrated Decision Support System

Lifecycle Simulation Element

KYKLOS 4.0 Maintenance Scheduler

KYKLOS 4.0 Marketplace

KYKLOS 4.0 Pilots

KYKLOS 4.0 will **demonstrate** the transformative effects that Circular Production System (CPS), Product Life Management (PLM), Life Cycle Analysis (LCA), Augmented Reality (AR) and Artificial Intelligence (AI) technologies and methodologies will have to the **Circular Manufacturing** framework

Large-scale piloting in 7 pilots to demonstrate the technical, environmental and economic viability of KYKLOS 4.0 Ecosystem

Pilots will be divided into two main categories: Pilots related to **Smart Manufacturing**, and to **Circular Manufacturing** (energy efficiency and waste management) framework

Smart Manufacturing Pilots

01 Aerospace Pilot
(**GENERAL ELECTRIC and KANFIT3D** facilities – Israel)

02 Electronic Devices/Equipment Pilot
(**VESTEL** facilities – Turkey)

03 Medical Pilot
(**PRO MEDICARE** facilities– Italy)

04 Electronic Manufacturer Pilot
(**CONTINENTAL** facilities – Romania)

Circular Manufacturing Pilots

01 Automotive Pilot
(**DIGRO** facilities – Italy)

02 Shipyard Pilot
(**ASTANDER** facilities – Spain)

03 Food Industry Pilot
(**PINDOS Cooperative** facilities – Greece)

KYKLOS 4.0 Dissemination & exploitation strategy

Strategic pillar	Goal	
Awareness	Make the project and its vision known in the relevant target groups. Primary instruments will be the KYKLOS 4.0 website and the presence in social networks (Facebook, Twitter, LinkedIn, and YouTube), the participation to relevant conferences, the promotion of project activities, and the partnering of end users	*Communication and dissemination of results (according to the dissemination level defined)*
Consolidation of scientific and technological achievements	Presentation of research articles and technical demonstrations at key conferences and workshops, peer-reviewed publications, presence in R&D focused media, as well as building up a community of interested developers and scientists	
Real case demonstrators	Highlighting KYKLOS 4.0 ecosystem developed as a proof of concept. Primary target groups will be manufacturing industries / production plants as well as manufacturers and providers of industrial equipment or machinery. The goal is to demonstrate to the target groups the benefits and opportunities provided by KYKLOS 4.0	
Participation of users for further developments	Mobilization and engagement of technology actors to utilize KYKLOS 4.0 results and develop new products	

Exploitation

KYKLOS 4.0 will **facilitate the acceptance and utilization of the developed solutions** by the market with:

- **Ensuring compatibility and interoperability** with what already exists in the market through **standards**
- Using the **standardization system** as a tool for dissemination of the project results and interaction with the market stakeholders

KYKLOS 4.0 follow us on

KYKLOS

https://www.facebook.com/Kyklos40Project

https://twitter.com/Kyklos40Project

https://www.linkedin.com/company/kyklos-4-0-eu-project

https://www.youtube.com/channel/UCjExattPrmLOetNPI4OxD0g

www.kyklos40project.eu

KYKLOS 4.0 - Open Call #1

Samuel Almeida

samuel@f6s.com | F6S Network Limited

KYKLOS 4.0 - Open Call #1

Guide to submitting a proposal

[1] Objectives | [2] Target domains

[3] Timeline | [4] Funding scheme | [5] How to participate | [6] Application form

| [7] Understanding the evaluation process |

| [8] Sub-project implementation |

KYKLOS 4.0 - Open Call #1

KYKLOS

[1] OBJECTIVES

- The KYKLOS4.0 Open Call #1 is looking for **SME-led consortia of up to three entities** to submit project proposals for the development of innovative solutions to improve **digital manufacturing processes**.

- The solution must be **validated and demonstrated in the pilot location**, which should be provided by one of the applicant's **consortium partners**.

- The proposed experiment must address the **digital manufacturing** domain and cover one or more **sub-domains**.

- Experiments should clearly demonstrate the **role of the circular economy** within the manufacturing domain in their activities.

[2] TARGET DOMAINS

DIGITAL MANUFACTURING

Artificial intelligence	Decision support systems
Augmented reality	Deep learning
Big data and data management	Life cycle analysis
Circular manufacturing	Product lifecycle management
Cyber-physical systems	*Others related*

Proposals must address at least one of the listed sub-domains.

KYKLOS 4.0 - Open Call #1

KYKLOS

Launch of Open Call #1
01 April – 30 June 2021

Evaluation and selection
01 July – 30 September

Sub-project implementation phase

6 months

6 months

Open Call #1 submission and evaluation

Planning
1 month

Implementation
3-4 months

*Commercialisation &
business sustainability*
1-2 months
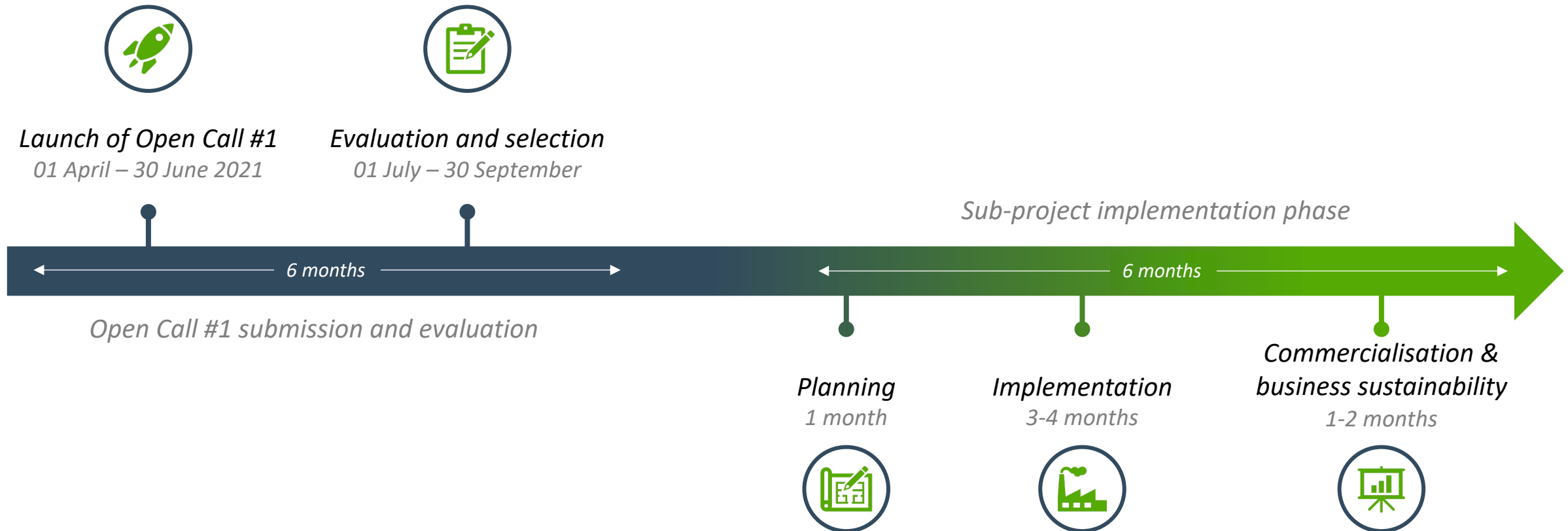
[4] FUNDING SCHEME

- A total of **€1 million** is available, funding a minimum of **seven (7) projects**.

- Any budget not consumed in Open Call #1 will be made available for Open Call #2 (tentatively scheduled for June 2022).

- Proposals will be eligible to receive financial support up to **€150.000** (for a consortium of three entities), with a limit of €60.000 per applicant.

- Activities that are already funded by other grants cannot be funded by KYKLOS4.0.

- There is a **€100.000 maximum limit** for companies receiving FSTP from the **Smart Anything Everywhere and I4MS initiatives**.

€ 1 million
7 projects

€150.00
3 partners

€60.000 (x2)
2 partners
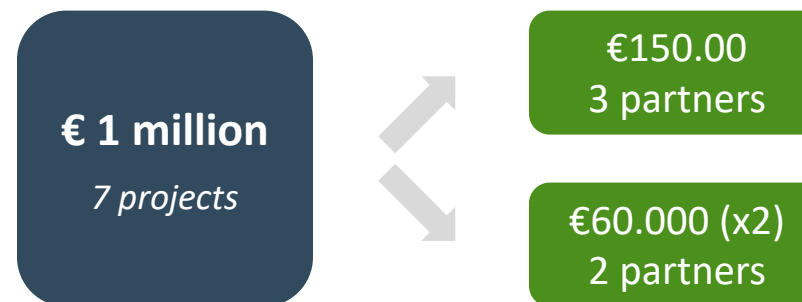
[5] HOW TO PARTICIPATE (1/2)

- Sign up for account on F6S to submit your proposal!

- All applications must be submitted via F6S, where candidates must fill in an **online application form** and complete and upload **additional annexes**, including a **technical proposal**. Submissions received via any other channel will be discarded.

- English is the official language and submissions done in other languages will not be evaluated.

- Note that some questions have limited characters; the technical proposal (template) has a maximum number of pages.

- It is strongly recommended to not wait until the last minute to submit the proposal. The time of receipt of the application as recorded by the submission system will be definitive and no system/network failures will be accepted as a justification.

[5] HOW TO PARTICIPATE (2/2)

- Each applicant may **submit up to two (2) proposals** in the KYKLOS4.0 Open Call #1. In case more than two proposals are submitted, the first two submitted to the system will be those considered.

- Applicants may **participate in a maximum of one (1) accepted sub-project** in the KYKLOS4.0 Open Call #1. Applicants that participate and are funded in the KYKLOS4.0 Open Call #1 are not eligible to participate in the KYKLOS4.0 Open Call #2, even if a different sub-project proposal is submitted.

- Applicants may **re-submit to the KYKLOS4.0 Open Call #2 a proposal that was not funded in Open Call #1**.

KYKLOS 4.0 - Open Call #1

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Annex 3.1 - KYKLOS4.0 OC01 proposal template [Mandatory to be included in the proposal]

1. CONCEPT AND IMPLEMENTATION

NOTE: MAXIMUM OF 4 PAGES, COVERING SECTION 1.1 AND 1.2

1.1. Concept and objectives

Describe the overall concept and objectives (general and specific) of the project within the scope of the open call and KYKLOS4.0 project, addressing the challenge proposed by the project and the selected sub-domain/s. Include also:

- *The technical challenges and barriers expected to be solved, aligned with the KYKLOS4.0 project concept.*
- *Expected project outcomes, which should be justified, measurable and realistic within the timeline of the project implementation.*
- *The innovation potential, and how the project is novel.*
- *The technology readiness level of proposed experiment/ prototype.*

1.2. Implementation

Describe the proposed workplan to be implemented towards the achievement of the objectives/ results. Include also:

- *The specific activities that will be implemented, the time required, and expected outputs.*
- *Relevant milestones and KPIs to measure achievement of results.*
- *External barriers/ risks that may affect the workplan and compromise the project.*

Table 1. Suggested table for description of activities

Workplan activity name	Activity description	Planned duration	Expected output
Activity 1			
Activity 2			
Activity 3			

NOTE: Add lines (for activities) as required

Table 2. Suggested table for description of milestones

Milestone name	Milestone description	Delivery month
Activity 1		
Activity 2		
Activity 3		

NOTE: Add lines (for milestones) as required

2. IMPACT

NOTE: MAXIMUM OF 3 PAGES, COVERING SECTION 2.1 AND 2.2

2.1. Socio-economic impact

Describe the overall impact of the project. Include also:

- *Describe the relevance and socio-economic impact and benefits of your project and planned experiment/ prototype.*
- *Describe the industrial relevance and market potential of the project and planned experiment/ prototype.*

2.2. Exploitation and dissemination strategy

Describe the exploitation and dissemination strategy of the project: Include also:

- *Planned activities (during and post-project) to ensure the exploitation and sustainability of expected project outcomes.*
- *Describe the industrial relevance and market potential of the project and planned experiment/ prototype.*

3. CONSORTIUM

NOTE: MAXIMUM OF 2 PAGES, COVERING SECTION 3.1 AND 3.2

3.1. Consortium structure and capacity

Provide the core consortium structure, including names of people per partner, in the table below. The people included in the proposal must be later involved in the execution. The involvement of additional people in the project implementation but not identified in the proposal is welcome, but the core team provided below must be maintained.

PARTNER NO. 1	PARTNER NAME:		
Name of person	Role in the project	LinkedIn profile (or similar)	Key areas of expertise
Person 1			
Person 2			
Person 3			

NOTE: Add tables (for partners) and lines (for persons) as required

3.2. Consortium motivation

Briefly describe the consortium's motivation to apply to this open call.

4. RESOURCES AND COSTS

NOTE: MAXIMUM OF 1 PAGES, COVERING SECTION 3.1 AND 3.2

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

Table 3. Person-months allocated to the project

Partner no./ name	Name of person	Person months (PMs[3])
Person 1		
Person 2		
Person 3		
	TOTAL	

NOTE: Add lines as required (for persons identified in Section 3.1)

Provide a description of expected costs and the requested total contribution using the table.

Table 3. Person-months allocated to the project.

Cost category	Partner 1	Partner 2	Partner 3 (if applicable)	Total amount (€)
[A] Direct personnel costs[2]				
[B] Travel costs[3]				
[C] Equipment costs[4]				
[D] Other direct costs				
Subcontracting[5]				
Indirect costs[6]				
TOTAL[7]				

NOTE: Footnotes can be removed to increase page availability.

[6] APPLICATION FORM (3/3) | https://www.f6s.com/kyklos4.0opencall01/

- It is mandatory to upload **Annex 3.1 – Technical proposal**.

- It is **mandatory** to upload **Annex 4** (Declaration of Honour), **Annex 5** (SME Declaration form), **Annex 6** (Consortium Declaration of Honour) in PDF format as part of the application process.

- Please review all items in the annexes and ensure you have provided all the required information (e.g., signatures, check boxes, tables, etc.). Other means of communication (e-mail) are not accepted.

- KYKLOS4.0 is GDPR compliant. To process and evaluate the application forms, the minimum information needed to deliver the evaluation procedure is requested. A summary of the proposals and the participants' information will be shared with the European Commission.

[7] UNDERSTANDING THE EVALUATION PROCESS (1/2)

Open Call 1 submissions
1 April – 30 June 2021

Evaluation and selection
1 July – 30 September 2021

Proposal submission

Eligibility check

Is the proposal eligible?

YES

External evaluation

At least 2 evaluators for each proposal

Positive review?

YES

Sub-grant agreement

Acceptance letter

NO

Rejection letter

NO

Rejection letter
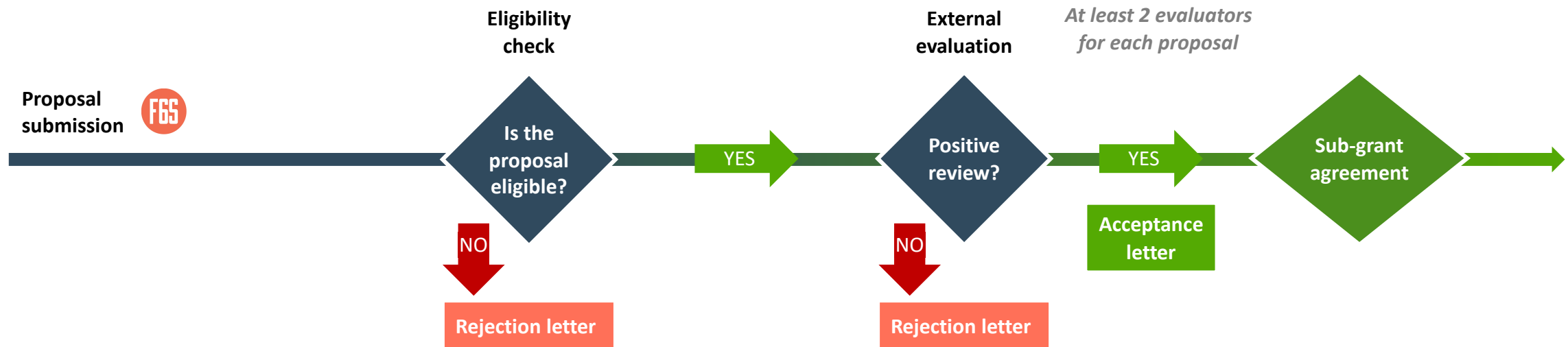
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ELIGIBILITY CHECK

Applicants are legal entities eligible for EC funding under H2020 rules

Applicants are SMEs complying with EC recommendations

Domain: digital manufacturing + one additional sub-domain

All annexes are provided and filled out correctly

Proposal and documentation in English

EXTERNAL (REMOTE) EVALUATION

All proposals are reviewed by two external experts

FOUR CRITERIA

CONCEPT AND IMPLEMENTATION *(Weight: 30%)*

Objetives, novelty, workplan, level of innovation, alignment with KYKLOS 4.0.

IMPACT *(Weight: 40%)*

Industrial relevance, market potential, proposed commercialization and business strategy.
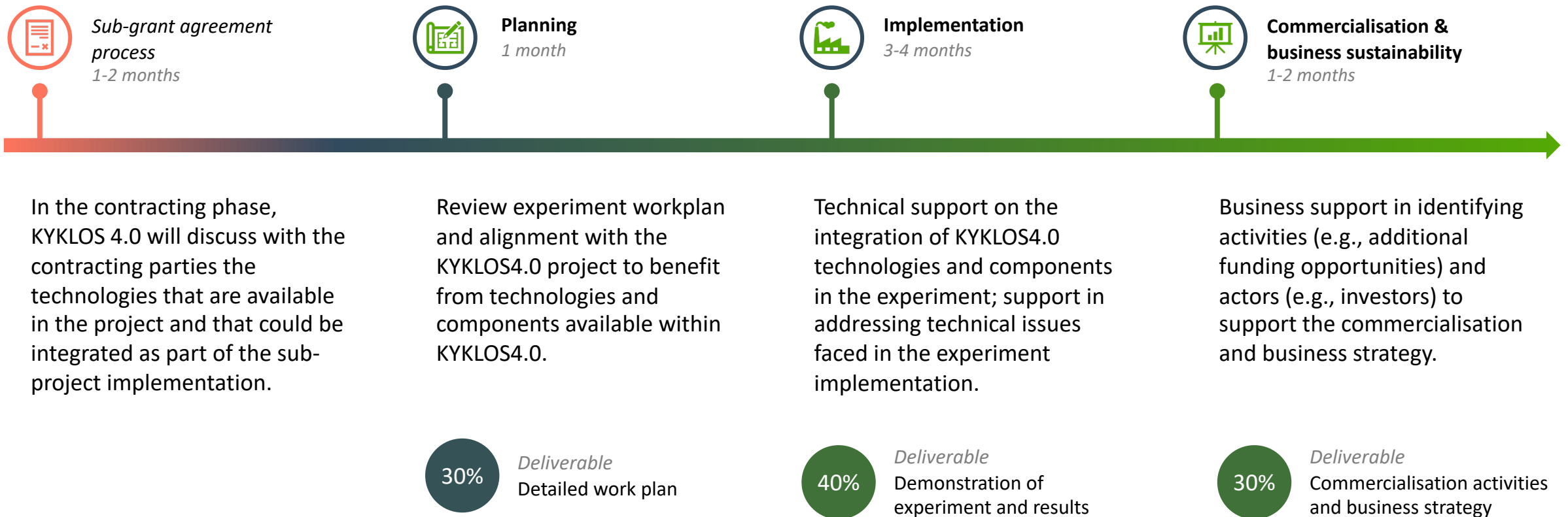
CONSORTIUM *(Weight: 20%)*

Competences, knowledge, technical capacity, roles, complementarity.

RESOURCES AND COSTS *(Weight: 10%)*

Justification of resources, distribution among partners.

KYKLOS 4.0 - Open Call #1

[8] SUB-PROJECT IMPLEMENTATION

Sub-grant agreement process
1-2 months

Planning
1 month

Implementation
3-4 months

Commercialisation & business sustainability
1-2 months

In the contracting phase, KYKLOS 4.0 will discuss with the contracting parties the technologies that are available in the project and that could be integrated as part of the sub-project implementation.

Review experiment workplan and alignment with the KYKLOS4.0 project to benefit from technologies and components available within KYKLOS4.0.

Technical support on the integration of KYKLOS4.0 technologies and components in the experiment; support in addressing technical issues faced in the experiment implementation.

Business support in identifying activities (e.g., additional funding opportunities) and actors (e.g., investors) to support the commercialisation and business strategy.

30% *Deliverable* Detailed work plan

40% *Deliverable* Demonstration of experiment and results

30% *Deliverable* Commercialisation activities and business strategy

Tips when preparing a proposal

KYKLOS 4.0 - Open Call #1

TIPS WHEN PREPARING A PROPOSAL

- Download and read carefully all the documentation relevant to the open call. Pay particular attention to **Annex 2: Guidelines for Applicants**, which provides detailed information on the scope of the project, objectives of the open call, all the requirements and processes to be carried out.

- Prepare a text document with all the information requested in the proposal form (in addition to the technical proposal). It's easier to make changes in the document before putting it on the platform and submitting.

- Be clear and specific. Make sure the evaluators can understand the concept of your project, the objectives, what you want to deliver and how.

- The open call will run for three (3) months! Take your time, review carefully, clarify doubts, but **submit well ahead of the deadline**.

- Attend our webinars (and re-watch them) for information and to ask questions!

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KYKLOS 4.0 - Open Call #1

IMPORTANT LINKS AND CONTACTS

- More info at: https://kyklos40project.eu/about-kyklos/open-call/

- Apply via: https://www.f6s.com/kyklos4.0opencall01/apply

- FAQ: www.f6s.com/kyklos4.0 and https://kyklos40project.eu/about-kyklos/open-call/

- Online Q&A: https://www.f6s.com/kyklos4.0opencall01/discuss

- F6S support team (for platform issues during the application): support@f6s.com

- Other support : opencalls@kyklos40project.eu

Keep in touch!

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Information webinar

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Thank you for joining today.

Good luck!