



# Open Call 1 Innovators Guide for Applicants



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## 1. Introduction

This document contains a guide for applicants with the necessary information to apply to the Open Call 1-Innovators , including the eligibility criteria, instructions to apply, an overview of the evaluation process, funding and relevant legal information, and the track template that applicants must fill to apply.

### 1.1 AIPlan4EU in a brief

The European Commission funds AIPlan4EU Project under the European Union’s Horizon 2020 Information and Communication Technologies programme and the call topic ICT-49-2020. The project launched in January 2021. The AIPlan4EU consortium comprises 16 European partners from different industries and expertise (research groups and companies). The project will have a duration of 3 years with 11 milestones.

Within the consortium, seven application areas will be considered from the beginning. These are both areas where planning has already been used and where planning has seen very little application: planning for space, agriculture, manufacturing, logistics, autonomous driving, automated experimentation, and subsea robotics). In addition to these application areas, AIPlan4EU uses part of the cascade funding to widen the elicitation of requirements as much as possible.

The AIPlan4EU project will bring AI planning as a first-class citizen in the European AI On-Demand (AI4EU) Platform by developing a uniform, user-centered framework to access the existing planning technology and by devising concrete guidelines for innovators and practitioners on how to use this technology. To do so, we will consider use-cases from diverse application areas that will drive the design and the development of the framework, and include several available planning systems as engines that can be selected to solve practical problems. We will develop a general and planner-agnostic API that will both be served by the AI4EU platform and be available as a resource to be integrated into the users’ systems. The framework will be validated on use-cases both from within the consortium and recruited by means of cascade funding; moreover, standard interfaces between the framework and common industrial technologies will be developed and made available.

AIPlan4EU is based on a methodology designed to address the challenge of building the UPF (Unified Planning Framework) and developing a sustainable and robust ecosystem around it. A key aspect is to ensure that the integration of the UPF within such an ecosystem will bring tangible value for innovators and practitioners of planning and the AI4EU platform and that the cascade funding will provide valuable assets and feedback at the right time in the project.

AIPlan4EU is centred around 6 ambitious objectives:

- O1: Making planning accessible to practitioners and innovators
- O2: Facilitate the integration of planning and other ICT technologies
- O3: Making planning relevant in diverse application sectors
- O4: Seamlessly integrate planning within the AI4EU platform
- O5: Facilitate learning of planning for reskilling and lower the access barrier
- O6: Standardize and drive academic research towards applications.



## 1.2 Concept

Following the overall vision for AI in Europe, the project will focus on planning technology and bring it to innovators and practitioners. On one side, AIPlan4EU will leverage the excellent research that Europe has funded and constructed over the years. Moreover, being a model-based technology, planning is particularly suited to ensure trust and being explainable: both these factors will guide the project's principles. They will be particularly highlighted in the different use-cases where humans are subjected or can interfere with the decisions and suggestions of planners.

Over the years, planning has been applied in several applicative domains (e.g., space, electroplating, and port operations) and has seen an impressive flourishing of techniques, tools, and theory that achieved spectacular results. Despite these successes, implementing innovative solutions based on planning is still costly and requires dedicated and specialized expertise. In many cases, practitioners need to re-implement state-of-the-art techniques and customize them for their needs. On the other hand, efficient research tools are available. Still, their technological usability is limited because they are engineered to solve a given planning problem expressed in a dedicated formal language instead of providing suitable APIs for practitioners to use. Another issue is fragmentation: it is very hard, even for experts, to reliably predict which technique will work well on a certain problem, and, in addition, the available research planning tools are not uniform in their API, input language, and capability.

AIPlan4EU aims at solving these problems through the AI4EU platform: we will offer state-of-the-art planning technology through a unified API designed for practitioners and validated on practical use-cases that will be a convenient entry-point for any innovator willing to take advantage of plan-generation techniques and related technologies. This goal is well aligned with the AI4EU platform vision: offer AI technologies on-demand. All the resources and the methodologies developed within the project will be provided through the AI4EU platform that will be extended to give the novices a convenient entry point for planning users.

The project will collect several state-of-the-art planning engines under the foreseen unified planning API and present the resulting Unified Planning Framework (UPF for short) as a resource in the AI4EU platform. In addition to the innovative UPF framework, we will validate its applicability through several case studies in diverse application domains. For each of them, we will develop several "Technology-Specific Bridges" (TSBs for short) that will connect the ICT technology relevant in an application domain with the planning services UPF offers. For example, consider a logistics application domain and imagine a scenario where we want to use planning techniques to automate decision-making for intra-logistics in a warehouse where a certain Warehouse Management System (WMS) software is in use. The TSB, in this context, will be responsible for assessing the status of the warehouse and the orders from the WMS software and transform this information into a (series of) planning queries for the UPF. Moreover, the same TSB will convert the answers, measures, and estimations produced by the UPF into significant quantities and decisions at the level of the WMS. In this example scenario, the WMS is the relevant ICT technology for the application domain. The software will not be the sole contribution AIPlan4EU will bring to the AI4EU platform. The collected planning use-cases and the identified ICT technologies will be documented and reported in the AI4EU platform for future reference.



## 1.2.1 The Unified Planning Framework

The Unified Planning Framework (UPF) library makes it easy to formulate planning problems and to invoke automated planners.

The library allows the definition, manipulation and solving of planning problems in a simple, intuitive, and planner independent way. The user can solve planning problems using one of the native solvers, or by using any PDDL planners, can read and write problems in PDDL (or ANML) format, can use simplification, grounding, removal of conditional effects and many other transformations and much more.

The purpose of the library is to provide an abstraction layer for planning technology allowing a user to specify planning problems in a planner independent way and then use one of the available planning engines installed on the system. The library is implemented as a Python package offering high level API to specify planning problems and to invoke planning engines. Moreover, the library offers functionalities for transforming and simplifying planning problems and to parse problems from existing formal languages.

The library is being developed publicly under a permissive open-source license (Apache 2.0) and the progress and the code can be followed at <https://github.com/aiplan4eu/upf>. Code-level documentation is being written and is automatically generated and accessible at <https://upf.readthedocs.io/en/latest/>

### 1.2.1.1 Functionalities and code structure

In this section, we will present the main functionalities offered by the library in its current status.

- **Problem specification**

The main functionality offered by the library concerns the specification of a planning problem. The API provides classes and functions to populate a Problem object with the fluents, actions, initial states and goal specifications constituting the planning problem specification. In order to showcase the basic modelling capabilities of the library, we created an interactive Python notebook using the Google Colab service, which guides the reader in the details of the problem specification API. This documentation is publicly available<sup>1</sup>.

The functionalities for creating model objects and to manipulate them are collected in the `upf.model` package of the library.

The following example shows a simple robotic planning problem modeling a robot moving between locations while consuming battery. The example shows the basic functionalities and objects needed to declare the problem specification. A more detailed presentation of the different objects is available on the Google Colab Python notebook where we document and explain all the different classes and their semantics.

```
# Declaring types
Location = UserType('Location')
# Creating problem 'variables'
robot_at = Fluent('robot_at', BoolType(), [Location])
battery_charge = Fluent('battery_charge', RealType(0, 100))
# Creating actions
move = InstantaneousAction('move', l_from=Location, l_to=Location)
l_from = move.parameter('l_from')
```

---

<sup>1</sup> <https://colab.research.google.com/drive/1kbNu3k1SxO1CbTtqfLEUTmU1AuAyxuHG?usp=sharing>



```
l_to = move.parameter('l_to')
move.add_precondition(GE(battery_charge, 10))
move.add_precondition(Not(Equals(l_from, l_to)))
move.add_precondition(robot_at(l_from))
move.add_precondition(Not(robot_at(l_to)))
move.add_effect(robot_at(l_from), False)
move.add_effect(robot_at(l_to), True)
move.add_effect(battery_charge, Minus(battery_charge, 10))
# Declaring objects
l1 = Object('l1', Location)
l2 = Object('l2', Location)
# Populating the problem with initial state and goals
problem = Problem('robot')
problem.add_fluent(robot_at)
problem.add_fluent(battery_charge)
problem.add_action(move)
problem.add_object(l1)
problem.add_object(l2)
problem.set_initial_value(robot_at(l1), True)
problem.set_initial_value(robot_at(l2), False)
problem.set_initial_value(battery_charge, 100)
problem.add_goal(robot_at(l2))
```

In the current version, the UPF library allows the specification of classical, numerical, and temporal planning problems. In order to support the latitude expressiveness levels we have operators for arithmetic such as plus minus times and division and specific temporal operators to attach conditions and effects to specific timings within the duration of an action. The library documentation provides examples and describes the use of these functionalities.

- **Transformers**

Another very interesting functionality offered by the UPF concerns model-to-model transformation. The library implements several simplifications and compilations that can transform one problem into an equivalent one getting rid of some of the planning constructs. For example, we offer a functionality to remove conditional effects from the planning problem specification by transforming the input problem into an equivalent one that does not make use of conditional effects. Our transforming architecture is very general and offers functionalities to transform a plan for the target problem of the compilation into a plan for the input problem. This allows the creation of pipelines of transformations that can map an input planning problem into an equivalent one supported by a target planning engine and then transform back the plan generated by the engine into a valid plan for the overall input problem.

All the available transformers are part of a class hierarchy rooted in the Transformer class and are contained in the `upf.transformers` package.

The following example shows how to create a transformer to compile away negative conditions from a problem and to retrieve the plan for the original problem from a plan of the transformed problem. If the planner does not support negative conditions, the original problem could not be solved, while the transformer allows us to solve the problem anyway.

```
# Creating the negative conditions remover
neg_removal = NegativeConditionsRemover(problem)
# Checking that the problem has negative conditions
assert problem.kind().has_negative_conditions()
# Asking the transformer to get the new problem
new_problem = neg_removal.get_rewritten_problem()
# Checking that the new problem does not have negative conditions
assert not new_problem.kind().has_negative_conditions()
```



```
#Solving the problem generated by the transformer
new_plan = planner.solve(new_problem)
#Getting the equivalent plan for the original problem
plan = neg_remover.rewrite_back_plan(new_plan)
#Checking that the generated plan is valid for the original problem
assert planner.validate(problem, plan)
```

- **Solving Interface**

The library offers primitives to invoke planning engines of different kinds on problem specifications. In particular, the library uses the concept of operation modes to account for different possible interactions that can be performed with the planning engine at hand. Such operation modes allow the standardization of APIs towards different planning engineers sharing the same interaction kind and primitives.

We currently support 3 operation modes:

- One shot Planning: is the classical interaction mode for the planning community, it consists in posing the planning problem entirely and then waiting for the solution. This operation mode does not support incremental reuse of information and is limited to one planning problem at a time, but is the most common operation model among the different planners available.
- Plan Validation: is an operation mode supporting the use case of checking the validity of a given plan against the problem specification. Essentially, the engine is required to analyse the given plan and report whether it is guaranteed to achieve the goal conditions or if instead it can fail due to an action not being applicable or a goal not being reached. For this operation mode, we also implemented a native engine that is part of the library itself.
- Grounding: Is an operation mode that transforms a given problem into an equivalent one that doesn't make use of action parameters or first order predicates. This is a very common operation to be done for solving a planning problem and it is needed to transform planning problems into state machines. Also in this case, the library offers a native grounder, and it also integrates grounders of different engines so that more powerful grounding algorithms can be accessed in a uniform and engine-independent way.

The solving interface also features a powerful automatic filtering of planning engines. In fact, the input planning problem is automatically analysed in order to determine the features needed to tackle the problem itself. The planning engines available on the system where the library is executed are then filtered, and only the ones that are capable of tackling the problem are left for the user to select from. This mechanism simplifies the job of the user in the selection of the right planning engine to be used.

All the functionalities of the solving interface are collected under the `upf.solvers` package.

The following example shows how to get a planner and solve a problem.

```
# Getting a oneshot planner that is able to handle the given problem kind
with OneshotPlanner(problem_kind=problem.kind()) as planner:
    # Asking the planner to solve the problem
    plan = planner.solve(problem)
    # Printing the plan
    print(plan)
```



- Input/Output and Interoperability

Finally, the UPF library offers primitives and functions for the interoperability with external formal languages and libraries. In particular, we offer a strong integration with the Planning Domain Definition Language (PDDL) language: we implemented a parser that can read in a problem specified in PDDL and convert it into a UPF problem data structure, and we have a comprehensive emitter that yields PDDL specifications from a UPF problem instance.

We also have automatic interfacing with other planning libraries. In particular, we have a conversion from a tarski<sup>2</sup> representation into a UPF problem allowing a user to import from this external data structure and simplify the interoperability between the two libraries.

The input-output classes and functions can be found in the upf.io package, while the interoperability with tarski (and in the future with other libraries) are in the ups.interop package.

The following example shows how to read a PDDL problem from files and how to dump to files in PDDL format a UPF problem.

```
# Creating a PDDL reader
reader = PDDLReader()
# Parsing a PDDL problem from file
problem = reader.parse_problem('domain.pddl', 'problem.pddl')
# Creating a PDDL writer
writer = PDDLWriter()
# Writing the PDDL domain and problem in new files
writer.write_domain('new_domain.pddl')
writer.write_problem('new_problem.pddl')
```

### 1.2.2 Designing from Use-Cases

The design of the various activities in AIPlan4EU will be derived from user needs: the UPF needs to be usable by practitioners. Therefore, we want to elicit requirements for the framework directly from the final users. We planned a series of measures to keep the users involved in the design and development of the platform throughout the project. Within the consortium, we identified seven applicative areas (Table 1) to consider from the beginning: these are both areas where planning has already been used and areas where planning has seen very little application.

Application Areas
Planning for space
Planning for agriculture
Planning for flexible manufacturing
Planning for logistics automation
Planning for autonomous driving
Planning for automated experimentation (in FMCG – fast-moving consumer goods)
Planning for Subsea Robotics

Table 1: AIPlan4EU Application Areas

AI planning technology has been used in several projects in the industrial world, but most of these efforts have been concentrated in specific domains. With AIPlan4EU, we aim to reverse this trend and apply planning technologies to a wide variety of industrial problems in several diverse domains.

<sup>2</sup> <https://github.com/aig-upf/tarski>



You can find the use-case details on our website <https://www.aiplan4eu-project.eu/>

### 1.3 Open Calls Overview

The project will use the Funding Support to Third Parties (FSTP) mechanism to push the uptake of AI planning technologies through an AI on-demand platform (AI4EU). To connect applications to the planning technology in the UPF, we envision several technology-specific bridges (TSBs): interfaces that map the applicative data and abstractions into planning and vice versa.

AIPlan4EU will organize 2 open calls for innovators to widen the use-cases addressed by the project, to robust the collection of planning engines within the UPF, and to increase the number of technologies integrated through TSBs. This document refers to open call 1 Innovators. We will issue the following:

Call 1 Innovators is focused on engaging with innovators (researchers, experts, students,...) and organisations (SMEs, MidCaps, larger companies, universities, research institutes, labs,...). This call will be issued, with the following specific tracks having each track accessing different scopes.

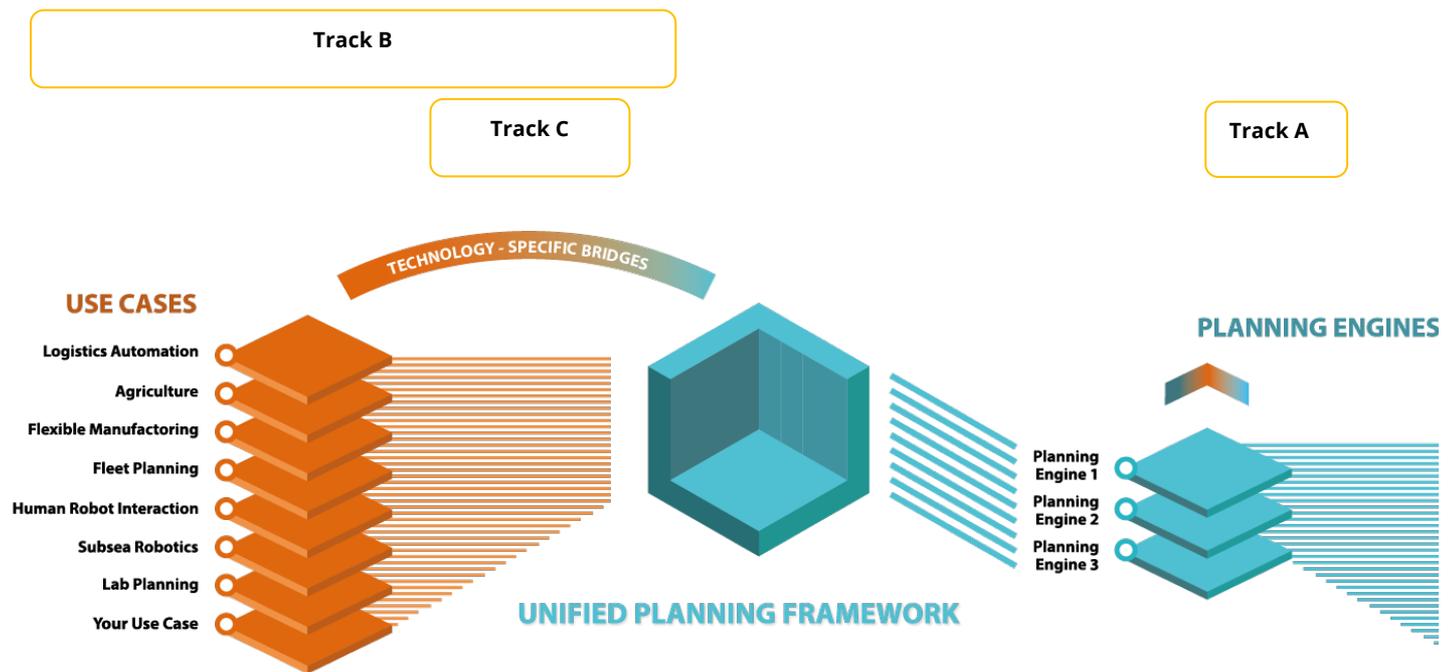


Figure 1: Open Call tracks in the AIPlan4EU architecture



- **Track A:** aims to engage innovators in the development and integration of new planners in the AIPlan4EU ecosystem. Applicants should present a planner capable of solving a problem and it will provide the solution. The whole architecture will be planner-independent, so that it becomes possible to effortlessly experiment with different planning engines.

TRACK	A
Scope	<ul style="list-style-type: none"> <li>· The applicant is expected to propose the integration of a “planning engine” in the Unified Planning Framework (UPF) (<a href="https://github.com/aiplan4eu/upf">https://github.com/aiplan4eu/upf</a>) developed by the AIPlan4EU project.</li> <li>· The UPF is a python library allowing the programmatic modeling, manipulation and solving of planning problems. The UPF is interfaced with several planning engines and embeds an automated filtering mechanism to select, among the planning engines installed on a system, the ones that are applicable for a given planning problem.</li> <li>· More details can be found on the project GitHub page (<a href="https://github.com/aiplan4eu/upf">https://github.com/aiplan4eu/upf</a>) and on the documentation page (<a href="https://upf.readthedocs.io/en/latest/">https://upf.readthedocs.io/en/latest/</a>).</li> </ul>
Context/ environment	<ul style="list-style-type: none"> <li>· A planning engine in this context is a software tool/library/technology relative to planning that can be adapted to offer services through the UPF interface. Examples include (but are not limited to): plan generation tools (e.g. automated planners), validation procedures (e.g. plan validators), visualization tools (e.g. plan animators), problem transformation utilities (e.g. grounders and compilations).</li> <li>· Example integrations of planning engines include pyperplan (<a href="https://github.com/aiplan4eu/pyperplan-upf">https://github.com/aiplan4eu/pyperplan-upf</a>), tamer (<a href="https://github.com/aiplan4eu/tamer-upf">https://github.com/aiplan4eu/tamer-upf</a>) and tarski (<a href="https://github.com/aiplan4eu/upf/tree/master/upf/interop">https://github.com/aiplan4eu/upf/tree/master/upf/interop</a>).</li> </ul>
Specifications/ integration	<ul style="list-style-type: none"> <li>· During the execution of such projects, the AIPlan4EU consortium will be available for supporting, helping and mentoring open call winners.</li> <li>· AIPlan4EU project finances the integration of the proposed engine into the UPF library and the realization of a demonstrator that showcases the integration with the UPF and the tool capability.</li> <li>· The integration code shall be released as free software under the Apache 2.0 license, while the tool itself can be released under any license (even commercial, but preference will be given to open-source engines) provided that the AIPlan4EU consortium partners and use-case owners will be granted at least the permission to reproduce the demonstrator tests and to use the tool for evaluation purposes on the project use-cases. Moreover, we require winners to publish their integration code and planning engine as an AI asset within the AI4Europe platform (<a href="http://ai4europe.eu">ai4europe.eu</a>).</li> </ul>
Expected Results	<ul style="list-style-type: none"> <li>· The integration code shall be documented, and a final written report shall describe in detail how to use the tool via the UPF and how the integration code works. The financed projects will have a duration of 6 months and will be structured in three sprints of 2 months each plus one month for finalizing and preparing the demonstrator.</li> </ul>
Number of projects	5



Target Applicants	Innovators (researchers, experts, students,...) and organisations (SMEs, MidCaps, larger companies, universities, research institutes, labs,...)
Indicative budget	€60.000
Indicative duration	7 months
Track A Documents to Apply	<a href="https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/#call-1-for-innovators-track-A">https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/#call-1-for-innovators-track-A</a>
Contact for clarification	<a href="mailto:aiplan4eu_support@fbk.eu">aiplan4eu_support@fbk.eu</a>

Table 2: Track A specification

- **Track B:** aims to deploy new use-cases within the AIPlan4EU framework. This call will attract small consortia of 2 entities: a use-case owner and a TSB provider (SME).

TRACK	B
Scope	<ul style="list-style-type: none"> <li>· The application is reserved to partnerships of two distinct legal entities: an integrator realizing the TSB and a use-case provider.</li> <li>· The applicant is expected to propose the integration of a “Technology-Specific Bridge” (TSB) that uses the Unified Planning Framework (UPF) library (<a href="https://github.com/aiplan4eu/upf">https://github.com/aiplan4eu/upf</a>) developed by the AIPlan4EU project to offer planning-related capabilities in an existing technology/tool/framework that is useful for a planning use case to be presented.</li> </ul>
Context/ environment	<ul style="list-style-type: none"> <li>· A TSB is a software tool/library/technology relative to planning that integrates into an existing technology/software in order to offer services by means of planning.</li> <li>· Examples include (but are not limited to): adding planning capabilities to simulators (i.e. extend plant simulation tools with plan generation capabilities so that generated plans can then be simulated), integration of automated planning in logistics tools (e.g. gather data from Warehouse Management Systems to form a planning query and report the generated plan to the user), visualization tools (e.g. plan animators, plan simulators), integration of planning in existing software ecosystems (e.g. wrap UPF planning for robotic operating systems), translating existing formalisms/software libraries for decision making into planning problem and mapping-back the results.</li> </ul>
Specifications/ integration	<ul style="list-style-type: none"> <li>· The TSB code shall be released as free software under the Apache 2.0 license, while there is no requirement concerning the technology for which the TSB serves as integration with the UPF (even commercial licenses are OK, but preference will be accorded to open-source technologies).</li> <li>· However, the AIPlan4EU consortium partners shall be granted at least the permission (and tools) to reproduce the demonstrator tests and to use the developed TSB for evaluation purposes on the project use-cases. Moreover, we require winners to publish their use cases and TSBs within the AI4Europe platform (<a href="http://ai4europe.eu">ai4europe.eu</a>).</li> </ul>



Expected Results	<ul style="list-style-type: none"><li>· The use-case must be described in a dedicated report deliverable and the developed TSB shall address at least some of the aspects highlighted by the use-case. Moreover, at the end of the 6 months project, the TSB shall be demonstrated and evaluated on the use-case specifications.</li><li>· The AIPlan4EU project finances the realization of TSBs that must use the functionality offered by the UPF library and the realization of a demonstrator that showcases the developed TSBs on the proposed use-case.</li><li>· The TSB code shall be documented, and a final written report shall describe in detail how to use the tool and how the integration code works. The financed projects will have a duration of 6 months and will be structured in three sprints of 2 months each plus one month for finalizing and preparing the demonstrator.</li></ul>
Indicative budget	€90.000
Target Applicants	Consortium of 2 organisations (SMEs, MidCaps, larger companies, universities, research institutes, labs,...)
Indicative duration	7 months
Number of projects	7
Track B Documents to Apply	<a href="https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/#call-1-for-innovators-track-B">https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/#call-1-for-innovators-track-B</a>
Contact for clarification	<a href="mailto:aiplan4eu_support@fbk.eu">aiplan4eu_support@fbk.eu</a>

Table 3: Track B specification



- **Track C:** aims to attract SMEs to develop TSBs for the use-cases selected from “Call for use-cases”. Both entities, TSB provider and use-case owner, will work together and validate the results.

TRACK	C
Scope	<ul style="list-style-type: none"> <li>· Two kinds of applications (sub-tracks) are possible within this track, namely winning use-cases and Technology Specific Bridges (TSBs) for the winning use-cases.</li> <li>· For both tracks, we identified one domain of interest that have been selected in the context of the first open-call for use-cases. The domain is Healthcare.</li> <li>· The proposals in either of the following sub-tracks are expected to belong to this use case.</li> <li>· As additional material, applicants will find the use-case presented in the first open-call for use-cases and the slides presented during the workshop.</li> <li>· We expect proposals attacking problems related to the use-case. The AIPlan4EU project will also organize webinars to present the use-case to prospective applicants.</li> </ul>
Context/ environment	<p><u>Winning Use-Cases Sub-Track</u></p> <ul style="list-style-type: none"> <li>· In this track, only legal entities which already won an “Open Call for Use-Cases” can apply. The AIplan4EU project grants additional funding to further develop the presented use-case and to evaluate the TSB solutions that will be selected in the Track C – TSBs sub-track of this call.</li> </ul> <p><u>Technology Specific Bridge Sub-Track</u></p> <ul style="list-style-type: none"> <li>· The applicant is expected to propose the integration of a “Technology-Specific Bridge” (TSB) that uses the Unified Planning Framework (UPF) (<a href="https://github.com/aiplan4eu/upf">https://github.com/aiplan4eu/upf</a>) library developed by the AIPlan4EU project to offer planning-related capabilities in an existing technology/tool/framework.</li> <li>· A TSB is a software tool/library/technology relative to planning that integrates into an existing technology/software in order to offer services by means of planning. Examples include (but are not limited to): adding planning capabilities to simulators (i.e. extend plant simulation tools with plan generation capabilities so that generated plans can then be simulated), integration of automated planning in logistics tools (e.g. gathering data from Warehouse Management Systems to form a planning query and report the generated plan to the user), visualization tools (e.g. plan animators, plan simulators), integration of planning in existing software ecosystems (e.g. wrap UPF planning for robotic operating systems), translating existing formalisms/software libraries for decision making into planning problem and mapping-back the results.</li> </ul>



Specifications/ integration	<p><u>Winning Use-Cases Sub-Track</u></p> <ul style="list-style-type: none"> <li>The applicants are required to detail their use-case and provide data, examples and evaluation measurements to the TSB developers that will win the Track C – TSBs sub-track of this call.</li> </ul> <p><u>Technology Specific Bridge Sub-Track</u></p> <ul style="list-style-type: none"> <li>The AIPlan4EU project finances the realization of TSBs that must use the functionality offered by the UPF library and the realization of a demonstrator that showcases the developed TSBs on the identified use-case.</li> <li>The TSB code shall be released as free software under the Apache 2.0 license, while there is no requirement concerning the technology for which the TSB serves as integration with the UPF (even commercial licenses are OK, but preference will be accorded to open-source technologies).</li> <li>However, the AIPlan4EU consortium partners shall be granted at least the permission (and tools) to reproduce the demonstrator tests and to use the developed TSB for evaluation purposes on the project use-cases. Moreover, we require winners to publish their use cases and TSBs within the AI4Europe platform (<a href="https://ai4europe.eu">ai4europe.eu</a>).</li> </ul>
Expected Results	<p><u>Winning Use-Cases Sub-Track</u></p> <ul style="list-style-type: none"> <li>Moreover, we require winners to publish their use-case within the AI4Europe platform (<a href="https://ai4europe.eu">ai4europe.eu</a>).</li> </ul> <p><u>Technology Specific Bridge Sub-Track</u></p> <ul style="list-style-type: none"> <li>The TSB code shall be documented, and a final written report shall describe in detail how to use the tool and how the integration code works. The financed projects will have a duration of 6 months and will be structured in three sprints of 2 months each plus one month for finalizing and preparing the demonstrator.</li> </ul>
Track C Kit link (use-case detailing and slides)	<p><a href="https://www.aiplan4eu-project.eu/wp-content/uploads/2022/02/Healthcare-Use-Case-Pitch.pdf">https://www.aiplan4eu-project.eu/wp-content/uploads/2022/02/Healthcare-Use-Case-Pitch.pdf</a></p> <p><a href="https://www.aiplan4eu-project.eu/wp-content/uploads/2022/02/Healthcare-Use-Case.pdf">https://www.aiplan4eu-project.eu/wp-content/uploads/2022/02/Healthcare-Use-Case.pdf</a></p>
Indicative budget	<p><u>Winning Use-Cases Sub-Track</u> €30.000</p> <p><u>Technology Specific Bridge Sub-Track</u> €60.000</p>
Target Applicants	Organisations (SMEs, MidCaps, larger companies, universities, research institutes, labs,...)
Indicative duration	7 months
Number of projects	1 TSBs for 1 winning use-cases (1 + 1)
Track C Documents to Apply	<a href="https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/#Call1ForInnovatorsTrackC">https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/#Call1ForInnovatorsTrackC</a>



Contact for clarification	<a href="mailto:aiplan4eu_support@fbk.eu">aiplan4eu_support@fbk.eu</a>
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Table 4: Track C specification

### 1.3.1 Open Call Process

The first call for innovators will follow a systematic process to evaluate and select the third-party project efficiently. The figure below reports a view explaining how it will work.

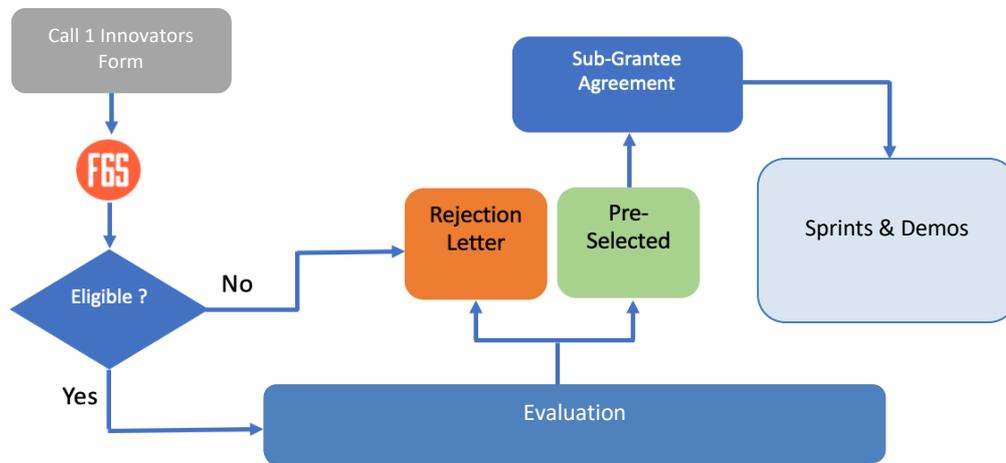


Figure 2: Open Call Process

Within the project, the funding to third parties aims to upgrade and extend AIPlan4EU technology offer beyond consortium partners and enlarge the outreach of the project deployments. For this purpose, the consortium has planned to devote a budget for the cascade funding (See table 7 item 6.2).

In total 14 projects will propose the deployment of TSBs integrators and planners in different tracks (A,B,C).

Call for Innovators			
Open Call # 1	Topic	# projects	#duration
Track A	Planners	5	7
Track B	UC*+TSB**	7	7
Track C	TSB	1	7
	UC*	1	7
		14	

Table 5: Tracks Distribution and Duration

The open call documents are specifically dedicated to the Open Call 1 Innovators and outline the application modalities for this call, highlighting that the winners use-case from Call 1 Use Case will be involved in the call for innovators and take part in the definition of the final requirements for the framework on par with consortium members.

This mechanism follows the principles of open innovation and is very important for the final impact of the framework: through such open calls we will involve organisations and innovators collecting the widest possible set of diverse application scenarios, technological needs, and use-cases.



Applicants are encouraged to submit proposals that involve different contexts and scenarios that go beyond the seven application areas (planning for space, agriculture, manufacturing, logistics, autonomous driving, automated experimentation, and subsea robotics). Based on the results of Open Call 1 Use-Cases, the project has a special interest on the healthcare domain in Track C.

Call 1 is open for submission from 17 February (12:00 PM CET) to 20 April (5:00 PM CEST), and its indicative budget is in Table 5.

## 2 Eligibility Criteria

All applicants will have to abide by all general requirements described in this section to be considered eligible for AIPlan4EU.

### 2.2 What types of proposals will be eligible?

Proposals must address the AI Planning technology and fit within the tracks aforementioned in section 1.3. Moreover, the participants should demonstrate their long-term commitment to the AIPlan4EU research and innovation agenda. The teams will demonstrate the proposed solution progresses from the beginning of the project, reaching a higher maturity level and take-up by the end of the action. Thus, third-party projects must evidence substantial progress with a particular focus on the sustainability of the outcomes.

### 2.3 Type of Applicants

The target applicants are:

- Natural persons/Individuals - Single individual established in any eligible country (section 2.3). This does not consider the country of origin but the residence permit.
- Single Organisations established in any eligible country (section 2.3)
- Group of Organisations (a consortium of two companies) - Organisations established in any eligible country (section 2.3).

Track	Type of Applicants Eligible
A	<ul style="list-style-type: none"> <li>- Natural Persons/Individuals: students, experts, professionals, etc.)</li> <li>- Single organisations: SMEs, Mid Caps, larger companies, research institutes, universities, labs., etc.</li> </ul>
B	<ul style="list-style-type: none"> <li>- Group of Organisation (a consortium of 2 companies maximum): SMEs, Mid Caps, larger companies, research institutes, universities, labs.</li> </ul>
C*	<ul style="list-style-type: none"> <li>- Single organisations: SMEs, Mid Caps, larger companies, research institutes, universities, labs., etc.</li> </ul>

Table 6: Type of Applicants Summary according to each track



\* In track C only companies that aim to develop TSBs for the use-cases selected from “Call for use-cases” will be selected. Both entities, TSB provider and use-case owner, will work together and validate the results. Please, check the specification on table 4 (section 1.3)

The participating organisations should not have been declared bankrupt or have initiated bankruptcy procedures.

The organisations applying should not have convictions for fraudulent behaviour, other financial irregularities, and unethical or illegal business practices.

## 2.4 Eligible Countries

Only Applicants legally-established/resident 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 ([https://european-union.europa.eu/principles-countries-history/country-profiles\\_en](https://european-union.europa.eu/principles-countries-history/country-profiles_en))
- The Overseas Countries and Territories (OCT) linked to the Member States ([https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-ga\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-ga_en.pdf)) . Please see pg 3.
- H2020 associated countries (those which signed an agreement with the Union as identified in Article 7 of the Horizon 2020 Regulation): according to the updated list published by the EC ([https://ec.europa.eu/research/participants/data/ref/h2020/grants\\_manual/hi/3cpart/h2020-hi-list-ac\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf)).
- The UK applicants are eligible under the conditions set by the EC for H2020 participation at the time of the deadline of the call.

## 2.5 Language

English is the official language for AIPlan4EU open calls. Submissions done in any other language will be disregarded and not evaluated.

English is also the only official language during the whole execution of the AIPlan4EU programme. This means any requested submission of reports will be made in English to be eligible.

## 2.6 Conflict of Interest

Applicants shall not have any actual or/and potential conflict of interest with the AIPlan4EU selection process and during the whole programme. All cases of conflict of interest will be assessed case by case. In particular, applicants cannot be AIPlan4EU Consortium partners or affiliated entities nor their employees or co-operators under a contractual agreement.

Suppose a conflict of interest is discovered and confirmed at the time of the evaluation process. In that case, the use-case proposal will be considered as non-eligible and will not be evaluated.



## 2.7 Other

Each applicant must confirm:

- The organisation is not under liquidation or is not an enterprise under difficulty accordingly to the Commission Regulation No 651/2014, art. 2.18.
- Its project is based on the original works and going forward, any foreseen developments are free from third-party rights, or they are clearly stated.
- It is not excluded from the possibility of obtaining EU funding under the provisions of both national and EU law or by a decision of both national or EU authority.

## 2.8 Admissibility and Eligibility Check

The open call period will be two months. The AIPlan4EU Consortium staff checks admissibility and eligibility criteria for each proposal. A proposal may be declared ineligible or inadmissible at any stage.

Applicants should fill a form and attach the requested documents via the F6S platform (<https://www.f6s.com/aiplan4eu-oc-1-innovators/apply>). A complete list of proposers will be drafted containing their basic information for statistical purposes and clarity (also shared with EC for transparency).

To be considered admissible, a proposal must be:

- Submitted in the electronic submission system before the call deadline (F6S platform).
- Readable, accessible, and printable.
- Complete and upload the template proposal file.

A proposal will only be considered eligible if its content corresponds to the eligibility criteria set out in the relevant parts of this guide. An eligibility filter enables the creation of a shortlist of use-case to be evaluated.

### 2.8.1 Eligibility filter

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

- The applicant is a natural person or an organization.
- The existence of a legal entity (for organisations) in an eligible country.
- A natural person based in an eligible country.
- The uniqueness of the proposal (one proposal per company or individual)
- Upload of the signed administrative documents
- Upload of the proposal according to the template duly filled.
- The applicant has submitted a completed application before the deadline.
- Proposals in English.



### 3 Preparation and Submission of the proposal

- Applicants should access the project website to apply: <https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators>
- Participants are requested to read and follow the instructions in the form carefully. Evaluators will be instructed not to consider extra material in the evaluation.
- On the website, click on the Apply button. The submission will be done through the F6S platform (<https://www.f6s.com/aiplan4eu-oc-1-innovators/apply>) directly linked with the AIPlan4EU Programme.
- Applicants are required to register a profile at F6S to be able to submit a proposal.
- Applicants are requested to answer all mandatory questions (with no exception): <https://www.f6s.com/aiplan4eu-oc-1-innovators/apply>
- Applicants are requested to upload the proposal according to the track template. The document must strictly adhere to the template provided by the AIPlan4EU consortium in the project website which defines sections and the overall length.
- Additional material, which has not been specifically requested in the online application form, will not be considered to evaluate the use case. Data not included in the proposal will not be taken into account.
- It is strongly recommended not to wait until the last minute to submit the proposal. Failure of the proposal to arrive in time for any reason, including communication delays, automatically leads to rejection of the submission. The time of receipt of the message as recorded by the submission system will be definitive.
- AIPlan4EU offers a dedicated support channel for proposers at [aiplan4eu\\_support@fbk.eu](mailto:aiplan4eu_support@fbk.eu) for requests or inquiries about the submission system or the call itself. Those received after the closure time of the call will neither be considered nor answered.
- The information provided should be actual, accurate, and complete and should allow the assessment of the proposal
- The preparation and submission of the proposal and other actions that follow this procedure (such as withdrawal) fall under the final responsibility of the applicant.

#### 3.2 Multiple Submission

This call is competitive, and applicants should focus on one specific track. Therefore, only one proposal per applicant per organisation may be submitted to this call.

Any other submitted use case involving the same applicant, or the same organization will be declared non-eligible



and will not be evaluated in any case. Note that the regular functioning of the F6S platform limits to one application submission per F6S user in each call.

### 3.3 Complaint due to a technical error of the AIPlan4EU Online Submission Service

If you experience any problem with the application submission system before the open call deadline, you should reach F6S by e-mail through [support@f6s.com](mailto:support@f6s.com), cc'ing the AIPlan4EU Team [aiplan4eu\\_support@fbk.eu](mailto:aiplan4eu_support@fbk.eu), and explain your situation.

Suppose you believe that the submission of your proposal was not entirely successful due to a technical error on the side of the AIPlan4EU Online Submission Service. In that case, you may lodge a complaint by email through [support@f6s.com](mailto:support@f6s.com) cc'ing the AIPlan4EU Team [aiplan4eu\\_support@fbk.eu](mailto:aiplan4eu_support@fbk.eu) and explain your situation. For the complaint to be admissible, it must be filed within four calendar days following the day of the call closure. You will receive an acknowledgment of receipt, the same or the next working day. What else to do? You should secure a PDF version of all the documents of your proposal holding a timestamp (file attributes listing the date and time of creation and last modification) that is before the call deadline, as well as any proof of the alleged failure (e.g., screenshots). Later in the procedure, you may be requested by the F6S IT Helpdesk to provide these items.

For your complaint to be upheld, the IT audit trail (application log files and access log files of AIPLAN4EU Online Submission Service) must show that there was indeed a technical problem at the project side that prevented you from submitting your proposal using the electronic submission system.

Applicants will be notified about the outcome of their complaint within the time indicated in the acknowledgment of receipt. If a complaint is upheld, the secured files (provided to the IT helpdesk) for which the investigation has demonstrated that technical problems at the project prevented submission will be used as a reference for accepting the proposal for evaluation.

### 3.4 Confidentiality and Deadline

Any information regarding the third-party use case will be treated in a strictly confidential manner. Only use cases submitted before the deadline will be accepted. After the call closure, no additions or changes to received proposals will be taken into account.

### 3.5 What happens after the proposal is submitted?

Proposals must be submitted before 20 April 2022 5 PM CEST. To avoid missing the deadline, you are encouraged to submit your proposal as soon as possible.

Immediately after the submission deadline is over, the evaluation process begins (as described in detail in Section 4 of this Guide). Experts will evaluate proposals and score them adequately according to the quality of the content presented.



## 4 Evaluation Process

The proposals are submitted in a single stage and evaluated as presented in figure 2.

### 4.1 The Evaluation of Proposals

The Call evaluation process will take about 4 weeks and considers the following procedure:

- Evaluation Criteria:

Consortium partners selected to evaluate the proposals will score each application using the following evaluation criteria. The weights of each criterion will change according to each track:

- Challenge fit [score between 1-10; with threshold >6; weight 40% (Track A and Track C); weight 40% (Track B)]: relevance to AIPlan4EU challenges.
- Technology Innovation [score between 1-10; with threshold >6; weight 40% (Track A and Track C); weight 20% (Track B)]: potential to improve the preparedness and response to the challenges/open call request; the novelty of the proposed technology/ solution.
- Impact [score between 1-10; with threshold >6; weight 20% (Track A, Track B and Track C)]: development output, scalability/replicability, exploitation plan, impact on society, impact on AI ecosystem.
- Team [score between 1-10; with threshold >6; weight 20% (Only for Track B)]: capacity of the team based on proven experience to deliver the proposed solution and to bring it to the market.

Also, all evaluators will sign a declaration of impartiality and no conflicts of interest.

- Online Interview (Optional):

After evaluation, proposals will be ranked based on the overall score. If necessary, the top-ranked proposals (twice the number of the proposals to be selected) will be invited to an online interview. Partners will decide about the necessity of an online interview aiming to clarify any issue related to the proposal.

The top projects that succeed in stage 3 will be invited to an online interview. The interview aims to deeply understand project concepts, team skills & competence, capacity, and wiliness to exploit the results. The interviews will be carried out by two evaluation board members and will evaluate the following criteria:

- Concept & Technology: confirmation of proposed targets and technology fit; [score between 1-10; with threshold >6 - weight 80%];
- Exploitation: reliability to reach milestones; potential to use planning technologies, through the UPF, in a specific business-case and application sector; [score between 1- 10; with threshold >6 - weight 20%].



If applicants do not commit to what had been presented in the application form during the interview, these will be declassified.

- Consensus meeting and final selection

After the 2-stage evaluation process (proposal evaluation and online interview), all proposals will be ranked based on their scores. Evaluators form a consensus regarding the evaluation, and a report is prepared.

- Communication of the results

Regarding the communication of the results, each applicant will receive via e-mail a letter informing of the decision, whether a rejection decision or an invitation to negotiation and following steps.

## 5 Sub-Grant Agreement Signature

All the legal issues are accurately covered by the planned contracts with the sub-granted beneficiaries. A written Subgrantee agreement will be signed with successful applicants. It will foresee, among other things, the special clauses derived from H2020 in cascading granting, the payment schedule and conditions (milestones), general legal text issues of rights and obligations by the AIPlan4EU consortium, and each sub-grantee, including IPR and audit procedures.

The sub-grantee agreement will also have a set of annexes like the technical description of the project (form submitted), bank account information form, guidelines of the call, status information, and any other document required by AIPlan4EU to assure the correct execution of the sub-grantee projects.

A legal entity that does not provide the requested data and documents in due time will not be included in AIPlan4EU Acceleration Programme.

### 5.1 Scientific Misconduct and Research Integrity

Issues of scientific misconduct and research integrity are taken very seriously. In line with the Horizon 2020 Rules for Participation, appropriate action such as termination of the Grant Agreement Preparation phase or, if the Grant Agreement has been signed, the implementation of liquidated damages and financial penalties, suspension of payments, recoveries, and termination of the Grant Agreement, will be taken against any applicants/beneficiaries found to have misrepresented, fabricated or plagiarised any part of their proposal.

### 5.2 The Negotiation Process

The objective of the negotiations is to fulfill the legal requirements between the AIPlan4EU consortium and each selected project of the call. It covers the status information of the beneficiaries essentially. The legal requirements for legal entities are provided in the table hereafter.



For Legal Entities	For Natural Persons
<p>A legal existence: Company Register, Official Journal, and so forth, showing the name of the organization, the legal address and registration number and, if applicable, a copy of a document proving VAT registration (in case the VAT number does not show on the registration extract or its equivalent)</p>	<p>A copy of the ID-Card or passport of participant(s) in the project team will be required. A proof for each participant in the project that (s) he is legally established and working in an eligible country (see section 2).</p>
<p>Specifically for organisations:</p> <ol style="list-style-type: none"> <li>1. A proof of the organisation condition is required: <ul style="list-style-type: none"> <li>- If the applicant has been fully validated as an organisation on the Beneficiary Register of the H2020 Participant Portal, the PIC number must be provided.</li> <li>- If the applicant has not been fully validated as an organisation on the H2020 Participant Portal, the following documents will be required to prove the status:</li> </ul> </li> <li>2. In the event the beneficiary declares being non-autonomous, the balance sheet and profit and loss account (with annexes) for the last period for upstream and downstream organizations is required.</li> <li>3. Status Information Form. It includes the headcount (AWU), balance, profit &amp; loss accounts of the latest closed financial year, and the relation, upstream and downstream, of any linked or partner company.</li> <li>4. Supporting documents. In cases where either the number of employees or the ownership is not identified: any other supporting documents which demonstrate headcount and ownership such as payroll details, annual reports, national regional, association records, etc.</li> </ol>	
<p>Bank Account Information: The account where the funds will be indicated via a financial information form signed by the entity, individuals, and the bank owners. The account holder will be the legal entity and/or all the individuals or the coordinator of the group on its own (a consortium of legal entities or consortium).</p>	
<p>Sub-grantee funding agreement: Signed between the AIPlan4EU Consortium (represented by its coordinator European Dynamics) and the beneficiary/ies.</p>	

Table 7: Legal Requirements for legal entities and natural persons

The information request by the AIPlan4EU consortium will be made, including deadlines. Failing to meet the deadlines requested will directly end up the negotiation process.



## 6 Financial Support of Provided

The financial support to third parties within the AIPan4EU will be in the form of a grant awarded (lump sum).

### 6.1 Indicative Distribution of the funds

The overall financial support provided during the AIPlan4EU allows for an innovator to receive the total grant up to €60,000 in Track A. The budget available for each consortium in Track B is €90,000 (€60,000 for TSB developers and (€30,000 for Use-Case owners). Track C has the same budget but here the separation between TSB developers (€60,000) and use-cases (€30,000 added to the €1,500 paid under the call for use-cases) is clearly defined.

Call for Innovators					
Open Call # 1	Topic	Budget	# projects	# months	Total
Track A	Planners	€60,000	5	7	€300,000
Track B	UC*+TSB**	€90,000	7	7	€630,000
Track C	TSB	€60,000	1	7	€60,000
	UC*	€30,000	1	7	€30,000
Total			14		€ 1,020,000

Table 8: Budget Distribution – Call 1 Innovators

\*Use-Case

\*\*Technology-Specific Bridges

## 6.2 Origin of the Funds

Any selected proposer will sign a dedicated Sub-Grant Agreement with the AIPlan4EU project coordinator (on behalf of AIPlan4EU Consortium). The funds attached to the Sub-Grantee Funding Agreement come directly from the European Project AIPlan4EU funds. The consortium is managing the funds according to the Grant Agreement Number 101016442 signed with the European Commission.

As will be indicated in the Sub-Grant Agreement, the relation between the sub-grants and the European Commission through the AIPlan4EU project carries a set of obligations to the sub-grants with the European Commission. It is the task of the sub-grants to accomplish them and of the AIPlan4EU consortium partners to inform about them.

## 7 Third-Party Activities after the Sub-Grant Agreement Signature.

This call will have 3 tracks, each addressing different purposes and bringing new value to the AIPlan4EU framework and consequently to the AI4EU platform. Overall, with the call for innovators we aim to engage tech SMEs in the development and integration of new valuable planners (Track A). While Track B has been designed to fund small consortia of 2 entities (a use-case owner and a TSB developer), Track C will fund TSB developers willing to build a solution to answer to a specific use-case identified and defined within the call for use-cases.

To ensure a fluid third-parties project development, a proper monitoring/follow-up, and the payment according to deliverables and achievements, we will use the AIPlan4EU Sprints-Demo program, detailed below:

The AIPlan4EU project will leverage the community and partnerships created, developed, and stimulated along the project activities. The program has been designed keeping in mind the goals:



- Iterative development approach: the Sprints phase will be divided into 3 Sprints of 2 months each, and 1 Demo of 1 month, during which specific work has to be completed and made ready for review.
- Stimulating cross-collaboration and exchange between SMEs, use-case stakeholders, and project partners: at the end of each Sprint, SMEs will meet with project partners to demonstrate the work accomplished and set targets for the following Sprint.
- Reward excellence and impact: payments are based on work accomplishment and achievement of objectives.
- These are evaluated at the end of each Sprint. Demo phase is a method to increase impact and demonstrate the value also to the AI4EU platform ecosystem overall.
- Expose common AIPlan4EU results: all third-party projects will go through the Demo phase where they are invited to pilot and validate their solutions with users/ customers.
- Promote third-party commitment: third parties that have not been selected for funding but are committed to develop the proposed solutions even without funding, are welcome to participate in the AIPlan4EU Sprint-Demo program.

The AIPlan4EU Sprint-Demo program will be organized as follows:

- Sprints

The Sprint is the first phase after the selection of the winning proposals and aims at supporting the design, development, and integration of third-parties projects. The phase starts with a kick-off bootcamp aiming to engage third parties in AIPlan4EU objectives and processes (resources, tools and instruments made available by the team). Community building activities will be performed to ensure common collaboration and engagement with the AI4EU platform beyond the project duration.

This phase is divided into 3 Sprints of 2 months each. At the end of each period third parties are invited to present their Sprint results on a meeting with their reference consortia Tech-mentor. The meeting will be important to discuss technology paths, define next Sprint objectives, access project resources, understand third-party constraints/challenges and support them by connecting to the right entities and networks.

- ⇒ Duration: 6 months, third parties work remotely and occasionally participate in face-to-face meetings/ workshops and trainings organized by the consortium or in direct communication with their use-case partner (Track B and C)
- ⇒ Activities: Third parties will be developing their projects in collaboration/ connection with tech-mentor, sector specialists and technology experts and participating in the AI4EU platform community events.
- ⇒ Funding: 30% at end of each sprint, being the payment associated with objectives assessed by Tech-mentors.

- Demo

The Demo phase focuses on demonstrating the project achievements/ results towards the AI4EU platform community. The AIPlan4EU team will engage in promoting and expanding demonstrators' impacts across the various networks, as well as supporting third parties in accessing new business opportunities.

- ⇒ Duration: 1 month.
- ⇒ Activities: Third parties will develop activities associated with the demonstration, promotion and exploitation of their project results.



⇒ Funding: missing 10%, being the payment associated with positive assessment of their Demo phase activities.

## 8 Applicants Communication Flow

### 8.1 General Communication Procedure

The applicants will receive communications after the evaluation process indicating if they passed or not. A communication will also be sent to applicants rejected, including the reasons for the exclusion.

### 8.2 Appeal Procedure

If at any stage of the evaluation process, the applicant considers that a mistake has been made or that the evaluators have acted unfairly or have failed to comply with the rules of this AIPlan4EU Open Call, and that her/his interests have been prejudiced as a result, the following appeal procedures are available.

A complaint should be drawn up in English and submitted by email to [aiplan4eu\\_support@fbk.eu](mailto:aiplan4eu_support@fbk.eu). Any complaint made should include:

- Contact details.
- The subject of the complaint.
- Information and evidence regarding the alleged breach.

Anonymous complaints or those not providing the mentioned information will not be considered.

Complaints should also be made within five (calendar) days since the announcement of the evaluation results to the applicants.

As a general rule, the AIPlan4EU team will investigate the complaints to arrive at a decision to issue a formal notice or close the case within no more than twenty days from the date of reception of the complaint, provided that all the required information has been submitted by the complainant. Whenever this time limit is exceeded, the AIPlan4EU Consortium will inform the complainant by email of the reasons for the unforeseen delay and the subsequent steps.

## 9 Intellectual Property Rights (IPR)

Concerning IPR, here we specify the principles that will be used to manage IPR projects of the third party. The acceleration program does not affect the ownership of any intellectual property in any background or any other technology, design, work, invention, software, data, technique, know-how, or materials. The intellectual property will remain the property of the third party that contributes with AIPlan4EU.



AIPlan4EU general strategy for knowledge management and IPR will be to have an open-source UPF freely available through the AI4EU platform for download and deployed as a live API. TBSs and Planners will be available on the platform with licenses "as free and open as possible", considering IPR and confidentiality constraints

The consortium will gather the basic aspects to manage third parties IPR

- Confidentiality
- Third Party Ownership of results
- Commercial exploitation of results and any necessary access right
- Relevant Patents, know-how, and information sublicense
- Pre-existing know-how excluded from contract

Nevertheless, many specific IPR cases that will need a concrete solution from the bases previously fixed, may exist. In these conflict situations, the General Assembly will be responsible to arbitrate a solution.

## 10 Exploitation

Open calls will be designed in order to boost the deployment of AI-based solutions and services, enabling a larger user community to reap the economic benefits of AI, especially SMEs and non-technology sectors. In line with AIPlan4EU and AI4EU exploitation strategies, the open call will indicate rules for the use by awarded open call beneficiaries, project partners and third parties of the solutions developed. We expect that each proposal elicited through open-calls will have an interest in using planning technologies, through the UPF, in the specific business-case and application sector. Moreover, open-call applicants that develop TSBs will focus their exploitation in enhancing the target technology with planning capability to either sell the TSB itself or to reinforce the competitiveness of the target technology. Finally, planning-technology developers that apply to open-calls will be able to exploit the UPF and the visibility into the AI4EU platform to sell their tool or to widen the applicability of their technology.

## 11 Support for the Applicants

For more information about the AIPlan4EU Call 1 Innovators, please check the Open Call section at <https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators> where you will find the application material and instructions to apply.

For further information on the Open Call, in case of any question regarding the eligibility rules, the information that is to be provided in the Application Form, or if you encountered technical issues or problems with the Application Form, please contact [support@f6s.com](mailto:support@f6s.com), cc'ing the AIPlan4EU team [aiplan4eu\\_support@fbk.eu](mailto:aiplan4eu_support@fbk.eu) and explain your situation.



## 12 Indicative Timetable

The table below presents the indicative dates during which each phase of Call 1 Innovators will occur.

Description	Indicative Dates
Call Announcement and Launch	17 Feb 2022
Call Closure and Submission Deadline	20 April 2022
Announcement of the selected proposal	By 20 May 2022
Signature of the Sub-Grant Agreement	By 20 June 2022

Table 9: Timetable - Open Call 1 Innovators

## 13 Checklist

- Does your planned work fit with a track of the Open Call 1 Innovators? Check that your proposed work does indeed address the AI Planning technology.
- Does your planned work fit with a track of the Open Call 1 Innovators? Check that your proposed work does indeed address the AI Planning technology.
- Is your proposal eligible? The eligibility criteria are given in section 2. Eligibility Criteria. In particular, make sure that you satisfy the minimum participation requirements.
- Budgetary limits. Check that you comply with any budgetary limits as expressed in chapter 6.
- Does your proposal fulfill questions, requests/comments? Proposal should be precise, concise, and answer the requested questions designed to correspond to the applied evaluation. Omitting requested information will almost certainly lead to lower scores and possible rejection.
- Have you prepared the proposal description according to the template to upload at the F6S Platform during your application? (Available for download at <https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/>).

Track A: <https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/#call-1-for-innovators-track-A>

Track B: <https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/#call-1-for-innovators-track-B>

Track C: <https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/#Call1ForInnovatorsTrackC>

- Have you maximised your chances? There will be fierce competition. Therefore, edit your proposal tightly, strengthen or eliminate weak points.
- Have you submitted your proposal before the deadline? It is strongly recommended not to wait until the last minute to submit the proposal. Failure of the proposal to arrive in time for any reason, including network communication delays, is not acceptable as an extenuating circumstance. The time of receipt of the message as recorded by the submission system will be definitive.



- Do you need further advice and support during the proposal phase? You are strongly advised to communicate with the AIPlan4EU team.
  
- Do not forget that it is mandatory to have a valid VAT number during negotiation time (for the applicant organisation).

## 14 Points of Contact

The AIPlan4EU consortium will also provide information to the applicants via the F6S blog so that the information (question and answer) will be visible to all participants. No binding information will be provided via any other means (e.g., telephone or email).

- ⇒ More info at: <https://www.aiplan4eu-project.eu/>
- ⇒ Apply via: <https://www.aiplan4eu-project.eu/call-for-use-cases/open-call-1-for-innovators/> or <https://www.f6s.com/aiplan4eu-oc-1-innovators/apply>
- ⇒ F6S support team contact: [support@f6s.com](mailto:support@f6s.com)
- ⇒ Online Q&A: <https://www.f6s.com/aiplan4eu-oc-1-innovators/discuss>
- ⇒ Individual emails: [aiplan4eu\\_support@fbk.eu](mailto:aiplan4eu_support@fbk.eu)