

## **PROTO CHALLENGE: PUBLIC NOTICE OF SELECTION OF COMPANIES**

### **INTRODUCTION**

PROTO Challenge (hereinafter, "Challenge" or "Initiative") is an initiative of Fondazione Hub Innovazione Trentino (hereinafter, "HIT"), created in collaboration with the University of Trento, Trentino Sviluppo, Confindustria Trento, NOI Techpark, in the context of Digital Innovation Hub Trentino–Alto Adige/Südtirol.

The Initiative has dissemination, knowledge and training purposes. The main objective is to encourage the development of technology transfer activities and research-enterprise collaborations in an open innovation context:

- allowing companies to learn about the benefits of using structural geometric analysis and optimization methodologies for prototyping industrial products and components with additive manufacturing technologies;
- enabling university students to master these methodologies by applying them to industrial problems and challenges, thus improving their own preparation (Challenge-Based Learning);
- offering teachers and researchers an opportunity to disseminate and transfer their knowledge and technological know-how.

The activities of the Initiative are mainly carried out by students and young competent researchers in the methodologies described (hereinafter, "Solver"): they will work in a group to analyze and redesign the products and components or elements of products (hereinafter, "Products") presented by participating companies. Solver groups will be supported by professional mentors.

### **ART. 1 – SUBJECT OF THE NOTICE**

This Notice is aimed at selecting products or industrial components proposed by companies. On the Products, the Solvers will perform analysis, structural geometric optimization, and industrial redesign activities, including additive manufacturing (hereafter, "Activities").

Specifically, by way of example, we mean:

- *Products*: products or components of industrial products, in plastic or metal, with characteristics (exemplary, non-mandatory) such as the following:
  1. already on the market or under development, in any case available in the form of 3D CAD drawing;
  2. having characteristics such as mass, geometry, and mechanical properties (e.g., lightness or stiffness) that can potentially contribute to improving the quality and performance of the product and/or its manufacturing process if additive manufacturing.
  3. having an overall dimension between 500 x 500 x 500 millimeters, possibly made up of several components or elements.

- *Activities:* Finite Element Analysis (FEA); 3D modeling; structural geometric optimization techniques; use of specialized software for CAE - Computer-Aided Engineering mathematical modeling; kinematic modeling; CAD design.

## **ART. 2 – MODE OF CONDUCTING THE CHALLENGE**

The PROTO Challenge provides that, during about eleven weeks and following some Preliminary activities, a group of Solver (composed of university students and young talents) dedicated to each Product carry out the Activities for the purpose of producing a new design solution (possibly also in 3D CAD format) of the Product in an optimized version, potentially prototypable also with additive or hybrid techniques (hereinafter, "Results").

The Challenge will be organized according to the following schedule:

- late February 2023 -first two weeks of March 2023: training appointments on the Challenge and the use of the software (total of about 12 hours);
- Wednesday 8 March 2023 (afternoon): kickoff meeting aiming at presenting the Products and optimization objectives to the Solver groups by the selected companies;
- 8 March to 24 May 2023: approximately 11 weeks during which the groups will carry out the Activities independently, in collaboration with the selected companies, assisted by expert mentors;
- Late May 2023 - **date to be defined:** final event with the presentation of the Results in a private session to the participating companies and, subsequently, in an abbreviated version without confidentiality content to an invited audience of insiders. The final event will possibly be held at SOI – School of Innovation of the University of Trento. In the event that current health regulations do not allow the event to be held in secure conditions, it will be held online.

At the end of the public presentation, an expert commission appointed by HIT will evaluate the results presented by each group of Solver and will formulate a ranking based on the following criteria:

- Criterion 1: completeness and maturity of the results produced (from 1 to 5 points).
- Criterion 2: innovativeness of the results produced (from 1 to 5 points).
- Criterion 3: potential business impact of product results (from 1 to 5 points).
- Criterion 4: effectiveness of the presentation of the results (from 1 to 5 points).

The final evaluation score for each Outcome will equal the sum of the scores on the previous criteria multiplied by the difficulty coefficient of the Challenge, defined by the committee that will evaluate the Outcomes.

Each member of Solver's group that will have scored highest in the ranking will receive a 3D mouse (by way of example: <https://3dconnexion.com/it/product/spacemouse-compact/>). The Foundation reserves-at its sole discretion-the right to change the type of award should it see fit.

In the case of a tie score, the Solver group that will have scored the highest score in the first criterion starting from criterion 1 will prevail.

The company whose team has scored the highest score will be able to benefit from further support for the prototyping of the optimized product at the ProM Facility in Rovereto, through the skills and technologies available to ProM Facility, in the ways to be defined jointly between the company, HIT and ProM Facility, according to contingent availability and with product development orientation.

### **ART. 3 – APPLICATION SELECTION PROCEDURES**

Companies interested in participating in The Challenge must complete the application form, which can be downloaded from the link at <https://www.trentinoinnovation.eu/en/innovate/innovation-tools/proto-challenge/proto-challenge-for-companies/>, and send it to [proto-challenge@trentinoinnovation.eu](mailto:proto-challenge@trentinoinnovation.eu) by **Wednesday 21 December 2022 at 23.59** - server time. Applications received after the above deadline or whose form is not complete in every part marked as mandatory will be considered inadmissible.

A Commission appointed by HIT will select the Products suitable for participation in the Challenge. This Commission will be composed of internal staff and representatives of some Founders of HIT (Fondazione Bruno Kessler, University of Trento, Trentino Sviluppo) and other partners' Initiative.

The eligibility criteria used by the Commission are as follows:

1. Innovativeness of the product and its context of use (score: 1-5).
2. Potential impact of the application of Activities on the performance of the Product, on its own production process, and on the company's business (score: 1-5);
3. Motivations, expectations and objectives of Product innovation that push the company to apply for the Challenge (score: 1-5).

To be considered suitable, the Products must reach a minimum score of ten (10). The Commission will draw up a ranking list and identify the Products that will be selected to participate in the PROTO Challenge. In the event that the same company has submitted more than one product that will result suitable, only the product with the highest score will be considered.

By **Tuesday 17 January 2023**, companies will receive an email notification of the outcome of the Commission's selection process.

Within 7 days of receipt of such communication, the companies whose Products have been selected may renounce participation in the Initiative by giving notice by post electronics at [proto-challenge@trentinoinnovation.eu](mailto:proto-challenge@trentinoinnovation.eu). In this case, HIT will propose the participation in the Initiative to the company whose Product is in a successive position in the ranking.

During the Initiative, reference information about the selected Products and related companies will be published on a dedicated web page.

#### **ART. 4 – TERMS OF PARTECIPATION**

The companies selected and confirming their participation undertake to pay the participation fee of Euro 500.00, plus VAT, to HIT by 31 January 2023, to IBAN IT 84 I 02008 05364 000103978293 (further information at this URL: <https://trasparenza.trentinoinnovation.eu/ita/Pagamenti-dell-amministrazione/IBAN-e-pagamenti-informatici>), under penalty of exclusion from the Initiative. At the end of the process, the references of the selected Products and of the relevant companies will be published on the web page of the Initiative.

#### **ART. 5 - TRADEMARKS**

The participation of the companies in The Challenge implies the concession, by each company, of a free and non-exclusive license to use its own trademark in favour of HIT, to be used exclusively for the promotion of The Challenge. HIT will have the right to use the trademarks of participating companies on its website, as well as in connection with any product, service, event, or advertising material promoting The Challenge.

HIT acknowledges and accepts that the trademarks of the companies participating in The Challenge are the exclusive property of those companies, and that nothing in this Notice is intended to confer any right over such trademarks other than as provided for in the preceding paragraph. Therefore, HIT will not assign, sub-license, or otherwise dispose of the trademarks of the companies participating in The Challenge without their written consent.

The trademarks must be submitted to [proto-challenge@trentinoinnovation.eu](mailto:proto-challenge@trentinoinnovation.eu) by January 31, 2023 in vector format or in image format other than vector with at least 300 dpi.

#### **ART. 6 – CONFIDENTIALITY**

HIT undertakes to keep the data and information included in the application form confidential except for data and information in the boxes marked with an asterisk (company name, website URL, reference sector, brief description of entrepreneurial activity and name of Product), which can be freely disseminated in connection with the needs of promotion of the Challenge. HIT also undertakes to keep the results confidential.

Given the confidential nature of the data and information referred to above, HIT commits itself to likewise, to (i) not disclose them in any way and in any form, subject to different written consent, even partial, of the company concerned; and (ii) not to use them for purposes other than those strictly necessary for participation in the Challenge.

HIT undertakes to impose this duty of confidentiality also on its employees, collaborators and consultants, as well as to all those who, due to participation in the Challenge as a Solver or members of the Commissions will be aware of such data and confidential information.

This confidentiality restriction remains for two (2) years from the date of commencement of the Challenge

## **ART. 7 – INTELLECTUAL PROPERTY. USE OF THE NAME**

Intellectual property rights in the Results will belong to the companies, without prejudice to the right of the Solvers to be recognized as authors or inventors.

By participating in The Challenge, companies authorize Solvers in each case to:

- to use part of the Results (not containing confidential material, and in any case to be agreed with the company) for the presentation at the final event open to the public of The Challenge, as well as to make other presentations during events, courses and initiatives related to The Challenge, for educational purposes at the end of the initiative.
- mention their participation in The Challenge in their CV and portfolio, making express reference to the name of the Product and the company for which they carried out the Activities.

## **ART. 8 – ABSENCE OF GUARANTEES. EXEMPTION OF LIABILITY**

The results are presented by the Solvers and accepted by the company "as is". Neither HIT nor Solver provide no statement or guarantee that the results (i) are of a specific nature technical quality; (ii) are suitable for a particular purpose; (iii) do not violate third party rights or positions subjective legal protection.

Neither HIT nor the Solver take any responsibility for the correctness, validity, originality and quality of the results, which will be considered in complete autonomy by the company.

The participating companies expressly exempt HIT and the Solvers from any direct damage, indirect, incidental, consequential, punitive or moral deriving from participation in the Challenge or from the use of the results.

## **ART. 9 – PROCESSING OF PERSONAL DATA**

Pursuant to art. 13 of the GDPR 2016/679, we inform you that all the data that will be held by HIT in carrying out the procedure provided for in this Notice, they will be used exclusively for the purposes specified therein and will be processed with the aid of information systems in full compliance with the aforementioned legislation. The data will not be communicated or disclosed to third parties. The owner of the treatment is HIT, in the person of the legal representative pro tempore, which you can contact for the exercise of the envisaged rights, including the right of access to data, integration, correction and cancellation.

To view the complete information, refer to: ([https://www.trentinoinnovation.eu/wp-content/uploads/2022/12/Privacy-Policy\\_PROTO23\\_ENG.pdf](https://www.trentinoinnovation.eu/wp-content/uploads/2022/12/Privacy-Policy_PROTO23_ENG.pdf)).

## **ART. 10 – AUTHORIZATION TO PUBLISH YOUR OWN IMAGE**

The participating companies endeavor to obtain all possible authorizations from the subjects that will represent them and attend the Challenge so that HIT can publish their image with any form of support (print, websites, and the like) for the sole purpose of promote and publicize the Challenge. HIT agrees not to use any image in such a way

that it may harm or impair personal dignity or in any case for purposes other than those indicated therein and / or contrary to the law

#### **ART. 11 – TREATMENT OF PRIZES**

The initiative is to be considered part of the category "projects or studies in the commercial or industrial field, in which the awarding of the prize to the author of the chosen work is in the nature of a consideration for the performance of the work or represents recognition of personal merit or a title of encouragement in the interest of the community" pursuant to art. 6 D.P.R. 26 October 2001, no. 430.

#### **ART. 12 – RESPONSIBLE FOR THE PROCEDURE**

The person in charge of the procedure pursuant to the LP n. 23/1992 and sm and i.: Dr. Luca Mion.

Trento, 01 December 2022

Prot. HITF-01.12.2022-0000833-I

Luca Mion

Head of Innovation and Techtransfer  
Fondazione Hub Innovazione Trentino

SIGNED IN ORIGINAL