TECHNOLOGY FOR HUMANITY COMPETITION SPECIFICATION

2024

VERSIONS		
Version	**Date**	**Explanation**
V1.1	29.11.2023	
V1.2	20.02.2024	Application deadline update in the Competition Schedule heading

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TABLES

1. COMPETITION OBJECTIVE

The primary aim of this competition is to encourage individuals to integrate their sense of social responsibility with their technological knowledge and expertise, thereby fostering the development of projects that contribute to the betterment of society. The focal point of innovative initiatives and technological advancements across various aspects of human life lies in projects that embody utility, societal benefit, and convenience. In alignment with these principles, submitted projects will undergo evaluation and subsequent implementation. Simultaneously, the overarching goal is to address issues related to health and first aid, disaster management, and social awareness in technologically and economically disadvantaged regions. This involves devising solutions to challenges within these domains, ultimately simplifying life in these areas. The fundamental objective is to initiate endeavours that deploy technologies in an authentic manner, utilizing national resources to bring about positive change.

2. COMPETITION SCOPE

2.1. Health and First Aid

The competition aims to enhance public health by fostering innovation in various realms of the healthcare sector. Within this scope, projects focusing on emergency healthcare technologies, remote health services, health monitoring devices, artificial intelligence-supported health applications, health education and awareness initiatives, first aid equipment, and robotic healthcare services are encompassed. Additionally, it provides an opportunity to devise innovative solutions for the diverse challenges encountered in the healthcare sector and to develop projects aimed at improving public health.

Priority may be given to addressing the following contents within this scope:

- Emergency healthcare technologies
- Remote health services
- Health tracking and monitoring devices
- Health education and awareness applications
- First aid equipment and tools
- Robotic healthcare services
- Health data analytics and artificial intelligence applications

- Medication tracking and dosage management
- Innovative solutions for the healthcare sector

It is important to note that project ideas falling within the scope of Social Innovation and Disaster Management may be considered, while those pertaining to Barrier-Free Living Technologies are excluded from the competition.

2.2. Disaster Management

With the objective of creating a more resilient society against both natural disasters, such as earthquakes, floods, landslides, rockfalls, avalanches, which pose a high risk to our country, and human-induced disasters like chemical, biological, radiological/nuclear threats and hazards, as well as industrial accidents, the competition aims to increase disaster awareness and enhance the effectiveness of the disaster volunteer system. It encompasses projects focused on developing new technologies to prevent loss of life, property, and minimize economic damages during disasters. Furthermore, the projects aim to generate technological ideas beneficial to humanity at every stage of disaster management.

a) Risk Reduction

Projects in this category include the development of prediction and early warning systems supporting measures and efforts to overcome identified hazards and risks before they escalate into a disaster. This involves the creation of hazard and risk maps through GIS, tools for risk identification and assessment for critical infrastructures, and simulation tools. Additionally, projects may incorporate artificial intelligence-based measurement assessments and modelling, such as detecting the economic impacts of disasters, and ensuring the establishment of secure structures.

b) Intervention

This category encompasses projects that provide services in disaster and emergency situations, including search and rescue, health, sustenance, restoration, security, communication, information flow, goods and environmental protection, as well as social and psychological support services. Additionally, projects aimed at developing decision support tools for use by disaster managers and operational personnel at every level are included.

c) Betterment

Projects falling under this category support measures and efforts to overcome identified hazards and risks before they escalate into a disaster. This includes the development of prediction and early warning systems, hazard and risk maps produced through GIS, tools for risk identification and assessment for critical infrastructures, and simulation tools. Furthermore, projects may involve artificial intelligence-based measurement assessments and modelling, such as detecting the economic impacts of disasters, and ensuring the establishment of secure structures.

2.3. Social Innovation

The competition aspires to catalyse the emergence of project ideas that transcend existing solutions, offering innovative responses to the societal needs of the community. It seeks to elevate conditions, tackle issues in social life, and facilitate individuals in sustaining effective lives while participating in social opportunities and environments.

Aligned with this objective, the competition anticipates inventive initiatives focused on enhancing the social conditions of **diverse ethnic, socioeconomic, gender, and age groups**. Significantly, it underscores the importance of addressing prevalent issues within this context: Innovative projects are expected to delve into challenges such as social exclusion, discrimination, economic disparities, cultural adaptation obstacles, ethnic conflicts, legal hurdles, housing and employment dilemmas, health and education inequalities, difficulties accessing social services, security concerns, societal norm pressures, bullying, digital threats, parenting difficulties, social isolation, emotional challenges, and access to care services. By emphasizing these issues, the competition encourages endeavours that contribute to the betterment of varied communities through novel and impactful approaches.

3. COMPETITION PARTICIPATION CONDITIONS

- The competition is open to all primary, middle school, high school (including Open Education), university students (Bachelor's, Associate, Master's, PhD, and Open Education), and graduates studying in Türkiye and abroad.

- Teams at the primary, middle, and high school levels are required to have an advisor. The advisor must submit a document, signed wet, along with the Project Detail Report / Project Presentation, affirming their commitment to fulfilling advisory duties.

- University-level teams and above are not obligated to have an advisor.

- Advisors are required to support the team until the final stage and commit to being present with the team during the final stage. It is mandatory for advisors of primary, middle, and high school level teams with projects that reach the final stage to be present in the field.

- Primary, middle, and high school level teams must apply through their advisors.

- Participation can be individual or as a team.

- Individuals applying individually with their projects must create a one-person team through the Team Creation module on the KYS portal.

- Individuals applying individually at the primary, middle, and high school levels must have an advisor.

- Project ideas must not be copied. Projects identified as similar or imitative will be disqualified. If the participant has previously participated in another competition with the same project, they must provide information about the competition's name, location, date, organizer, and results within the project file.

- Participants who have participated in previous TEKNOFEST technology competitions with the same project can reapply with the condition of developing and/or transforming their project.

- Only one category or competition within TEKNOFEST can be applied with the same project. Applications of teams or individuals applying to different categories or different competitions organized within TEKNOFEST with the same project will be considered invalid.

- Participants cannot submit the exact same project report as in a previous year. If quoting from reports published on www.teknofest.org in previous years, the source must be indicated following the format specified in the regulations.

- A separate application form must be completed for each project.

- Teams must consist of a maximum of 10 members for all categories and education levels, excluding the advisor. (The advisor is not included in this number.)

- The advisor should not be added as a team member. Each team can have at most one advisor. Teams with more than one advisor will have their applications considered invalid.

- There must be a team captain within the team. Individual applicants must select the team captain role.

- Throughout the competition process, all information provided by the TEKNOFEST competitions committee will be communicated to the designated contact person within each team. Therefore, each team must designate a communication representative.

- Monitoring the processes (Application, Report Upload Deadline, Objection Process, Form Completion, etc.) is the responsibility of the communication representative. The TEKNOFEST competitions committee is not responsible for delays or disruptions caused by the communication representative.

- Between the application dates, the team captain/advisor registers on the system, completes the registration, enters the correct and complete information of the advisor and/or team captain/team members, and sends invitations to the advisor and/or team captain/team members, if any. The invited member enters the application system, accepts the invitation from the "My Team Information" section, and completes the registration. Otherwise, the registration will not be completed.

- Participants who complete the team creation process must apply for the relevant competition with their project.

- All necessary processes (Application, Report Submission, Report Results, Financial Support Application, Objection Processes, Adding/Removing Members, etc.) during the competition are carried out through the KYS system. Teams must follow their processes through the KYS portal.

- Adding/removing members can be done until the Project Detail Report / Project Presentation Submission date. Changes cannot be made within teams after the final submission of the Project Detail Report / Project Presentation Submission.

- Throughout the competition process, application through KYS, uploading reports, filling out objection process forms, etc., are within the authority of the team captain and/or advisor, and the competition processes are managed through these individuals.

- Transportation and accommodation support for the teams that reach the final is limited. The number of supported individuals is a maximum of 3 people per team (including the advisor), and the TEKNOFEST Competitions Committee reserves the right to make changes.

- The TEKNOFEST Competitions Committee has the authority to limit the number of members present in the festival area. In case of limitation, the committee will inform the participants.

- University-level participants are not required to come with their advisor to the final stage. If there is an advisor in university-level applications, the advisor must send an advisory document.

- Participants can apply to different TEKNOFEST competitions with different projects.

- Teams can be formed from a single school or as a mixed team with one or more primary, middle, or higher education students coming together. The competition category that the team can participate in will be determined based on the highest education level of the team members.

- Teams consisting of primary school students will compete among themselves, teams consisting of high school students will compete among themselves, and teams consisting of university-level students and graduates will compete among themselves.

- Throughout the competition process, your education level at the time of application will be taken into account. Please pay attention to this when choosing the category.

- Participants can only enter the competition after reading and approving all explanations and participation conditions regarding the competition.

- Those who apply to the competition are deemed to have accepted all the conditions specified in the specifications.

3.1. Application Principles

Applications will be received through the official website of the TEKNOFEST Aerospace, Space, and Technology Festival Technology Competitions (www.teknofest.org). Applications are to be submitted online via the www.t3kys.com application system until **February 29, 2024**.

4. COMPETITION CALENDAR, SCORING AND EVALUATION

Detailed information regarding the competition timeline, scoring, and evaluations is outlined below:

4.1. Competition Schedule

DATE	EXPLANATION
29.02.2024	Competition Application Deadline
26.03.2024 - 22:00	Project Preliminary Evaluation Report Deadline
30.04.2024	Announcement of the Teams That Passed the Preliminary Elimination According to the Results of the Project Preliminary Evaluation Report
31.05.2024 - 17:00	Project Presentation / Project Detail Report Deadline
1 - 30 June 2024	Project Presentation (Semi-Final)
08.07.2024	Announcement of Finalists
August-September 2024	Competition Finals
August-September 2024	TEKNOFEST

Table 1. **Competition Schedule Table.**

Evaluation will be conducted in three distinct stages: Project Preliminary Evaluation Report,Project Detail Report or Project Presentation, and final competition scoring. Teams that do not submit Project Preliminary Evaluation Reports and Project presentation / Project Detail Report files will not qualify for participation in the competition.

The report must be uploaded to the CMS system on the day and hour specified in the schedule. The objection process is communicated to the teams via email by the TEKNOFEST competitions committee after the announcement of the results. The TEKNOFEST Competitions Committee reserves the right to make changes to the schedule and timings. After the application, a "preliminary screening" process will be carried out based on the preliminary evaluation reports submitted by the teams. During this preliminary screening process, the submitted reports will be examined in terms of report structure and project content. The decision to consider the preliminary evaluation report for evaluation will be made, and invalid or incorrect applications will be eliminated.

In this context, projects that are eliminated in the preliminary screening process do not have the right to appeal.

4.2. Project Preliminary Evaluation Report

During this evaluation phase, teams at all education levels (primary school, secondary school, high school, university and above) must upload reports.

Teams are obliged to submit their Project Preliminary Evaluation Reports on the date specified in the competition schedule. Detailed information regarding the submission of Project Preliminary Evaluation Reports will be shared with teams that have completed their applications after the end of the application period. A preliminary screening will be conducted based on the results of the Project Preliminary Evaluation Reports. The template for the Project Preliminary Evaluation Report can be accessed on the website. Teams that proceed to the second stage based on the preliminary evaluation will be announced on the date specified in the competition schedule.

Projects submitted to us in accordance with the application principles will be subject to the following criteria during the screening:

- Project Summary
- Problem/Need Addressed by the Solution
- Localization and Uniqueness Aspect
- Method and Target Audience
- Innovation and Commercialization Potential
- Project Timeline

The template and details for the Project Preliminary Evaluation Report will be published on the official TEKNOFEST website.

4.3. Project Detail Report (Semi-Final)

At this evaluation stage, only teams with university education and above should upload reports. Teams at primary, secondary and high school levels will not upload Project Detail Reports.

Teams that have passed the Project Detail Report (PDR) stage are obliged to submit their Project Detail Reports on the date specified in the competition calendar. Project Detail Report; There should be a report detailing the Project Development processes

including Analysis, Design, Development, Testing and Implementation (integration and go-live activities), as well as detailing the Project Budget, Project Plan (project schedule) and Project Scope. You can access the template of the Project Detail Report on the TEKNOFEST website. According to the results of the PDR, the teams that are entitled to receive financial support and the teams that are eligible to participate in the final will be announced on the date specified in the Competition Calendar. Teams that are successful according to the results of the Project Detail report will be entitled to receive financial support if they apply, at this stage, the financial support form to be sent through the KYS system must be filled. The date for the financial support form will be determined by the TEKNOFEST Competitions Committee and information will be given to the contact person. It is not mandatory to apply for financial support.

Project Detail Report will be evaluated based on the following criteria:

- Project Summary
- Problem/Need Addressed by the Solution
- Localization and Uniqueness Aspect
- Method and Target Audience
- Feasibility
- Estimated Cost and Project Timeline
- Market Analysis, Innovation, and Commercialization Potential

The project detail report template and details will be published on the official TEKNOFEST website.

4.4. Project Presentation (Semi-Final)

During this evaluation phase, teams at primary, secondary and high school education levels must upload and make presentations. University and above teams will not upload or make presentations during this evaluation phase.

Teams advancing to the project presentation stage are required to submit their presentations on the date specified in the competition schedule. Project presentations will be evaluated online. The template and requirements for the presentation can be accessed through the TEKNOFEST website. Teams that submit their presentations in accordance with the schedule and necessary criteria will have

their online presentation dates and times determined. The respective team is obliged to present at the designated date and time.

Teams successful in the online presentation stage, both those eligible for financial support and those qualifying for the finals, will be announced on the date specified in the competition schedule. Teams successfully completing the semi-final stage will earn the right to compete in the TEKNOFEST finals.

Teams successful in the online presentation stage, if they have applied for financial support, will be eligible to receive it. At this stage, it is mandatory to fill out the financial support form, which will be communicated to the teams through the KYS portal. The deadline for the financial support form will be determined by the TEKNOFEST Competitions Committee, and communication will be made through the designated communication representative. Applying for financial support is not obligatory.

Project presentations will be evaluated based on the following criteria:

- Project Summary
- Problem/Need Addressed by the Solution
- Localization and Uniqueness Aspect
- Method and Target Audience
- Feasibility
- Estimated Cost and Project Timeline
- Market Analysis, Innovation, and Commercialization Potential

The project presentation template and details will be published on the official TEKNOFEST website.

4.5. Scoring of the Competition

The scoring of the competition consists of two parts. The first part is the report evaluation, and the second part is the scoring for prototype development and visual presentation.

The table below outlines the types and percentages of scoring for the report. The report scores will constitute 20% of the Total Score.

SCORING TYPE	PERCENTAGE
Project Preliminary Evaluation Report	%5

Project Presentation / Project Detail Report (Semi-Final)	%15
Prototype and Final Presentation Scoring	%80

Table 2.   **Competition Scoring Percentages.**

Please note that the percentages are indicative of the weight each component carries in the overall evaluation.

4.5.1.   Prototype and Final Presentation Scoring

The projects of the teams that advance to the final will be evaluated by expert jury teams in the relevant category fields.

A prototype is a tangible demonstration of the product or process that will emerge after the project. It is the most primitive form of the eventual product. For a software project, a prototype may include some screen images and designs with functionality, while for hardware projects, it can be an example made of different materials such as cardboard, Lego, etc. Requirements for the competition environment, including how participants will show their prototypes to the jury and detailed information about visual presentations, will be shared with finalist teams after the determination of the finalist teams.

Final presentations must be made by team members; it is against the rules for advisors to present.

In the final stage, teams are required to prepare a poster for visual presentation, and information about poster size and content will be provided by the TEKNOFEST Competition Committee in the coming days.

The ranking of finalist teams based on the final evaluations will be announced on the www.teknofest.org website after the TEKNOFEST Competition finals.

5. AWARDS

In the competition, teams that pass the report stages and reach the final in their category will be awarded a cash prize based on their ranking in the final evaluation. The awards listed in the table below represent the total amount to be given to the teams that qualify for the award; individual awards will not be given. First, second, and third-place awards will be divided equally among all Team Members (all

registered members in the system) and deposited into each person's specified bank account. A payment of 2,500.00 ₺ will be made to the advisor of the team that ranks in the competition. If the advisor does not come to the competition area, the advisor award will not be given. In addition, the best presentation awards will be given to the teams that are finalists in each of the three levels.

CATEGORY	PRIMARY SCHOOL - MIDDLE SCHOOL	HIGH SCHOOL	HIGHER EDUCATION AND GRADUATES	ADVISOR
1st PLACE	50.000,00 ₺	50.000,00 ₺	60.000,00 ₺	2.500,00 ₺
2nd PLACE	40.000,00 ₺	40.000,00 ₺	50.000,00 ₺	2.500,00 ₺
3rd PLACE	30.000,00 ₺	30.000,00 ₺	40.000,00 ₺	2.500,00 ₺

Table 3.   Competition Scoring Percentages.

5.1. Best Presentation Award

This award is given to teams that aim to successfully complete their assigned tasks and business plans in the competition area, reflecting criteria such as project duration, accuracy of answers to questions, body language, attitude towards the audience, fluency of the presentation, and presentation outline. The evaluation will be based on these criteria as a team. The mentioned award is for prestige purposes and does not have a monetary value.

5.2. Commercialization Potential Award

The Commercialization Potential Award will be given to the team with the highest potential for commercialization among the finalist teams based on the following criteria:

- Ease of implementing the project,
- Absence of uncertainties and risks in producing the final product,
- Feasibility of production with existing technology and equipment,
- If the project output is a service product, it should be marketable and deliverable.

The mentioned award is for prestige purposes and does not have a monetary value.

6. GENERAL RULES

To access the General Rules booklet applicable to the competition, [click here](#).

7. ETHICS

To access the Ethics booklet applicable to the competition, [click here](#).

Declaration of Responsibility

T3 Foundation and TEKNOFEST are not liable for any injury or damage arising from any product submitted by participants or caused by participants in any way. T3 Foundation and the organization officials are not responsible for any damages caused by participants to third parties. T3 Foundation and TEKNOFEST are not responsible for ensuring that teams prepare and implement their systems within the framework of the laws of the Republic of Türkiye.

The Turkısh Technology Team Foundation reserves the right to make any changes to this specification.