**TEKNOFEST**

**AEROSPACE AND TECHNOLOGY FESTIVAL**

**ROBOTAXI-FULL SCALE AUTONOMOUS VEHICLE COMPETITION**

**(AUTONOMOUS-READY VEHICLE CATEGORY)**

**PRELIMINARY DESIGN REPORT**

**APPLICATION ID**

**CONTEST**

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1. **Summary**

In this section, general introductory information about the software system to be prepared for the competition should be given. Emphasis should be placed on the design process, acquired skills, and unique aspects of design. The task to be performed by the autonomous vehicle should be briefly explained and general information about the performance of the vehicle that will perform this task should be conveyed.

1. **Team Organization**

This section should provide general introductory information about team organization and capabilities. An organizational chart showing the work sharing during the Robotaksi Autonomous Vehicle design process and who is working should be shown. At this stage, brief information about the team members should be conveyed. **Personal information of team members should not be shared at this stage**. The work packages to be used in the vehicle design process should be shown with a “timeline graphic”. Also, the main work packages should be briefly described with their requirements and objectives.

1. **Software Architecture**

It is requested to explain the software architecture required for autonomous driving, such as the autonomous driving algorithm and sensor fusion, which you will create in order for the vehicle to be given by the TEKNOFEST committee to fulfill the tasks and requirements given in the specification.

1. **Autonomous Driving Algorithms**

In this section, information should be given about the autonomous driving algorithms used in the vehicle, such as the recognition of traffic signs and lane tracking.

1. **Sensors**

Information should be given about the sensors and sensor fusion techniques you use in the software.

1. **Software Security Precautions**

During the test phase and during the competition, the precautions to be taken for possible dangerous situations will be determined and information about the software systems planned for this will be conveyed.

1. **References**

You should specify the resources, websites, trainings, books, articles, etc. you have used in this section.

***Additional Notes:***

* Each report should begin with a cover page and include a “Contents” page.
* Reports pages should be numbered consecutively.
* Font should be selected as “Times New Roman”, “Point: 12”.
* Compliance with academic report standards is sought.
* Reports should have a maximum of 40 pages. Reports exceeding the page limit will not be considered.

**Preliminary Design Report scoring will be done according to the template below.**

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