

# **Annex 1** of the terms and conditions for participating in the events **“Bosch Sensortec IoT Innovation Challenge”** and the **“MikroSystemTechnik Kongress 2021”**

## **Rules and Regulations of the “Bosch Sensortec IoT Innovation Challenge”**

### **1. Goal of the competition**

The Bosch Sensortec IoT Innovation Challenge is a four and a half month, solution-oriented and digital innovation competition, where university student teams are challenged to develop innovative IoT solutions based on the sensors and development platforms of Bosch Sensortec. The goal is the realization of a practical and innovative project that lives up to the motto “IoT – Invented for Life”. At the end of the competition student teams should be able to provide a rough-and-ready proof of concept and function of their idea. Participants have the opportunity to demonstrate their skills in front of an expert jury and compete with other teams.

### **2. Website**

Current Information on the Bosch Sensortec IoT Innovation Challenge can be found on the following website: <https://www.bosch-sensortec.com/about-us/events/iot-innovation-challenge/>.

### **3. Event date and venue**

Phase 1: Student teams develop their own IoT solution online from 15th of May to 30th of September 2021.

Phase 2: The ten best teams present their projects at the MikroSystemTechnik Kongress 2021 (“MST Kongress”), which will take place from 8th to 10th of November 2021 in Ludwigsburg, Germany.

Detailed dates and deadlines can be found on the above-mentioned website.

### **4. Event language**

Correspondence and presentations will be in English.

### **5. Jury**

The expert jury consists of members of the MST Kongress’ steering committee, Robert Bosch GmbH, Bosch Sensortec GmbH, as well as industry professionals and professors from universities.

### **6. Task**

Student teams of two (minimum) to five (maximum) members are challenged to develop fascinating IoT solutions, enabled by sensors and development platforms of Bosch Sensortec. All accepted teams will receive a starter kit with hardware. Software is available for download on the Bosch Sensortec website [www.bosch-sensortec.com](http://www.bosch-sensortec.com), subject to the Bosch Sensortec license terms. Additionally Software is available for download on the Arduino website, subject to the Arduino license terms.

Bosch Sensortec is interested in exciting use cases that require data processing and data fusion of several sensors in the device with restriction in power consumption and computing power. An essential part of the competition is the conversion of the underlying idea into a functional demonstrator or prototype.

#### **6.1 Focus areas**

In keeping with the motto “IoT – Invented for Life”, Bosch is looking for sensor-based solutions in the following focus areas:

- a) Solutions in consumer electronics such as wearables,
- b) Solutions focusing on air quality,
- c) Solutions for smart building & home applications and
- d) Use cases that improve fitness & well-being.

## 6.2 Development requirements

The teams can choose one of the focus areas to develop their IoT solutions. Participants are encouraged to incorporate as many Bosch Sensortec sensors as possible within their IoT solutions. Teams are expected to come up with new and innovative ideas.

## 7. Project submission

The documents must be uploaded to the Google form that will be provided in advance, meeting the deadlines. They can only be submitted as a document link via an online file storage tool incl. Google Drive, OneDrive or Dropbox.

### 7.1 Idea presentation

Please submit an initial video of not more than two minutes that tries to answer key questions when starting an innovation project. It helps to structure your thinking by looking at your idea from different perspectives.

You can include the following aspects:

- a) Problem(s) / use cases you want to solve
- b) Your idea in one sentence and a description of your solution
- c) Value proposition for the user
- d) Introduction of your team

(Possible formats: Mov, MP4, Avi, Mpg)

*Submission deadline: 30<sup>th</sup> of June 2021.*

### 7.2 Final documentation

The final documentation serves as a basis for the evaluation of your projects and pitch at the MST Kongress. Following documents are required:

- A project presentation giving a synopsis of your idea and trying to answer all questions mentioned in section '9. Evaluation'. We advise teams to use pictures and illustrations to make it more pictorial. The size of the report should not exceed 15 slides. Please use this [Project Report Template](#). (Possible formats: ppt, pptx, pdf)
- A demo video that demonstrates your solution of max. 3 minutes. (Possible formats: Mov, MP4, Avi, Mpg)
- A link to your GitHub repository to share your library.

Please list any third-party materials that were used to build your solution (e.g., pre-built libraries) and specify source.

*Submission deadline: 30<sup>th</sup> of September 2021.*

*Note: For recording, you can use semi/professional camera or your smartphone; either way, it should be recorded in HD. Use landscape (horizontal) orientation if possible. If you are going to use music, be very careful with copyrights.*

## 8. Competition implementation

Depending on the number of registered teams, the competition will be held in one or two stages. A maximum of ten teams will be admitted to the finals at the MST Kongress from 8<sup>th</sup> to 10<sup>th</sup> of November 2021 in Ludwigsburg.

### a. Preliminary round

The ten best teams will be determined in a preliminary decision based on the evaluation of the documents submitted during the competition (see section '7. Project submission').

### b. Final round

Each team participating in the competition will be notified approximately three weeks before the MST Kongress whether it may participate in the finals.

A poster presenting the results must be prepared for the final round. Bosch Sensortec will specify the poster size and layout.

Furthermore, each team should prepare a functional exhibit (demonstrator or prototype) for the MST Kongress. At the venue each team will get an exhibition area with a table. Bosch Sensortec reserves the right to prohibit presentations and to ask teams to dismantle exhibits if they have not been agreed upon in advance.

During the finals at the MST Kongress 2021 the jury will visit and evaluate the exhibits of the participating teams. Furthermore, the teams will have the chance to pitch their idea in a 3-minute presentation during an elevator pitch. All presentations for the pitch must be submitted until 5<sup>th</sup> of November 2021 in digital form (ppt, pptx or pdf).

The three best teams in the overall ranking will be awarded at the evening event of the MST Kongress. The teams competing in the finals are obliged to remain at the venue until the competition is over. Bosch Sensortec will provide further details in advance.

## 9. Evaluation

All team projects are compared and evaluated on the basis of the following weighted criteria:

1. Innovation (30%): What is new about the idea?, What is the technical progress? What are the USPs of your idea?
2. Feasibility (20%): Which use case or problem did you solve and how relevant is it? Who is your target customer?, How easily could the idea enter the market? What is the current or expected competitive situation for the idea?
3. User experience (20%): How will the customer in the target market benefit from the idea? What is the value proposition?
4. Functional demonstrator (20%): Evaluation of the performance and setup of the demo (proper setup of electronics and mechanics) and the library on GitHub. How did you use the hardware and how do the sensors enable your solution?
5. Style of presentation (10%): Recognizable and convincing storyline, compact and valid information, memorable visualization.

## 10. Prizes

Every participant receives a certificate of participation. In addition, the first three teams in the overall ranking will receive a cash prize. Details are available on the Bosch Sensortec website.

## 11. Participants' obligations and responsibilities

a) Participants expressly agree to, among other things, observe the following minimum rules of conduct:

- respect other participants;
- avoid using expressions, in any case or context, that incite violence, discrimination, obscenity and/or defamation;
- avoid content that is offensive, defamatory, vulgar, political/ideological, religious, constitutes advertising, infringes privacy, or is in any event contrary to the law or to the principles of correctness and good faith;
- develop projects that adhere to the objectives of the Challenge;
- avoid violation of copyrights, trademarks, patents or other intellectual and industrial property rights in the presentation of their projects;
- avoid violating third parties' or other participants' right to privacy and personal data protection.

b) Each team shall be exclusively responsible for the content of their project – therefore, no direct or indirect liability can be attributed by anyone to Bosch Sensortec and/or partners with respect to the content of projects. Each participant hereby agrees to indemnify and hold Bosch Sensortec and/or partners harmless in relation to any claim – including for damages – that may be advanced for any reason in relation to the project presented.

## 12. Miscellaneous

These Rules and Regulations are subject to change without notice.

Dated: 17<sup>th</sup> August 2021

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