

Terms and Conditions

Safe Cities Creative Challenge

This document lays down the general rules for participation in the contest organized through the official pages of Bosch Portugal, by Robert Bosch, S.A., an anonymous company with headquarters in Avenida Infante D. Henrique, lots 2-E and 3-E, registered with the Commercial Registry of Lisbon under the single registration and corporate entity 500.233.179, with the share capital of EUR 259,000,000, henceforth referred as "Bosch".

1. Candidates

1.1 Participation in the Safe Cities Creative Challenge event is free.

1.2 In the event students enrolled in the 2017/2018 academic year may participate in any course taught by the University of Porto.

1.3 Participation in the Safe Cities Creative Challenge assumes participation in all the its activities.

1.4 Participation in the Safe Cities Creative Challenge should be carried out in groups of 2 to 4 people. All members of the group shall be eligible to participate in accordance with point 1.2.

1.5 Members of the group are not allowed to register as members of more than one group. Elements that are enrolled in more than one group will be excluded from the event and the remaining group will retain membership as long as the remaining number of elements is greater than or equal to 2.

2. Applications and Applications

2.1 The registration of the groups and submission of the proposed resolution of the challenge must be done through the website (available after April 21th) made available for the event by Bosch. All groups that do not fill out the form as described on the website and within the deadlines indicated in the event calendar will be excluded from the event.

2.2 Bosch will present the themes for the challenges during the presentation sessions according to the expected dates. Bosch assumes that candidates will be present at least one of the presentation sessions mentioned in the calendar because the information about the challenges can only be found in the presentation sessions and on the website set for that purpose. Bosch will not provide information by any other means.

2.3 The proposed challenges will address the following themes:

- Crowd Safety
- Building Safety

- Industry 4.0

Details on each of the themes can be found on the website set for this purpose.

2.4 At the time of the registration of the groups, a resolution must be submitted for one of the proposed challenges, written in Portuguese or English in PDF format containing the following recommended elements:

- Summary of the motion for a resolution;
- Justification of the adequacy of the proposed solution to the proposed challenge;
- Value proposition against the state of the art;
- Architecture of the proposed solution (articulation between the different subsystems of the solution, articulation with systems external to the solution, technologies involved, new technologies to be developed);

Proposals created in presentation format can have up to 7 content slides. Proposals created in a text editor can have up to 3 pages of content.

2.5 Documents submitted during the application process will not be returned to candidates and it will be the candidates' responsibility to bear any costs involved in the creation of the application process.

2.6 A sequential number will be assigned to the group after submission of the application which will identify the group in the subsequent phases.

2.7 Bosch will not provide additional clarifications other than those mentioned during the presentation sessions.

2.8 Groups are only allowed to present a proposal to solve the proposed challenge. Groups that apply with more than one resolution proposal will be excluded from the event.

2.9 Proposals for the challenge resolutions identified by the jury as plagiarism will lead to the exclusion of the event from the groups that submitted them.

2.9 Bosch reserves the right to cancel or amend the Safe Cities Creative Challenge if submitted applications do not meet the minimum number of 10 or do not present technical quality considered sufficient by the jury of the event.

2.10 The group's registration reflects the express acceptance of the rules of this Terms and Conditions.

3. Evaluation of proposals

3.1 The evaluation of the proposals will be carried out by a jury composed of jurors appointed by Bosch and the University of Porto for this purpose.

3.2 The jury will analyze the proposed resolutions to the challenges defined according to the following criteria and weights:

- Cr1 - 20% - Technical rigor and documentary quality;
- Cr2 - 35% - Technological and scientific relevance;
- Cr3 - 35% - Feasibility of the solution;
- Cr4 - 10% - Social impact;

3.3 Each criterion will be evaluated according to the following scale graded from 0 to 5:

- 0: The proposed resolution has no impact on the criterion;
- 1: There is a slight link between the criterion in question and the proposed resolution or reveals inconsistencies or serious flaws;
- 2: The criterion was observed but the proposal presents several failures;
- 3: The criterion was observed although presenting some inconsistencies;

-4: The criterion was observed in depth and there are no weaknesses with meaning;

-5: The criterion was observed in the totality and there were no flaws.

3.4 The final grade will be calculated by applying the following formula:

$$NF = Cr1 \times 0.2 + Cr2 \times 0.35 + Cr3 \times 0.35 + Cr4 \times 0.1$$

3.5 The 9 groups with the highest scores will have access to the final stage. The finalist groups will be informed through indicated email during the application phase on the date indicated in the calendar. The final grade of all groups will be emailed to all candidates.

3.6 It will be up to the jury to select the finalists in case there are groups with identical final scores.

3.7 There shall be no opportunity for recourse to the evaluations.

3.8 In the event of the withdrawal of any of the selected groups, the group immediately following will be given the opportunity. If this new group is not available to participate, no further replacement opportunities will be given.

4. Prototyping

4.1 The groups selected as finalists will be given the opportunity to prototype and present their solution proposal on the date indicated in the calendar at the Faculty of Engineering of the University of Porto.

4.2 All prototyping materials shall be made available by the organization except for the computer equipment. The organization will make available the following materials:

- Cardboard, paperboard or similar
- Plates of expanded polyethylene or similar
- Miscellaneous equipment for manual work
- Legos
- Miscellaneous equipment for electrical development (breadboards, resistors, capacitors, etc.)
- Arduino starter kit and proximity sensors

4.3 Groups may use their own personal computer and the software they think relevant for the presentation of the prototype.

4.4 Bosch is not liable for any damages caused by computer hardware brought by the groups.

4.5 It is the responsibility of the groups to ensure that they have the licenses to use the software they intend to use at the event.

4.6 It is not permitted to use any other prototyping material other than that provided for organization and personal computers brought by participants. All prototyping action must be performed during the event, i.e. participants are not allowed to use pre-designed content on their personal computers.

4.6 The groups will have 3 hours to prototype the submitted proposal. Additional time will not be granted to groups that begin prototyping late.

4.7 Groups that prototype a solution that does not match the one submitted in the previous phase will be excluded from the event.

4.8 After the prototyping phase 60 minutes will be given to the groups to prepare a presentation of a maximum of 10 minutes explaining the validity of the idea presented and explaining the characteristics of its prototype.

4.9 The jury will be given the opportunity to ask questions about the solution presented.

4.10 Groups that do not participate in the prototyping phase or at the jury stage will be excluded from the event.

4.11 The jury will have 60 minutes to decide the winner after the end of the presentation session.

5. Awards

5.1 The jury will select the winning idea of the Safe Cities Creative Challenge by evaluating the quality of the proposed solution initially, the methods and quality of prototyping, the quality of presentation and validity of the answers to the questions asked by the jury.

5.2 Each member of the group selected as winner by the jury will be awarded a tablet Lenovo YOGA Book.

5.3 To all the finalists, a personalized participation certificate will be sent to the contact email containing the main areas in which they stood out during the event (technological, scientific and softskills areas), within a maximum of 30 working days after the event.

6. Intellectual Property

6.1 It is the responsibility of the groups to ensure that they do not infringe any copyrights or industrial property and that the information provided in the application is not encumbered.

6.2 Copyright and industrial property rights in the ideas and solutions generated, as well as all technical documentation relating to them, do not transfer to Bosch.

7. Guarantees provided by participants

7.1 Participants shall not assume any link or commitment regarding promotional or advertising activities of the event without the prior consent of Bosch

8. Calendar

Presentation of the challenge	2:00pm April 23th	FEUP	Room B030
Presentation of the challenge	2:00pm April 24th	FCUP	Auditorium FC5 – room 003
Applications	May 14th	Website	
Selection of applications	May 23th	Email	
Final Phase	May 26th	FEUP	To be communicated to the finalists by email