

## ELPID 2021 in cooperation with Siemens Mobility

### Project overview:

ELPID was an international project resulting from the cooperation between four European universities: University of Zagreb, University of Ljubljana, Polytechnic University of Milan and Vienna University of Technology. The goal of ELPID was the realization of a product development task, which was carried out in cooperation with an industrial partner. In the preceding years, the project had been carried out in collaboration with BSH Household Appliances (ELPID 2019 - Ljubljana) and both Electrolux and ROLD (ELPID 2020 - Milan). The project was funded by the European Erasmus+ program.

Student groups were coordinated by academic coaches and received lessons on product development from the respective university professors and specialists from Siemens Mobility.

### Project task and project procedure:

The title of this year's project task was "What will future seats and seating arrangements in metros look like". The students were asked to discuss their experiences and wishes for future seating arrangements in metros in their groups. Siemens Mobility did not specify a specific region or country, but the groups could decide for themselves which country they would like to implement their ideas for.

After each phase, each group received feedback from Siemens Mobility. Siemens experts were also available for the students during the individual phases. In addition, the students were supported by other experts in the fields of markets and industrial design.

In the first phase, a workshop was held in which the individual members got to know each other, and the project topic was explained to them. Due to the many different topics (acoustics, fire protection, personal safety, maintainability, etc.) Siemens Mobility agreed to present the most important topics to the students through the specialist departments. The aim of these presentations was to bring all students up to the same level with the Metro topic.

In phase 1, the students dealt with deciding on a country or region, identifying the focus groups, including the user experience, identifying the actual problem and its sub-problems, and generating potential solutions.

In phase 2, the students were asked to create several concepts based on the findings from the first phase and furthermore, the requirements of Siemens Mobility had to be taken into account, which the students received in the introductory workshop.

In phase 3, the groups each created a virtual prototype, which was decided by Siemens Mobility based on the concepts presented in phase 2. The groups were asked to simulate their final concepts to verify that they could withstand the required forces.

At the final workshop, each group presented their result in front of all ELPID contributors and key representatives from Siemens Mobility. After the presentations, the employees of Siemens Mobility chose the winning team, which from their point of view has best adhered to and implemented the requirements

### Presented solutions:

The groups' solutions were developed for the different markets of Scandinavia, Japan and India. Siemens Mobility was very pleased with the different solution ideas and concepts. For this reason, the experts are still looking at the solutions that have been worked out and will vote on how to proceed with them.

Partners: