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| 1. **Name of the challenge** *(short, powerful and inspiring description):*

 **Automotive media-on-demand** |
| 1. **Context*:*** *(what is the background information behind the challenge, what is the state of the art of the sectors, the role of the organization in this context, the target group to whom the solution need to be addressed, etc.)*

 The Musical Operating Devices (MODs) are small computers found in modern buses, trains and planes. They are meant to be used by the travelers at leisure. The challenge consists in analysis of advantages and limitations of current systems of MOD (Media on Demand) devices. The focus is on the use of WiFi in existing technology which is currently missing. A specific issue is provision of multimedia content with regard to the Digital Rights Management. |
| 1. **Problem:** (*What i*s *the problem that needs to be solved, why is important to solve, impact of this problem in the close future, impact of the problem on local or international area)*

Detailed analysis of existing software solutions including the competitive ones and trends. The goal is to design a detailed architecture and implement a software system that will make multimedia content accessible for passengers with regard to the DRM (Digital Rights Management). Based on the designed architecture it is necessary to implement the system core and selected software modules. The solutions should be platform (within the Linux distributions) and hardware independent.1. **Additional info (for internal use):**  *(what is expected to be delivered by the team (idea/concept/prototype), what are the specific tools & instruments that shall be used (e. g. Programing language etc.), what are the asset (as knowledge, materials) will be given to the team*

The challenge involves a real life implementation and should help to develop a completely new functionality for Multimedia on Demand. At the STU FIIT there is a modern lab FIIT-Molpir, s.r.o. equipped with the latest technology products in the field of IT in transport. The challenge will enable you design of a big project. An example: buses of the company RegioJet equipped with video monitors for the convenience of passengers. |
| 1. **Skills of the team (for internal use):** *what specific skills shall the team have in order to address the challenge*

Obligatory technologies: Linux, HD MOD (not necessary to know the system based on FreeBSD and Android in advance).Useful knowledge areas: Embedded systems, Architecture of software systems. |
| **5. About the Seeker:****Molpir, s.r.o.** is a company active in development, manufacturing , import and distribution of broad portfolio of car accessories in Slovak Republic. Mentor: Ing. Martin Kosa |