



Annex 4 - Challenge Template

1. Name of the challenge:

- Development of a system for controlling vacancies in a public parking lot

2. Context:

- The system uses optical sensors to mark the available places and sending information at the entrance of the parking lot showing number of free places. In case of filling capacity, terminates access. An additional feature is the guiding to the free positions by a light indication that makes it easier to find a parking place.

3. Problem:

- *The problem with the degree of filling of the parking space and finding free space exists in all public car parks. The developed system will contribute to the faster and more convenient detection of vacancies as well as to block access in the absence of such.*

4. Additional info (for internal use):

- The team has to offer a concept that will be further developed together with company specialists and implemented into a small prototype.

5. Skills of the team (for internal use):

- Knowledge of working with PLC-based management systems, application of sensors and actuators in automation, programming languages C ++, FBD and Java programming under Android

5. About the Seeker: