



Annex 4 - Challenge Template

1. Name of the challenge:

- Development of a system for controlling access to public parking by telephone.

2. Context:

- Access control is performed via a Bluetooth connection from the phone to the control system. The developed application in the phone sends the user code and the system reports whether it has the right to access. The control is implemented with a PLC that signals to the automatic barriers.

3. Problem:

- *Controlling access to corporate parking is essential because mass-in-use remote devices are not personalized. This creates a problem with the multiple use of an access device and the inability to restrict access by invalid remotes. The system provides easy control as each user receives an individual code and the system checks the right of access. This way, invalid codes are easily eliminated.*

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: