



#### Annex 4 - Challenge Template

**1. Name of the challenge:**

- Developing an intelligent home appliance control system

**2. Context:**

- Accessed through a phone connection to the Android based home office management system, the module installed in the phone allows you to switch on, off, and set up various household, heating and lighting devices. The fixed management system processes the job and implements the desired functions.

**3. Problem:**

- *Modern requirements for efficient use of energy create the prerequisites for optimizing the management of home appliances by using the capabilities of long distance remote control and process monitoring.*

**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 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:**