**ARROWHEAD**

**ARTEMIS Innovation Pilot Program TASK 1.1 - SMART SERVICES**

**PROJECT DESCRIPTION**

The Arrowhead project addresses technical and applicative challenges associated to cooperative automation:

- Provide a technical framework and standardization,
- Propose solutions for integration with legacy systems,
- Implement and evaluate cooperative automation in several domains

AVL and partners address communication, security and authentication challenges to develop prototypes of connected measurement devices based on existing AVL products. These new devices will interact with AVL servers via the Internet to demonstrate, test and evaluate smart services such as automatic maintenance scheduling in close-to-reality environments.

**RESULTS IN ITERATION 1**

After an in-depth safety & security analysis of AVL’s use cases by the Austrian consortia a concept for secure communication of a device to its manufacturer network was designed. In cooperation with all partners a first prototype was realized.

- building block 1: embedded µ-controller for communication purposes to an AVL product
- building block 2: security controller with NFC interface to acquire information from an AVL product via a mobile devices
- building block 3: MQTT featured mobile application to transport information to a “broker in the cloud”

**LIST OF DISSEMINATIONS EVOLVED IN ITERATION 1**