CASE STUDY
Automotive Bluetooth Transmitter

Challenges
- Highest quality standards for automotive project
- Scope not completely defined at the beginning of the project
- Innovative solution with four Bluetooth modules in a single device
- Project divided into software and hardware modules developed by different companies
- Timeline and scope changes during the project

Project Scope
- System architecture, Bluetooth firmware design, MCU to Bluetooth module protocol design
- Implementation of Bluetooth transmitter module
- System architecture, Bluetooth firmware design, MCU to Bluetooth module protocol design
- Deliverables: binaries, software release notes, software code, software documentation, test results, error reports
- Transmitter MCU mock simulator (UART communication for testing)
- Complete and independent project management including setting up development environment for Comarch tasks
- Hardware review and support in resolving HW issues
- Complete QA. Unit testing (full coverage), sanity testing, performance and stress testing, functional testing, protocol testing, interoperability testing
- Continuous integration system and tests automation
- SonarQube for testing MISRA standard compliance
- BT SIG certification support (including internal PTS test)
- Delivering documentation for implemented SW and related processes
- Onsite workshops, hardware prototypes bring-ups (four HW versions)
- Project started with incomplete scope, flexible approach to delays in the project caused by HW delays

Project Plan

Project Metrics

Tasks in Jira

Source Code Complexity, Unit Tests, Statical Analysis

Automated Test Setup
- GOC Code Coverage Report
- GCC Code Coverage Report

Result
- Comarch partner accepted final delivery
- Comarch and its partner resolved all challenges, expected and unexpected
- Comarch delivered high-performance software compliant with automotive standards

24.11.2022, version 1.0