

## **Introduction of Verification Tools in TASTE**

The initial objective and implementation of TASTE rely on code generation to generate system targeting various C RTOS and Ada runtime; and then on tests to validate these systems. This solution does not scale to complex systems where an exhaustive simulator operating in automatic mode would be more relevant.

The objective of this contract was to define the requirements and specification of an exhaustive simulator (or model checker) that aims at verifying properties on the models of the functional blocks that are developed using the TASTE tool-set; and to perform its implementation and validation on selected case studies. In this final days presentation, we will report on the demonstrator built. We illustrate how to leverage code generation strategies to build a “on-demand” model checker as an instrumented version of the system. We will report on the performance of this strategy based on selected TASTE case studies.