Developing an Open Source conformance testing environment for ITS communications

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ITS - Intelligent Transport Systems and Services - is the integration of information and communications technology with transport infrastructure, vehicles and users.

By sharing vital information, ITS allows people to get more from transport networks, in greater safety and with less impact on the environment.

ITS equipment is currently being deployed in experimental trials with the progression towards fully operational deployment. Thorough conformance testing will increase the level of confidence that equipment from various suppliers will interoperate. This in turn will reduce implementation and rollout times.

During the past few years ETSI has developed libraries for cooperative ITS testing, conformance test suites for ITS protocols, a Java test adaptor and codecs to accelerate execution of the tests.

Applus+ IDIADA and Ericsson - in cooperation - has developed a solution allowing execution of the ETSI test suites with the open source TTCN-3 tool Titan. It has been successfully used in ITS related European projects such as i-Game and Companion.