VALIDATION TOOLS FOR ATC SYSTEMS

Validation of ATC system functionalities on validation platforms requires often an artificial target(s) to be generated with complete control over its behavior, or even an artificial target(s) to be injected to the real surveillance data. For such purposes CS SOFT developed two validation tools intended for air and ground surveillance. These tools could be used either by ANS provider or system developers.

**BENEFITS**

- No need to wait for particular situation in live traffic. User can simulate any situation and target configuration.
- Quicker validation of ATC system on development platform without blocking simulator positions.
- Effective testing of functions and configuration of Safety Nets.
- Replace validation of ATC system with live traffic or recorded situations.

**S-PILOT TOOL**

S-Pilot tool is intended for simulation of SSR or Mode-S targets in Asterix Category 001/002 or 034/048. The tool enables an easy preparation of several target scenarios, by means of configuration file. When running, the tool offers an easy control interface, by which operator has control over the target’s behavior, including setup of non-standard technical attributes of target detection. Generation and control over Mode-S DAPs (Downloaded Aircraft Parameters in BDS registers) is available.

**G-PILOT TOOL**

Tool is intended for simulation of targets for A-SMGCS type of systems. It generates Asterix Category 010 data. Offline database allows for preparation of airfield significant points. These points serve for definition of named taxi routes. Offline scenarios allow for preparation of situations:

- Arrival. Target appears airborne at FAF, lands, taxies to selected stand.
- Departures. Target is generated on stand, taxies to defined runway and takes off.

- Taxi only between points on ground. Scenarios allow inserting delay, waiting for manual resume, scenario restart, speed change and others.

Online interface provides control over all, even over the technical characteristics of the generated Asterix data flow.