

Deviation Request ETSO-C115c#1 for an ETSO approval for CS-ETSO applicable to Airborne Area Navigation Equipment Flight Management Systems (FMS) Using Multi-Sensor Inputs (ETSO-C115c)

Consultation Paper

1 Introductory Note

The hereby presented deviation requests shall be subject to public consultation, in accordance with EASA Management Board Decision No 7-2004 as amended by EASA Management Board [Decision No 12-2007](#) products certification procedure dated 11th September 2007, Article 3 (2.) of which states:

“2. Deviations from the applicable airworthiness codes, environmental protection certification specifications and/or acceptable means of compliance with Part 21, as well as important special conditions and equivalent safety findings, shall be submitted to the panel of experts and be subject to a public consultation of at least 3 weeks, except if they have been previously agreed and published in the Official Publication of the Agency. The final decision shall be published in the Official Publication of the Agency.”

2 ETSO-C115c#1 Airborne Area Navigation Equipment Flight Management Systems (FMS) Using Multi-Sensor Inputs

2.1 Summary of Deviation

Deviates from RTCA DO-283A section 2.2.2.7 by cancelling the offset mode after proceeding from a manually defined (present position) hold.

2.2 Original Requirement

RTCA DO-283A

2.2.2.7 Parallel Offsets

(...) If a present position hold capability is provided, it shall be possible to define and navigate a hold at present position while an offset route is active. On exit from the present position hold, the offset route shall remain active, unless cancelled by flight crew action while in the hold. Initiation of a hold exit by a direct-to procedure to the holding fix shall not cause cancellation of the offset route. (...)

2.3 Industry

The applicant FMS complies with all requirements relative to parallel offsets except that it cancels the offset mode after proceeding from a manually defined (present position) hold.

Offset mode is cancelled immediately when PPOS HOLD is activated, the offset annunciation is removed, and guidance is provided to the hold. The pilot may re-activate offset mode after proceeding on course.

2.4 Equivalent Level of Safety

The FMS properly annunciates the current mode. The pilot may re-activate offset mode as desired. The equivalent requirement to remain in offset mode following a hold at present position does not appear in

DO-229D, though all other requirements relative to parallel offsets are included there. This appears to be a change made in DO-283A for operational convenience.

Flight crew operating procedures for use of PPOS HOLD when parallel offsets are selected are addressed in Operator's Manual.

An equivalent level of safety is provided by the system annunciating the mode and by the Operator's Manual reflecting this behaviour.

2.5 EASA position

We accept the deviation.