EASA	COMMENT RESPONSE DOCUMENT
	Proposed Equivalent Safety Finding on CS 25.979(b)(1) for "Pressure fuelling system shut-off operation check" (Applicable to A350-941)

Commenter 1 : CAA UK

Comment # [1] – Design proposal

The 'independent sensors' feature of itself does not allow for "checking for proper shut-off operation" by actuating the shut-off valve during pre-fuelling checks, as required by 25.979(b)(1). The intent of the rule is to prevent hazardous overspilling or venting of fuel during refuelling, such as caused by failure of the valve to close

Comment :
It is not evident why the provision of independent sensors supports an ESF.

EASA response:

Any overspilling in the surge system resulting from a failure of the tank inlet valve will be automatically detected and accommodated. The sensors in the surge tank and the corresponding shut-off mean (refuel isolation valve) will prevent hazardous overspilling, thus precluding any damage to the airframe and/or overboard release of fuel. The proposed design therefore meets the intent of the rule without relying on operational procedure, which may be affected by human factor type issues.

Comment # [2] – Safety Equivalency Demonstration

Safety analysis, equipment qualification, and testing for the fuel system is required anyway, irrespective of the configuration, in compliance with 25.1301. 25.1309 etc and it is not clear how this provides additional safety or other mitigation features for the proposed configuration..

Comment :

The point 2 reason to support the ESF does not provided equivalent safety.

EASA response:

Noted. The paragraph does not intent to provide any compensating factor, but rather lists the proposed methods of compliance agreed between the applicant and EASA.

Commenter 2 : Boeing

Comment # [1] – Statement of Issue

We [ ] note that the wording in the "Statement of Issue" portion is not congruent with the referenced regulations.
Specifically, the proposed text states:

"CS 25.979(b)(1) ***requires*** *that the shut-off means of the automatic pressure fuelling system be checked before each fuelling of the tanks for proper shut-off operation."* [highlighting intentional]
However, both the EASA Certification Standards (CS) and the FAA Federal Aviation Regulations (FAR) use the word ***"allow"*** instead of "require" when referring to the check. Changing "allow" to "require" changes the context and intent of the regulation.

Comment :

We ask whether this is this a shift in EASA's interpretation of the regulation or merely an editorial error. If the former, then we request that an explanation and justification be added to the ESF. If the latter, then we request that the word "requires" be changed to "allows."

EASA response:

Agreed.

The current wording of 25.979(b)(1) reads: 'This means must allow checking ', which was transposed as 'requires checking…'. While transparent from a design point of view, the proposed text in the ESF would imply the check is to be done at each fuelling, whereas clearly the intent of the rule is to offer the possibility for a check without mandating its periodicity.

This does not however affect the ESF itself, but the statement of issue should be corrected.