

Abstract for SW PA Workshop 2023

The purpose of the presentation is to describe the update of the ECSS-Q-ST-80C Rev.1 “Software Product Assurance” standard (now Rev. 2).

The first driver for the update was the alignment with the recently updated of ECSS-E-ST-40C (now Rev.1). Some of the changes in that standard have a clear impact on ECSS-Q-ST-80C, hence, to ensure an adequate consistency between both, it was necessary to update of ECSS-Q-ST-80C. The engineering standard was being updated in a list of major topics: Hardware Software Co-engineering, Requirements for DRB (Delivery Review Board), Verification activities, Requirements for automatically generated code... All these mentioned topics have an impact as well on software product assurance therefore they had to be considered by the ECSS-Q-ST-80C working group.

The second major reason for update is to incorporate software security assurance requirements. Another key objective of the update of ECSS-E-ST-40C was to include cybersecurity requirements. At the same time, a new working group was created to draft a new system level security standard. This implies that new security related requirements need to be included in three standards: the software engineering standard, the security standard and the software product assurance standard. The working group aimed to ensure the alignment of these three sources of requirements.

In addition to these two major drivers, past lessons learned gathered by ESA, and external change requests uploaded in the system covering diverse topics were addressed by the working group.

The presentation at the SW PA workshop 2023 is aiming to explain these (major) changes in more detail.