

AR/VR For European Space Programs

Call for presentations

Abstract

AR4Telecom – Showcasing AR applied to AIT procedures

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This presentation will focus on showcasing the developments and results that were obtained during the ESA's AR4Telecom project. The goal of this project was to demonstrate the gains that can be achieved by using Augmented Reality during satellite AIT processes. The project was led by Lusospace (PT) in partnership with ENEA (RO), with validation and consulting provided by OHB.

Extremely positive results were achieved, and OHB estimated that more than 50% saving can be attained in complex AIT procedures.

For this presentation, we propose to replace the dull and traditional powerpoint by a more attractive and engaging show featuring live usage of the Augmented Reality tool. We believe that this will be memorable wake-up moment and will capture the attention of the participants.

AR4Telecom is the combination of space related AIT procedures with Augmented Reality tools that allow productivity boost through guidance, automatization, traceability and data centralization.

AIT engineers are more aware, informed and involved during operations, by using AR glasses to interact with all the relevant actions, schemes, data and other contents.

The solution developed for the AR4Telecom project consists of:

- AR Authoring tool - to design the AIT procedures using AR features
- AR Player – converts the designed procedures in Augmented Reality experiences
- AR Reporting Tool – Records and tracks significant interactions in the procedures' executions

The AR Player will be the main protagonist in this showcase, as it raises more curiosity and demonstrates better the applicability and achievements, but references will be made to the authoring and reporting tools.

Given the difficulty in placing a full-scale representation of a satellite panel, and the time constraints, our presentation will use a children's assembly toy for demonstration purposes.