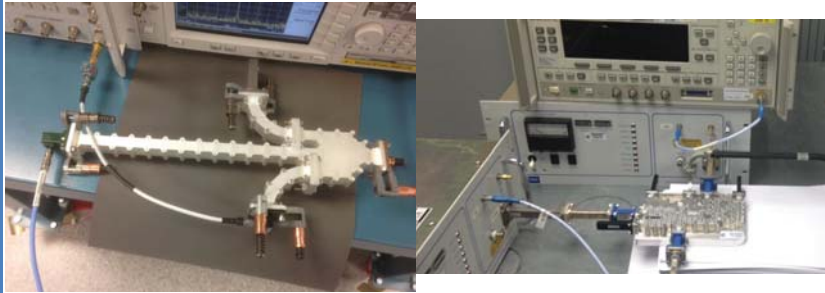


<b>Activity Title:</b>	<b><i>CAD of Multiplexers for PIM Measurement Set-Ups</i></b>		
<b>Contract type</b>	<b>TRP</b>	<b>Budget (k€)</b>	<b>200</b>
<b>Company (-ies) (including country)</b>	Technical University of Valencia, Valencia Space Consortium, Aurora Software and Testing, S.L.		
<b>Team (name of the participants in the project)</b>	V. Boria, P. Soto, C. Carceller, M. Guglielmi, S. Cogollos, D. Smacchia, J. Gil, C. Vicente, B. Gimeno, D. Raboso		
<b>(*) Speaker (s)</b>	V.E. Boria	<b>Email</b>	vboria@dcom.upv.es
<b>Short Speaker Information (experience and involvement in this project – maximum 60 words)</b>	<p>Vicente E. Boria was did receive the "Ingeniero de Telecomunicación" degree and the "Doctor Ingeniero de Telecomunicación" degree from Universidad Politécnica de Valencia, Valencia, Spain, in 1993 and 1997, respectively. Since 2003, he is a Full Professor on Transmission Lines and Microwaves. In 1995 and 1996, he was Spanish Trainee ESTEC-ESA, Noordwijk, The Netherlands, where he was involved in the area of EM analysis and design of passive devices (filters and multiplexers) in several technologies. In these topics, he has co-authored 10 chapters in technical textbooks, 135 papers in refereed international technical journals, and 180 papers in international conference proceedings. He is Associate Editor of IEEE Microwave and Wireless Comp. Lett. (since 2013) and of Electronics Letters (since 2016), and Chairman of the MTT-8 Technical Committee on "Filters and Passive Components" since 2014.</p>		
<b>Summary of the activity (maximum 400 words and 2 pictures)</b>	<p>This ESA-funded activity focuses on the computer-aided design (CAD) of manifold-coupled multiplexers used to implement PIM measurement test beds. After a brief summary of the demanding requirements to be satisfied by such multiplexers, two novel topologies of rectangular waveguide filters conceived for this particular application will be shown. Next, the procedures carried out for the design of the involved multiplexers are outlined. Finally, the performance of several wideband manifold-coupled multiplexers, specifically for PIM measurement set-ups to be used in the European RF High Power Laboratory (located at UPV, Valencia, Spain), is fully validated with prototypes and measurements.</p>		
			

(\*) The speaker needs to do the registration through this website