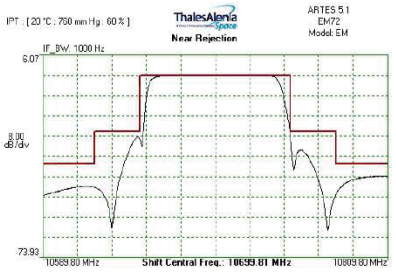
Activity Title:	***Compact Ku-band channel filters for input multiplexer***		
Contract type	**ARTES 5**	**Budget** *(k€)*	**450**
Company (-ies) *(including country)*	TAS-E		
Team *(name of the participants in the project)*	Joan O'Callaghan, UPC Jordi Mateu, UPC Carlos Collado, UPC Luis Rogla, TAS-E Santiago Sobrino, TAS-E Maite Perez, TAS-E Isidro Hidalgo, TAS-E		
(*) **Speaker (s)**	Luis Rogla	**Email**	ljroglam@thalesaleniaspace.com
Short Speaker Information *(experience and involvement in this project – maximum 60 words)*	Technical Responsible of the project. Senior R&D Microwave Engineer RF & Microwave Engineering Department. He has been technical responsible in R&D and commercial projects (e.g. AMOS4, SICRAL2, DMUX30GHZ, ARTES51, MTG-KAT). Among his responsibilities are design and development of novel passive RF products and improvement of the design process, elaboration of technical proposals for commercial and R&D projects, and management of collaborations and contracts with universities and research institutes.		
Summary of the activity *(maximum 400 words and 2 pictures)*	The objective of the activity is to design channel filters for compact Ku-band input multiplexers using pre-distortion and lossy circuit techniques, with the objective of 25% reduction in terms of mass and size. Breadboards for the filters have been designed and characterized. In a second step, channel filters (EMs) have been built and tested for a narrow band and a wide band channel filter to evaluate the developed concepts and demonstrate the technology. Finally, limitations in key performance parameters against the mass and size improvement have been analyzed with respect to conventional unpredistorted Ku-Band IMUX channel filters.  		

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