

Title:	"Ka-Band TC ODmux"			
Contract type	ARTES 3.4	Budget (K€)		449 K€
Company (-ies) (including country)	THALES ALENIA SPACE FRANCE			
Team (name of the participant in the project)	Jean Claude Lacombe Herve Dillenbourg Damien Pacaud Franck Bauduin			
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Short Speaker Information (experience and involvement in this project)	Senior RF Engineer in charge of Filters & Multiplexers studies and developments			
Summary of the activity (maximum 400 words)	 Objective of the study : development and qualification of a Ka-Band TC 2 Channels ODMUX. The solution is based on TAS Ku-Band TC OMUX background The main goals are : 237 MHz bandwidth (6 poles) Optimized in mass and footprint (30% savings) for broadband payload. Medium power per channel : 170W (specified) and 250W (design goal) RF performances improvement thanks to a reduced frequency shift over temperature (lower than 1 MHz). Full aluminum design except for channel compensation system. Non compensated aluminum manifold with stacked output Low Pass Filter. The channel filter compensation is tuneable during equipment mounting phase. 			