

Training Opportunity for Portuguese Trainees

Reference	Title	Duty Station
PT-2017-TIA-APC	Impact assessment modeling for applications projects	ECSAT (UK)
<p><u>Overview of the unit's mission:</u></p> <p>TIA-APC is running a number of ARTES¹ applications projects (https://artes-apps.esa.int/) within the Telecommunications related and Integrated Applications Department. Since 2013 TIA-APC is carrying-out a systematic impact assessment analysis to correlate Key Performance Indicators (KPIs) measured during different stages of application projects' lifecycle and the ability to reach the recovering of the internal investment borne by the Industrial Consortium (i.e. to reach the breakeven point).</p> <p>Examples of KPIs are:</p> <ul style="list-style-type: none"> - "Technical Utilization" KPI: if the product/service worked as expected during the pilot demonstration activities with the end users - "Selling before end of pilot stage" KPI: if the project generated revenues before the end of the pilot demonstration activities <p>The analysis has been complemented by a statistical modeling to find the expected probability of commercial success given a specific combination of KPIs.</p>		
<p><u>Overview of the field of activity proposed:</u></p> <p>The analysis conducted so far has revealed interesting results, which have however to be re-assessed taking into account also the possible occurrence of special (rare) combination of KPIs and the way to treat them in the statistical model. Furthermore, the analysis has to be enhanced in order to take into account the time elapsed between the breakeven point is reached and the project conclusion.</p> <p>The activity will be dedicated to critically review the whole methodology used since 2013, and work out a more stable and comprehensive methodology for the assessment in combination with a probabilistic predictive model (Bayesian model or alternative to be identified and validated).</p> <p>The work will be complemented with the definition of a methodology to improve the reliability and automatize to the possible extent the data acquisition necessary for the impact assessment.</p>		
<p><u>Required education:</u></p> <p>Engineering Degree in Space or Telecommunications, with knowledge of fundamentals of economics.</p>		

¹ Advanced Research in Telecommunications Systems