

Training Opportunity for Luxembourgish Trainees

Reference	Title	Duty Station
LU-2019-TEC-EDD(2)	Assessment of Time Service Network (TSN) technology for space application	TEC-EDD
<p><u>Overview of the unit's mission:</u></p> <p>The Section's domain of responsibility covers control and data handling computers, low-level software, data transfer interfaces, command & control protocols and buses, OBC solid state mass memories, authentication/encryption modules, and general underlying microelectronics devices such as microcontrollers and interface components.</p>		
<p><u>Overview of the field of activity proposed:</u></p> <p>Recently Ethernet has become one of the potential candidates for command and control bus in certain space applications (i.e. launchers). One of the Ethernet types being used is Time Triggered Ethernet (for Ariane 6). Other type of deterministic Ethernet currently being looked at is Time-Sensitive Networking (TSN) – IEEE standard for automotive and industry market. Proposed activity will contribute (including significant hands-on part) to the assessment of the TSN technology for space applications.</p> <p>In particular, the scope of the proposed activity is:</p> <ul style="list-style-type: none"> - Getting familiar with IEEE TSN Standards and hardware platforms used to implement TSN. - Characterise the TSN technology with respect to space applications (i.e. timing, determinism, jitter, fault tolerance etc.). For this part, full TSN testbed is available. - Distribute obtained knowledge in form of clear reports and presentation to other members of the section. 		
<p><u>Required education:</u></p> <p>Applicants should have just completed, or be in their final year of a University course at Masters Level (or equivalent) in a technical or scientific discipline with specialisation on Electronics and with background on Software domain.</p>		