

Alstom sign MOU to advance transportation cybersecurity

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Alstom and the Rochester Institute of Technology's (RIT) ESL Global Cybersecurity Institute (GCI) have signed a three-year Memorandum of Understanding (MOU) outlining their collaboration to advance transportation cybersecurity, specifically in the areas of education, development, and research.

Alstom and RIT's ESL GCI have established five pillars of collaboration, which include Alstom 'as a teacher' and student projects, student/talent recruitment activities, corporate training and education, and sponsored research. In addition, Alstom is the theme sponsor of the 2023 Collegiate Penetration Testing Competition (CPTC), a global offense-based collegiate computing security event. This sponsorship will introduce, for the very first time, a cybersecurity rail transportation theme to the global competition that involves over 100 schools across the globe.

"Alstom's innovative mobility solutions are helping to revolutionise railways and railway communications by boosting intelligence and functionality in rail assets. In a world driven by digital, having assurance that data and connected systems are protected is a basic requirement to ensure continuous operations. For this reason, Alstom has placed cybersecurity at the heart of its culture of excellence and safety," said Eddy Thésée, Alstom's Vice-President of Cybersecurity Products and Solutions, who was on-hand for the official

sponsorship announcement for the 2023 Collegiate Penetration Testing Competition and a judge in this year's competition.

"However, adding more connectivity and intelligence to operations is increasing the exposure of railway systems to external threats. These threats are fast changing, and we must continuously adjust our technologies and defence strategies. Partnering with institutions such as RIT's ESL Global Cybersecurity Institute creates value for the entire rail sector and cybersecurity industry."

Scarcity of cybersecurity professionals is a challenge across all major industries. This is the first North American partnership for Alstom, and will enable it to enhance its workforce with well-trained cybersecurity engineers to help its customers, particularly with regards to implementing security protection at the local, state and government level. RIT students will have premiere access to Alstom cybersecurity engineers and experts via student capstone projects, Alstom-taught signal-security curricula, graduate sponsored research projects, and career opportunities. Through the MOU, Alstom will have access to future talent and the latest knowledge to develop future technologies that will make digital technology smarter and more resilient to cybersecurity threats.

The U.S. Transportation Security Administration's requirements set forth in its recent directive institutionalise and build upon existing, effective industry practices with an increased focus on strengthening and safeguarding America's cybersecurity for critical infrastructure. Alstom plans to demonstrate with CPTC modelling, how it can secure customers' rail networks and prevent associated operational disruptions leveraging industry best practices and standards. Alstom will work with RIT's ESL GCI to model and develop the 2023 collegiate testing competition environment that will focus on railway signalling.

Alstom addresses the entire cybersecurity lifecycle, providing rail asset owners and operators with adequate system protection, whether through cybersecurity enhancement, vulnerability management or consulting. In addition to strategic partnerships such as that with RIT's ESL GCI, Alstom also has strong partnerships with Airbus and Israeli-based Cylus. Leveraging its 70+ years of complex railway expertise addressing more than 150 cybersecurity projects worldwide, Alstom plays a leading role in key standardisations (CENELEC, IEC).

Photo credit: Alstom