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05 May 2023

Innovate Funding competition: UK – Singapore Collaborative R&D Round 2
Project Name: Operational Technology Cybersecurity Toolbox for Rail

Dear Paul,

Thank you for the opportunity to be involved in the Innovate UK and Enterprise Singapore initiative. Northern Trains Ltd. are fully in favour of your application and will be happy to support the consortium in form of information, advice, and feedback from a Train Operating Company (TOC). As the second largest TOC in the UK we operate a fleet of over 360 trains, all of which are now digital assets. During our digital trains roll out we realized that our trains were now vulnerable to a range of cybersecurity threats and have worked hard to ensure that we are safe from those, however the process was, and continues to be, arduous and difficult.

As you know we are currently very active in ensuring that railway critical infrastructure including rolling stock, complies with the NIS directive and feel we can make useful contributions to the success of this project due to the work we have already done in this area making us industry leaders.

We see Operational Technology (OT) cybersecurity as very different from the approach to Information Technology (IT) cybersecurity and having to comply to NIS regs by adopting the IEC62443 suite of standards for OT operation and system renewal is rather daunting for all involved. In this current economic climate, we need to be as cost effective as possible whilst ensuring a safe and secure railway.

The tools that you have described to us that you will be developing as part of this project are necessary as there is no real body of knowledge to help with adoption. Senior managers and engineers will find a novel tool that facilitates the process, something that they would readily adopt and as soon as possible.

Yours sincerely,



Alistair Rutter
Head of Operational Science
Northern Trains Ltd.

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