Vehicle/Vehicle System Interface Committee (V/V SIC) Annual Report for 2019

Message from the Chair, V/V SIC

During 2019, V/V SIC has continued to assist the railway industry in managing all aspects of identified system interfaces within the scope its remit.

As is the case for many industry groups, one of the key challenges faced by V/V SIC comes in ensuring that the output of its work is useful to, and implemented by, the wider industry. In this respect, V/V SIC has been successful, with a number of the key achievements outlined below providing real world support to industry stakeholders.

V/V SIC is looking forward to the year ahead and supporting the industry to deliver and implement solutions to its key issues.

I am pleased to present the end of year report setting out the key achievements of V/V SIC and its subgroups over the last 12 months and its plans for 2020.

Achievements in 2019

In the last 12 months, V/V SIC has completed and implemented the findings from research and studies as follows:

- Completion and Issue of Version 5.1 of the Key Train Requirement (KTR) document, an invaluable point of reference when purchasing or supplying a new train. Work also commenced on Version 6 of the KTR.
- Completion of T1145, Options for Traction Energy Decarbonisation in Rail, research project, which underpinned the Industry’s response to the Rail Minister.
- Significant progress has been made on the on IMP-RCM Project, building on the previous T1010, Remote Condition Monitoring, research project.
- Research Project T1137, Electrical and Data Control Compatibility Between Trains, delivered an evaluation of standardising the electrical coupling arrangements between trains, whilst the output of T1140, Defining the requirements of a seat comfort selection process, had provided a mechanism for assessing and scoring the comfort of a seat in its proposed environment, helping the industry to select appropriate seats for future new build and refurbishment projects.
• Fire Forum, under the new chairmanship of Nick Swift, has continued its good work in ensuring that the industry remains abreast of the latest standards and good practice in the field of fire prevention. It has also developed a self-assessment tool which can be used for individuals and organisations to check their understanding of applicable standards and recognised good practice, which is now available on RSSB’s website.

• The former ‘Diesel Systems Working Group’ (DSWG) changed its name to the ‘Independent Power Traction Working Group’ (IPTWG), with a corresponding change to its remit and broadening of the expertise within the group’s membership. These changes have been made to ensure that the IPTWG and indeed V/V SIC remains able to fully support the industry’s ambitious decarbonisation plans as alternative sources of independent power reduce our current reliance on diesel engines.

Programme of work for 2020 – 2021

As we move into 2020 and beyond, V/V SIC and its sub-groups will continue to support some of the key issues that the industry is grappling with, including:

Decarbonisation
V/V SIC will support the “DECARB” group of research projects, through the provision of specialist knowledge and acting as the client group where appropriate. In particular, the reconstituted IPTWG will continue to provide guidance on the vehicle-based aspects of lower carbon traction power systems, and we will support the “Decarbonisation” strand of the evolving Rail Technical Strategy, and the wider commitment of the UK government to reduce carbon emissions.

We will support research that will allow benchmarking and targeted reduction of energy consumption, for both traction energy and in the overall lifecycle of a rail vehicle.

Environmental Improvement
V/V SIC will continue to support the “CLEAR” group of research projects, aimed at better understanding and improving rail vehicles’ impact on air quality, both on board trains and around the railway. We will also promote research into ways in which noise can potentially be reduced in the passenger and public environment.

More generally, through the output of IMP-RCM, we will continue to support making better use of data to improve reliability and optimise maintenance, and will seek to promote and embed the use of previous research projects, including the Seat Comfort assessment methodology outlined in T1140.
We will manage the further revision of the Key Train Requirements, which will culminate in the issue of Version 6 of the KTR. Through an industry launch event and through our members’ constituent groups, we will continue to promote the KTR and embed their use in the procurement of new and refurbished trains.

Finally, the Fire Forum will continue to provide expert advice to the industry following its reviews of fire events across the world and changes to applicable standards and legislation.

The activities and areas of research outlined above will form the core of V/V SIC’s work through 2020 and beyond. I very much hope and expect that that V/V SIC and its sub-groups will continue to provide valuable input to the industry over the coming months and years.

Euan Smith
Chair, V/V SIC