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Mr Paul Neville MP
Chair, Standing Committee on Transport and Regional Services
House of Representatives
Parliament House
CANBERRA ACT 2600

Dear Sir,

**INQUIRY INTO THE INTEGRATION OF REGIONAL RAIL AND ROAD FREIGHT TRANSPORT
AND THEIR INTERFACE WITH PORTS**

I note that the terms of reference for your Committee's current inquiry include reviewing the role of regional road and rail networks in the national freight transport task and their connectivity to ports, and measures to assist in achieving greater efficiency in the national transport network with particular reference to the movement of bulk export commodities, the role of regional intermodal freight hubs, and better use of existing infrastructure including possible advantages of intelligent tracking technology. As Director of the Centre for Railway Engineering (CRE) at Central Queensland University (CQU), I felt it important to make your Committee aware of the capabilities of our organisation as an important regionally based resource which has already produced, in collaboration with QR, significant technological gains and environmental benefits for the Central Queensland export coal rail network.

THE CENTRE FOR RAILWAY ENGINEERING

The CRE is a very successful research centre instituted by the Council of CQU Rockhampton campus in 1994 with a view to fulfilling part of the vision statement of CQU on "well focused research, contributing strongly to the sustainable development of the regions and communities in which we operate". The CRE offers applied research, technology transfer, and continuing education opportunities to the wider community within and outside the Central Queensland region.

The CRE was successful in attracting \$570,000 in grants from the Australian Research Council (ARC) to construct a heavy engineering laboratory in Rockhampton specifically designed to support railway engineering research. This facility is unique in Australia, and includes a world-class strong floor and loading frame system, plus matching hydraulics and dynamometer infrastructure; this allows full-scale testing of wagons and locomotives. Any road vehicle and/or intermodal vehicles/ systems could also be tested. We have tested several road base and track systems also to date. We also have a purpose built engineering research building with high quality office accommodation and laboratories for the use of our research staff and postgraduate students.

The CRE was instrumental in establishing the Commonwealth Government funded Rail CRC (Cooperative Research Centre for Railway Engineering and Technologies) in 2001. The CQU Rockhampton is the lead university for the Rail CRC. The CRE and Rail CRC work together in several key projects of national freight transport significance.

The CRE has consistently received external research income of more than \$750,000 per year. It has now diversified its funding sources significantly, with its customer base expanding in recent years from the traditional focus of Queensland into New South Wales, and more recently South Australia. CRE's research expertise now covers the human and environmental aspects in addition to the full range of railway engineering structures. Based on its previous record of success, the CRE has obtained strategic investment funding from CQU to help it move into other transport sectors and engineering disciplines closely aligned with railway engineering to achieve further growth in customer base and income.

Four research themes operate within the CRE. They are

1. Train and Wagon Dynamics
2. Fatigue, Fracture and Stress Analysis
3. Track System Design, Maintenance & Management
4. Instrumentation and Electrical Devices

Each theme has a leader at senior academic level supported by several postdoctoral fellows/ research engineers and postgraduate and honours students as well as technical and programming staff. Currently the research staff and student membership of the CRE is close to 30. I am sure that for a regional university supported research centre, this level of human and physical resources is exceptional.

We are ready to put our staff and resources to any challenging freight transport projects/ research that are of national significance.

CONCLUSION & RECOMMENDATION

Regarding the third dot point of the Terms of Reference of your Committee's inquiry, it is obvious that further research and improved knowledge transfer across specialist technical disciplines will be key measures that will assist in achieving greater efficiency in the operation of the integrated Australian transport network. The CRE welcomes this inquiry and strongly recommends to the Committee that specific consideration be given to policies that would strengthen the level of both government and industry funding/support for innovative research, development and technology transfer programmes aimed at improving the safety and efficiency of heavy freight transport operations and network infrastructure performance. The CRE would be happy to be involved at all levels of the inquiry should there be opportunities provided.

Yours sincerely



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