Robert Freer has recently visited Australia to collect information about the long-term planning of their national infrastructure. The visit was partly supported by the QUEST fund of the Institution of Civil Engineers.

Water is an important commodity in Australia. I arrived in Sydney at the end of a week of steady rainfall and the fact that the reservoirs were then 60% full was a sufficiently important matter for an announcement by the Premier of New South Wales State to allow an easing of restrictions on the watering of gardens. Even Lake Eyre in South Australia had water in it, which does not happen very often.

But for the rest of the world Australia is an important source of minerals, not only gold and silver but also industrial minerals including coal, iron ore, bauxite and uranium. Transporting these minerals to the docks for export to meet world demand requires investment in a modern and robust infrastructure and efficient and well organised shiploading facilities.

The Australian Federal Government has been concerned for some time about the state of the national infrastructure. Its condition has apparently been deteriorating as a consequence of lack of funding and development, creating bottlenecks and backlogs which were thought to be damaging the national economy. Developing the infrastructure of any country requires long-term planning and the Australian Government decided the best way to achieve this was by setting up a panel of experts who are separated from the day to day work of politicians and are able to recommend long term objectives, priorities and funding proposals.

The expert panel is called Infrastructure Australia. It was set up in 2008 and consists of 12 specialists drawn from the public sector and from industry. Their objective is to prepare a long-term plan for the infrastructure which is detached from the electoral cycle so that continuing infrastructure development can go ahead whichever party is in power.

Australia, a country the size of the mainland USA (excluding Alaska), consists of six states (New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania) and two territories (the Northern Territory and the Australian Capital Territory). The infrastructure for the whole country is funded by the Federal Government and the individual states are invited to compete for the money available. Some of the projects, especially port and railway developments where there is a potential future income, may lend themselves to possible joint public-private funding.

Infrastructure Australia set out seven main themes where urgent action was required for future development to boost national productivity, enhance the national quality of life and protect the environment, and in August 2008 they invited applications and proposals from the individual States, and also from the general public.

The seven themes were:

- A national broadband network
- A national energy market
- Competitive international gateways (ports and associated land transport developed together)
- Secure water supplies
- A national rail freight network
- Improving city transport
- Essential infrastructure for the indigenous population

Within these themes the criteria used for selecting suitable projects included value for money, sustainability and practicality of completion.

They received over 1,000 proposals (600 from the public) and by December 2008 had whittled the selection down to 94 projects, for each of which the proposers had provided a minimum level of information to allow an assessment against the selection criteria.

From the 94 shortlisted projects the assessment process identified nine projects for construction, many of them for new highways and road works, which met the defined criteria. These projects fitted one of the seven themes, they were of national significance with the prospect of being successfully implemented and of making a positive contribution to the national policy goals. They also showed benefit-cost ratios significantly above 1:1. A further 28 projects were judged to need more development and analysis and were put in a priority pipeline for further consideration.

The Government’s new Infrastructure Planning Commission has been set up with a generally similar objective to the Australian model. Long-term planning of the infrastructure needs to be separated from short-term political considerations and to be promoted and developed to suit the national needs, but at the same time ensuring that local interests are recognised and considered.

If this approach is successful then the prolonged public enquiries which have in the past bedevilled and delayed projects such as Sizewell B nuclear power station will hopefully not occur again.