NATIONAL INFRASTRUCTURE PLAN – VERSION 2 TRANSPORT CHAPTER

SUBMISSION TO THE MINISTRY OF TRANSPORT

4 MARCH 2011

1. BACKGROUND

The Institution of Professional Engineers New Zealand (IPENZ) is the lead national professional body representing the engineering profession in New Zealand. It has approximately 12,000 Members, including a cross-section from engineering students, to practising engineers and senior Members in positions of responsibility in business. IPENZ is non-aligned and seeks to contribute to the community in matters of national interest, giving a learned view on important issues, independent of any commercial interest.

To assist with the preparation of this submission, IPENZ sought input from members of the Transportation Group and the broader IPENZ Membership. Their comments, as well as those of the Transportation Group, which is an IPENZ technical group, are included in this submission.

2. CONSULTATION

The questions asked of IPENZ were provided to all IPENZ Members via the IPENZ website and responses invited. Transportation Group comments and those of IPENZ Members are included in this submission.

3. SUBMISSION

PRELIMINARY COMMENTS

The initial statement is that "the overall purpose of the National Infrastructure Plan (NIP) is to improve investment certainty for businesses by giving confidence over current and future transport provision". This purpose statement does not align with the vision in the NIP which was released in March 2010[1]. This vision appropriately has a much wider focus than investment certainty.

IPENZ agrees certainty is a very important element of the NIP, but considers its purpose should be to set the strategic direction for infrastructure and provide a framework to support the achievement of the Government's economic, social and environmental objectives.

The implications for the NIP in relation to funding the costs of rebuilding Christchurch needs to be considered. Options for addressing funding may need to include reviewing "sacred cows" such as the provisions of the Land Transport Management Act (Section 9) relating to hypothecation of all fuel excise duty, road user charges and motor vehicle registration fees for land transport expenditure.

[1] March 2010 Vision – "Infrastructure is an enabler of economic growth and social cohesion. The Government's vision is that New Zealand's infrastructure will be of a quality, reliability and resilience sufficient to support our aspiration to become a competitive, high productivity, high wage and sustainable economy with good living standards enjoyed by all".

The Institution's responses to the questions posed by the Ministry of Transport and the NZ Transport Agency for input into the NIP's transport chapter are as follows.

3.1 ARE THERE SOME ASPECTS OF THE VISION[2] THAT DESERVE MORE ATTENTION THAN OTHERS?

It is not clear if this is the Government's overall vision for "transport", or the vision for "transport infrastructure". The Ministry of Transport (MOT) website document refers to "transport vision" and the MOT document with the questions refers to "transport infrastructure vision". The vision itself refers to a "transport system". This is a very important difference: the road safety system, for example, refers to roads, road use, vehicles, and safe speeds; i.e. infrastructure is just one element of an interrelated transport system. It thus seems pointless to have a separate vision for transport infrastructure, as infrastructure is a means to an end.

The vision as outlined in the NIP seems to be new. It is not in legislation, the Government Policy Statement (amended November 2010), on the MOT website, or on the New Zealand Transport Authority (NZTA) website. The Government's vision for transport, as set out in the still current *New Zealand Transport Strategy 2008* is that people and freight in New Zealand have access to an affordable, integrated, safe, responsive and sustainable transport system. The purpose of the Land Transport Management Act 2003 is to contribute to the aim of achieving an affordable, integrated, safe, responsive, and sustainable land transport system.

If there is an intention to develop a vision for transport infrastructure to go into the NIP it is strange to develop this in the absence of a similarly worded vision for transport. This situation has the tail wagging the dog.

What seems to be missing in this vision is the concept of environment. Also IPENZ questions the need for the word "secure" as it seems to be redundant when the concepts of "safe" and "resilient" are already included. Does it refer to a particular aspect relating to security for example airline security? If so, then surely this is covered by the reference to "safe".

3.2 IS TRANSPORT INFRASTRUCTURE A CONSTRAINT FOR YOUR BUSINESS?

For the movement of freight, transport capacity and connectivity limitations are an increasing issue within Auckland and Wellington. Network resilience is a related concern and there is the need to ensure that there is some level of redundancy in the overall transport network. It is also important to recognise that by moving more commuters on the public transport network, there are corresponding benefits for freight.

3.3 WHAT ARE THE TRANSPORT CHALLENGES IN THE NEXT 20 YEARS?

The transport challenges IPENZ has identified for the next 20 years are described below.

3.3.1 Transport pricing

Road pricing is one of the most important tools needed in the next 20 years, to change behaviour, to restructure transport funding arrangements, and to achieve efficient transport outcomes. The whole road network needs to be subjected to an electronic pricing regime. A major challenge is public acceptance. For road network pricing there

[2] The Vision for transport infrastructure in the MOT Questions document is *"An effective, efficient, safe, secure, accessible, and resilient transport system that supports economic growth of our country's economy in order to deliver greater prosperity, security and opportunities for all New Zealanders".*

must be a strong public perception of the need for it; the money raised must be used to improve transport, and there must be alternatives such as public transport

Road pricing has the potential to significantly influence demand patterns and is much more effective than the "soft" travel demand management (TDM) mechanisms.

An approach to transport pricing (including externalities) also needs to be considered for all transport modes (road, rail, and sea), to incentivise the ongoing development of an optimal transport infrastructure configuration. A typical example of the pricing issue is the issuing of "high productivity" permits for trucks that run alongside the rail corridor between Dunsandel (dairy factory) and Timaru (cool stores). The movement of this freight would use a quarter of the fuel if it were moved by rail.

3.3.2 Future fuel costs

Increasing oil prices, the threat of peak oil and the increasing price of emissions all pose considerable challenges to the current transport arrangements, and to society's ongoing demand for independent travel.

3.3.3 Public transport demands

With considerable attention currently being paid to completing the motorway and major routes over the next 10 years, by the 2030's there will be a need to place less emphasis on increasing road capacity and more emphasis on public transport infrastructure networks and services. This will be incentivised by ongoing concerns over vehicle emissions, and increasing costs of fossil fuels.

3.3.4 Funding shortfalls

The current state of the New Zealand economy, declining road user charges from lower levels of economic activity, and declining fuel excise revenues from increasing fuel efficiencies will raise considerable issues for future funding levels and sources.

There may also be a need to consider the balance of funding from national, regional and local sources. Catering for sustainable modes of transport may need to be more regionally funded as opposed to nationally funded, given that these are unlikely to provide many tangible national benefits.

IPENZ believes these issues highlight the need to seriously consider road pricing as discussed above.

3.3.5 Reducing emissions

Greenhouse gas emissions from transport make up approximately 18% of emissions[3] and 89% of this is road transport. It has to be questioned whether the pricing signals of the emissions trading scheme (given transport's price inelasticity of demand), ongoing fleet renewal, and the biofuel sales obligation will be sufficient to reduce demand to assist in meeting New Zealand's international obligations. The Government does not seem to have a strategy to address this issue.

3.3.6 Co-ordinating transport planning

Transport planning is undertaken by central and local government. This poses, and will continue to pose, ongoing challenges to reconcile national and regional transport outcomes, and 10 year project priorities. This will require a much stronger involvement

[3] Sustainable Transport – Discussion Paper – update of the New Zealand Transport Strategy – December 2007

from local authorities and Regional Councils, as collectively these networks act as an integrated whole. It is important to ensure that their priority transport projects form part of the NIP especially given the need for complementarity, resilience and redundancy.

Improved co-ordination of planning is also needed with the private sector for different transport modes – road, rail, sea, ports and airports. This type of inter-agency planning is at its infancy. This also impacts on New Zealand's international transport links – air and sea.

There is also a need to co-ordinate land transport planning – including State Highways and rail, with land use planning and the intention to make our cities more competitive. There will be significant challenges to build and co-ordinate the development of competitive cities, to undertake good urban design, in conjunction with developing efficient transport networks.

3.4 WHAT ARE THE TOP PRIORITIES IN THE NEXT 3–10 YEARS AND THE NEXT 20 YEARS?

3.4.1 Development of a Transport Strategy

A top priority is to develop a transport strategy that aligns with the current Government's aspirations. Regular updating of the *Government Policy Statement on Land Transport Funding 2009/10–2018/19* (the Policy Statement) is not a strategic approach to land transport planning. It is imperative that planning goes well beyond a three year election cycle and in this context a 20 year planning timeframe may be too short.

3.4.2 Separation of outcome decision making from output decision making

The decision to prioritise the seven Roads of National Significance (RONs) is contained in the Policy Statement. The Government should not dictate which projects should be undertaken (the outputs), but rather decide the outcomes they would like to see achieved. The decisions on which roads are required to be upgraded should be made by a separate and independent agency. This is a significant constitutional issue and needs to be resolved.

3.4.3 An assessment system for prioritising new roading investment.

To ensure roading investments support the Government's priority for national economic growth (outcome), a robust assessment system is required. Most of the seven RONs have very low benefit-cost ratios and low wider economic benefits (WEBs). Based on the information available, they will make very modest contributions to the economy and productivity. Unfortunately these projects will dominate roading investment over the next 10 years. The NZTA's current evaluation system (strategic fit, effectiveness, economic efficiency) is therefore inadequate to ensure projects align with the Government's objectives. An obvious example is the 'strategic fit" criteria which gives a high priority to RONS – essentially a circular argument. Therefore a more robust and transparent decision making frame-work needs to be developed for transport investments.

There is no doubt some roading projects would make a much more positive contribution to the Government's objectives in the economic powerhouse of the economy - in the Auckland, Hamilton, and Tauranga triangle. Currently the Waikato expressway is the only major project in this area.

3.4.4 Improving road safety

The *Road Safety to 2010* strategy is a good attempt at tackling New Zealand's poor road safety record by international standards. Unfortunately some of the recommendations

have not been accepted by the Government - in particular it has been decided to not lower the blood alcohol limit. The reasons for this decision were not transparent.

Road safety is a high priority for Government and they need to need ensure that these actions are implemented through the Road Safety Strategy at national, regional, and local levels if we are to really address the issue.

3.4.5 Improved planning and certainty

One of the NIPs purposes is to improve investment certainty for businesses by giving confidence over current and future transport provision. To assist this, the former Government used to prepare 10-year State Highway plans. In addition to providing funding certainty for the construction industry, these plans provide project certainty. These are important for regional planning, land-use plans, infrastructure users and affected communities. They enable regional and district plans to be developed with confidence and enable designations and planning consents to be obtained well in advance of construction timetables.

It is agreed the NIP and the transport chapter should not contain lists of projects.

Therefore IPENZ believes the Government agencies, and in this case the NZTA, should prepare, in the interests of transparency, publicly available 10-year State Highway plans outlining both funding and projects, with three yearly reviews, similar to those required by local authorities. These plans are important to the industries that deliver infrastructure, to other planning agencies, and to affected communities.

3.4.6 Efficient rail system – developing a decision making framework

The Government's commitment to invest $250 million to support *The KiwiRail Turnaround Plan*, and commitment in principle to a total package of $750 million over the next three years, will assist in improving the efficient movement of freight and New Zealand's economic productivity.

However some very difficult decisions remain for KiwiRail and the Government on the future of branch lines that are not economically viable.

A transparent decision-making framework is required to assist with these deliberations. This should take into account environmental externalities, and social benefits, as decisions should not be made on economic viability alone.

3.5 WHAT CAN THE SECTOR YOU REPRESENT DO TO CONTRIBUTE TOWARDS MEETING THE CHALLENGES?

The Institution is able to provide independent and non-aligned comment on transport policy issues. An example of how this works in action can be seen in IPENZ's submission on the first NIP, to which Members made significant contributions. IPENZ was able to co-ordinate detailed and specific comments from Members from across a very wide range of infrastructure sectors.

The IPENZ technical interest groups including the IPENZ Transportation Group (which has over 1,090 members), and the wider IPENZ Membership will continue to contribute to the development of transport policy drawing on their considerable expertise, knowledge and experience. Their input will be provided through submissions on legislation, on discussion documents, and through participation in stakeholder engagements.

3.6 ARE THERE ANY INVESTMENT ACTIVITIES YOU ARE DOING IN THE NEXT 3–10 YEARS THAT WOULD CONTRIBUTE TOWARDS THE TRANSPORT SECTOR?

No comment.

3.7 WHAT ARE YOUR EXPECTATIONS FOR THIS NATIONAL INFRASTRUCTURE PLAN?

Our expectations for the NIP are that it should address the following key issues.

3.7.1 Demand management

In all infrastructure sectors, managing demand is a key element of ensuring capital is optimally applied. Demand can be managed by pricing and non-pricing mechanisms. The *Government Policy Statement on Land Transport Funding 2009/10–2018/19* still contains the odd statement that "the Government considers that moving too quickly on modal shift will have a negative impact on environmental and economic efficiency." (paragraph 35).

There is no evidence to support such a controversial contention. Recognising that changing travel behaviour is a long term game, it is strange to claim that moving too quickly will have detrimental effects – including environmental effects.

Our expectation of the NIP is that it will give serious consideration to demand management in the transport sector, and in the other infrastructure sectors.

3.7.2 Workforce Planning

"Investing in productive infrastructure" along with "education and skills" are two of the Government's six key economic programme drivers. Accordingly the NIP needs to consider how to address the ongoing shortage of engineers in the infrastructure disciplines – highlighted in recent Department of Labour and Ministry of Education reports. By Organisation for Economic Co-operation and Development (OECD) standards, New Zealand under produces engineering, manufacturing, and construction tertiary graduates (5.1 per cent versus 12 per cent, OECD 2006) whereas we produce a relatively higher number of humanities, arts, education, social sciences, business, and law graduates.

Thus there is a market failure. The NIP needs to ensure the infrastructure industry has both the capacity and capability to deliver the Government's infrastructure aspirations.

3.8 DO YOU HAVE ANY DATA THAT WOULD ASSIST MOT IN TRACKING PROGRESS ON TRANSPORT TRENDS?

IPENZ has no comment in relation to this question.

CONCLUSION

IPENZ appreciates the opportunity to make this submission and is able to provide further clarification if required.

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