



ENGINEERS
AUSTRALIA

Draft NSW Freight and Ports Plan

Engineers Australia submission

March 2018



ENGINEERS
AUSTRALIA

Engineers Australia
11 National Circuit, Barton ACT 2600
Tel: 02 6270 6555
Email: publicaffairs@engineersaustralia.org.au
www.engineersaustralia.org.au

Contents

[Introduction4](#)

[Strengthen freight industry and government partnerships4](#)

[Increase access for freight across the road and rail network.....4](#)

[Protect existing freight precincts and ensure future land use.....5](#)

[Facilitate introduction of technologies that reduce freight costs and impacts.....5](#)

[Reduce the regulatory burden on industry.....6](#)

[Ensure safe, efficient and sustainable freight access to places6](#)

[Recommendations6](#)

[Conclusion7](#)

[Contact Details7](#)

Introduction

The Institution of Engineers Australia (Engineers Australia) is the not-for-profit professional association for engineers. Established in 1919, Engineers Australia is constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

Engineers Australia is the trusted voice of the profession. We are the global home for engineering professionals renowned as leaders in shaping a sustainable world.

Engineers Australia welcomes the integrated approach to transport that is articulated in Transport for NSW's current planning processes. The movement of freight is critical to the NSW economy, and engineers have an important role in delivering freight infrastructure and services.

Engineers Australia recognises that the Draft Freight and Ports Plan is at an earlier stage of evolution than other aspects of the NSW Transport Strategy. However, the final Plan should contain a significantly greater level of detail, particularly in response to stakeholder feedback, and key success criteria to enable evaluation of the effectiveness of the Plan.

Strengthen freight industry and government partnerships

Identifying both the barriers and opportunities for collaboration will assist this draft develop into a structured long term infrastructure plan.

Industry, working in collaboration with the state government, will not only help to develop the plan but play the critical role of providing the innovation to keep freight moving.

This will rely on governments providing the infrastructure to help industry develop, not just the hard infrastructure, but the developing soft infrastructure, such as integrated communication systems, data analytics and real time statistics, that underpins moving goods around the state and across the world.

Engineers Australia welcomes the NSW Government's commitment to consulting with freight industry partners to identify the priority projects that will assist in framing the next version of the state infrastructure strategy in 2019.

Increase access for freight across the road and rail network

The draft Plan recognises the need for increased freight access to the road and rail network. This section could be strengthened by explicitly recognising the role of sea and air freight facilities, gateways and corridors in the movement of freight, and particularly for the import and export of commodities.

Increasing the availability of freight distribution throughout NSW will be a constructive first step in increasing export and import delivery. For example, the expansion of container facilities at the Port of Newcastle and Port Kembla would relieve pressure off the Port of Botany. These facilities would complement the Port Botany facility and reduce congestion both at Port Botany and on surrounding Sydney roads. They would also deliver significant savings in rail and road transportation for freight both to and from western NSW.

Expanded rail connections to these two major ports, including upgrade of the south coast and south western Illawarra lines to Port Kembla, and connections between the planned inland rail line from both Port Kembla and the Port of Newcastle would provide better access to export markets. Plans to invest in intermodal terminals, and improve freight transport around Sydney by investment in rail connection to Western Sydney Airport and the outer city orbital, would complete a major shift in thinking in the storing and shipping goods to markets.

However, investment in these projects will require procurement methodologies that will ensure, not only value for money, but long term asset lives.

Knowing what to build, when to build and how much to spend on these engineering intensive projects will require expertise in answering these questions. That would be not simply on a technical level for initial asset delivery, but through practical approaches over the entirety of the network's life cycle.

Engineers Australia would also encourage the NSW Government to prioritise completion of the planned fuel pipeline corridor framework to identify opportunities to increase transportation of liquid fuel by pipeline. This analysis should consider the potential for increased offshore liquid natural gas generation in NSW and increased production of biofuels. It should also consider Australian Government initiatives to improve Australia's energy security.

Protect existing freight precincts and ensure future land use

Ensuring that freight corridors are protected in future land use plans will be a critical component in ensuring the long term success of the draft plan.

NSW and local government land use plans need to clearly identify corridors to be reserved for freight transport so that urban encroachment does not hinder or divert vital supply lines.

Clearer identification of freight corridors should be included in the overall state plan and communicated directly to planning authorities and local governments so that long term development planning can be undertaken.

Facilitate introduction of technologies that reduce freight costs and impacts

New technologies require expertise in engineering to make things happen. Engineering underpins the technologies that will help streamline the delivery of freight through automation, system integration, intelligent transports systems and system analysis.

While work is underway within Transport for NSW on real time data feeds on road transport, more needs to be done to integrate logistics of freight transport.

Driverless road transport systems are already in the later stages of testing in the United States, and some US states have already begun the integration of driverless long haul transport.

Last mile freight movement, as part of the transport plan, will require long term integrated engagement with local governments and communities. This engagement should include educational engagement, informing local government representatives on the use of last mile delivery.

NSW and local governments need to collaborate to identify and develop systems to support the integrated use of last mile delivery. Additionally, governments and agencies need to engage with the local communities early in the planning phase so that the use of this new technology supports the community's needs.

Engineers can assist in developing platforms that can advance these types of technology.

The development of technologies cannot be done in isolation. Instead, it needs an integrated approach, meaning that NSW should continue to promote national standards, which includes support for the development nationally of Mobility as a Service (MaaS) standards.

The transition through new technologies to more modern freight transport will have knock-on effects in employment. Long term planning of the integration of the Plan will also need long term planning on transitioning workforces.

Delivering better educational programs that focus on engineering foundation subjects will need to be a fundamental component in this transition.

With the increasingly technical nature of work, especially with regard to freight and transport services, workers will need access to training to ensure that they develop skills for the future.

Modern ICT can improve the operational and logistical efficiency of freight movements through continuously applying operational lessons in real time. The benefits of such improvements can be substantial and include better short term performance, cost savings and extended asset lives.

Reduce the regulatory burden on industry

A truly national economy is reliant on better regulatory harmonisation between jurisdictions. National standards that can be applied by states assist in a more fluid and effective transport system.

Regulatory barriers need to be identified and dealt with so that the draft Plan can be efficiently delivered. It is also through this process that opportunities will be identified, such as harmonising registration requirements for engineers in NSW.

Engineers are registered in Queensland and a Bill has been introduced to do the same in Victoria. Similar important regulation is expected in the ACT as well. However, NSW has no such requirement.

As well as NSW missing out on the wide range of benefits from regulating engineering services, this creates both a barrier for NSW engineers wishing to provide services across jurisdictions that are part of the transport roll out. As the other east coast governments require engineers to be registered to fulfil major contracts, NSW engineers could be locked out of the process.

The registration of engineers is a significant issue in its own right and Engineers Australia would welcome an opportunity to discuss this important issue with the Government.

Ensure safe, efficient and sustainable freight access to places

Engineers Australia supports the movement and place framework articulated in the NSW Transport Strategy, and the draft Plan. This framework seeks to improve the safety of all transport users by separating incompatible movements such as high volume freight and passenger movements. We particularly support bypasses for key urban areas, such as the Fassifern to Hexham rail freight bypass of Newcastle.

The draft Plan does not address potential risk to the freight network presented by natural disasters, both now or in the future. It would be useful if the draft Plan included a commitment to assess the resilience of the NSW network to extreme climatic events such as flooding, heatwaves and bushfire, and how the network may be adapted to improve its resilience to the increased frequency and intensity of these natural disasters that will result from climate change.

The draft Plan also does not address potential changes to the energy mix used to power freight vehicles, which may include increased electrification, liquid natural gas and biofuels. These fuels may require additional infrastructure, particularly at intermodals.

Recommendations

Engineers Australia recommends that:

1. The final Plan include a significantly higher level of detail about the NSW Government's planning and investment priorities, to provide more certainty to the freight sector.
2. The Plan have an increased focus on connections between transport modes and investment in rail and port infrastructure.
3. The Plan investigate the merits of increased use of pipelines for fuels, including biofuels.

Engineers Australia offers broad support for:

1. The protection of freight corridors which should be identified in state and local land use plans.
2. The movement and place framework.
3. The separation of passenger and freight movement through key bypasses of urban areas.

With regard to engineering skills, Engineers Australia recommends that:

1. The NSW Government implement a co-regulatory scheme for the registration of engineers in NSW.
2. There be further development and support for engineering expertise in automation, system integration, intelligent transport systems.

Conclusion

Engineers Australia continues to welcome the roll out of long term transport plans for NSW.

We also acknowledge and welcome the inclusion in this draft of freight projects identified by Infrastructure Australia in its priority list. The additional work on some ports in NSW is also welcomed.

However, as noted in the introduction and throughout this submission there is a great deal of work that needs to be done on this draft plan before it could be effectively rolled out.

Engineers Australia continues to note that many of the ideas and much of the work being identified by Transport for NSW and the NSW Government in the transport-related plans will rely on a highly capable engineering workforce.

Engineers and engineering services are not limited to the development of civil and structural assets but also include the application of engineering practices/approaches and organisational techniques including project management, procurement and analysis.

For NSW to continue on its trajectory of growth the delivery of goods through an integrated and efficient network must be paramount in the thinking of decision makers. This includes the movement of freight not only through Sydney but in the long term planning of cities outside of Sydney that have been identified as Global Gateways.

Now is the time for governments to commence working together to preserve corridors, develop precincts and invest in technologies that will ensure that freight is not held up going to or coming from ports, factories, farms and warehouses.

Developing faster and more reliable transport routes that connect these cities will help to coordinate both the import and export of freight, increase productivity and provide better economic and lifestyle outcomes for the people of NSW.

Contact Details

To discuss this submission further please contact Collin Jennings, Policy Advisor for Engineers Australia.



ENGINEERS
AUSTRALIA