



DISCUSSION PAPER

A NATIONAL RAIL GOVERNANCE STRUCTURE

A proposed governance structure to facilitate the introduction of high speed rail into a national rail network

Fastrack Australia argues that high speed rail will be instrumental in improving the lives of Australians. It will enable greater regional population settlement, provide better connectivity for regional centres, take pressure off our capital cities, improve economic efficiency and reduce carbon emissions. We agree with Infrastructure Minister Catherine King when she said:

"It is essential the HSRA takes the time now to establish a robust foundation on which to build".

Fastrack believes that a clear vision for the ultimate network and a sound process for implementing it are fundamental to deliver the network and achieve its broader policy objectives. Our view is that the ultimate vision should be to implement a national rail network that connects all regional cities with passenger and freight services using both high-speed and conventional rail lines. Our rationale for this has been published in "Implementation Plan for High-Speed Rail" and "Freight and High Speed Rail".

This paper addresses the governance structure to deliver both the national rail network and its associated policy objectives. Our proposed governance structure is based on the current Interstate Rail Network as a base, modified using proven approaches primarily from the UK and China governance models as references. Fastrack also proposes a phased approach to transition from the current arrangements as sections of high speed rail are implemented and new passenger services are introduced.

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1 A FEDERATED MODEL OF GOVERNANCE

Previous high speed rail studies in Australia envisaged a separated network between either Sydney and Melbourne or between Brisbane, Sydney and Melbourne. Its purpose was to carry passengers only, primarily between capital cities, with only high speed long-distance passenger services running on it. It was also considered that the line could be built and operated as a mega-project by a federal government authority, independent of the current state-based rail authorities.

Fastrack considers this approach is not suitable to meet Australia’s needs and conditions. Foremost is the explicit policy objective of introducing faster rail connections to encourage greater growth and development in regional areas. This means the rollout of high speed rail must be tightly coordinated with development to achieve the policy objective of ‘shrinking the distance’ to regional cities.

Achieving this objective requires a national rail network that ultimately connects all regional cities in the southeast of Australia. High speed rail should form a central backbone for the network, and be connected with the existing rail network to create an integrated national rail system.

However, a major challenge for high speed rail in Australia is the long distances between highly urbanised cities, with a sparse settlement pattern between them. This means the high speed line should be able to carry a range of regional commuter and long-distance passenger services, plus some freight services (especially at night), in order to maximise its utilisation and the value it delivers for the investment in it.

Finally, Australia’s federal system of government means that both levels of government have a role in the planning, funding, implementation and operation of rail lines. In particular, it is essential that the respective roles of the federal and state governments be clearly established to ensure the steady implementation of rail infrastructure is unruffled by a changing political landscape.

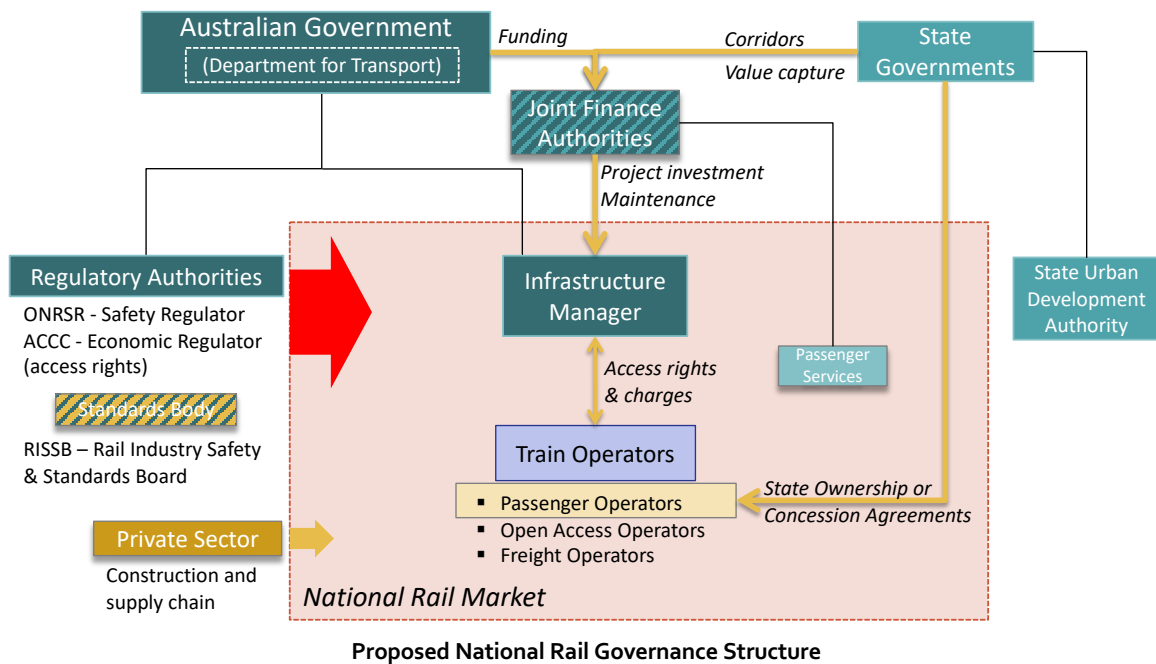
The additional complexity to successfully implement high speed rail in Australia places greater importance on getting the governance structure right. Fastrack therefore proposes a governance structure that builds on the current arrangements for the Interstate Rail Network, spans both state and federal governments, delivers a national rail system with high speed and conventional lines, and opens the rail market for both passenger and freight services. A further objective is to establish clear interfaces with other jurisdictions to allow passenger and freight services run on state- or privately-owned networks as needed.

| Role | Own land & infrastructure | Design & Build the network | Maintain and Operate the network | Operate train services | Manage the rail market |
|-------------------------|---|--|----------------------------------|--|------------------------|
| Proposed | Joint Finance Authorities (1 per state) | National Rail Authority (High speed and conventional rail lines) | | Passenger and Freight Operators (Public & Private) | ACCC ONRSR RISSB |
| Interstate Rail Network | State Rail Authorities / ARTC | Australian Rail Track Corporation (ARTC) | | Private Freight and State -owned Passenger Operators | ACCC ONRSR RISSB |

ACCC: Australian Competition and Consumer Commission; ONRSR: Office of the National Rail Safety Regulator; RISSB: Rail Industry Safety and Standards Board.

Allocation of Responsibilities

The proposed governance structure is shown in the following diagram.



Key elements of the proposed structure are:

ADAPTED FROM THE CURRENT INTERSTATE RAIL NETWORK

The proposed governance structure builds on the current governance structure for the national Interstate Rail Network. It retains the overall accountability with the Australian Government and the oversight of the rail market by its current regulatory authorities.

STATE AND FEDERAL FUNDING

New joint finance authorities are proposed to own and fund the rail infrastructure in each state. Each authority would be jointly owned by the federal and relevant state government, with the holding based on the relative contribution made by each government. These authorities will provide the funds to implement new lines and upgrades to existing ones.

NEW SKILLS AND EXPERTISE

A new rail infrastructure manager with the skills and expertise to manage the delivery and operation of high-speed rail is proposed. Initially this will be a standalone authority, but its role should be gradually expanded to include sections of the existing conventional network as they are integrated into a national rail network.

MARKET FOR PASSENGER SERVICES

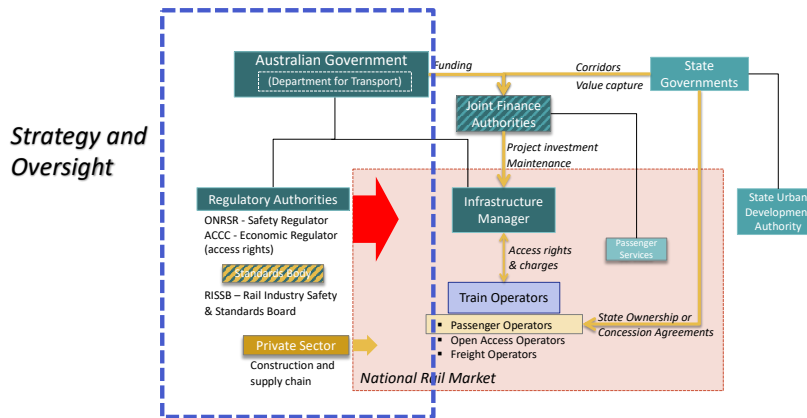
The national rail market should be opened to include passenger in addition to freight services. This will be phased to initially allow the current state-owned authorities access high speed lines, and then allow the market to open up for new operators and new services.

LINKED WITH URBAN DEVELOPMENT

The structure also includes the state urban development authorities, which have an essential role in managing the growth and development of regional cities. This will ensure the implementation of the national rail network is tightly coordinated with regional development policies.

2 STRATEGY AND OVERSIGHT

Fastrack proposes that the new governance arrangements build on the existing governance arrangements for the national market for freight services. Under the current freight model, the Australian Government is responsible for the strategy and planning of the network, and for the establishment of regulatory authorities to manage the operation of a market for rail services.



2.1 ACHIEVING NATIONAL POLICY OBJECTIVES

Fastrack considers there are two national policy objectives for implementing high speed rail in Australia. The scope of these policy objectives means a national approach must be taken to the planning, funding, implementation and operation of the rail system and associated regional development, led by the Australian Government supported by the relevant state government in each state.

PROMOTING REGIONAL SETTLEMENT

The first policy objective is to promote regional growth and development to more evenly distribute Australia's population across the south east of Australia.

The rationale for implementing high speed rail is to provide faster connectivity to encourage the population and economic growth of regional areas outside the major capital cities. The intention is to balance growth geographically across Australia (where practical), rather than continue to grow our major capitals into mega-cities on a global scale.

The objective is to encourage growth and development in all regional cities in the south east of Australia. This implies that ultimately all regional cities should be connected within 2 hours by a high-speed line to either Sydney, Melbourne or Brisbane. This will take many decades to rollout a national network of high speed and conventional rail.

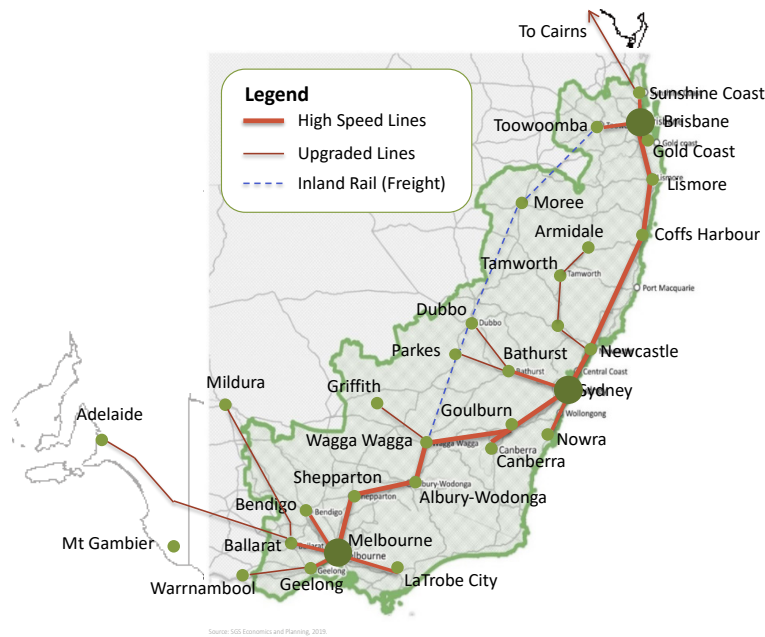
It will also require Australian Government leadership and funding. Redirecting growth into regional areas cannot be constrained by state borders that are artificial lines on a map. It will also require ongoing commitment and investment that only the Australian Government can provide. This means the planning of the national rail network must be led by the Australian Government, assisted by state and local governments within their jurisdiction.

A specific challenge is the need to protect corridors for future rail corridors, particularly high speed lines which have less flexibility for changes in alignment. The rapid expansion of urban areas on NSW (such as near Wilton and Picton) and Brisbane will significantly drive up land acquisition cost in the short term. Coupled with the

expansion of national parks to protect wildlife (especially Koalas), route options are rapidly diminishing through key areas south of Sydney, on the NSW coast and in south east Queensland. It is believed the HSRA should be tasked to ensure key corridors are adequately protected as soon as possible.

DELIVERING AN INTEGRATED NATIONAL RAIL NETWORK

The second policy objective is to establish a national rail network delivering the level of rail services needed to support an advanced economy in the 21st century.



An Integrated National Network

Fastrack believes high speed rail in Australia will only be viable if it is integrated with the existing rail network, if it is adequately utilised, and if it is built in stages over many decades.

Only a few countries have built high speed lines completely separated from their existing rail networks. Japan is the prime example, because its existing railways were narrow gauge, slow and had limited spare capacity. A stand-alone system made sense in this situation. But most countries adopt an integrated approach to utilise existing rail networks that already serve major cities. Typically these networks carry both passenger and freight traffic, such as in France, Germany, Italy and Spain. This approach is highlighted in the UK, where high speed services were initially carried on its existing rail network until a new high speed line was built to European rail standards, but integrated with the existing network in Kent.

Integration of high speed rail with the existing network allows the benefits of faster connections to be realised earlier, reducing the economic risk of major project implementation. Integration is particularly important in the early stages while a high speed rail network is being built. It allows the travel and economic benefits to be realised as each stage is completed, especially over the next few decades that it could take to connect Brisbane-Sydney-Melbourne.

However, unlike most other countries with high speed rail, Australia's major cities are separated by long distances with sparse population settlement between them. Utilisation of high speed rail lines must be maximised to justify investment in infrastructure and rolling stock. This means that Australia's high speed rail lines must accommodate regional commuter in addition to fast long-distance passenger services. Through an integrated network approach, the high speed and conventional lines can deliver a productive rail freight sector which keeps freight moving rather than have rolling stock sitting idle while waiting for access outside

commuter periods. In addition, high speed passenger trains should be able to operate at lower speed on existing infrastructure to provide services to additional cities and towns off the main high speed backbone.

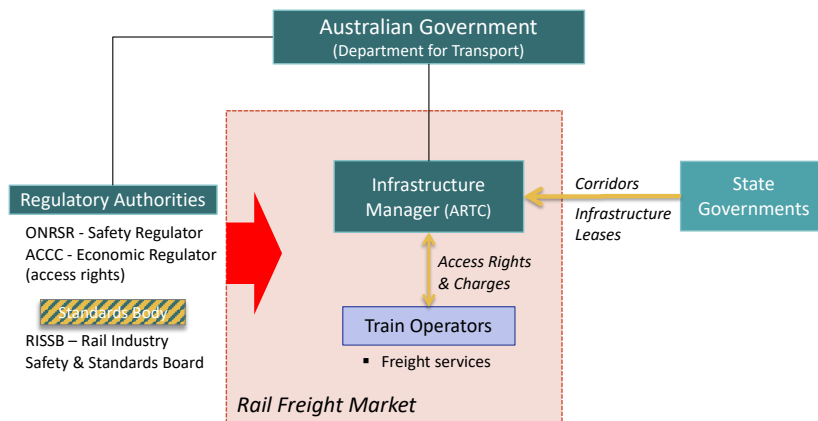
One of the greatest benefits of integrating freight services into a faster national network is to support the development of regional manufacturing industries. An example of this historically was the Albury-Wodonga and the Bathurst-Orange Development Corporations which built rail sidings to service industrial areas, resulting in Electrolux, Uncle Bens, APPM (Albury) establishing manufacturing plants in regional areas. NSW has followed a similar model more recently with the developments at Parkes and Bomen (Wagga Wagga), but neither of these initiatives have been able to deliver the benefits associated with improving travel time to markets.

Integrating the network is also pragmatic in Sydney, Melbourne and Brisbane to postpone the higher expense of a new line in urban areas (especially where tunnelling is required). In fact, integration is almost essential in Sydney to allow interstate high speed trains to proceed into Central Station pending the construction of a tunnel connecting the north and south of Sydney via a high-speed station at Olympic Park.

2.2 OPENING THE RAIL MARKET FOR PASSENGER SERVICES

Fastrack proposes the roles of the existing regulatory authorities should be expanded to oversee the national rail network (with its high speed rail infrastructure) and the opening of the rail market for passenger services.

Currently Australia has a national standard gauge interstate track across Australia (Interstate Rail Network) that operates under the governance of the Australian Government, with long-term lease agreements with state governments. It is used by container freight services (such as manufactured goods), bulk freight services (such as mining and agriculture products), and by regional and interstate passenger services.



Current National Rail Freight Industry Structure

The Interstate Rail Network is managed by the Australian Rail Track Corporation (ARTC), an Australian Government owned statutory corporation. ARTC implements, maintains and controls tracks in all mainland states, which it either owns or leases from state governments. There are two national and a number of smaller regional freight operators providing freight services on the national network.

The Australian Government provides the strategic direction and oversight to the build a national railway network. While state governments need to be involved, it is ultimately the Australian Government’s responsibility to provide the strategic direction and oversight over how the future integrated national rail network should be rolled out and operated.

It is therefore proposed the Australian Government continues to provide the strategic direction in terms of specifying services to be delivered; balancing investment across projects and the nation; ensuring transport is safe, secure and sustainable; and promoting a transport system that is efficient and productive.

It is considered that this would remain a role for the Department of Transport within the Australian Government. Some aspects of this role could be devolved to an independent agency in a similar way to ORR in the UK which provides the funds for the Infrastructure Manager and oversees its operation.

It is proposed the current regulatory authorities for freight services using conventional rail infrastructure be retained and their powers expanded to cover high speed rail infrastructure and passenger services.

ACCESS

The Australian Competition and Consumer Commission (ACCC) is the national body with responsibility for access to the Interstate Rail Network nationally and the Hunter Valley Network in NSW. The ACCC regulates access to rail infrastructure under the Competition and Consumer Act 2010. This act establishes an open access regime for essential facilities, which includes railway infrastructure.

SAFETY

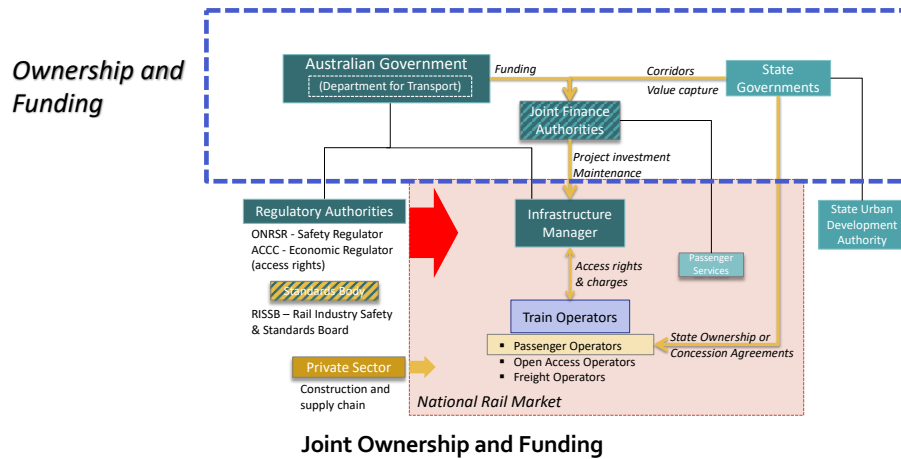
The Office of the National Rail Safety Regulator (ONRSR) is the current body that has responsibility for regulatory oversight of rail safety in every Australian state and territory. Its objectives are to encourage and enforce safe railway operations and promote and improve national rail safety. The new network would also come under the responsibility of this body.

STANDARDS

The Rail Industry Safety and Standards Board (RISSB) is the accredited Standards development organisation for the rail industry in Australia. RISSB is owned by the rail industry. It acts as a partner in co-regulation of the rail industry with the Australian Government. It works with the rail industry to provide Standards, Codes of Practice, Guidelines and Rules, as well as training programs. While RISSB standards are not compulsory, the National Rail Action Plan is looking to lock in a number of mandatory standards which will be imposed on the industry, with a view to driving inter-operability and streamlining rolling stock approval processes.

3 OWNERSHIP AND FUNDING

Fastrack proposes that new shared ownership and funding arrangements be established for the rail infrastructure in each state, while state governments should retain their role in subsidising rail travel in their state. This approach is recommended to ensure each level of government retains its accountability under Australia’s federal system of government.



3.1 NEW JOINT FINANCE AUTHORITIES

Under Australia’s federal system of government, most revenue is raised by the federal government, but the state governments retain ownership of public land and have some revenue raising capabilities. Therefore, there will need to be a joint ownership structure for high speed rail assets. At a minimum, state governments would need to acquire land for the rail corridors and station precincts. It is also expected that state governments will want a say in the rollout of rail infrastructure within their state. They also have the ability to develop stations as regional transport and retail hubs, and could contribute to the investment in rail infrastructure through land value capture.

Fastrack proposes that new Joint Finance Authorities should be established to own and fund the rail infrastructure in each state. This approach is similar to the financing arrangements used in China (See appendix for an overview). Each authority would be jointly owned by the federal and relevant state government, with the holding based on the relative contribution made by each government. These authorities will provide the funds to implement new lines and upgrades to existing ones.

Establishing different finance authorities (one for each state and territory) allows the state government needs and priorities to be addressed independently in each state. This means that different funding arrangements can be adopted, different priorities set for the delivery of each new section of rail infrastructure, and different charging regimes used in each state. It also means that the governance of the national rail network is more immune to changes in the state and federal governments that will occur an extended period of time.

PROVIDING A CONTINUOUS STREAM OF FUNDING

The implementation of a national rail network should proceed as a continuous stream of development to efficiently rollout a national network that promotes growth in regional cities. It will lead to the more rapid connection of regional cities to the network. This will open each city for growth and development, which is essential to provide better housing options for Australia’s expected population growth over the next 50 years.

A continuous stream of investment will also enable greater efficiency and productivity in the construction of the network. Under a staged implementation approach, each section of high speed rail lines is major project in their own right. Staging the rollout reduces risks and delivers regional benefits early. But the stages need to be sequenced to complete the full line between capital cities as economically as possible. In particular, a stop-start process that incurs extra costs must be avoided.

Establishing a continuous and steady pipeline of projects will allow the construction industry to spread its capital investment in equipment and facilities over a longer time. It will also lead to innovation, which was a major factor in minimising the implementation costs of high speed rail in China. Most importantly, implementation of high speed rail should not be delivered as individual investment projects that lack continuity and dramatically increase costs associated with each project.

Fastrack proposes this should be achieved by the Australian Government raising long-term bonds that provide a continuous stream of funding for the major infrastructure elements.

SETTING ACCESS CHARGES

There is increasing recognition that rail networks are an essential service in a modern economy and therefore have to be funded as a public service by government. In fact, most rail lines around the world do not make money. In Britain, government funding made up nearly a third of the rail industry's income in 2019/20, before the Covid pandemic¹. Similarly, most high speed lines in China do not make a profit, with only a few lines with the highest demand lines cover its costs. And the suburban rail networks in Sydney, Melbourne and Brisbane which are heavily subsidised by government.

This will be even more critical for high speed rail in Australia, which will be implemented to promote growth in regional areas.

Access charges are a contentious issue, even in Europe with much higher population densities and greater history of using rail, especially for passenger services. The EU has taken the view that governments have a major role in developing a balance between road and rail modes. This has been critical for economic development of Europe, and will be in Australia.

Therefore a realistic approach to access charges will be needed in Australia. It is not expected that train operators will be able to generate sufficient profits to pay for the expensive below rail infrastructure (there are relatively few rail lines in the world where this occurs). The same is true for highways, where road users receive the benefits of enormous government investment in what is considered national infrastructure.

Fastrack proposes that open-access agreements should be used for all train services using the national network (see section 5.1), which would be collected by the Infrastructure Manager. However, it is also proposed that the Joint Finance Authorities should set track access charges within each state. This will provide state governments with an element of control over pricing of the rail network within their state.

Rail access charges need to be realistic or they will quickly make any rail services uneconomic, and hence nullify the whole objective of the investment. Access charges should be designed to recover some part of the investment in rail infrastructure, but generally be low enough to encourage train operating companies to establish services. In the early years the revenue stream from track access charges will be relatively low, and setting access charges too high will simply discourage rail services from developing.

¹ Source: Great British Railways: The Williams-Shapps Plan for Rail, May 2021

3.2 CONCESSION AGREEMENTS

Fastrack proposes that the market for rail passenger services should adopt concession arrangements similar to the UK model (See appendix for an overview). The purpose of concession agreements is to deliver reliable, timetabled public transport services. The UK Government is introducing a concession model where it will competitively procure train operators to provide passenger services for a fee. Fare revenue will go to the infrastructure manager. Operators will deliver services to the specification and manage their costs to provide profitable services.

Train operators would probably not own the rolling stock under a concession model. So separate arrangements would have to be made to own and lease rolling stock to the concession operators. Private ownership of the rolling stock could also be considered, but may need safeguards if concessions are ~~not~~ **not** renewed.

Fastrack proposes that concession agreements should be awarded by state governments. This is a variation from the UK model reflecting the federal system of government in Australia. Currently regional passenger services are subsidised by state governments who offer them through state-owned rail authorities. Making concession arrangements the responsibility for state governments means those governments can continue to offer and subsidise their current regional passenger services, with the option of transitioning to concession agreements in the future.

As the national network grows, interstate passenger services will become an increasing component of the services using the network. Therefore future concession agreements may be awarded by joint state governments or potentially the Australian Government.

3.3 COORDINATED WITH URBAN DEVELOPMENT

The rationale for introducing high speed rail is to promote regional growth. Opening high speed rail lines acts as a catalyst for population and economic growth in regional cities. That is why governments introducing new high speed rail lines also initiate projects to activate urban and economic development in regional cities.

Most cities develop the station as a central, modern multi-function hub, and initiate development in the precinct around the station to stimulate economic activity. Other projects are also typically undertaken to activate key economic sectors within the city, usually related to an advanced tertiary economic activity such as trade fair and conference activities, research and development facilities, specialist education, various commercial sectors, tourism and leisure, and logistics hubs.

Fastrack propose that state governments should fund the development of regional stations. These should become a focal point for the city as a transport hub and retail centre. These centres should then be able to offer value capture mechanisms station (similar to international airports) to recover the cost (or part thereof) for the development and operation of the station.

Fastrack also recommend that state governments should buy land around proposed stations where possible, and undertake joint development with the private sector. This will provide the state government with a revenue source from land value uplift to fund its contribution to rail infrastructure plus local infrastructure for the city community.

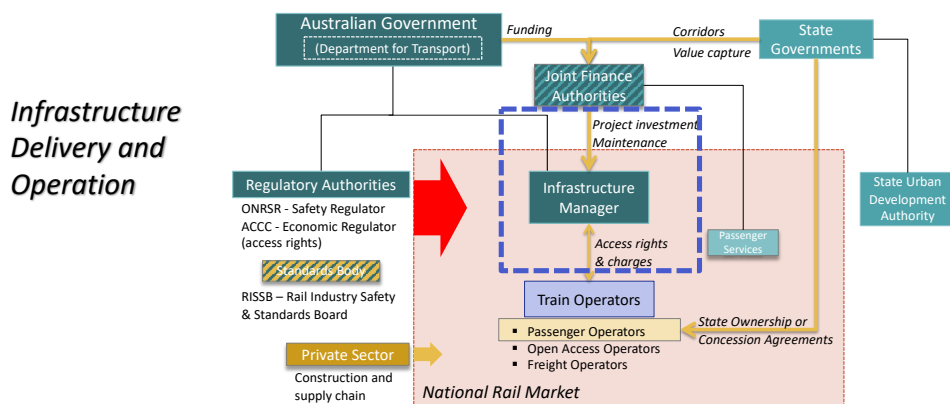
State governments should also consider buying larger tracts of land for the development of new urban centres which will be served by the national network.

Fastrack recommend that the purchase and development of this land be undertaken by the relevant urban development authority in each state. These authorities would be responsible for developing a masterplan for each precinct or area, and to then for working with the private sector to have the land developed.

The proposed model recognises that the rollout of high speed rail connections will be a catalyst for regional growth. It is proposed that each state should actively encourage growth in regional cities by developing the station and the precinct around it. Our recommendation is that states should acquire land around stations so that they can directly capture land value uplift to fund investment in the rail infrastructure as well as local infrastructure for the precinct and the broader city communities.

4 INFRASTRUCTURE DELIVERY AND OPERATION

It is proposed that a single national authority should manage the delivery, maintenance and operation of an integrated national rail network.



UNDER A NEW AUTHORITY

For these reasons, Fastrack believe that a single national authority should manage the delivery, maintenance and operation of an integrated national rail network. This implies that either the role of the current infrastructure manager (ARTC) should be extended, or that a new authority should be created which would assume ownership and control over existing freight lines as they are integrated into a national network.

It is proposed that a new body should be created to fulfil this role. Many consider that having a government-owned company formed under the Corporations Act is a broken model for the delivery of government objectives (especially broader objectives such as promoting regional growth). In particular, its inflexibility to fund infrastructure delivery beyond its access fees revenue raising capabilities is seen to be a critical flaw.

The establishment of a new authority will allow it to focus on the policy objectives of the Australian Government, particularly in ensuring the benefits of the network are realised. This is different from the current Interstate Rail Network where the ARTC's role is to manage the network simply as an asset. Instead, the future national rail network has to be implemented and managed to promote regional growth. This means the new infrastructure manager has to build the network to optimise connectivity to regional areas, and offer it as a government service for the benefit of all Australians.

Clearly the new authority should be responsible for the delivery and operation of the new high speed lines from the outset. Fastrack recommends that the high speed line should be implemented in stages that connect regional cities to the capital cities, with crossovers to the existing conventional line at appropriate locations. Therefore, Fastrack recommends that the authority should take over responsibility for the conventional line parallel to each stage. This will give it responsibility for managing the scheduling, timetabling, pathing and control of trains using the corridor, regardless of which track is used.

Ultimately this will lead to a single infrastructure manager to schedule and control all traffic on the national rail network (although the network could be sub-divided into regional administrations using the same systems to ensure safe operations).

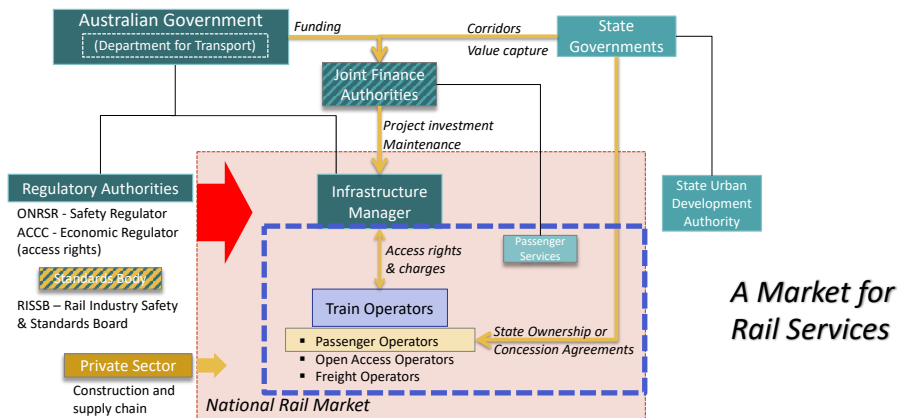
WITH NEW SKILLS AND CAPABILITIES

The capabilities required to deliver and operate high speed rail infrastructure will require skills and experience that can only be acquired outside Australia. An option may be to establish a concession agreement with an

infrastructure manager already delivering high speed rail services overseas, such as in Japan or Europe. This may also be an option to fast track the establishment of Australian rail standards based on existing standards from another country.

5 A NATIONAL MARKET FOR RAIL SERVICES

Fastrack proposes that the market for rail services be opened to include passenger in addition to freight services. Currently regional passenger services are provided by state government authorities, predominantly within their home state, whereas the national rail market is for freight operators only. The proposed structure will allow the state authorities to offer their current or new services using the high speed line on the national network, while allowing new entrants to offer passenger services in the future.



5.1 RETAIN A MARKET-BASED APPROACH FOR RAIL SERVICES

Given the high capital cost of rail infrastructure, it is generally agreed that the “below rail” fixed infrastructure should be in public hands, and that the rolling stock and operations should be in private hands or some form of Public Private Partnership.

AECOM² adopted this principle in its recommendations for the governance of a future HSR system in its 2013 study:

As the rail network would be predominantly publicly funded, the Australian and relevant state governments would be the owners of the system. They would assume the key role in the specification and procurement of network infrastructure, the allocation of its capacity for transport services and the specification of minimum service requirements.

Control of the movement of trains and maintenance of infrastructure would also be the role of the private sector, under competitively tendered concession arrangements.

It is proposed that this principle should be adopted for all services using a national rail network with trains operating on either the new high speed lines or existing conventional lines, or both. This is the approach adopted by the UK Government in setting up a competitive rail market for train operators in Britain. Many European countries are adopting similar arrangements, allowing new operators to provide competitive services to the incumbent operator on their high speed rail networks.

USE OPEN-ACCESS AGREEMENTS FOR ALL RAIL SERVICES

Fastrack proposes that the infrastructure manager should use open-access agreements for all train services using the national rail network. This will allow the current freight and passenger operators to start using the new high speed lines as they are opened for service by simply paying an access fee and meeting any safety and

² AECOM (2012), High Speed Rail Study Phase 2 Report, 2012

related standards. It will also allow new services to be introduced, and new operators to enter the market, without any change to the governance arrangements.

It is expected that the current state government-owned authorities will continue to offer their existing passenger services as the national network is rolled out, and could even offer new services. It is also expected that the Australian Government will establish a new rail authority to operate high speed commuter and long-distance passenger services when significant sections of Sydney-Canberra line have been implemented. The network could also be opened to private train operators when the major routes support high speed services.

Open-access agreements will initially only be required for freight and regional passenger services. But they should be established in a way that opens opportunities for new types of services (such as interstate passenger services, charter tourist services and overnight sleeper services), as well as new operators to enter the market. The objective should be to allow train operators to work independently of, and even compete with, each other. This approach is being adopted for high speed rail in Europe, where new entrants have introduced alternative services that have increased usage and reduced costs for passengers.

5.2 DELIVER A SINGLE CUSTOMER EXPERIENCE FOR PASSENGERS

Fastrack proposes that a shared service be created to provide common customer service and ticketing for all passenger services across the national network. Given that customer service and ticketing revenues directly relate to the funding by each state, it is suggested this shared service should be jointly owned by the Joint Finance Authorities.

Regional passenger services are currently provided as a multi-modal network in each state. Rail provides a radial backbone of services, connecting to coordinated road coach services to smaller towns, in most cases with integrated fares and ticketing. Customers will want to see this coordination and ticketing continued with the advent of faster regional rail services, along with the ability to browse timetables and plan trips online.

Fastrack therefore proposes that a single national Customer Service operation should be established using National Rail in the UK as a guide³. It is proposed that this service be created as a shared service jointly owned by the Joint Finance Authorities. This will allow input and management by all states and the federal government into the delivery of common services, and enable states to have control over ticket pricing within their state (or nationally for the federal government). It should be noted that pricing should be used to encourage travel patterns that optimise the value of the network, such as off peak regional trips and tourist fares for scheduled time of day travel.

³ National Rail is being integrated as a function into the new Great British Rail organisation under the concession agreement structure

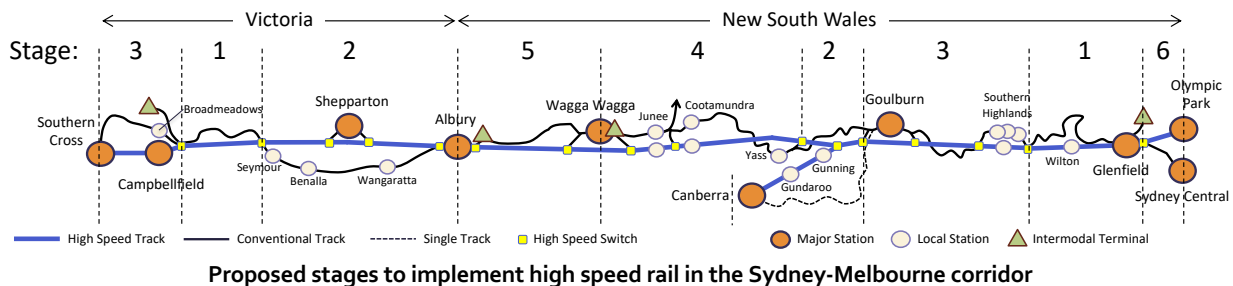
6 TRANSITION AND INTERFACE ARRANGEMENTS

Establishing the right governance structure is arguably the most important step towards the introduction of high speed rail services in Australia. The rollout of high speed infrastructure and services will occur over a long period of time, probably many decades. Therefore a governance structure is needed that enables a transition from the current mix of state and federal authorities into a new set of authorities governing an integrated national rail network. Managing interfaces with other jurisdictions will also be critical for the delivery of end-to-end rail services as the national network is rolled out.

6.1 STAGED NETWORK IMPLEMENTATION

The reality is that high speed rail infrastructure will need to be built in stages, and that services will evolve over time. In most countries, high speed rail has grown in stages from initial segments to much larger networks. For example, Japan's first high speed line was opened in 1964, which expanded into a network with new lines still being added. Similarly, France's first high speed services commenced nearly 40 years ago, and are still being expanded, including new international high speed passenger and overnight sleeper trains.

Our proposed approach to implement high speed rail between Sydney, Canberra and Melbourne adopts multiple stages to complete the line, potentially over several decades⁴. Unlike other countries though, we recommend an approach to upgrade services using the existing line so that the benefits of high speed rail are realised as each stage of the line is completed. We have also adopted a staged approach for the route through Sydney to Newcastle.



The objective is to allow existing services to use sections of high speed track to reduce travel times, thereby increasing the connectivity of regional centres on the route. It means that new services with new, faster rolling stock, can be introduced as more sections are completed. But it won't be until all sections between Sydney and Melbourne are completed and electrified that very fast passenger trains will be able to deliver services at over 250km/h.

We also propose that the high speed line and the conventional line running parallel to it should be treated as an integrated national rail network. This provides the flexibility for scheduling services on either track that is a fundamental objective for a single national rail network. This means the National Rail Infrastructure Manager should plan and build each section of high speed track, and then take over responsibility for operating the high speed and parallel conventional line as an entity⁵.

⁴ An Implementation Plan For High Speed Rail In The Sydney-Melbourne Corridor, 2023

⁵ interim arrangements could be established to operate the first few sections of high speed track, but could not continue after use of the high speed signalling system has commenced.

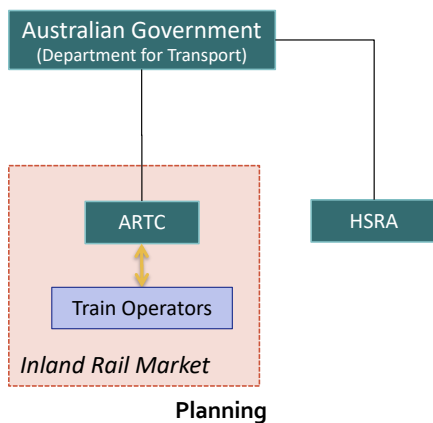
Therefore, the jurisdiction of the national rail governance structure should coincide with the rollout of sections of the high speed line. In other words, the national governance structure should apply to each section of high speed and parallel conventional rail track as each stage of the high speed line is completed.

6.2 PHASED GOVERNANCE ARRANGEMENTS

The full governance structure is not needed until a national market for rail services is established, which may take several decades. Therefore four phases are proposed to establish a governance structure for a national rail network that supports a national market for both passenger and freight services.

PLANNING

The initial phase of the governance has already commenced with the establishment of the High Speed Rail Authority to start the planning for high speed services in Australia.



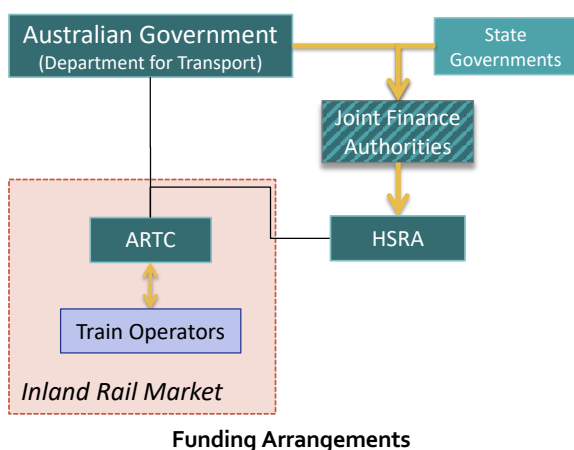
Its role is to advise on, plan, develop and oversee the construction and operation of a national network along Australia's eastern seaboard.

While it is tasked with the planning and corridor works for the Sydney to Newcastle section of high speed rail, it is also responsible to coordinate with state and territory governments, and the rail industry, to establish the bodies and processes needed to manage Australia's long-term investment in rail infrastructure.

It is anticipated this phase should be relatively short until joint funding arrangements can be put in place.

INFRASTRUCTURE DELIVERY

The next phase of governance starts when the funding arrangements have been put in place to start the design and construction of high speed rail infrastructure.



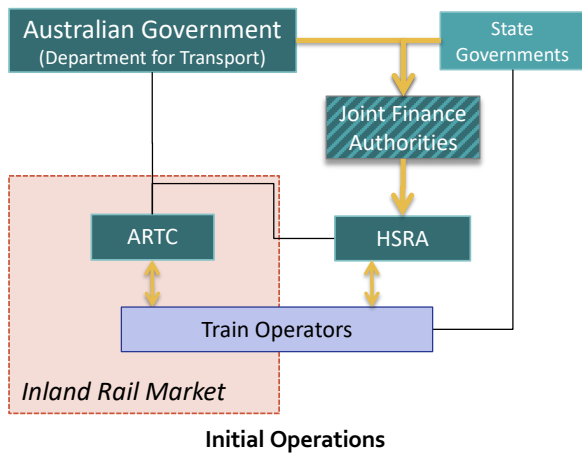
The construction of the high speed line should only commence when joint funding arrangements have been agreed.

During this phase, the HSRA will have responsibility to design and construct the section of high speed line under its current authority under the HSRA Act. Currently the HSRA is tasked to start the implementation of high speed line from Sydney to Newcastle, although Fastrack recommend the section between Campbelltown and Mittagong as a more appropriate option.

This phase could last for a number of years until the first section of high speed line is completed and opened for use.

INTERIM OPERATIONS

The following phase of governance starts when trains start using the first section of high speed rail.



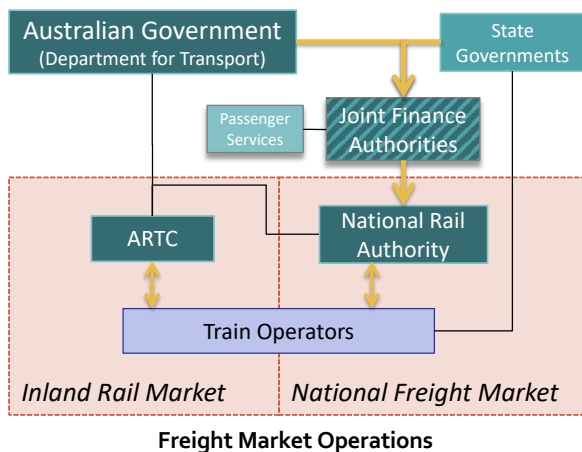
It is expected that most current passenger services and some, but not all, current freight services will swap to the high speed line when it opens, instead of continuing to use the conventional line. The first faster passenger services will begin with the completion of the first high-speed stage, and will be expanded and accelerated with each additional stage.

The HSRA will start levying access charges for use of the high speed line from both passenger and freight operators. State rail authorities will continue to offer passenger services.

It is expected this phase should be for a limited period as the first few sections of high speed rail line are completed.

FREIGHT MARKET OPERATIONS

The next phase of governance starts when the national rail network can be considered as an entity (and not just sections of track).

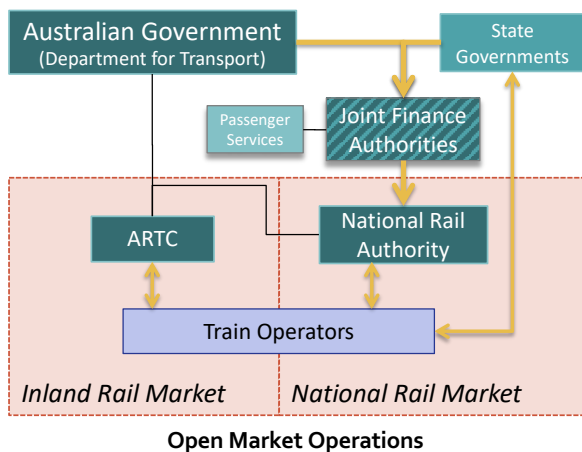


It is expected that new higher speed passenger services will be offered by the existing state operators, and possibly a new federal government operator. In addition, the freight market must be extended to include the national rail network.

It is also expected that new legislation will be required to expand the scope of the High Speed Rail Authority. Therefore it is proposed that a new National Rail Authority should be established incorporating the HSRA as well as additional powers to support an open market for freight and passenger services.

This would complete the implementation of governance arrangements for the national rail network. It would remain in place until private operators enter the market either as concession operators or to offer competitive services.

OPEN MARKET OPERATIONS



The final phase commences when private operators enter the market for passenger services. It does not require any change to the governance arrangements, but signals the commencement of passenger services under open market governance arrangements.

As the rail industry matures, state governments will be able to consider awarding concession agreements to private train operators. In addition, private operators may consider entering the market to offer overnight sleeper or charter tourist services.

The open market for passenger services must be established. Most importantly, the new national customer service function must be established to support the delivery of interstate passenger services, particularly if they are offered by multiple government train operators.

It is expected that it could take a number of decades to reach this level of maturity. But this governance structure will then be able to comfortably manage the growth of the national rail network and the introduction of new services and train operators over the coming decades.

6.3 MANAGING INTERFACE ARRANGEMENTS

The integration of high speed rail with the existing conventional rail network has many advantages. Therefore a new 'national network' is proposed that incorporates the new high speed rail lines with the existing conventional rail lines that run parallel with it. The proposed governance arrangements would then apply to the new national rail network.

However, the rail sector is a lot more complex.

Freight runs on all state-owned networks (Sydney Trains, Country Regional Network, VLine and QR), as well as using the Arc network in WA and the Aurizon network in SA and the NT. Use of these state-owned networks is governed by the state regulatory authorities, including the NSW Independent Pricing and Regulatory Tribunal (IPART), the Queensland Competition Authority (QCA), and the Essential Services Commission of SA (ESCOSA), while Victoria is currently reviewing its regulatory framework. A single regulatory framework will be critical to deliver an optimal model.

In addition, commuter passenger services run on sections of track managed by ARTC, including in the Southern Highlands, the Hunter Valley and the Melbourne-Seymour-Albury corridor. The interconnection of these networks means it is likely that some passenger and freight services will have different drivers which will need to be balanced by the network manager, without eroding the broader industry objectives.

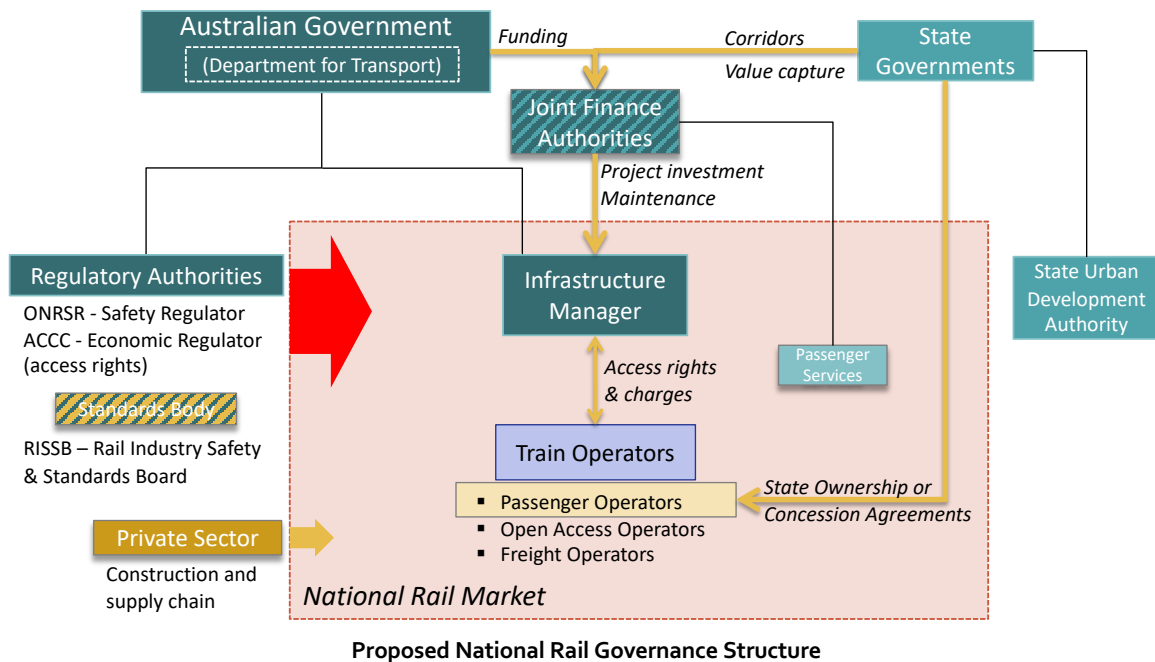
Where possible, this should be minimised by separating the national network (delivering regional and interstate services) from the suburban networks in Sydney, Melbourne and Brisbane. This can probably be achieved through the need for extensive tunnelling to allow the faster regional and interstate services to arrive and depart from central locations. Details of proposed track arrangements to accomplish this are detailed in Fastrack Australia's report on "High Speed Rail through Sydney".

Incorporation of the Interstate Rail Network in NSW, Victoria and southern Queensland should also be considered. This would allow those lines to be upgraded for faster and more frequent passenger services to provide the connectivity to promote growth in regional cities outside the high speed corridor.

7 CONCLUSION

Fastrack has proposed a new governance structure for a national rail network. The structure builds on the current governance structure for the Interstate rail Network which supports the national rail freight market. It also uses aspects of the UK and China governance models to manage the introduction high speed rail and establish a national market for passenger and freight services.

The proposed governance structure allows state and federal governments to fulfil their accountability to plan and fund infrastructure through Joint Finance Authorities. It establishes a single national Infrastructure Manager to plan, implement and operate a national rail network carrying both passengers and freight. And it opens the rail market for both passenger and freight services.



Fastrack believes the proposed governance structure will ensure the successful implementation of high speed rail in Australia places. It provides resilience to changes in state and federal governments that will occur. It directly links the rollout of high speed rail to the national policy objective of increasing growth in regional cities. It ensures that a national rail network integrating high speed and conventional rail can be implemented in a sequence of stages that will occur over many decades. And it establishes a competitive market for the delivery rail services that meet customer needs.

This governance structure need not be created immediately. A transition plan has been developed to phase in the introduction of the relevant authorities and their responsibilities as we progress from the current preparatory planning stage for high speed rail through to full operations of the national network.

APPENDIX: CASE STUDIES

The UK and China governance models provide guidance for managing the introduction of high speed rail into an existing conventional rail network, associated with more intensive urban development to help pay for the rail infrastructure. In addition, China provides a model for joint funding by the national and state (provincial) governments.

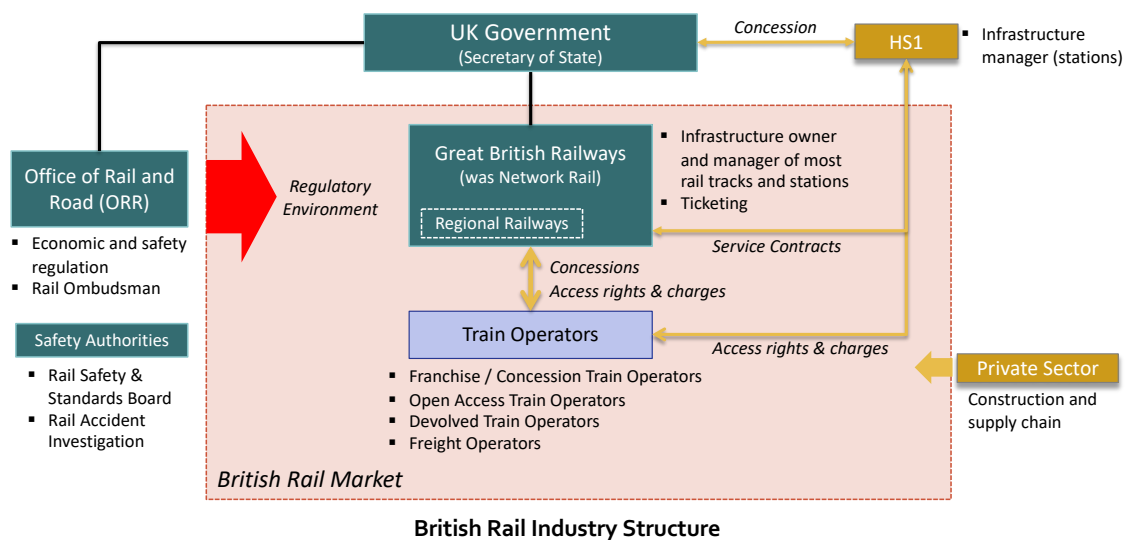
Spain and Italy also provide case studies of the introduction of competition and open access for high-speed services, with three different high-speed rail operators now providing services between Madrid and Barcelona, and two on much of the Italian high-speed rail system. This experience will be most relevant to later stages in the evolution of high-speed rail in Australia, so the focus here is on experience from the UK and China.

The United Kingdom (UK) provides guidance on the management of private participation in public services to optimise the provision of an integrated national railway service, and also for the management of the introduction of high speed services to the national network.

China has overseen the rapid implementation of high speed rail to support the overall economy, and in recent years in particular, the economic growth of inland regional areas. It provides a number of lessons for the arrangements needed to facilitate the introduction of high speed rail in conjunction with a massive expansion of the conventional rail network.

7.1 UNITED KINGDOM⁶

The UK model seeks to create a market for rail services by separating infrastructure from operations, while also accommodating arrangements reflecting legacy arrangements such as devolved operators and international services.



The **Office of Rail and Road (ORR)** is a non-ministerial government department responsible for the economic and safety regulation of Britain's railways. ORR regulates Network Rail by setting its activities and funding requirements for each Control Period (5 years). It ensures train operators have fair access to the railway network, and enforces compliance with its network licence.

⁶ Source: Great British Railways: The Williams-Shapps Plan for Rail, May 2021

Network Rail is the owner and infrastructure manager of most of the railway network in Great Britain. Network Rail owns the infrastructure, but not the passenger or commercial freight rolling stock. It is an arm's length public body of the Department for Transport with no shareholders. It is responsible for upgrading and maintaining the rail infrastructure in Britain.

Network Rail is being replaced by **Great British Railways**. It will own the railways across Great Britain and run them as an integrated system. Great British Railways will draw up timetables and set most fares. It will not operate most trains directly but will contract with private companies to operate them on its behalf under Passenger Service Contracts. Great British Railways will specify service levels and on most of the network will set fares and take the revenue risk.

Train Operating Companies are responsible for passenger transport and freight services using the national rail infrastructure under either a contract or open access agreements. Franchise (or future concession) contracts engage private operators to provide regular timetabled passenger services. Open access agreements allow independent operators to use the network to provide supplementary services on chosen routes for the duration of the licence.

Devolved authorities provide independent services, but will work in partnership with Great British Railways to improve consistency in the passenger experience across the network, maintain common principles and standards, and improve joint working on national issues.

A number of **regulatory authorities** have a role in managing safety and customer service, including the Rail Safety & Standards Board and the Rail Accident Investigation Branch.

ESTABLISHING A MARKET FOR RAIL SERVICES

The UK has gone through a number of iterations of rail governance models in an attempt to increase efficiency and service performance through private sector competition in delivering services. The latest model currently being introduced uses a concession model that recognises that physical connectivity is essential for the social and economic wellbeing of the nation, which means services need to continue even if ridership profitability falls such as during the covid pandemic. This means that service operations cannot be simply managed according to ridership profitability, a risk that could have been passed on to the private sector.

The transition from franchise to concession agreements is of particular relevance to how public and private sector participation should be structured. Franchise Agreements allowed private companies compete for the right to operate services for typically around seven years, and to manage stations. Each private operator designed their own timetable, set many fares and took revenue on their part of the network. Fares were set to a specification set out by the Department for Transport or devolved authorities, to whom they paid a fee or received a subsidy. Most operators bore the financial risks of changes in revenue and operating costs.

However, franchising has proven unable to meet changing demands. It focused operators only on short-term priorities, discouraging them from investing for long-term savings or passenger benefits. It also cemented barriers to more efficient ways of working, particularly in enabling network-wide changes such as modernising fares and ticketing. Misalignment of incentives has prevented train operators and Network Rail from working together. This has resulted in escalating costs, inefficient services and commercially unsustainable franchises that the government has a legal responsibility to keep in operation.

The UK is now introducing a concession model for train operators. It will competitively procure passenger service operators to provide services for a fee. In most contracts, fare revenue will go to Great British Railways, with operators delivering to the specification and managing their costs in doing so. Operators will take cost

risk but will need to balance that with service quality, in order to be efficient while also meeting the needs of passengers.

INTRODUCING HIGH SPEED SERVICES

The United Kingdom also provides an example of how the implementation of high speed rail services could be introduced in Australia. The United Kingdom (UK) has one of the busiest rail networks in the world, with many lines offering services operating at 200 km/h (125 mph). High speed services (able to travel at more than 250 km/h) were introduced when the channel tunnel was created to link the UK with France.

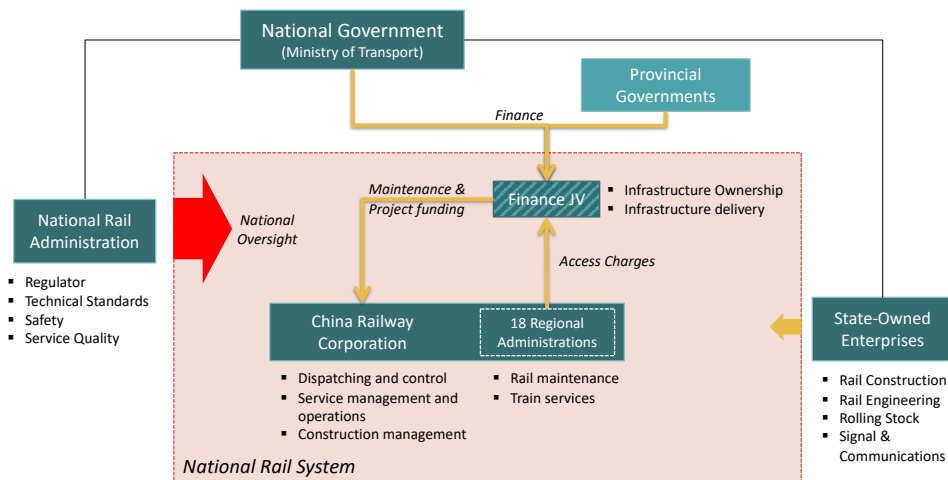
Initially the line between London and the channel was to be a separate entity owned and operated by a private consortium. However, due to financial difficulties, the government had to step in, and although further attempts were made to continue private investment, ultimately the line was fully taken over by the government in 2009. In 2010, a 30-year concession was awarded to a private infrastructure management consortium to operate the line and its stations.

7.2 CHINA⁷

China has a centrally-planned economy where high level objectives are set centrally, a long-term (15 year) program is planned, and projects are delivered in a 5 year cycle. Development of a Long-Term Plan with minimal changes provides a clear and consistent framework that focuses all parties on delivery.

Because of the massive scale of the investment program, China was able to develop an innovative and competitive supply industry for design and construction of high-speed infrastructure, systems, and rolling stock. It has standardised designs for many HSR components. This has contributed to infrastructure construction costs that are about 30% lower than in Europe.

RAIL INDUSTRY STRUCTURE



China Rail Industry Structure

Most of China’s high speed rail operates under an access charge model, which separates ownership and management of rail services. Under the access charge model, a Joint Venture (JV) is established between the national China Railway Corporation (CRC) and the local provincial government. The Finance JV is an asset

⁷ Source: World Bank (2019): China’s High-Speed Rail Development

management company responsible for supervising the construction, use, and maintenance of the asset and for service of the debt.

CRC is a 100% state-owned enterprise responsible for the management and safety of almost all the 127,000km public rail network. CRC includes 18 Regional Administrations (RAs) that maintain the rail network and provide train services.

The JV is essentially an infrastructure financing and contract managing company and does not operate any services. They are analogous to tolled expressway companies. The JV collects access charges for use of lines and stations by train operators, and contracts with the Regional Administration for infrastructure maintenance.

Access charges are set by CRC. JV revenue and expenditure are primarily related to the number of trains operated rather than passenger volume. Any cash shortfall of the infrastructure JV is funded directly by CRC (through assumption of debt) or by its Regional Administration (through reduced payments for maintenance).

The Regional Administration organises train services and retains the passenger ticket revenue, taking revenue risk.

HSR fares were under the guidance of the State Council until 2016, when they were delegated to CRC. Fares were set by speed and class of travel. Second class fares for lower speed services are matched to equivalent bus services, while first class fares for higher speed services are matched to equivalent air services. Fares for conventional rail services are considerably lower. Fares for both high speed rail and air services are gradually being opened up to market competition.

LESSONS FOR AUSTRALIA

The World Bank identified the following lessons for the planning and financial management of the high speed rail network in China:

Long-term Planning. Careful planning, consistently implemented, is required to deliver a large infrastructure program.

Standardisation. Although few countries will be able to match China's scale, they may gather some of the benefits by using standard designs and tapping the competitive supply industry internationally.

Infrastructure partnerships. China has delivered HSR infrastructure through a joint venture structure for implementation of HSR projects that secured regional government support and financing for the projects.

Economic viability. HSR in China is economically viable mainly because users switch from air and car travel. Regional development impacts associated with improved regional connectivity and the rebalancing of growth geographically to reduce income disparity were emerging in 2015, but their full impact will only be seen over a longer time period.