

Railway Projects in Victoria

**Presentation to Railway Technical Society of Australasia –
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Railway Projects

- Basic Railway Project Characteristics.
- Yesterday's framework.
- The current and future framework.
- Projects into the future.

Basic Railway Project Characteristics

- Railway Projects are complex.
- Integrated in all phases with the operational railway.
- Involve disruption to operating business at some time during project cycle.
- Are only complete when trains are operating to the specified performance level.

Basic Railway Project Characteristics

As an example

An extension to a line will involve:

| | |
|-------------------------------|---|
| Government policies | Operator management |
| Land | Unions |
| Services | Rail Safety |
| Local Government | Train Control Consultation |
| Civil | Train Control Training |
| Track | Driver Consultation |
| Signals | Driver Training |
| Electrical | Signalmen Consultation |
| Maintenance – Track and Civil | Signalmen Training |
| Maintenance – Signals | Timetable Development |
| Maintenance – Electrical | Project Finances |
| Environmental – State | Operating Finances |
| Environmental – Federal | Critical Timing – Services Commencement |
| Signal Sighting | Commissioning |

28 Items

Basic Railway Project Characteristics

In Summary

Any railway project of any reasonable size will have an impact across all elements of the railway business.

Yesterday's Framework

- Rail organisations have always undertaken projects.
- Projects have been delivered by in-house and contract resources.

Yesterday's Framework

BUT

- The projects were delivered in a relatively simple legal framework and without the commercial overlay.
- The interfaces between the project manager and the operational railway were tight – one organisation.

Yesterday's Framework – Some Examples

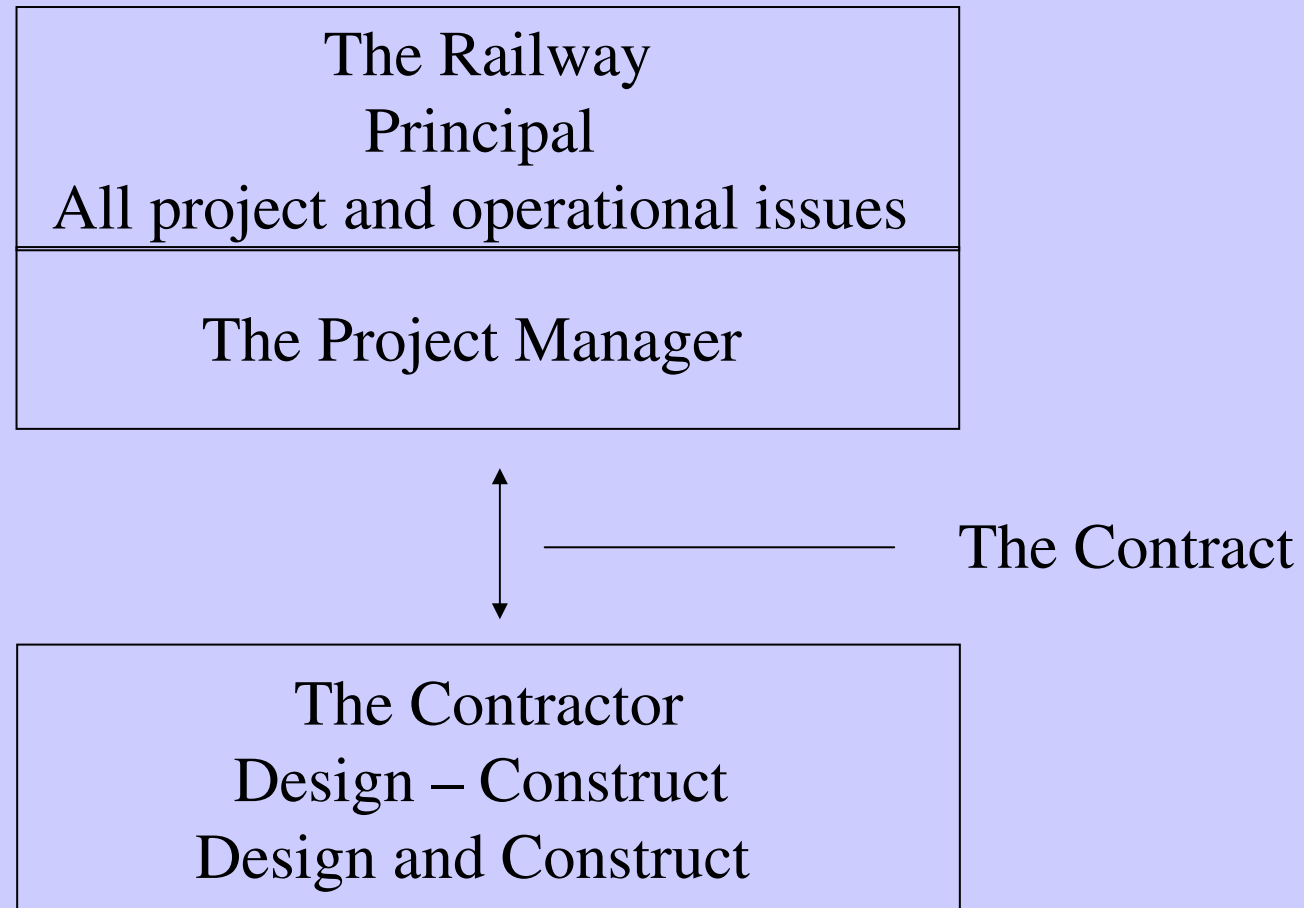
Melbourne Underground Rail Loop

- Principal – MURLA
- All operational interfaces – Victorian Railways
- Construction – non-railway land – MURLA contractors
- Construction – railway land – Victorian Railways

Jolimont Decentralisation Project

- Principal – Metropolitan Transit Authority
- All operational interfaces – MTA
- Construction – Contractors and Direct Labour

Yesterday's Framework – Relationship Map

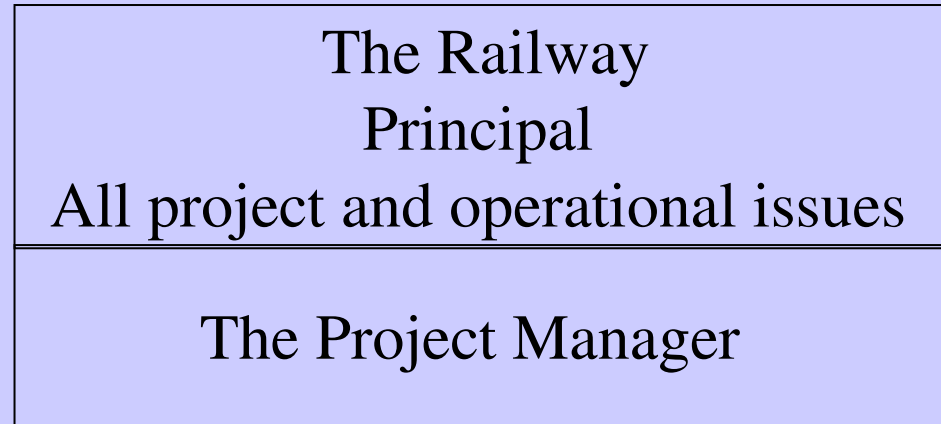


Yesterday's Framework – Relationship Map

Within the one legal entity the project manager has access to all things necessary to deliver the operational project.

The business and Operations management have direct access to the project manager – one management team.

The business comes to a common view as to the disruption to services acceptable during project delivery.



The Contract



Clarity for contractor as given in contract.

Industry standard approach to services works.

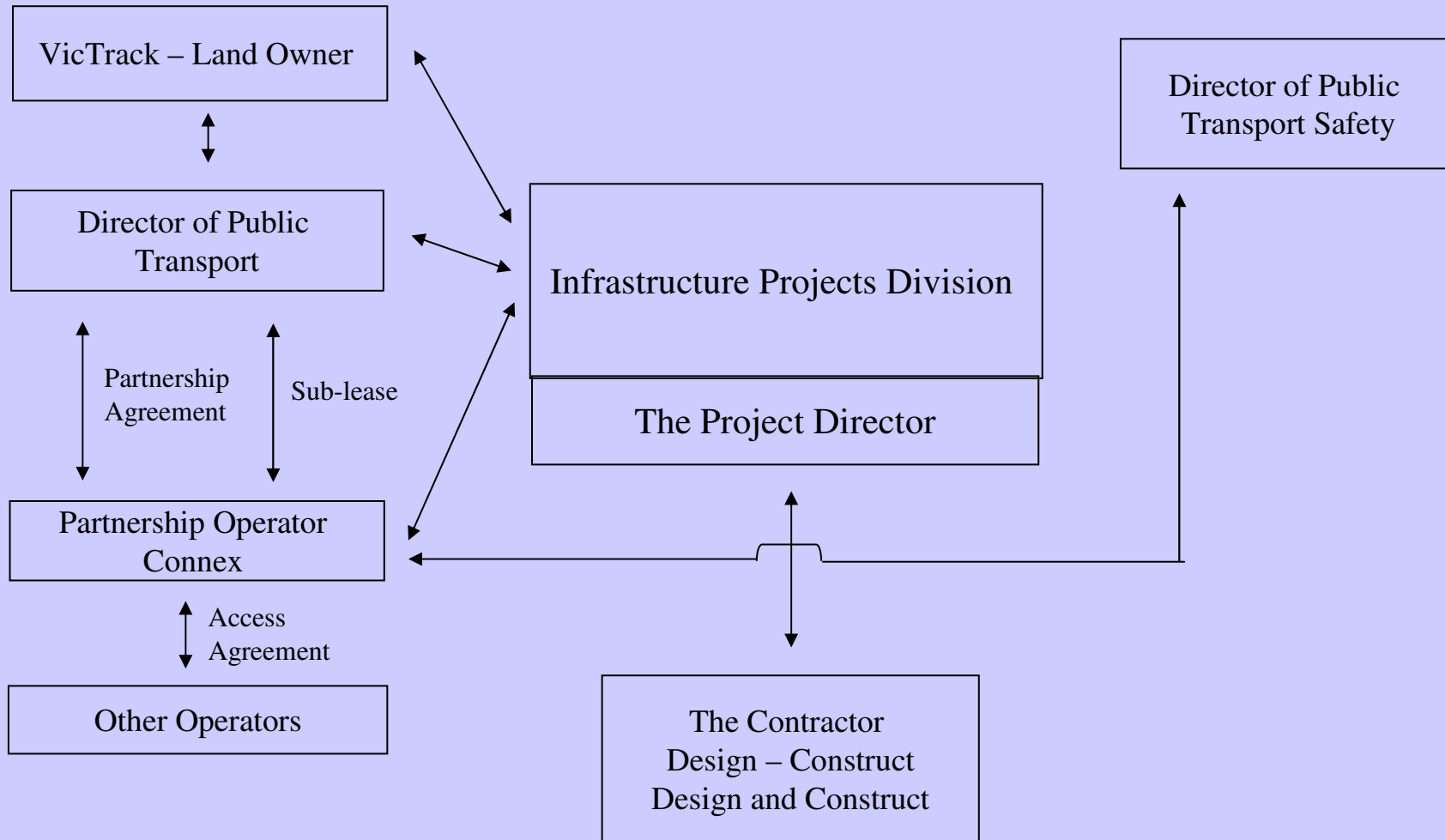
The current and future framework

- Railway projects in themselves are as complex as they always were.
- We now have partnership operators.
- State rail assets are leased – and sub-leased.
- Decisions on project scope/timing/functionality/costs disruption events etc., are spread across a number of organisations with different commercial objectives.

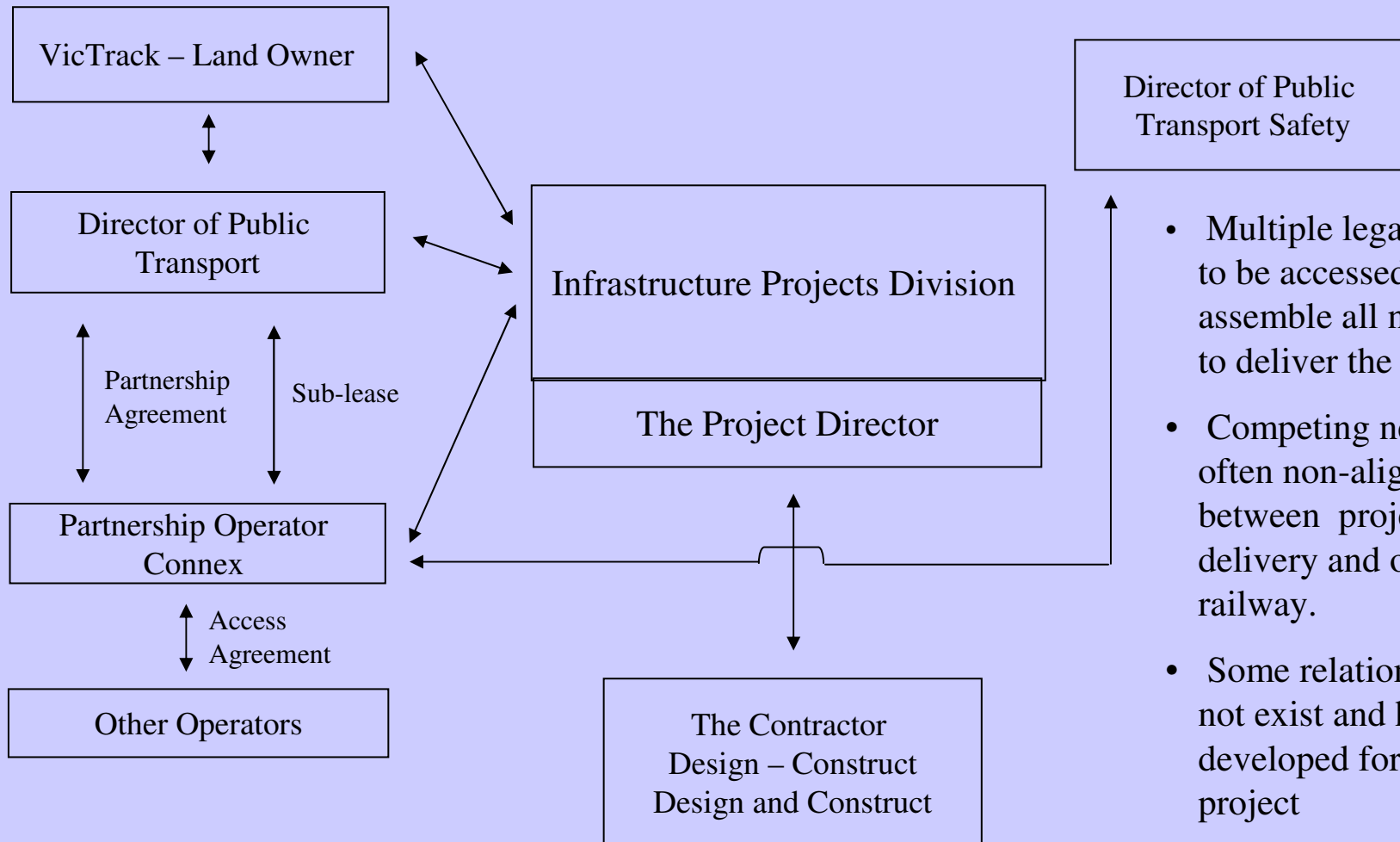
The current and future framework

- Current – this is what we have.
- Future - internationally governments are not taking railways back into the public sector.
 - A small but strong core of international operators.
 - Financial and political benefits for the State through using private operators.
- The model we see today will change, but the overall framework will remain.

Current Framework – Relationship Map – Project “X”

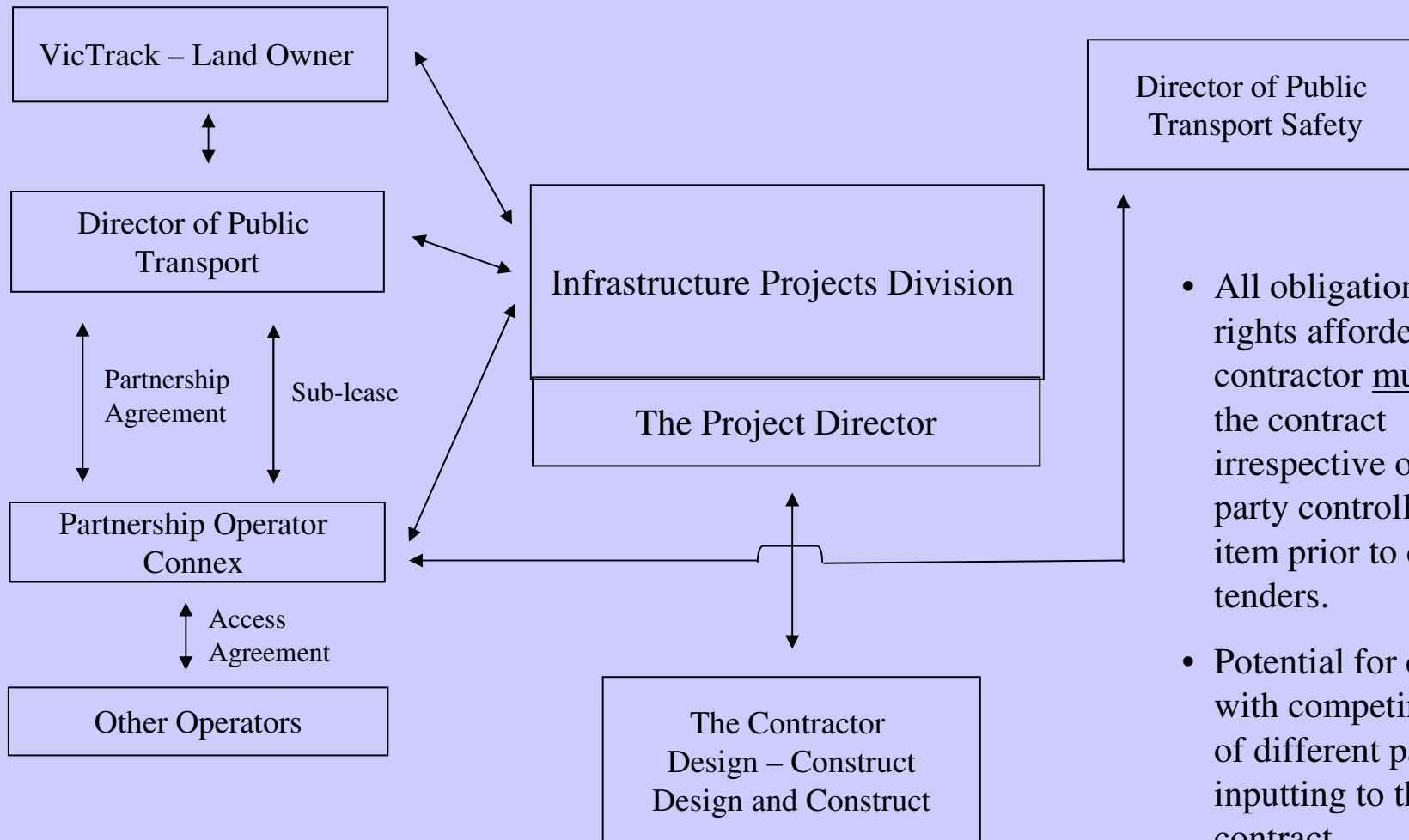


Current Framework – Relationship Map – Project “X”



- Multiple legal entities to be accessed to assemble all necessary to deliver the project
- Competing needs and often non-aligned between project delivery and operating railway.
- Some relationships may not exist and have to be developed for each project

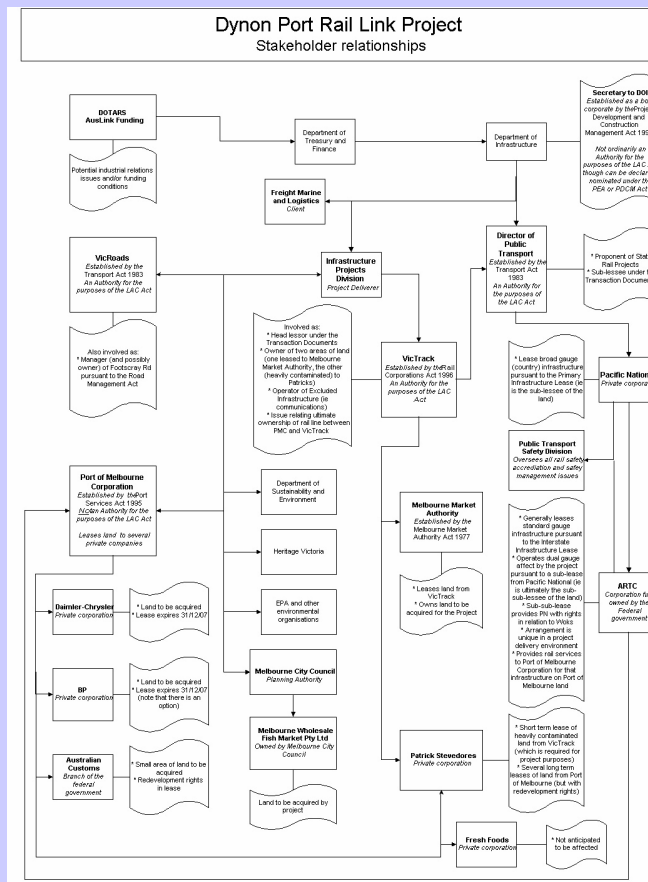
Current Framework – Relationship Map – Project “X”



- All obligations and rights afforded the contractor must be in the contract irrespective of the party controlling the item prior to calling tenders.
- Potential for conflict with competing needs of different parties inputting to the contract.

Sample Relationship Map - Dynon Port Rail Link Project

- Land Only



- Multiple land owners.
- Multiple leases and sub-leases.
- No formal relationships between some parties.
- Different approaches to risk/indemnities/access to land.

But

Project requires access to land from all parties nominated for delivery.

Projects into the future

- How do we manage projects in this environment?
 - Are governments going to be more forgiving when projects are not delivered to budget, schedule and functionality because the working environment has become more complex?

Projects into the future

- Management is the answer.
- Adopt new techniques to
 - understand the project
 - get the relationships right
 - get the contract framework right.
- Use the established techniques
 - scope
 - cost
 - schedule
 - work breakdown structure
 - project management plan.
- Set a plan and manage against it.

Projects into the future

- **Some techniques**
 - Relationship Mapping – draw them out.
 - Relationship Term Sheets
 - What rights/obligations exist before the project commences.
 - What rights/obligations go forward at the completion of the project.
 - Write a Term Sheet for each relationship.

Projects in the future

- **Some Techniques**

- The Project Definition Report
- Expanded Project Management Plan.
- Completed before final approval to proceed with the project.
- Covers the who, what, when, where and how of the project.
- Addresses the operation of first services.
- Becomes the “Book Shelf Reference” for the project.

Projects into the future

Project Definition Report – Project Plan Check List

For Project

| Item | Complete |
|--|----------|
| Project Title | |
| Project Objectives (from Business Case) | |
| Relationship to Government policy (from Business Case) | |
| Project Scope – Stakeholder Functionality | |
| Approval (date agreed) | |
| Land, Planning and Environment Scope* | |
| Work breakdown structure | |

Projects into the future

Project Definition Report – Project Plan Check List (cont'd)

| | |
|--|--|
| Specific project exclusions | |
| Project schedule | |
| Projected service disruptions and service closures to facilitate project delivery – Rail Disruption Regime Approval | |
| Nominated day for practical completion | |
| Project Budget by Work breakdown structure | |
| Contingencies and risk allowances | |

Projects into the future

Project Definition Report – Project Plan Check List (cont'd)

| | |
|---|--|
| Contract framework – relationships with existing contracts/franchise/leases – Stakeholder Relationship Map | |
| EOI/Tender strategy (including tender evaluation procedures) | |
| Contract framework – recommended project delivery strategy – parties/relationships – Contract Relationship Map | |
| DOI client team – designated team leader | |
| Rail safety requirements/Material Changes/necessary approvals | |
| Precedents/direction settings/leadership positions established by the project | |

Projects into the future

Project Definition Report – Project Plan Check List (cont'd)

| | |
|---|--|
| Stakeholder consultation plan | |
| Suggested media events | |
| Recommended Rail Safety audit cycle/events | |

Some Techniques

- Involve the lawyers in the project early
 - Relationships
 - Land
 - Contract and commercial
- Build in checks and balances within the project team.
- Monitor, correct.
- Follow the plan.

But overall

Do not promise a project scope, timing, cost and outcome until you have done your homework.

- Project objectives.
- Scope.
- Schedule.
- Relationship agreements – contracts/letters/restated obligations.
- Risks.
- Form of delivery contracts.

Conclusion

- Railway projects have always been complex.
- The framework in Victoria has added many layers of complexity.
- We will not be relieved of project delivery responsibilities because the environment is different.
- Management adaption to the environment will give successful project delivery.
- Build a skilled and motivated project delivery team.