19 May, 1999

Ms Cassandra Meagher
Productivity Commission
Level 25, Telstra Tower
5 Collins Street

Melbourne VIC 3000

**Re - Rail Reform Inquiry, Melbourne**

Dear Cassandra

Please find enclosed our presentation to the Inquiry. Attendees will be:

- Councillor Peter O'Rorke, Greater City of Ararat - Chairman, South West Municipalities Group Infrastructure Committee.

• Mr. Stewart Walker - Manager Economic Development, City of Geelong.

Thanks for your assistance.

Regards,

Phillip Martin
Director Business Development

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# STANDARDISATION OF VICTORIAN COUNTRY RAIL LINES

A SUBMISSION PREPARED BY
THE MUNICIPALITIES OF SOUTH WEST VICTORIA,
THE CITY OF GEELONG AND
JOHN HOLLAND
CONSTRUCTION & ENGINEERING PTY LTD.

JULY 1998

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# EXECUTIVE SUMMARY

### INTRODUCTION

This report was prepared by the Municipalities of South West Victoria, the City of Geelong and John Holland Construction & Engineering Pty Ltd.

A total of 16 municipalities throughout Victoria and Southern N.S.W. as well as a number of business organisations are seeking the support of the Federal Government to standardise the remaining broad gauge lines in rural Victoria and Southern N.S.W.

A number of recent reports have identified standardisation costs of between $136 - 180 million. Detailed costing by John Holland indicates* a total cost of $87.17 million. This company has had extensive experience in the rail standardisation process, including the conversion of 340 km of track, 86 turnouts and 21 sidings, all within a limited time frame.

### BACKGROUND

The standardisation of the rail line into Portland in South West Victoria in 1995 resulted in the State having a number of lines with incompatible broad & standard gauges. Geelong still does not have standard gauge to the port. The upgrading of the Ararat to Geelong line which is supported by concrete sleepers still has not been completed. Also it only has a 47 kg line compared with a 60 kg line from Ararat to Adelaide.

Since that time a number of strategic rail lines in rural areas have not been standardised.

South Eastern Australia's rural areas are rapidly expanding into value adding and exporting. It is feasible that this region will become the engine room for future growth in the Australian economy.

However if this is to be achieved all areas of business including transportation MUST be internationally competitive.

At present, transhipping of products from different gauges to access the ports of Portland and Geelong adds significantly to the cost of the products on the global markets.

### THE FUTURE

At, present some 7.33 million tonnes of product is shipped by V-Line throughout Victoria. These products are a mix of grains, cement, petroleum, paper products, quarry products and others.

However there are huge opportunities for the development of products especially in agribusiness. The mineral sand deposits in North Western Victoria and South Western N.S.W are a significant opportunity but the key to their development will be access to internationally competitive transport systems.

# THE ISSUES

As the development of transport corridors and the winding down of state "barriers" become an integral part of Australia's thrust to be internationally competitive it is critical that these corridors have uniform rail systems.

Producers and manufacturers must also be internationally competitive if they are to survive in today's global 'market. The Asian crisis has resulted in a number of Asian countries selling competitively priced products in the Australian market, placing intense pressure on domestic producers, Increased transport costs resulting from the dual gauge system are affecting the ability of many producers in South Eastern Australia to compete.

Organisations in this region do not have cost effective access to the cheapest and most efficient Port.

Ports which have a ’captive market" due to the dual gauge system have little reason to be more efficient and to eliminate poor work practices.

Significant amounts of products also end up being shipped by road as a result of high rail costs. This results in a major impact on the road system and the higher costs associated with maintenance and road trauma. It is the responsibility of both local and State Governments to address these road issues.

With exporters being limited to one or two ports there is a risk of product being delayed due to industrial action or maritime accidents,

## BENEFITS

DTA MAUNSELL (January 1998) identified potential cost savings of between $16.9 -26.7 million to both government and private sector organisations.

These reduced transport costs will result in increased international competitiveness of products from South Eastern Australia.

At present, interstate standard gauge lines are limited to one corridor from Melbourne to Sydney and Adelaide with a substandard line between Ararat and Geelong. Consequently the system may be constrained from meeting future capacity demands. Standardisation would give the system increased flexibility during peak loads by enabling trains to be diverted to alternate routes.

Standardisation would give producers and marketers a wider range of options when choosing a port. This would force those ports to examine their work practices as a means of increasing their competitiveness.

With a wider choice of ports, products would not be delayed waiting for ships in an overcrowded port, they could be diverted to a port that had spare capacity.

There would be a reduced risk of products being delayed as a result of maritime accidents or union disputes.

Reduced road trauma and road maintenance costs to local and State Government.

The ability to move and re-deploy locomotives and wagons to areas of greatest need.

## SUPPORTING ORGANISATIONS

Standardisation is a major strategic issue in the economic development of rural South Eastern Australia. Consequently it has received significant support from a number of municipalities including:

Rural City of Ararat
Berrigan Shire
Buloke Shire
Corangamite Shire
Greater City of Geelong
Glenelg Shire
Northern Grampians Shire
Southern Grampians Shire
Hay Shire
Hindmarsh Shire
Horsham Rural City
Jerilderie Shire
Leeton Shire
Mildure Rural City
Moyne Shire
Narrandera Shire
Swan Hill Rural City
Shire of Urana
Warrnambool City
West Wimmera Shire
Yarriambiack Shire

## RECOMMENDED IMPLEMENTATION STRATEGY*

The standardisation of the remaining broad gauge lines in Victoria would be a staged process. The Melbourne to Warrnambool, Melbourne to Gippsland and Melbourne City lines would for a variety of reasons remain broad gauge.

The standardisation process was based on economic benefits, technical and logistical feasibility as well as minimising disruption to rural communities and, businesses.

Staging will be to move progressively on lines from West to East, working North to South on each line as well as the Geelong local lines connecting to their port.

Whilst each section is closed for work, train operations will be transferred to the adjacent parallel line. Given that line closures will be limited to approximately 8 weeks, work must proceed concurrently on 2-3 fronts on the closed line.

The total program will take approximately 12 months assuring only one line is closed at any one time. The assessed cost is $81.17M. There is the possibility that the staged process could be spread over several years if constrained by budgetary factors. Each work face will progress at an average rate of 3 km per day on gauge conversion.

**COSTS**

The following spreadsheet has been developed from several sources in order to establish by line section:

- Track length effected (Km)
- Number of turnouts effected
- Civil works implications
- Signalling modifications

Historical data gathered on similar projects, such as gang production rates for various activities including plant and labour requirements were assessed and updated to 1998 dollar values.

The result is an indicative total cost to gauge convert the particular line section stated. It should be noted that the start/finish point may be included in several line sections but the actual cost of the works will be included in only one location. Therefore care must be taken when quoting specific dollar values for specific line sections, to ensure that all works are captured.

In summary, John Holland have allowed to gauge convert 2319.6 km of track and 830 No. turnouts, and to reinstate 1133 level crossings.

Signalling costs are affected significantly by the scope of work in the Geelong and Melbourne areas.

An allowance of 7.5% has been made for project construct ion management.

Costs are:

| | | | | |
|---|---|---|---|---|
| I . | Gauge conversion | $ | 65.85 M | |
| 2. | Signal alterations | $ | 15.25 M | |
| 3. | Construction management | $ | | 6.08 M |
| | **TOTAL** | $ | 87.17 M | |

BUDGET COST OF GAUGE STANDARDISATION FOR VICTORIA
VICTORIAN COUNTRY EXCEPT GIPPSLAND, WARRNAMBOOL, BALLARAT, ARARAT AND Bendigo LINES

| Line Section | Line Kilometres | | | Points & Crossings | | 8 | Civil Works | | | | Signalling (item) | Total ($a) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std Gauge Conversion (km) | Dual Gauge Conversion (km) | Std Gauge Construction (km) | Std Gauge Conversion (No) | Dual Gauge Conversion (No) | Dual Gauge/ Standard Gauge Contruction (No) | Formation & Drainage (km) | Bridges Tunnels (No) | Level Crossings (No) | Turntables Weighbridges (No) | | |
| Geelong Area: | | | | | | | | | | | | |
| MiMaintenance/Freight Centre | 2 | | | ls | | | | | 10 | | 8.OM | $ 8,395,220.00 |
| Ar Arr/Dep Rds & GEB Grain Loop | 4.5 | | | | | | | | 5 | | | $ 55,620.00 |
| Pi, Pivot Nth Shore | 2 | | | 16 | | | | | 3 | | | $ 419,920,00 |
| C(Corio Quay | 3 | | | 12 | | | | | 5 | | | $ 333,480.00 |
| St Shell Corio Refinery | 3 | | | 15 | | | | | 2 | | | $ 407,580.00 |
| Fy Fyansford Siding | Closed | | - | - | | | | | - | | | $ |
| M Makeup Road | | | 0.5 | 2 | | | 0.5 | | 2 | | | $ 374,400.00 |
| Fy Fyansford Australian Cement | Closed | | | | | | - | | - | | | $ |
| W Waurn Ponds Blue Circle | | 18 | | | | 6 | | | 3 | | | $ 342,480.00 |
| El Elders Wool | Review | | | | | - | | | | | | $ |
| **Sub Sub Total** | | | | | | | | | | | | $ **10,328,700.00** |
| IN Melbourne Area: | | | | | | | | | | | | |
| Melbourne Melbourne Fright Terminal | Nil | | | | | | | | | | 1.5M | a 1,500,000.00 |
| Spencer Spencer St | No change | | | | | | | | | | | $ |
| Dock Dock Sidings/NRC Steel | No change | | | | | | | | | | | $ |
| Newport Newport W/S | Nil | | | | | | | | | | | $ |
| 8 Sunshine G.E.B./Brooklyn | 5 | | | 10 | | | | | 5 | | | $ 308,800.00 |
| Tottenham Tottenham Yard | 22 | | | 96 | | | | | 20 | | | $ 2,618,420.00 |
| Dynon Dynon Loco Maintenance | No change | | | | | | | | | | | $ - |
| A West Footscray-Albion | 6.5 | | | | | 2 | 1 | | 5 | | | $ 770,340.00 |
| Yalta Yalta - Ouyen | 130.8 | | | 47 | | | | | 57 | | | $ 3,592,688.00 |
| Pinnaroo Pinnaroo - Ouyen | 135.1 | | | 32 | | | | | 45 | | | $ 3,103,736.00 |
| Ouyen Nguyen - Dunolly | 284 | | | 82 | | | | | 137 | | | $ 7,494,740.00 |
| Kulwin Kulwin - Krong Vale | 215.1 | | | 67 | | | | | 87 | | | $ 5,557,636.00 |
| Robinvale Robinvale - Krong Vale | 244.1 | | | 63 | | | | | 104 | | | $ 6,060,376.00 |
| K Krong Vale - Inglewood | 32.9 | | | 2 | - | | | | 18 | | | $ 713,444.00 |
| In Inglewood - Dunolly | 40.4 | | 0.5 | 2 | 2 | | 0.5 | | 31 | | | $ 1,386,444.00 |
| D Dunolly - Maryborough | 28.1 | | - | 22 | | | - | | 11 | | | $ 1,048,016.00 |
| P Prangil - Eaglehawk | 233 | | | 59 | | | | | 118 | | | $ 6,044,580.00 |
| M Moulamein - Barnes | 131.9 | | | 23 | | | | | 39 | | | $ 2,756,084.00 |
| 0 Deniliquien - Barnes | 64.8 | | | 13 | | | | | 28 | | | $ 1,522,428.00 |
| Barnes - Echuca | 17.9 | | | 21 | | | - | | 10 | | | $ 902,944.00 |
| Echuca - Nth Bendigo Junction | 79.3 | | 0.5 | 12 | | | 0.5 | | 36 | | 0.5M | $ 2,291,348.00 |
| N Nth Bendigo Junction - Eaglehawk | 6.2 | | - | 4 | | | - | | 11 | | | $ 332,732.00 |
| E Eaglehawk - Inglewood | 42.7 | | 0.5 | 9 | 2 | | 0.5 | | 19 | | | $ 1,396,172.00 -i |

BUDGET COST OF GAUGE STANDARDISATION FOR VICTORIA
VICTORIAN COUNTRY EXCEPT GIPPSLAND, WARRNAMBOOL, BALLARAT, ARARAT AND BENDIGO LINES

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| Line Section | Line Kilometres | | | Points & Crossint | | a | Civil Works | | | | Signalling Item | Total ($M) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sid Gauge Conversion (km) | Dual Gauge Conversion (km) | Std Gauge Construction (km) | Std Gauge Conversion (No) | Dual Gauge Conversion (No) | Dual Gauge/ Standard Gauge Contruction (No) | Formation & Drainage (km) | Bridges Tunnels (No) | Level Crossings (No) | Turntables Weighbridges (No) | | |
| Cobram - Strathmerton | Excluded | | | | | | | | | | | |
| Tocumwal - Strathmerton | 17.6 | | | 4 | | | | | 15 | | | $ 530,836.00 |
| Strathmerton - Shapparton | 57.9 | | | 36 | | | | | 41 | | | $ 2,191,144.00 |
| Dookie - Shepparton | 29.3 | | | 10 | | | | | 12 | | | $ 780,748.00 |
| Echuca - Toolamba | 69.6 | | | 6 | | | | | 46 | | | $ 1,666,256.00 |
| Shepparton - Toolamba | 16.5 | | | 2 | | | | | 14 | | | $ 453,540.00 |
| Toolamba - Mangalore | 59.2 | | | 12 | | - | | | 33 | - | | $ 1,500,012.00 |
| | | | | | | | | | 65 | 1 | | $ 949,500.00 |
| Oaklands - Benalla | 139.7 | | | 54 | | 2 | | | - | 1 | | $ 3,100,492.00 |
| Wahgunyah - Springhurst | Excluded | | | | | | | | | | | |
| Maryborough - Nth Ballarat Junction | 70.1 | | | 7 | - | - | | | 53 | - | 0.75M | $ 2,547,236.00 |
| Nth Ballarat Junction - Gheringhap | 86.5 | 1 | | 52 | 2 | | | | 29 | 1 | | $ 2,830,000.00 |
| Gheringhap, - Nth Geelong | - | 13.4 | - | - | | | | | 10 | - | | $ 308,624.00 |
| Ararat Triangle | | | 0.5 | | | 2 | 0.5 | | 4 | | 0.5m | $ 500,000.00 |
| | | | | | | | | | | | 2.0m | $ 2,000,000.00 |
| Seymour loop | | | 1.5 | | 1 | 2 | 1.5 | | - | | 2.0m | $ 2,000,000.00 |
| Benalla loop | | - | 1.5 | | 1 | 2 | 1.5 | | | | | $ |
| **SUB TOTAL** | $ 28,189,452.00 | 400,464.00 | 625,000.00 | 19,908,200.00 | $ 148,200.00 | $ 200,000.00 | $ 100,000.00 | $ | $ 15,286,700.00 | $ 80,000.00 | $ 15,250,000.00 | $ 81,088,016.00 |
| Construction Management | | | | | | | | | | | | $ 6,081,601.20 |
| TOTAL | | | | | | | | | | | | $ **87,169,617.20** |
| **Total km of track:** | | | .2319.6 | | | | | | | | | |
| **Total no. of Turnouts** | | | | | | 830 | | | | | | |