

Advice for Minister for Transport and Main Roads

Subject: Current Status of Zero Emission Bus pilot program

Document ID: MBN24382

- On 28 May 2021, the Department of Transport and Main Roads (TMR) gave approval, through a variation to the existing service contracts, for Sunbus Sunshine Coast and Marlin Coast Sunbus (being entities of the Kinetic Group) to introduce battery electric buses onto the Sunshine Coast and Cairns bus network.
- Kinetic is in the process of finalising the bus specification with Yutong and intends to place an order for the buses in the week commencing 7 June 2021.
- Subject to the electrical grid upgrade works being completed on time, it is proposed that five buses will operate on selected parts of the Cairns network from December 2021, and five buses will operate on selected parts of the Sunshine Coast network from January 2022.
- TMR is agreeable to piloting Yutong buses on the network as part of its pilot program to evaluate different types of buses. Below sets out the current status of the zero-emission bus pilot program including the different bus manufacturers.

Delivery Partner	Chassis / Body Manufacturer	Implementation Date
Transdev	BYD / Volgren	12 April 2021
Logan Coaches	BYD / Gemilang	12 April 2021
Clarks	BusTech / BusTech	September 2021
Kinetic: Surfside	BYD / BusTech	under negotiation
Kinetic: Sunshine	Yutong / Yutong	January 2022
Kinetic: Marlin Coast	Yutong / Yutong	December 2021
Mackay Transit	Scania / BusTech	August 2021

- TMR is still negotiating with one further delivery partner as part of the 4G SEQ Bus Alternate Bid process. The process is close to being finalised, subject to funding and contract execution.

Minister Comments

Dept to advise on how local manufacturing opportunities will be built into the contract negotiations. Thx.

Noted / Not Noted

Minister's signature.....

Date: 2 July 2021

Action Officer/ Approved by:	Endorsed by GM	Endorsed by DDG	Endorsed by DG
Liz Hussey	Graham Davis	Matt Longland	Neil Scales
Project Manager (Fleet Sustainability)	General Manager, (Passenger Transport Services)	Deputy Director-General, TransLink	Director General
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Date: 2 June 2021	Date: 03 June 2021	Date: Progressed under GM	Date: 07 June 2021

MBN24382

Advice for Minister for Transport and Main Roads

Subject: Current Status of Zero Emission Bus pilot program

Document ID: DLO5393

- MBN24382 was an update from Department of Transport and Main Roads (TMR) on the current status of zero emission buses. In noting MBN24382, you requested TMR to advise how local manufacturing opportunities will be built into contract negotiations.
- TMR has an existing procurement process that provides a greater opportunity for local manufacturers.

Sch.4 Part 4 s.4 delib processes of gov

- Currently in the 4G SEQ bus service contracts, when a bus is due for replacement, it is a requirement for the bus delivery partner to submit three bus quotes for TMR's approval. The quotes are assessed against a number of evaluation criteria, including the location of the chassis and body builder.
- In recent negotiations for zero emission pilot buses, the majority are manufactured in Queensland by BusTech (**Attachment 1**). TMR supported a mix of different bus manufacturers for the pilot program to better inform our evaluation process and provide valuable insight into the roll out of the zero emission strategy.

Sch.4 Part 4 s.4 delib processes of gov

Action Officer/ Approved by:	Endorsed by GM	Endorsed by DDG	Endorsed by DG
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Date: 2 July 2021	Date: 6 July 2021	Date: 7 July 2021	Date: 8 July 2021

[DLO5393]

Attachment 1 – Location of zero emission bus body builders

Delivery Partner	No. of buses	Location		
		Queensland	Australia	Overseas
Transdev	1		1	
Logan Coaches	2			2
Clarks Logan City	10	10		
Kinetic – (Sunbus Sunshine Coast)	5			5
Kinetic – (Sunbus Cairns)	5			5
Mackay Transit	2	2		
Alternate Bid – Kinetic (Gold Coast Surfside Buslines)	10	10		
Alternate Bid – Hornibrook Buslines	16	15		
Total	51	38	1	12
		75%	2%	24%

Minister Comments

Noted / Not Noted

Minister's signature.....

Date/...../.....

Advice for Minister for Transport and Main Roads

Sch.4 Part 4 s.4 / Sch.4 Part 4 s.7(1)(c)

Subject: Meeting with

Document ID: DLO6283

Background

Sch.4 Part 4 s.4 delib processes of gov/ Sch.4 Part 4 s.7(1)(c) Bus/comm affairs

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Response

Sch.4 Part 4 s.4 delib processes of gov/ Sch.4 Part 4 s.7(1)(c) Bus/comm affairs

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Action Officer/ Approved by:	Endorsed by GM	Endorsed by DDG	Endorsed by DG
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Project Manager (Fleet Sustainability)	GM Passenger Transport Services	DDG Translink	Director-General
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Date: 1 September 2022	Date: 5 September 2022	Date: 6 September 2022	Date:

[DLO6283]

Advice for Minister for Transport and Main Roads

Subject: Sch.4 Part 4 s.4 /Sch.4 Part 4 s.7(1)(c) - **Zero Emission Bus Solutions**

Document ID: DLO6613

Sch.4 Part 4 s.4 delib processes of gov/ Sch.4 Part 4 s.7(1)(c) Bus/comm affairs

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- Translink's Zero Emission Bus Program (ZEBP) is working to deliver the Queensland government's commitment that every new Translink funded bus added to the South-East Queensland fleet will be a zero-emission bus from 2025. Regional Queensland will begin its transition between 2025 and 2030.
- The ZEBP is hosting roundtable meetings from 13 to 24 February 2023 to seek industry's views on the challenges and opportunities associated with transitioning Queensland's bus fleet to zero emission vehicles.
- The results of this engagement will inform government's understanding of how to develop a pipeline of manufacturing in Queensland and a preferred commercial model to deliver the 2025 and 2030 commitments.

Sch.4 Part 4 s.4 delib processes of gov/Sch.4 Part 4 s.7(1)(c) Bus/comm affairs

Action Officer/ Approved by:	Endorsed by GM	Endorsed by DDG	Endorsed by DG
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Transition Director (Zero Emission Bus)	A/GM Passenger Transport Services	DDG Translink	Director-General
Tel: 3338 4441	Tel: 3066 7207	Tel: 3338 4158	Tel: 3066 7316
Date: 10 Feb 2023	Date: 10 Feb 2023	Date: 10 Feb 2023	Date:



Released under RTI - DTMR

Advice for the Premier's office

Subject Sch.4 Pt 4 s.4 zero emission bus transition plan

Sch.4 Part 4 s.4 delib processes of gov/Sch.4 Part 4 s.7(1)(c) Bus/comm affairs

Zero Emission Bus Program

- In March 2022 the Queensland Government released *Queensland's Zero Emission Vehicle Strategy 2022-2032* (the strategy). The strategy aims to deliver cleaner, greener transport that will help Queensland meet its goal of reaching net zero emissions by 2050.
- One of the strategy's major commitments is that all new Translink funded buses in South East Queensland (SEQ) will be zero emission from 2025, and in regional Queensland from between 2025 and 2030.
- DTMR's Zero Emission Bus Program (ZEBP) is working to achieve these goals by supporting Queensland's transition to a zero emission bus fleet.

Action Officer/ Approved by:	Endorsed by GM	Endorsed by DDG	Endorsed by DG	Approved by Minister's Office
Matt Anderson	Graham Davis	Sally Stannard	Neil Scales	
Transition Director (ZEB)	General Manager (Passenger Transport Services)	Deputy Director-General (Translink)	Director-General	
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Date: 6/03/23	Date: 6/03/23	Date: 7/02/23	Date:	Date:

- Some of the ZEBP's current key milestones are:
 - Jan to March 2023: industry engagement
 - Q1 to Q2 2023: government decisions and budget allocations expected
 - Q3 2023 to Q1 2024: procurement processes
 - 2024: bus manufacturing and depot construction begin
 - 2025: delivery of zero emission buses.
- The ZEBP industry engagement period consisted of roundtable meetings held from 13 to 24 February 2023, and the invitation of written submissions until 8 March 2023.

Sch.4 Part 4 s.4 delib processes of gov/Sch.4 Part 4 s.7(1)(c) Bus/comm affairs

Released under RTI - DTIR

Sch.4 Part 4 s.4 delib processes of gov/Sch.4 Part 4 s.7(1)(c) Bus/comm affairs

Sch.3(7) Legal Professional Privilege

Released under RTI - DTMR

Advice for Minister for Transport and Main Roads

Subject: Zero Emission Bus Program Industry Engagement Findings

Document ID:	DLO6825
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- In 2022 the Queensland Government released its Zero Emission Vehicle Strategy (the strategy). The ten-year plan aims to bring Queensland into a cleaner, greener transport future by supporting the uptake of zero emission vehicles.
- The strategy includes a commitment that all new urban buses in South East Queensland will be zero emission from 2025. Regional Queensland will begin its transition to a zero emission fleet between 2025 and 2030.
- The Department of Transport and Main Roads is working to deliver these commitments through the Zero Emission Bus Program (ZEBP).
- On 8 March 2023 the ZEBP completed its first period of industry engagement.
- Industry roundtables were held from 13-24 February 2023, and more than 120 people representing 70 organisations attended to share their experience and expertise.
- Over 900 pieces of feedback were collected from the bus operators, bus manufacturers, energy suppliers and more who attended, with 19 written submissions also received by the 8 March deadline.
- Industry engagement participants will be provided with a copy of the attached fact sheet, which details some of the key findings from the industry roundtables (**Attachment 1**).

Approved by:

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Date: 4/4/2023

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Date: XX/05/2023

Zero Emission Bus Program Industry Engagement Findings

April 2023

The Queensland Government's Zero Emission Vehicle Strategy commits that all new urban buses in Southeast Queensland will be zero emission from 2025. Regional Queensland will begin its transition to a zero emission fleet between 2025 and 2030.

The Department of Transport and Main Roads (TMR) will deliver these commitments through the Zero Emission Bus Program (ZEBP). The ZEBP held its first industry engagement period in early 2023, including a series of roundtable meetings attended by over 120 people from 70 organisations.

Attendees were invited to discuss manufacturing, financing and capability development issues. Over 900 pieces of feedback were collected, with key findings presented below.

Industry engagement impact

With over 120 people in attendance across 14 sessions, the breadth of discussion at the industry roundtables was considerable.

The findings presented here are some of the key themes— views repeated across multiple sessions and by multiple attendees.

These findings and the written submissions received have informed the ZEBP's approach to delivering the Zero Emission Vehicle Strategy commitments.



Manufacturing

“We won’t get gold standard local manufacturing straight away. That will come in time.”



Local content needs to be developed and defined with care to help create a sustainable zero emission bus manufacturing industry

- Attendees called for a rigorous definition of local content to provide clarity to manufacturers and enable claims about local content to be assessed.
- Bus and battery asset lifespans need careful review and consideration



The program timeline is seen as overly ambitious and may not support the objective of establishing sustainable local manufacturing

- Attendees were concerned about industry's ability to meet the project timeframe
- Lead times for upgrading grid connections and ordering batteries were particular concerns



Industry needs more information it can rely on to support it through the transition

- A Government commitment to supply levels would provide certainty to the supply chain, supporting investment and industry development

“Manufacturing locally will come at a cost. How far down the supply chain can Queensland made go?”

\$\$ Financing

“Government risk is cheaper and easier to finance but it probably won't be a one size fits all approach.”



Government can provide confidence, but no one model stood out

- No single financial model attracted notable levels of attention or unified sentiment
- Government involvement was seen to support certainty for investors



Smaller operators find it difficult to fund capital requirements within existing contract tenures



No single approach on asset ownership was favoured

- Some attendees expressed strong views on asset ownership, but no clear preference emerged
- Risks associated with depots and batteries were a key concern, particularly to operators

“We need to move battery degradation risk away from operators.”

Capability development



“A career as a diesel mechanic isn’t attractive to young people, but zero emission technology is.”



Defined and consistent training pathways are needed for new and existing workers, particularly for upskilling staff to work on battery electric buses

- Queensland’s electrical licencing requirements for staff who manufacture and maintain battery electric buses need to be clarified
- Operators and their staff also need to be upskilled
- Collaboration was seen as critical to making progress



Attendees identified a national skill and labour shortage which is already affecting capacity and capability



A new generation of workers needs to be made aware of the career opportunities available in a changing industry

- The bus manufacturing sector is being transformed into a cleaner, greener industry by zero emission technology
- Government could have a role to play in helping industry rebrand to attract and retain workers

“We’re asked how many jobs we can create. How many people can be created to fill them?”

Register to supply TMR

The **Supply TMR** portal connects industry to supply chain for projects such as the Queensland Train Manufacturing Program and the ZEBP. Click below to register your business:



Register for
Supply TMR

Contact Us

If you have any questions or queries about the ZEBP, please contact us by email to zeb@translink.com.au or sign up to our mailing list for the latest updates:



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Department of Transport and Main Roads
Noting Brief
MBN26023

To: Minister for Transport and Main Roads and Minister for Digital Services

<p>SUBJECT: Zero Emission Bus Program benefits</p>	<p>ROUTINE</p>
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Summary

- In addition to the associated emission reduction benefits, the proposed Zero Emission Bus Program (ZEBP) is a significant investment in the development of Queensland’s manufacturing capability, with significant benefits for employment.

Background

- In 2022, the Queensland Government released its Zero Emission Vehicle Strategy (the strategy). The ten-year plan aims to bring Queensland into a cleaner, greener transport future by supporting the uptake of zero emission vehicles.
- The strategy includes a commitment that all new urban buses in South East Queensland (SEQ) will be zero emission from 2025. Regional Queensland will begin its transition to a zero emission fleet between 2025 and 2030.
- The Department of Transport and Main Roads (TMR) is working to deliver these commitments through the ZEBP. Stage 1 of the ZEBP will focus on the transition from diesel to battery electric buses in SEQ.
- The SEQ diesel bus fleet emits over 12,000 tonnes of CO2 a month and the staged implementation of the ZEBP will aim to reduce emissions by 50 per cent by 2030 and 80 per cent by 2035.
- The annual cost impact of a battery electric bus is \$123,000, compared to a diesel bus cost of \$127,000. While the capital cost of electric bus is higher than a diesel bus, the energy cost for an electric bus is less expensive than a diesel bus (**Attachment 1**).
- In April 2023 the Tourism & Transport Forum Australia (TTF) released a paper entitled ‘The Road to Net Zero: Decarbonisation of the Surface Transport Sector’. Developed in conjunction with L.E.K Consulting, this paper suggests that the current ‘low’ rate of public transport decarbonisation will not support the achievement of Australia’s emission targets, and that policy changes and further investment commitments are required. Specifically, the document notes:
 - all states have targets for ceasing diesel bus purchases (typically by 2025)
 - EV technology is readily available, but requires government conviction and upfront capital for deployment
 - decarbonisation solutions already exist for buses and are being readily adopted internationally. Upfront capital and capital conviction are key barriers to adoption, along with bus specific charging infrastructure

<p>Action Officer: Matt Anderson Transition Director (Zero Emission Bus) Passenger Transport Services Tel: 07 3338 4441 Date: 6 April 2023</p>	<p>Endorsed by: GM Graham Davis General Manager Passenger Transport Services Tel: 07 3338 4748 Date: 12 April 2023</p>	<p>Endorsed by: DDG Sally Stannard Deputy-Director General Translink Tel: 07 3338 4158 Date: 22 May 2023</p>	<p>Endorsed by: DG Neil Scales Director-General Tel: 3066 7316 Date: 23 May 2023</p>
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- existing policies continue to fall short of incentives by leading international jurisdictions.
- On 16 May 2023 the Victorian Government announced some of the most ambitious emissions reduction targets in the world:
 - cutting the state's emissions by 75-80 per cent by 2035
 - committing to 95 per cent renewable energy generation by 2035
 - net zero emissions by 2045
- The state is also working to accelerate the adoption of ZEVs to ensure a timely transition to net-zero emissions by 2045. Victoria's Zero Emissions Vehicle Roadmap sets the pathway to decarbonising road transport which includes phasing out the sale of new petrol and diesel cars.

Sch.4 Part 4 s.4 delib processes of gov

- The ZEBP provides immediate opportunity to address significant challenges associated with major rail replacement services. Major closures associated with Cross River Rail (CRR) and Logan-Gold Coast Faster Rail (LGFR) projects are generating significant demand for a flexible, responsive rail replacement bus fleet numbering in excess of 100 vehicles, which cannot be met by existing providers. By procuring zero emission buses to meet this immediate need, and stabling them at Ormeau, TMR can:
 - ensure a flexible, responsive and zero emission fleet is available to address the priority requirements of construction related rail replacement up to 2030
 - contribute to delivering the zero emission bus numbers required to deliver an environmentally friendly transport function for Brisbane 2032.

Sch.4 Part 4 s.4 delib processes of gov

Consideration of the *Human Rights Act 2019* (HR Act)

- The HR Act was considered when developing this brief, and there are no impacts to human rights.

Consultation with Stakeholders

- No consultation was undertaken.

Employment

- The economic output of the manufacturing industry is modelled to increase by approximately \$1.8 billion to FY45 as a result of the procurement and manufacture of zero emission buses to supply the transition. This investment is expected to create approximately 1800 full-time equivalent (FTE) new jobs in Queensland.
- The associated investment in depot upgrades is expected to increase the output of the construction industry by \$2 billion, which translates to new project related employment of approximately 2000 FTE in the proposed TMR-led and hybrid models.

Media

- There are no media impacts associated with this matter.

Election Commitments

- This matter relates to the zero-emission bus election commitment which requires every new Translink-funded bus operated by the contracted private operators on the public transport network in Queensland to be a zero emission bus by 2030 (GEC1750).

Government Objectives

- This matter relates to 'Protecting the environment' by supporting TMR's zero emission project in SEQ, and therefore contributes to safeguarding the health of Queenslanders by significantly reducing their exposure to greenhouse gas emissions.
- The matter also relates to the objective 'Making it for Queensland' as the ZEBP will support the growth of the local manufacturing industry and create new jobs.

Minister's comments

Noted / Not Noted

Minister's signature.....

Date 3 / 7 / 23

Released under RTI - DTMR

Department of Transport and Main Roads
Decision Brief
MBN26272

To: Minister for Transport and Main Roads and Minister for Digital Services

SUBJECT: Zero Emission Bus Program – Sch.3(2)(1)(b) Sch.3(2)(1)(b) Reveal Cabinet consideration	URGENT: Sch.3(2)(1)(b) Reveal Cabinet consideration
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Summary

- Sch.3(2)(1)(b) Reveal Cabinet consideration
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Recommendations

- Sch.3(2)(1)(b) Reveal Cabinet consideration
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Date: 27 July 2023

Endorsed by:
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Endorsed by: DDG
Graham Davis
A/DDG Translink

Tel: 07 3066 8510

Date: 31 July 2023

Endorsed by: DG
Sally Stannard
A/Director-General

Tel: 3066 7316

Date: 1 August 2023

Sch.3(2)(1)(b) Reveal Cabinet consideration

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Background

- The ZEBP is working to deliver the Queensland Government's Zero Emission Vehicle Strategy commitments that:
 - all new Translink funded buses in SEQ will be zero emission from 2025
 - regional Queensland will begin its transition to a zero-emission fleet between 2025 and 2030.

Sch.3(2)(1)(b) Reveal Cabinet consideration

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Key Issues

Sch.3(2)(1)(b) Reveal Cabinet consideration

Released under RTI - DTMR

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Consideration of the *Human Rights Act 2019* (HR Act)

- The HR Act was considered when making the recommendations outlined in this brief, and there are no impacts to human rights.

Consultation with Stakeholders

- No consultation was undertaken.

Employment

- There are no employment impacts associated with this matter.

Media

- There are no media impacts associated with this matter.

Election Commitments

- This matter relates to the zero-emission bus election commitment, which requires every new Translink-funded bus, operated by the contracted private operators on the public transport network in Queensland, to be a zero-emission bus by 2030 (GEC1750).

Government Objectives

- This matter relates to the government objective 'Protecting the environment', by supporting TMR's zero-emission project in SEQ, therefore contributing to safeguarding the health of Queenslanders by significantly reducing their exposure to greenhouse gas emissions.
- This matter also relates to the government objective 'Making it for Queensland', as ZEBP will support the growth of the local manufacturing industry and create new jobs.

Summary of Actions

- Sch.3(2)(1)(b) Reveal Cabinet consideration
-
-

Minister's comments:

Approved / Not Approved

Minister's signature.....

Date/...../.....

Department of Transport and Main Roads
Noting Brief
MBN[number]

To: Minister for Transport and Main Roads and Minister for Digital Services

SUBJECT: Zero Emission Bus Program – Sch.3(2)(1)(b)	URGENT: Sch.3(2)(1)(b) Reveal Cabinet consideration
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Summary

- Sch.3(2)(1)(b) Reveal Cabinet consideration
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Background

- Sch.3(2)(1)(b)

Issues and Suggested Approach

- Sch.3(2)(1)(b)

Action Officer: Matt Anderson Transition Director (ZEB) Passenger Transport Services Tel: 07 3338 4441 Date: 27 July 2023	Endorsed by: Jasmine Green A/General Manager Passenger Transport Services Tel: 07 3338 4037 Date: 17 July 2023	Endorsed by: DDG Graham Davis A/DDG Translink Tel: 07 3066 8510 Date: [Approval date] 2023	Endorsed by: DG Sally Stannard A/Director-General Tel: 3066 7316 Date:
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Financial Implications

- Sch.3(2)(1)(b) Reveal Cabinet consideration

Consideration of the *Human Rights Act 2019* (HR Act)

- The HR Act was considered when making the recommendations outlined in this brief, and there are no impacts to human rights.

Consultation with Stakeholders

- The ZEBP Control Group was be briefed on 19 July 2023 and support the proposed course of action.
- Treasury has been formally briefed and support the proposed course of action.

Employment

- There are no employment impacts associated with this matter.

Media

- There are no media impacts associated with this matter.

Election Commitments

- This matter relates to the zero-emission bus election commitment, which requires every new Translink-funded bus operated by the contracted private operators on the public transport network in Queensland to be a zero-emission bus by 2030 (GEC1750).

Government Objectives

- This matter relates to the government objective 'Protecting the environment', by supporting TMR's zero-emission project in South East Queensland, therefore contributing to safeguarding the health of Queenslanders by significantly reducing their exposure to greenhouse gas emissions.
- This matter also relates to the government objective 'Making it for Queensland', as ZEBP will support the growth of the local manufacturing industry and create new jobs.

Minister's comments

Noted / Not Noted

Minister's signature.....

Date/...../.....

Released under RTI - DTMR