

# SUBMISSION ON THE CHANGE OF NORTH WEST RAIL LINE FROM HEAVY RAIL TO METRO

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Leading up to the last NSW election, the people of Sydney's northwest were promised by the then opposition a North West Rail Line (NWRL) from their area to the Central Business District (CBD). Since coming to government, the Premier, Barry O'Farrell and the Transport Minister, Gladys Berejiklian have broken their promise and have opted to build a North West Metro Line (NWRL) instead.

The reasons for the Government breaking their promise is generally unknown to the electors of the northwest and the ramifications for their commute to the CBD are not yet understood.

The Government's primary reason for the broken promise seems to be the break-up the CityRail network. The NWML will be the first privatised line and it will only be a matter of time until they announce further privatisation of services.

To ensure that the NWML can never be operated by CityRail, the new tunnels will be constructed to a diameter of 6.1 metres, which won't permit the running of double deck trains. This is a questionable decision by TfNSW, as this will limit the options for the eventual private operator and will constrain the capacity of the line forever.

The selection of the small tunnel size is a government decision, designed to ensure that the NWML remains isolated from the CityRail network. It will also restrict the capacity of the line, to the number of single deck trains per hour that the signalling system can cope with.

This decision to bore the tunnels to a non-standard loading gauge will be locked-in after the construction contract is signed and the tunnel boring machines are acquired by the contractor. I urge the Government to reverse its decision and construct the NWML to the standard CityRail loading gauge, so that in the future the capacity of the line can be increased by the introduction of double deck trains, no matter who the operator is.

Building a NWML was a decision that the bureaucracy pushed the previous government into, which led to the original North West Metro, which was followed by the CBD Metro, which was defeated by public opinion. It is interesting to note that the same bureaucrat has been the head of all three metro projects!

It seems that the bureaucracy is determined to break CityRail's monopoly on rail services in Sydney and also remove guards and drivers from trains, regardless of the consequences. If they succeed, they will limit the capacity of rail transport in Sydney for the next 50 years. This is a narrow vision approach and in sharp contrast to the visionary approach of Dr Bradfield, whose foresight gave Sydney an excellent rail system that served the City well for over 50 years.

The transverse seating configuration planned for the NWML trains is similar to Melbourne suburban trains and is not true metro style seating. It will be interesting to see if this seating configuration is actually introduced, or whether it will be changed to longitudinal seating when the trains are in production. The loading figure of 1200 passengers given for these trains is at "crush" loading and not a good figure for comparison to existing CityRail trains.

The new double deck Waratah trains, have a capacity of 896 seated and over 1,000 standing at "crush" loading. This demonstrates that the capacity of double deck trains is superior, with approx. twice the number of seats and an overall additional capacity of 600 passengers!

The additional seating capacity is essential for this long distance suburban service, which is eventually planned run from Cudgegong Road to Central, a distance of 47 kms.

The closest overseas equivalent of the CityRail network is the Paris RER. It took Paris 60 years to catch-up with Sydney in

providing a long distance all double deck service from the suburbs to the CBD. The RER are now in the process of replacing the remainder of its single deck fleet with double deck trains (see appendix).

TfNSW are now planning to return to the past and restrict the capacity of the CityRail network. No matter how TfNSW try to “spin” their message that single deck trains will provide the same capacity, the fact is that if the line were run with an all double deck service (12 trains per hour is the planned service), the capacity would be 5,000 passengers more per hour, with double deck trains.

One other very concerning aspect of the NWML is the lack of stub tunnels to allow the connection of the Epping to Parramatta line, in the future. It would seem that the government does not want to build the Epping to Parramatta Line and by not providing stub tunnels in the construction of the NWML, they will kill-off any prospect of building it in the future.

It would seem from the Government’s decision, the NWML is now not intended to take people from the northwest to the CBD, it is instead a cross-country line from Rouse Hill to Chatswood only. The commuters who do try to access the CBD from the northwest will be confronted with boarding already crowded trains from the upper north shore.

I urge the Government to reverse its decision to build the tunnels for the NWML to 6.1 metres diameter and to build them to the standard CityRail loading gauge. This would allow the capacity of the line to be increased by the introduction of double deck trains, now or in the future.

## **Appendix**

### **Extracts from Railway Gazette.**

#### **Paris announces MI09 double-deck EMU order**

09 April 2009

FRANCE: Paris transport operator RATP announced on April 8 that it is to place a €917m order for 60 MI09 five-car double-deck EMUs with a consortium of Alstom and Bombardier. The EMUs will replace MI84 single-deck rolling stock on RER Line A, and there is an option for a further 115 units.

Alstom's share of the work is worth €640m, and includes the electrical equipment, bogies and end cars. Bombardier will produce the intermediate vehicles. The first trainset is scheduled to be delivered in December, and will enter service during 2011.

The design is based on the MI2N units supplied by the same consortium in the 1990s, but with a 'very contemporary' front end. The emphasis is on capacity and rapid passenger flows, with each car having three doors per side. The trains will be fitted with CCTV, and LCD passenger information screens.

The units will work in pairs as 10-car trains, the top speed will be 120 km/h, and the acceleration and braking performance will allow service frequencies to be increased.

#### **Alstom unveils Paris RER Line A double-deck train**

08 February 2011

FRANCE: The first MI09 double-deck electric multiple-unit for Paris RER Line A was officially unveiled on February 8. Certification testing is underway with three MI09 trainsets, ready for entry into passenger service by the end of the year.

A consortium of Alstom and Bombardier signed a contract to supply up to 130 units in April 2009, with an initial €917m firm order for 60 trainsets co-financed by transport authority STIF and operator RATP.

The five-car 120 km/h EMUs will replace MI84 single-deck units to increase capacity on Line A to 1 725 passengers per trainset. The MI09 design is derived from the MI2N supplied by the same consortium in the 1990s, but with interior changes to prioritise capacity and ease of movement. The units are 110 m long, with three wide doors per vehicle side and the entrances redesigned to offer a more direct view onto both levels to facilitate fluid passenger movement.

According to Alstom, the 'harmonious colour scheme' and interior lighting reflect 'contemporary trends, creating a soft, tranquil and relaxing atmosphere'. The 'immediately recognisable' exterior 'clearly embodies the identity and values upheld by the RATP: power, speed and flexibility'. The trains are fitted with CCTV and LCD passenger information screens.

Design work was undertaken at Alstom's Petite-Forêt site in Valenciennes, which is assembling the driving vehicles and also undertaking painting using a water-based spray process for the first time. The company's Ornans factory is supplying traction motors, Le Creusot bogies, Tarbes electrical equipment and Villeurbanne control systems. Bombardier is responsible for producing the intermediate vehicles.

## Extract from Railway Technology

# Réseau Express Régional (RER), Paris, France

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### Key Data

Réseau Express Régional, or RER, is a Regional Express Network rapid transit system serving the capital city of Paris and its suburbs in France. It is a combination of a modern metropolis centre underground railway and set of commuter rail lines. The RER and [Paris Metro](#) are the major means of rail transport in Paris.

The RER network includes 246 stations with 587km of rail network, of which 76.5km is underground. It is operated in parts by the RATP (Régie Autonome des Transports Parisiens) and SNCF (Société Nationale des Chemins de fer Français).

The lines in the RER network are being renovated and expanded to meet the needs of increased passenger traffic.

### Line routes along the Réseau Express Régional network

The RER network has five lines, namely A, B, C, D and E.

"It is operated in parts by the RATP (Régie Autonome des Transports Parisiens) and SNCF (Société Nationale des Chemins de fer Français)."

Line A, which was inaugurated in December 1969, stretches 108.5km east to west with 46 stations. It has terminals at Saint-Germain-en-Laye, Cergy Le Haut and Poissy in the west, and Boissy-Saint-Léger and Marne-la-Vallée - Chessy to the east. It has a daily ridership of 1.2 million passengers.

Line B, which was inaugurated in December 1977, stretches 80km from north to south with 47 stations. It has terminals at Charles de Gaulle Airport and Mitry-Claye in the north, and Saint-Rémy-lès-Chevreuse in the south. Its annual passenger ridership was 165.1 million in 2004. The southern part of the line from Gare du Nord is operated by RATP and northern part of the line is operated by SNCF.

Line C was inaugurated in September 1979. It stretches 185.6km in a north-west to south-east direction with 84 stations. It has terminals at Pontoise, Versailles - Rive Gauche and Saint-Quentin-en-Yvelines in the north-west, and Massy-Palaiseau, Dourdan-la-Forêt, Saint-Martin d'Étampes and Versailles - Chantiers in south-east. It has an annual ridership of 140 million passengers.

Line D, inaugurated in September 1987, stretches 197km north to south with 59 stations. It has terminals at Orry-la-Ville - Coye in north and Melun, Malesherbes in the south. It has annual ridership of 145 million passengers.

Line E was inaugurated in July 1999. It stretches 52.3km west to east with 21 stations. It has terminals at Haussmann St-Lazare in the west, and Chelles-Gournay and Tournan in the east. It is operated by the SNCF and has an annual ridership of 60 million passengers.

## Expansions and renovations on Paris's rapid transit system

Réseau Ferré de France (RFF), the French National Railways Operator, released a [€115m](#) fund in July 2009 for the renovation of Line D. The work is expected to be completed in 2013.

A new station was opened at Saint-Lazare on line E. SNCF released €90m and Klepierre provided €160m fund towards the construction of the station. [Spie Batignolles](#) was the main contractor for the project. The station acts as an interchange between the main line and five metro lines of Paris Metro. It is expected to be used by 450,000 passengers daily.

Line E is planned to be extended from La Défense to Mantes-la-Jolie. Systra was appointed to conduct the feasibility study for the project in March 2009. The construction will begin in 2012 and is scheduled to be completed by 2018.

## Rolling stock used on the RER railway lines

Each line of the RER rapid transit system uses different rolling stock. Line A operates MS 61, MI 84, MI 2N and MI 09 rolling stock. The [MI 09 rolling stock](#) was put into operation from December 2011. These train sets can operate at speeds of 120kmph.

"The lines in the RER network are being renovated and expanded to meet the needs of increased passenger traffic."

A contract worth €917m to supply 130 units of MI 09 units was given to a consortium of Alstom and Bombardier in 2009, of which 60 train sets were delivered. The remaining train sets are expected to be delivered at a rate of 24 train sets each year until 2014.

The new train sets will replace the MI84 single-decker trains which are currently being operated on the line. A second batch of 70 MI09 train sets will be delivered during 2014-2017 to replace the MS61 fleet.

Line B operates MI 79 and MI 84 train sets. Line C operates Z 5600, Z 8800, Z 20500 and Z 20900 rolling stock. Line D operates Z 5300, Z 5600 and Z 20500 rolling stock. RER Line E operates SNCF Class Z 22500 rolling stock.

## Future expansions to rapid transit systems in Paris

The local government of Paris in January 2011 announced that it would fund more than €32.4bn for the development of an automated metro throughout Paris and modernise the existing network. About €5.5bn will be spent on improving and acquiring modern rolling stock.

Funds to the tune of €11.9bn were allocated to the ongoing upgrades and expansions, including a €2.5bn extension of RER Line E to Mantes-La-Jolie via La Défense, along with €1bn to renovations to RER lines C and D.

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## For the RATP website visit:

[www.bmbf.de/pubRD/WS\\_MT\\_Planchet.pdf](http://www.bmbf.de/pubRD/WS_MT_Planchet.pdf)

*for lots of interesting statistics.*

### Line A: a priority

The new double deckers MI09 trains can carry 2,600 passengers every three minutes, 50% more than the old rolling stock. They came into service on 5 December 2011 on the RER Regional Express line A.

### 30% regularity improvement on Europe's most used urban line

By 2017, after approval by the Board of Directors, some 130 MI09s will be deployed, raising capacity by 30% on RER line A in Île-de-France, which carries more than a million passengers a day on weekdays. These new trains illustrate our commitment and proactive investment strategy. Our engineering department compressed the acquisition, validation and commissioning leadtimes for the new rolling stock to the absolute minimum without jeopardising safety. The first ten MI09s came into service at end-December, just 30 months after the contract was signed.

Line A, with its 20% growth in passenger traffic over 10 years, has been a victim of its own success – the slightest incident can have an impact on service regularity. The time between trains during peak hours has been reduced to two minutes on the central section thanks to RATP's automatic train control system. The MI09s are equipped with air-conditioning, onboard security cameras (62 per train), an audio visual public address system for announcing station arrivals and traffic disruptions, and 34 seats reserved for disabled people. RATP is financing 66% of a first tranche of 60 trains (€917 million in total), and STIF the remainder. RATP will operate the line at least until 2039.

### The RER A

- Opening hours: 5:00 a.m. to 1:20 a.m.

- 46 stations, 35 managed by RATP and 11 by SNCF
- 76 km of track (including 26 km underground) out of a total of 109 km including the SNCF section
- 207 trains in service
- Stations in 7 of Ile-de-France's 8 departments
- 11 arrondissements of Paris and 75 neighbouring towns served
- 2 eastern branches and 3 western branches
- Serves several important centres of activity: La Défense, the central business district, Cergy and Marne-la-Vallée
- Serves 3.5 million inhabitants (31% of the population of Ile-de-France) and 2 million jobs (41% of regional employment)
- A commercial speed of 49 kph
- Trains every two minutes during rush hour on the central section
- Connections with all other RER lines (except line C), and 10 out of 14 lines of the metro
- RATP sections: Boissy-Saint-Léger/Saint-Germain-en-Laye and Marne-la-Vallée/Nanterre Préfecture

## Extract from the SMH

THERE is no need to scrap double-deck trains to run more frequent services through crowded cities such as Sydney, a senior executive at one of Europe's largest train manufacturers says.

The state government, which announced plans yesterday to protect future transport corridors in the city's north-west, is continuing to pursue plans that would convert a portion of Sydney's train system to single-deck metro-style trains.

But a senior vice-president at Alstom Transport, the world's largest manufacturer of high-speed trains and a major urban rail builder, said the European experience showed there was no need to switch to single-deck carriages that had fewer seats.

"We should not consider that a double-deck train is not fit for very dense traffic and urban traffic," said Francois Lacote, who was in Sydney last week to help Alstom increase its business in Australia.

His comments fit into a wider debate about the future of the CityRail network, after transport bureaucrats began working on plans in 2009 to shift to single-deck on some services.

The argument for doing so is that single-deck trains take less time to load and unload passengers than heavier double-deck trains, which also take longer to brake and speed up again.

But Mr Lacote cited the example of Paris's RER A line, which uses double-deck carriages running at 90-second intervals. Sydney's trains currently run at three-minute intervals, or a maximum of 20 trains through any point of the network at one time.

There has been a surge of interest in Australian rail projects from international construction and transport companies.

Besides Alstom, which intends to participate in a consortium bidding for work on the north-west rail link, industry sources say Chinese and Spanish rail firms will also bid for work on the line.

The Transport Minister, Gladys Berejiklian, joined the Premier, Barry O'Farrell, yesterday in announcing the government would lock in further corridors for transport to be built beyond Rouse Hill at the far end of the north-west rail link.

It is looking at two corridor options to preserve land for transport in the north-west which is expected to house another 200,000 people in the next 25 to 30 years.

One would connect the north-west rail link to the Richmond Line south of Riverstone station; another would head west from Rouse Hill and on to Schofields station and then Marsden Park.

Read more: <http://www.smh.com.au/nsw/train-maker-backs-doubledeckers-20120312-1uwh3.html#ixzz22CmVKTbR>