



TOC Waiver – TW: 203-1079

Issued to: Sydney Rail Operations Centre
Sydney Trains

Issued by: Jakub Zawada
Principal Engineer, Rolling Stock Access Integrity

Issue date: 01 October 2021
Effective dates: 01 October 2021 to 01 April 2022

Prevalence: This TOC Waiver supersedes TOC Waiver 203-1029 and 203-960

Subject: **Operation of freight and locomotives on the Airport, ESR, North Shore, Flying Junction, City Circle Lines**

This TOC Waiver supersedes TOC Waivers 203-1029 and 203-960 and updates the restrictions associated with the Airport Line limits for vehicles from the East Hills Line (incorporates previous TW 203-960), refer item 8e.

A waiver to the published conditions in the Train Operating Conditions (TOC) Manual is granted for the operation of locomotives and freight vehicles on the TfNSW Metropolitan Heavy Rail Network.

Operating conditions shall be as follows:

1. A summary table, see item 12, is provided at the end of the document to summaries all the various freight rolling stock permitted on the City Circle and surrounding lines.
2. Permitted locomotives may include 1200, 46, 48, 49, 81, 82, 86 and X class locomotives, refer to specific sections below for locomotives and any restrictions.
3. Freight wagons shall be permitted up to a maximum of 73 tonne gross mass unless specifically permitted at higher or restricted to lower masses.
4. Locomotives shall be clear of any wheel skid or wheel flat defects.
5. All appropriate WHS processes and procedures shall be in place when operating diesel locomotives in any underground areas.
6. Operation is permitted between Erskineville Junction and Bondi Junction (ESR Line) with the following restrictions:

- a. Only 81, 82, 86, 48, X class locomotives permitted, and 86, 82, and 81 class combinations (double only) permitted in head end or push pull configuration with robel wagons.
 - b. Operation of freight trains between Martin Place and Bondi Junction on adjacent tracks is not permitted. That is, single line working is in effect on both Up and Down tracks.
 - c. Operation of freight trains between Martin Place and Bondi Junction shall not exceed a maximum speed of 10 km/h for all movements.
 - d. Any operation over Bondi Junction points 908/912 or 911/907 shall require block working. Operation under track signalling is not permitted.
 - e. Operation between Martin Place and Erskineville Junction shall not exceed track speed (up to a maximum of 50 km/h as per TS TOC 1, section 1.11).
7. Operation is permitted between Redfern and Central (including Flying Junctions) with the following restrictions:
 - a. Single 81, 82, 86, 48, 49, X, 1200 class locomotives permitted.
 - b. Double 81/82 class permitted, triple 48 class permitted, triple 81/82 permitted in a push pull consist (with up to 2 x 81/82 leading or trailing), 2 x 1200 class with 10 x NDFF in a push pull consist permitted, and 86 and 81 class combinations permitted in head end or push pull configuration with robel wagons.
 - c. Freight wagons up to a maximum of 76 tonnes gross mass permitted.
 - d. All freight operations shall not exceed a maximum speed of 20 km/h.
8. Operation is permitted between Central and Wolli Creek on the Airport Line with the following restrictions:
 - a. Only 81 and 86 Class locomotives are permitted.
 - b. Freight wagons up to a maximum of 76 tonnes gross mass permitted.
 - c. All freight operations shall not exceed a maximum speed of 40 km/h.
 - d. All freight operation over the Flying Junctions between Central and Green Square shall be as per note '7'.
 - e. Entry into and exit from the Airport Line is not permitted at the Wolli Creek end. That is operation past Wolli Creek in the Down direction is not permitted and operation past OHW stanchions at AL10.098km / EH7.871km in the Up direction is not permitted (travel past 500A/B Points permitted up to AL10.098km/EH7.871km).
 - f. For the purpose of changing lines, operation around Central up to Goulburn St car park is permitted but shall not operate past signal SH 0.31 (0.520 km). Refer to note 9, 10, and 11 for operation on the City Circle and North Shore Lines.

9. Operation is permitted between Central and Goulburn St car park (all lines up to 0.565km) with the following restrictions:
 - a. A single 81, 82, 86 or 49 class locomotives are permitted. Double 81 class permitted, triple 48 class permitted, triple 81 class in a push pull consist (with up to 2 x 81 leading or trailing), 2 x 1200 class with 10 x NDFF in a push pull consist permitted, and 86 and 81 class combinations permitted in head end or push pull configuration with robel wagons.
 - b. Freight wagons up to a maximum of 76 tonnes gross mass permitted, however Robel freight wagons to be limited to 60t gross mass.
 - c. All freight operations shall not exceed a maximum speed of 20 km/h, and 5 km/h when propelling. Propelling shall be carried out as per the relevant Network rules.
10. Operation is permitted on the City Circle with the following restrictions:
 - a. Freight wagons up to a maximum of 76 tonnes gross mass permitted, however Robel freight wagons to be limited to 60t gross mass.
 - b. Operation of single 1200, 46, 48, 49, 81, 82 and 86 class locomotives permitted. Triple 48 class permitted, 2 x 1200 with 10 x NGFF permitted in push pull arrangement, and double 86 and 81 class combinations permitted in head end or push pull configuration with robel wagons. Refer to table 1 in section 12 for further information on allowable areas of operation and speeds.
11. Operation between Hornsby and Central (North Shore Line) is permitted with the following restrictions:
 - a. Operation of 49, 81, 82, or 86 class locomotives permitted between Hornsby and Argyle St portal (2.836 km) on the Up and Down as follows:
 - i. Any locomotives/trains traversing Lavender St bridge (4.737 km) on both Up and Down adjacent tracks at the same time is not permitted. That is, single line working is in effect on both Up and Down tracks with a maximum speed of 20 km/h as per item '11.d.ii' below.
 - ii. Single 49, 81, 82, 86 class locomotives with freight wagons permitted.
 - iii. Double 81 and 86 class combinations in head end power or push pull configurations with Robel wagons permitted.
 - iv. Double 81 and 82 class combinations in head end power or push pull configurations with Robel wagons, or with ballast wagons (NDFF/NDOF), or with flat wagons (NDQF/NDVF/NDWF/NDYF/NQJX) or with spoil wagons (NDBF/NDCF/NDCH/NDMX/NDNF) as separate trains not mixed trains permitted.
 - v. Triple 81 and 82 class combinations in a push pull configuration with a double locomotive leading and single locomotive trailing with flat wagons (NDQF/NDVF/NDWF/NDYF/NQJX) or with spoil wagons (NDBF/NDCF/NDCH/NDMX/NDNF) as separate trains not mixed trains permitted.

- vi. Up to Quad 81 and 82 class light locomotive combination permitted or double 81 and 82 class combinations with NDCH/NDBF wagons in head end, push pull, and distributed power permitted (Hornsby to North Sydney / Lavender Bay only).
- b. Operation of 1200, 49, 81, 82, or 86 class locomotives permitted between Argyle St portal (2.836 km) and Central on the Up and Down, as follows:
 - i. Single 1200, 49, 81, 82, 86 class locomotives with freight wagons permitted.
 - ii. Double 1200 Class with 10 x NDFF wagons in a push pull consist and double 81 and 86 class combinations in head end power or push pull configurations with robel wagons permitted.
 - iii. Double 81 and 82 class combinations in head end power or push pull configurations with Robel wagons, or with ballast wagons (NDFF/NDOF), or with flat wagons (NDQF/NDVF/NDWF/NDYF/NQJX) or with spoil wagons (NDBF/NDCF/NDCH/NDMX/NDNF) as separate trains not mixed trains permitted.
 - iv. Triple 81 and 82 class combinations in a push pull configuration with a double locomotive leading and single locomotive trailing with flat wagons (NDQF/NDVF/NDWF/NDYF/NQJX) or with spoil wagons (NDBF/NDCF/NDCH/NDMX/NDNF) as separate trains not mixed trains permitted.
- c. Freight wagons up to a maximum of 76 tonnes mass permitted between Hornsby and Central.
- d. The maximum speed of rolling stock shall be as follows:
 - i. Between Hornsby and North Sydney as per Train Operating Length Diagram – 30 km/h
 - ii. Between North Sydney and Milsons Point - 20 km/h
 - iii. Between Milsons Point and Argyle St portal (2.836 km) - 10 km/h
 - iv. Between Argyle St portal (2.836 km) and Central - 20 km/h
 - v. Refer to table 1 in section 12 for specific speed restrictions of specific locomotives.

12. The following table summarises permitted areas of operation for vehicles.

Table 1 - Allowable areas of operation including speeds and tonnages

Corridor / Line	Note	1200 Class	46 Class	48 Class	49 Class	81 Class	82 Class	86 Class	X Class	Freight
ESR Line (Up / Down) (Bondi Jtc – Martin PI)	6	N/A	N/A	10 *	N/A	10 * ^F	10 * ^F	10 * ^F	10 *	73t ^{%F}
ESR Line (Up / Down) (Martin PI – Erskineville Jtc)	6	N/A	N/A	50	N/A	50 ^F	50 ^F	50 ^F	50	73t ^{%F}
Airport Line (Up / Down)	8	N/A	N/A	N/A	N/A	40	N/A	40	N/A	76t
Redfern to Central (Up / Down) (Flying Junctions)	7	20 ^S	N/A	20 [#]	20	20 / 10 ^{@&E}	20 ^A	20 ^E	20	76t ^{%E}
Central to Goulburn St Car Park (All Lines)	9	30 / 20 ^S	30	30 [#]	30 / 5 **	10 ^{E@} / 5 **	10	20 ^E	N/A	76t ^{%E}
City Circle (Inner / Outer) (Central – Museum - St James)	10	30 / 20 ^S	30	30 [#]	30	10 ^E	10	20 ^E	N/A	76t ^{%E}
City Circle (Inner / Outer) (St James - Wynyard)	10	30 / 20 ^S	30	30 [#]	30	10 ^E	10	20 ^E	N/A	76t ^{%E}
City Circle (Outer) (Wynyard – Town Hall - Central)	10	30 / 20 ^S	30	30 [#]	30	10 ^E	10	20 ^E	N/A	76t ^{%E}
City Circle (Inner) (Wynyard – Town Hall - Central)	10	30 / 20 ^S	30	30	30	10 ^E	10	20 ^E	N/A	76t ^{%E}
North Shore (Up / Down) (Hornsby - North Sydney)	11	N/A	N/A	N/A	30	30 ^{E Q}	30 ^{A Q}	30 ^E	N/A	76t ^{%E}
North Shore (Up / Down) (North Sydney - Milsons Point)	11	N/A	N/A	N/A	20 *	20 * ^E	20 * ^A	20 * ^E	N/A	76t ^{%E}
North Shore (Up / Down) (Milsons Point - Argyle St)	11	N/A	N/A	N/A	10	10 ^E	10 ^A	10 ^E	N/A	76t ^{%E}
North Shore (Up / Down) (Argyle St - Central)	11	30 / 20 ^S	30	30	30	10 ^E	10 ^A	20 ^E	N/A	76t ^{%E}

* Single line working

** When propelling

Includes triple 48 class

% Robel freight wagons to be limited to 60t

\$ For 1200 Class – 10 x NDFF – 1200 Class push – pull consist

@ Double 81 class permitted

^A Double 81/82 class permitted with robel, ballast, flat, or spoil wagons, Triple 81/82 class (double leading single trailing in push pull) permitted with flat or spoil wagons

& Triple 81 class permitted (in push pull arrangement with up to 2 x 81 leading or trailing)

^E Double 81 and 86 class combinations permitted (in push pull or head end power configuration with robel wagons)

^F Double combinations (with 81, 82, or 86 class) permitted (in push pull or head end power configuration with robel wagons)

^Q Single to Quad 81/82 light loco permitted. Double 81/82 class combinations permitted (in push pull, head end, or distributed power configuration with NDCH/NDBF wagons), up to North Sydney/Lavender Bay only.

13. A copy of this TOC Waiver is to be issued to the crew operating the train.

Jakub Zawada

Principal Engineer, Rolling Stock Access Integrity