

16th December 2019

[REDACTED]

E-mail: [REDACTED]

Re: Response IE_FOI_316

Dear [REDACTED],

I refer to the appeal which you made under the Freedom of Information Acts 2014 and my acknowledgement letter dated 25th November.

I, Barry Kenny, am a more senior member of the staff of this body than the person making the first decision and I have decided on 10th December 2019 to issue records relating to your request. This decision on review is an entirely new and separate decision on your request, and is explained as such below.

I reviewed the original correspondence, and enquired on the records sought.

Request:

1. What is the safe number of passengers on each type of DART carriage/car serving Raheny Dart Station?

The Commission for Railway Regulation, which regulates rail safety in Ireland states: "There are no national or international safety standards regarding the number of passengers that are allowed to travel on a train. Frequently passengers judge overcrowding in terms of comfort, particularly in crush loading situations on suburban trains, though it would be unusual for such conditions to be unsafe. Typically, risk arising from overcrowding does not relate directly to passenger numbers but to secondary impacts such as impairment of effective emergency evacuation."

Below is manufacturer's design capacity information for 8500/8510/8520 DART carriages. This is not safety information.

Manufacturer Design Capacity – 4 Car Vehicles

8500 EMU	TC1	MC1	MC2	TC2	Totals
SEATS	40	40	40	40	160
STANDING	175	198	198	175	746
TOTAL	215	238	238	215	906

8510 EMU	TC1	MC1	MC2	TC2	Totals
SEATS	40	40	40	40	160
STANDING	174	197	197	174	742
TOTAL	214	237	237	214	902

8520 EMU	TC1	MC1	MC2	TC2	Totals
SEATS	40	40	40	40	160
STANDING	170	193	193	170	726
TOTAL	210	233	233	210	886

Manufacturer Design Capacity – 2 Car Vehicles

8100 EMU	TC	MC	Totals
SEATS	64	64	128
STANDING	144	144	288
TOTAL	208	208	416

How was this/these safe number(s) established?

There are no national or international safety standards regarding the number of passengers that are allowed to travel on a train.

Establishing the carrying capacity of a railway vehicle starts the maximum sized vehicle that fits within the railway infrastructure. Then the train designer must consider the space that will be taken up by the following:

- The structure (body shell) of the vehicle
- The running gear (wheels, axles, braking system etc.)
- The driver's cab, if fitted
- The equipment required by the vehicle, e.g. air conditioning units

When all the above is considered, then the remaining space is available for the passenger saloon. Usually, the railway operator will specify their desired number of seats to be fitted in the saloon. The remaining floor area is available for standing passengers. When calculating the numbers of standing passengers, the industry norm of 6 persons per m² is applied. Armed with this figure, the Train designer will ensure that the vehicle conforms to regulatory requirements in range of technical areas, including:

- Vehicle crashworthiness
- Fire performance
- Running dynamics

2. How does the service ensure that this/these safe number(s) is/are not exceeded?

IE do not have a system which advises live passenger numbers on board a train or carriage which would also be the case on other Railway Networks. Each year the Annual Census is carried out and we analyse capacity with loadings from this data, while there are varying levels of occupancy with peak time services being heavily utilised there are no services operating where passenger loadings exceed designed train capacity utilising both standing and seated capacity.

3. Has this/these safe number(s) ever been exceeded?

Iarnród Éireann do not have a system which advises live passenger numbers on board a train or carriage which would also be the case on other Railway Networks. Each year the Annual Census is carried out and we analyse capacity with loadings from this data, while there are varying levels of occupancy with peak time services being heavily utilised there are no services operating where passenger loadings exceed designed train capacity utilising both standing and seated capacity.

There are occasions where regular passenger loadings are intensified such as when there are train delays creating a gap in service and as such 2 train loads may be attempting to board the later running service, post major events such as at the Aviva Stadium and Croke Park. On such occasions trains become heavily loaded however there is no system which indicates a carriage or train is loaded beyond capacity, this issue exists on all Railway Networks and tends to self-regulate when passengers are unable to board services due to lack of standing room.

4. What is the safe number of passengers on each type of Suburban train carriage/car serving Connolly Station?

As previously stated (see response to question 1), there are no national or international safety standards regarding the number of passengers that are allowed to travel on a train. Below is manufacturer’s design capacity information for 29000 DMU railcars.

Manufacturer Design Capacity – 4 Car Vehicles

This is not safety information.

29000 DMU	DM1	MDT	MT	DM2	Totals
SEATS	48	40	49	48	185
STANDING	150	173	161	150	634
TOTAL	198	213	210	198	819

5. How was this/these safe number(s) established?

There are no national or international safety standards regarding the number of passengers that are allowed to travel on a train.

Establishing the carrying capacity of a railway vehicle starts the maximum sized vehicle that fits within the railway infrastructure. Then the train designer must consider the space that will be taken up by the following:

- The structure (body shell) of the vehicle
- The running gear (wheels, axles, braking system etc.)
- The driver’s cab, if fitted
- The equipment required by the vehicle, e.g. air conditioning units

When all the above is considered, then the remaining space is available for the passenger saloon. Usually, the railway operator will specify their desired number of seats to be fitted in the saloon. The remaining floor area is available for standing passengers. When calculating the numbers of standing passengers, the industry norm of 6 persons per m² is applied. Armed with this figure, the Train designer will ensure that the vehicle conforms to regulatory requirements in range of technical areas, including:

- Vehicle crashworthiness
- Fire performance
- Running dynamics

6. How does the service ensure that this/these number(s) is/are not exceeded?

Iarnród Éireann do not have a system which advises live passenger numbers on board a train or carriage which would also be the case on other Railway Networks. Each year the Annual Census is carried out and we analyse capacity with loadings from this data, while there are varying levels of occupancy with peak time services being heavily utilised there are no services operating where passenger loadings exceed designed train capacity utilising both standing and seated capacity.

There are occasions where regular passenger loadings are intensified such as when there are train delays creating a gap in service and as such 2 train loads may be attempting to board the later running service, post major events such as at the Aviva Stadium and Croke Park. On such occasions trains become heavily loaded however there is no system which indicates a carriage or train is loaded beyond capacity, this issue exists on all Railway Networks and tends to self-regulate when passengers are unable to board services due to lack of standing room.

7. Has this/these safe numbers ever been exceeded?

There are occasions where regular passenger loadings are intensified such as when there are train delays creating a gap in service and as such 2 train loads may be attempting to board the later running service, post major events such as at the Aviva Stadium and Croke Park. On such occasions trains become heavily

loaded however there is no system which indicates a carriage or train is loaded beyond capacity, this issue exists on all Railway Networks and tends to self-regulate when passengers are unable to board services due to lack of standing room.

8. Did the manufacturer of each car/carriage relating to (1 and 5 above) provide safe passenger numbers or safety guidance?

Manufacturers Drawings provided. This is not safety information.

9. Could I have copies of any such guidance please?

Manufacturers Drawings provided. This is not safety information.

10. How does the service ensure that it complies with any guidance on safety?

Iarnród Éireann has a Safety Management System governing both infrastructure and train operations, and is regulated on safety by the Commission for Railway Regulation.

11. What input does passengers have to the current service customer/passenger charter?

Iarnród Éireann receive feedback directly from Customer feedback, Focus Groups, Disability Users Groups and “Meet the Managers” sessions.

12. When was the current service customer/passenger charter reviewed and amended?

The current charter was updated in July 2017.

13. When was the current customer service/passenger charter introduced?

The above update was based on charter introduced in early 2011.

14. Is the service provider covered by insurance for injury and death of passengers on Dart and Suburban services?

The CIE Group Combined Liabilities policy indemnifies Iarnród Éireann for all sums (including claimants’ costs and expenses) which IE shall become legally liable to pay arising out of:

- a) Death, Personal Injury, or Disease or Illness suffered by any person.
- b) Damage to and / or loss of Property

happening during the period of Insurance in connection with the whole of the Insured’s business of “Operators of Railways and Road Transport, Property Owners/Developers/Lessors/ Lessees, Tour Operators/Travel Agents and Event Managers, Advertising Agents, Transport Consultants, Roadworthiness Testing of Goods Vehicles and Buses, Sale and Supply of New and Used Assets and all other activities with or ancillary thereto, and the discontinued activity of Hotel Proprietors, from which residual liability may arise”.

Subject to the limits of indemnity, terms, conditions, deductibles and exceptions of the policy.

15. What does this insurance cover in the event of injury and death when safety numbers are exceeded?

As previously stated (see response to question 1), there are no national or international safety standards regarding the number of passengers that are allowed to travel on a train.

The CIE Group Combined Liabilities policy indemnifies Iarnród Éireann for all sums (including claimants' costs and expenses) which IE shall become legally liable to pay arising out of:

- c) Death, Personal Injury, or Disease or Illness suffered by any person.
- d) Damage to and / or loss of Property

happening during the period of Insurance in connection with the whole of the Insured's business of "Operators of Railways and Road Transport, Property Owners/Developers/Lessors/ Lessees, Tour Operators/Travel Agents and Event Managers, Advertising Agents, Transport Consultants, Roadworthiness Testing of Goods Vehicles and Buses, Sale and Supply of New and Used Assets and all other activities with or ancillary thereto, and the discontinued activity of Hotel Proprietors, from which residual liability may arise".

Subject to the limits of indemnity, terms, conditions, deductibles and exceptions of the policy.

You may appeal this decision by writing to the Information Commissioner at 18 Lower Leeson Street, Dublin 2. There is a fee of €50 for such appeals, other than appeals against a decision to impose a fee. If you wish to appeal, you must usually do so not later than 6 months from the date of this notification. Should you write to the Information Commissioner making an appeal, please refer to this letter.

If an appeal is made by you and accepted, the Information Commissioner will fully investigate and consider the matter and issue a fresh decision.

Yours sincerely,



Barry Kenny,
Corporate Communications Manager

