

**COMMITTEE ON TRANSPORT AND INFRASTRUCTURE**

**INQUIRY INTO ELECTRIC BUSES IN REGIONAL AND  
METROPOLITAN PUBLIC TRANSPORT NETWORKS IN  
NSW**

**Responses to Questions on Notice**

**Hearing – 20 March 2020**

**1. Dr MARJORIE O'NEILL:** Just to clarify, Transport for NSW has received no feedback at all from disability groups or disability advocacy groups regarding that?

**Mr ISSA:** Actually, I will have to take that on board. I might be wrong on that. I will take that on board. I think they are fitted. I will have to take that on notice to be honest, to be sure, but I do not believe or I am not aware of any feedback. But I will take that particular question on notice, if you do not mind.

**Response:**

Transport for NSW has completed a search of its customer feedback. Five enquiries were located, the first was from a person who confirmed they had visual impairment seeking information on the introduction of electric buses. The remaining four enquiries were seeking information on when zero emission buses will be introduced and stating positive comments on noise and pollution reduction.

In addition, Contract 6, Transit Systems, reported to Transport for NSW they received general feedback from a member of public on issue of potential for difficulty for vision and hearing impaired persons to interact with silent battery electric buses. Transit Systems believe the feedback came from a person using one of the four electric buses.

**2. The CHAIR:** With the current fleet is there an ability for the driver to turn that off that announcement manually as they approach a stop? The vision impaired group said that was happening and so they missed the opportunity to get to the stop because it was not announced.

**Mr ISSA:** I will take that on notice. We are happy to follow that one up.

**Response:**

Transport for NSW Bus Operators have advised that in most circumstances it is not possible for the driver to turn the passenger next stop information system off where this functionality is available in the fleet (examples provided included the Northern Beaches B Line and the new electric buses operating in Leichhardt depot).

However, in a minority of circumstances, due to the different systems available some operators have advised that some systems can be turned off by the driver when bus is not in motion.

Transport for NSW will discuss this with its bus operators and ask to instruct bus drivers to not disconnect the next stop information where it is fitted to a bus.

**3. The CHAIR:** I had a question in relation to the percentage of the current fleet that is less than five years of age. What percentage would you say that was?

**Mr ISSA:** Less than five years of age? I know that the fleet has an average age of 11 years. I can take on notice less than five years. What I do know is that we have until recently bought approximately 200 buses a year across Greater Sydney.

**Response:**

The total number of buses less than 5 years of age operating in the Sydney Metropolitan region are 761 of 4,079. This is 18.5% of Bus Fleet.

**4. Mr ISSA:** Internationally there are some apps currently under development and we are watching that closely. We are a follower in this space, so we are leveraging off what is being done internationally. We talked about the AVAS-type technology that will help people understand the bus is there and what is around them. That is for all our customers and there is an audible noise for customers. We have talked about the passenger information displays and the announcements for our mobility impaired or vision impaired or hearing impaired customers on our transport network. As they arrive at a bus stop they can hear a bus coming and they can understand the bus is arriving. There are apps currently in development around the world that will hopefully allow customers to know from a technology piece that gives some indication. We are watching that very closely.

What we have also found is that with our movement from a turn-up or timetable-type service to a turn-up-and-go service, the actual arrival of a bus to a timetable is occurring regularly. From a customer perspective, more buses are arriving more frequently. That means that reliance on a timetable is less important. We are seeing that particularly in greater Sydney. We will have the technology around allowing customers to be aware that a bus is approaching and the new technology around making announcements on buses that they are approaching their bus stop, so they are aware that they should get off at this stop. We are monitoring what is happening around the world with apps. We are bringing the products from an app perspective but also from a bus perspective closer together to try to meet those customers' needs and make them more accessible but also make sure that our customers are informed. We are learning in that space, like the rest of the world, and we will continue to drive ourselves to improve those services and make sure we meet those needs. It is a very dynamic environment.

**Ms ELANI PETINOS:** I believe that was specifically raised with us about the Halo app, unless any Committee members want to correct me? Is the department aware of that particular app and is there currently any interface between the department and that app?

**Mr ISSA:** Yes, we are aware of the app. I will have to take it on notice as to whether we are talking with them.

**Response:**

Transport for NSW is not currently working with the Halo app, however we would be happy to have conversations with them on how we can improve services for customers with vision or hearing impairment.

Transport for NSW has endorsed an app called "Stop Announcer" which has been available since 2015.

Stop Announcer (NSW) is designed to help customers with vision impairment navigate their way on public transport. It has a clear, high-contrast display and uses GPS to track your device's location and announce stops along your route.

- Uses stop numbers to determine your route.
- Allows you to save stops and routes for regular or planned trips.
- Can find the stop closest to you, or you can enter a known stop number.
- Allows you to listen to stop information again by tapping the 'Speak' button at any point.
- Will warn you if you select a short rail platform as your destination stop

The available apps can be located on the TfNSW website: <https://transportnsw.info/apps>  
<https://transportnsw.info/apps/stop-announcer>

**5. Mr GURMESH SINGH:** In other jurisdictions is the push towards uniform charging market and industry led or is it government led?

**Mr ISSA:** I will take the question on notice, but I think it is a combination of both industry and the market.

**Response:**

In other jurisdictions the issue of uniform charge connections is mostly led by industry at this time.

Europe has now developed an EU ISO standard (IEC 61851-23) for Alternating Current (AC) bus charging. This is referred to as EU Type 2 charge connection or CCS 2.

It is understood NSW could specify new buses to comply with the CCS 2 charge connection and this would minimise different charging technology and solutions across different manufacturers.

It is also critical that the charge system protocol is standardised so the charge point can communicate to the bus battery management system. This is also critical for depots with multiple bus type and for public bus charge points (for example at interchanges). NSW would need to standardise this at the same time.

Some manufacturers already comply with this standard. It is understood Transport for NSW could require bus manufacturers to provide this standardisation requirement in the future.

This would facilitate the install of AC charge points around Sydney for different types of buses.