Checklist against fire on buses

There have been a number of fires on buses recently and in order to prevent fires on buses Roads and Maritime Services (RMS) has created an information alert based on outcomes of investigations by the Office of Transport Safety Investigations (OTSI) with recommendations for inspections to be incorporated in the maintenance schedules, pre departure checks and end of shift procedures for all buses.
It is also important operators review procedures in case there is a fire, despite the prevention measures.

Drivers' pre departure and end of shift procedures

Drivers are to follow the pre departure and end of shift check procedures provided by their employer, which need to comply with accreditation standards and include any trailers if they are to be used.

For drivers undertaking charter or tourist services loading one group of passengers, they should advise passengers the location of emergency exits and to leave hand luggage and baggage in an emergency.

Operators need to ensure their pre departure and end of shift checks cover any additional checks related to Compressed Natural Gas (CNG) buses and visual checks for any obvious leaking fluids coming out from underneath the bus.

While driving

Drivers should stay alert and monitor:

- Smoke or heat detection systems if fitted to the bus.
- Loss of power including engine and air- conditioning.
- Avoid any overheating of the bus. Stop the bus if the engine, brakes, and/or retarder become overheated or when sensing unusual odours or if smoke is detected visually.
- Ensure the bus is parked in a safe place and emergency procedures are followed if fire and/or smoke is detected. This may involve early evacuation of passengers to a safer location.

End of shift procedures

The end of shift procedures provided by the Bus/Coach operator should include:

- In CNG gas buses ensure that the gas is turned off before leaving the bus (if applicable).
- Complete a visual external inspection ensuring no liquids are leaking from underneath the bus.
- Report any damage and/or mechanical damage to the operator or maintenance staff.
- Ensure any external heat sources (for example coaches may carry cooking or heating equipment) if fitted are switched off.
- Where possible activate the battery isolation switch to minimise the risk of electrical fires whilst the bus is unattended.
- No passengers (particularly children) are still on the bus.
- There is no lost property left on the bus.
- Check the bus has not been damaged or tampered with.

Emergency training

Drivers must be trained in emergency procedures. This training should be documented to comply with the requirements of the Bus Operator Accreditation Scheme (BOAS) and Safety Management System (SMS).

- All drivers should be trained in the location and use of the fire extinguishers. (Multiple training is required if different extinguishers are fitted to buses attached to the fleet.)
- Evacuation of passengers should be addressed whether they are mobile, wheelchair bound, elderly, and/or children.

- Training of cut off valves or switches (if applicable) that will reduce the spread of fire should be conducted and documented.
- Training of all warning systems in each different style of bus driven.

Emergency procedures

The following should be incorporated with training by operators in relation to management of fires or an emergency.

- Attempt to park the bus in a safe area.
- Apply the parking brake.
- Notify passengers and staff to exit the bus in a safe and timely manner.
- Open the doors and attempt to escort passengers to a safe distance from the vehicle.
- Shut down emergency switches if applicable (CNG gas emergency shut off, master switch for batteries).
- Identify the location of the fire.
- Inform the appropriate emergency services (000) and bus depot. Provide as much information as possible about the incident, location of bus and where the fire is located on the bus.
- Where appropriate and safe to do so use the on board fire extinguishers to put out containable fires.
- Secure the scene of the incident. Place warning signs around the bus.
- Wait for emergency services and ensure that all passengers and staff are at a safe distance from the bus and assess injuries for passengers and staff.
- Upon returning to the depot, ensure incidents are document and reported to management.

Bus maintenance procedures

Bus maintenance staff (the following provides guidance on the procedures operators should incorporate into regular checks/bus services)

Maintenance Managers and appropriately qualified staff are required to ensure:

- Driver defect reports are rectified and repairs documented.
- Fire and smoke detection systems fitted in the vehicle are correctly connected and working.
- Connector cables from the alternator and starter motor are correctly connected and in good condition.
- There are no loose wiring within the engine compartment.
- Hoses delivering fluids around the engine are in good condition with no tears or holes.
- Clamps are connected correctly and are secure.
- Liquids, fuel, power steering fluid, engine oil and hub/gear oil cannot come into contact with hot surfaces.
- Engine is cleaned regularly allowing no buildup of flammable deposits.
- No oil is leaking from the waste gate pivot of the turbocharger.
- Check sensors are not a source of leaking.
- Coolant and oils are at the correct levels.
- Regular checks that the fuel tank and fuel lines are not leaking and that all connections and brackets are tight and in good condition.
- The retarder (gas exhaust, hydraulic or electric) is functioning properly.
- All environment equipments are without any defects (no broken valves, lines, no leaking of fluids).
- Exhaust system is airtight/isolated and free of debris.
- Preheating systems are running correctly (engine and interior).
- Levels of grease in the wheel hubs are sufficient.
- Hubs are inspected for discolouration due to overheating.
- Braking systems are in order.
- Fire extinguishers are present in the bus, function correctly (no missing parts) and are in date.
- Emergency exits are marked clearly and function correctly.
- Visual inspection of tyre pressure and tread integrity, ensure dual tyres are not touching each other.
- Air system is operating correctly. Test operation of brakes, pressure gauges, warning lights and buzzer alarms.