

Rail Industry Safety and Standards Board (RISSB)

Amendment No. 1 to AS/RISSB 7527:2015 Event Recorders

CORRECTION

The 2015 edition of AS/RISSB 7527 is amended as follows; the amendments should be inserted in the appropriate place.

Amendment approved by Rail Industry Safety and Standards Board 21st June 2019.

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Section 1.2.3

Delete Section 1.2.3 and replace with the following:

For existing event recorder installations, only sections 2, 4.1.3 and 9 apply.

Section 2.4

Delete Section 2.4 and replace with the following:

For rolling stock fitted with analogue or tape type data logger or recorders, such as Hasler recorders, the system will need to meet the requirements specified in section 4.1.3 and section 9.

Section 4.1.3

New Section 4.1.3 (and sub-sections) inserted:

4.1.3 Minimum recording requirements

4.1.3.1 Legacy, tape-based data loggers should, as a minimum record the following information:

- Train speed
- Distance
- Time
- Brake status i.e. brake pipe pressure or brake cylinder pressure

4.1.3.2 Existing, electronic data loggers should, as a minimum record the following information:

- Train speed
- Distance
- Time
- Braking, brake pipe and brake cylinder pressure
- Throttle/master controller setting
- Safety devices acknowledgement, for example, acknowledgment of deadman device, vigilance device, trip gear
- Headlight switch operation
- Horn operation (on leading unit in case of multiple units)

For train or safety monitoring purposes the operator may wish to measure a far greater number of parameters, however, that is at the discretion of the operator

4.1.3.3 For locomotives operated by two drivers, electronic data loggers fitted to all new and retrofitted rolling stock should make provision for identifying the driver operating the controls of the train.

4.1.3.4 Electronic data loggers fitted to all new and retrofitted rolling stock should, as a minimum, record the following information:

- Train speed
- Distance
- Time
- Throttle/master controller setting
- Operation (i.e. continually monitoring and recording air pressures and voltages, where appropriate) of train automatic brake
- Operation (i.e. continually monitoring and recording air pressures and voltages, where appropriate) of the independent brake, if equipped

- Dynamic braking effort achieved
- Release of the electro pneumatic brake (if fitted)
- Operation of safety devices, for example, acknowledgment of deadman device, vigilance device, trip gear
- Driver response to safety devices, for example, acknowledgment of deadman device, vigilance device, trip gear
- Headlight switch operation (includes record of high and low operation)
- Horn operation (on leading unit in case of multiple units includes high and low operation)
- Wheel slip/slide operation (if equipped).

Section 9.10

New Section 9.10 inserted:

- 9.10 Rolling stock operators should have a programme in place to ensure data loggers are maintained, including a requirement (where data loggers record on tape) to ensure new tapes are installed when necessary.

AMENDMENT RATIONALE

RISSB Standard AS7527:2015 Event Recorders describes the requirements for event recorders installed in locomotive, self-propelled passenger, and infrastructure maintenance rolling stock vehicles. The main purpose is to ensure that event recorders fitted to rolling stock capture a minimum set of appropriate data for the use of rolling stock operators, rail infrastructure managers, investigators, and maintainers for forensic investigations of rail incidents.

In NSW it is mandatory to comply with their 'Data Loggers' Code which then creates an inconsistency in application of the Rail Safety National Law. This amendment aligns AS7527 with the NSW Data Loggers Code paving the way for the Code's retirement, thus improving national harmonisation.

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