



## CERTIFICATE OF ENGINEERING ACCEPTANCE

This certificate is issued in accordance with RIS-1530-PLT Issue 5

**NAME OF VEHICLE ACCEPTANCE BODY**

*SNC-Lavalin Rail & Transit Limited*

**ACCREDITATION CODE**

**IF**

Vehicle Class / Description

976/Aquarius/Defender 130/9C

Vehicle Owner

Aquarius Railroad Technologies Ltd

Issue Date

10 March, 2016

Expiry Date

30 October, 2022

Vehicle Number(s)

99709\_976094-1

First Of Class

99709 976090-9 on Engineering Acceptance Certificate IF/0524/14 against RIS-1530-PLT, Issue 5.

**Authorised by:**

**Adrian Staples**

*SNC-Lavalin Rail & Transit Limited*

*Adrian Staples*

**OFFICIAL STAMP**



**SNC-LAVALIN**

Reason for issue and Scope of Work

Certification of new Land Rover Defender 130 RRV with Aquarius Rail Gear.  
Chassis number SALLDKVP7FA461134, registration YE64KBX.  
On this certificate: Amendment to towing capacity (Limitation of Use 12). No engineering change.  
Originally assessed for compliance with RIS-1530-PLT, Issue 5.  
Expiry date conforms to the requirements of RIS-1530-PLT, Issue 5.

Deviations associated with this certificate

None.

Previous Certificate Number

IF/0551/15 : 99709 976094-1.

Maintenance Plan Details

AQUARIUS RAILROAD TECHNOLOGIES Highway Based Vehicle <3.5 tonne Maintenance Manual Issue 2  
Rev 4, 22/06/14.

**Customer Copy**

**Certificate Number: IF/0142/16**

### Limitations of Use

1. The vehicle shall only operate inside possessions.
  2. When travelling, the RRV is within W6a gauge and exception for road wheels as RIS-1530-PLT Issue 5. Cab doors can be out of gauge when open and account must be taken in the safe system of work.
  3. The vehicle is not permitted to on/off track, travel or work on live conductor rail lines.
  4. The vehicle shall not on/off track if adjacent lines are open to traffic.
  5. The vehicle will not activate train operated points.
  6. Vehicle shall not travel or work on:
    - Track cants greater than 200mm.
    - Track gradients greater than 1:25.
    - Curve less than 80m.
  7. When operating in reverse, before moving, the driver shall ensure that he has adequate visibility of the track to the rear, otherwise the reverse movements shall be controlled by an assistant in the rear compartment and/or ground staff.
  8. The vehicle may only operate with the opening door adjacent to a cess or a line closed to all train movements or the safe system of work must take account of adequate safe clearances to adjacent lines. Vehicle door to adjacent line to be disabled (with ALO lock cover) and second person used to unlock the door when required.
  9. Vehicle shall not on/off track on:
    - Track cants greater than 150mm.
    - Track gradients greater than 1:25.
  10. For on/off tracking, a site specific work plan shall be used taking account of the requirements in Network Rail Standard NR/PLANT/0200.
  11. The vehicle is suitable for use under live OLE (on/off track / travel / work) when used in conjunction with a safe system of work determined and authorised by taking guidance from the requirements of GE/RT8024.
  12. Vehicle is permitted to tow or propel:
    - Up to 3 Aquarius Ultra Light (ULT) 1,000kg (GLW) trailer; maximum combined GLW 3,000kg.
    - OR
    - One or two Aquarius R2R Trailer 3,500kg (GLW) trailers; maximum combined GLW 7,000kg.
    - OR
    - One or two Load Tray Extension (LTE) 550kg (GLW) trailers, maximum combined GLW 1,100kg.
- Note- The maximum towed and/or propelled weight may have to be reduced where the railhead conditions for adhesion and/or ruling gradient may affect the safe traction performance of the RRV.

### Supplementary Information

1. Vehicle is an Aquarius Land Rover Defender 130 with Aquarius Rail Gear.
2. Chassis number SALLDKVP7FA461134, registration YE64 KBX.
3. Vehicle is fitted with a trailer service brake control, working pressure 0-5.5bar.
4. Vehicle operates in low ride only.
5. Tare weight- 2,450kg.
6. Maximum payload of 930kg shall not be exceeded and shall be uniformly distributed permitting up to 5 persons in the cab (80kg/person) 6 persons (80kg/person) in the rear and/or equipment in the rear.
7. Maximum speeds (travel and working) on rail not to exceed:
  - 20mph plain line;
  - 5mph switches and crossings;
  - 10mph towing/propelling;
  - 15mph reversing only when driver has unrestricted view to the rear of the vehicle, otherwise 3mph.
  - 5mph emergency recovery.

Note that Interfleet Technology Ltd is now trading as SNC-Lavalin Rail & Transit Ltd. This certificate has been issued on the basis of the Engineering Acceptance of Rail Vehicles Licence Agreement issued to Interfleet Technology Ltd (certificate numbers 13/017/001 and 13/017/002) on 1 February 2013, and subsequently extended until the termination of the CCB/VAB licensing process. The certification management system is unaffected by the change of name in respect of compliance with PS305/04.