



File No.RDSO-TEST0RB(OMRS)/1/2020-O/o DIRECTOR/TESTING/HQ/RDSO

भारत सरकार - रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ - 226 011
EPBX (0522) 2451200
Fax (0522) 2458500

Government of India-Ministry of Railways
Research Designs & Standards Organisation
Lucknow - 226 011
DID (0522) 2450115
DID (0522) 2465310



No. TST-3/GL/OMRS/Vol.I

Date: 07.05.2021

EDME / Development,
Railway Board,
Ministry of Railway,
New Delhi.

Sub: Alert protocol for RailBAM of OMRS system
Ref: (i) Railway Board's letter no. 2018/Dev.Cell/IGRI/9 dated 29.12.2020
(ii) This office letter of even no. dated 22.07.2019

With reference to (i) above, it is clarified that involvement of Testing Directorate / RDSO in the newly installed OMRS systems is limited as RDSO was associated only in proving out trials of the first OMRS system at Panipat.

Further to this, it has already been clarified vide our letter at reference (ii) that the protocol issued vide this office letter no. TST.3/GL/TBMS/Vol.VII dated 31.01.2019 can be used by Zonal Railway for RailBAM of OMRS systems for gaining experience till further fine tuning is done by any lead Railway after gaining experience and interaction with the OEM especially with respect to multi pass-by system.

However in view of the Board's letter, detailed deliberations have been done and a draft provisional protocol, in-line with the protocol suggested by OEM and being already used by Northern Railway is enclosed herewith. It may be issued to various Railways / Consignees for the time being after necessary approval at your end.

Moreover as suggested in earlier letter in this regard, it is reiterated that Railway Board may nominate preferably more than one Railway using the system who may give necessary inputs to Railway Board / RDSO and then protocol may be finalized / fine-tuned on the basis of actual user feedback in-line with further directives of Railway Board in this regard.

This is for your kind information please.

Encl: As above

VIRENDRA SINGH YADAV
Digitally signed by
VIRENDRA SINGH
YADAV
Date: 2021.05.10
13:15:59 +05'30'

(V.S.Yadav)
Executive Director / Testing

Copy to:

EDME (Freight) / Railway Board / New Delhi

ED / Research / RDSO / Lucknow

from: A.K. Baranwal <baranwal.alok07@gmail.com>
to: edmef@rb.railnet.gov.in, edmed@rb.railnet.gov.in
cc: ED RDSO D K AGARWAL <edresrds@gmail.com>, rbdevcell@gmail.com date: May 10, 2021, 2:48 PM
subject: Alert protocol for RailBAM of OMRS system
mailed-by: gmail.com signed-by: gmail.com
security: Standard encryption (TLS) Learn more
A.K. Baranwal 12:03 PM (14 minutes ago)
to edmef, edmed, ED, me
R/Sir, The Railway Board's letter under reference may please be read as 2020/Dev.Cell/IGRI/9 dated 29.12.2020.
With regards,
A.K. Baranwal, SSE Mechanical, Testing Directorate, RDSO, Lucknow Mob: 9794863700

Draft Provisional Alert protocol for RailBAM of OMRS

- 1.1. In accordance with the alert protocol, only Clear Level 1 running surface bearing faults, such as RS1_e, RS1_m, RS1_r, RS1_p, and RS1_n have been configured as 'actionable bearing alerts'.
- 1.2. For 'non-repeatable' stocks such as freight stocks, single pass-by rule may be followed whereas for 'repeatable' stocks such as coach and loco, multiple pass-by rules may be followed.
- 1.3. Proposed actions to be undertaken are as under:

1.3.1. For 'non-repeatable' stock i.e. Freight stock

Fault type	Action Required
RS1_e, RS1_m, RS1_r, RS1_p, and RS1_n	i. OMRS National Control Center or Divisional C&W control (as decided by Railway) will inform concerned HQ C&W control of Zonal Railway where the intensive examination of the empty rake is scheduled. ii. Now this will be the responsibility of concerned Zonal Railway where the rake will be examined to ensure that the identified bearing is checked thoroughly. iii. Bearing shop of overhauling POH Workshop will inspect the bearing and will prepare an inspection note. iv. Copy of inspection report may also be forwarded to ED/Testing/RDSO/LKO.

1.3.2. For 'repeatable' stocks i.e. Coaching and Locomotive Stock

Fault type	Consistency & Trending Check	Action Required (For Coaches)
RS1_e, RS1_m, RS1_r, RS1_p, and RS1_n	3 out of 5 passes are flagged as consistent .	i. If the consistency criterion is met, OMRS National Control Center or Divisional C&W control (as decided by Railway) will pass on the incidence to concerned Railway / Division (Primary maintenance). ii. Now it will be the responsibility of the Primary maintenance Railway to ensure detachment of the involved coach and getting the identified bearing inspected in workshop. iii. Bearing shop of overhauling POH Workshop will inspect the bearing and will prepare an inspection note. iv. Copy of inspection report may also be forwarded to ED/Testing/RDSO/LKO.
	Consistency criterion not met	v. Monitor and allow for more passes. Issue advisory for monitoring till consistency criterion is met.

Fault type	Consistency & Trending Check	Action Required (For Locomotive)
RS1_e, RS1_m, RS1_r, RS1_p, and RS1_n	3 out of 5 passes are flagged as consistent .	i. If the consistency criterion is met, OMRS National Control Center or Divisional Power / Traction control (as decided by Railway) will pass on the incidence to concerned Railway / Division (Loco shed). ii. Now it will be the responsibility of the Railway that the loco is sent to Diesel / Electric loco shed / workshop. iii. Bearing shop of shed / workshop will inspect the bearing and will prepare an inspection note. iv. Copy of inspection report may also be forwarded to ED/Testing/RDSO/LKO.
	Consistency criterion not met	v. Monitor and allow for more passes. Issue advisory for monitoring till consistency criterion is met.

- 1.4. No immediate action/ enroute detachment is required for the alert generated.
- 1.5. Workshop / Shed must use the standard bearing inspection procedure i.e. remove and dismantle the bearing, wash off the grease and inspect individual components

Abbreviation and descriptor used:

RS1 – Bearing Running Surface fault of Severe level; e – Extended fault; m – Multiple faults, r – Clear roller fault; p – Clear cup fault; n – Clear cone fault