## GOVERNMENT OF INDIA MINISTRY OF RAILWAYS (RAILWAY BOARD)

No. 2016/39/CE-III/BR/Improvement Measures

New Delhi Dated: 27.03.2019

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Principal Chief Engineer All Zonal Railways

Sub: Implementation of New Technologies-Bridges.

Ref: (i) This office letter of even number dated 13.02.2019.

- (ii) RDSO letter no. ED/S/Misc, dated 05.03.2019.
- (iii) RDSO letter no. CBS/Tour/ME, dated 14.03.2019.

Vide above reference it was expected to have a review of Trials being conducted on your Railway. It was expected to have a pro-active action from you end, but only one of Zonal Railway had submitted the report. The Standing Committee in one of the recommendation has stressed upon modernization of Inspection, Maintenance and use of New technologies covering the use of such new technologies as already mentioned in reference above.

The updated status of these Trials has been obtained from RDSO vide reference (ii) & (iii) above, which is indicated in Annexure, Zone-wise. Following action should be taken at your end.

- a. Expedite fixation of Agencies including finalization of tenders for such Trials as per specification/guidelines.
- b. Implementation of the trials/schemes should be done in a time bound manner. In few cases, it is observed that the Agency has not even implemented/started the trials after award of work.
- c. The report to the RDSO (B&S Dte.) needs to be submitted timely and the concerned SAG level officer from Headquarter should involve himself for correct implementation of the New technology. Prior approval of RDSO should be taken in few of the cases like instrumentation/health monitoring of bridges. This is applicable more to the new bridges which are under construction by CAO/Cs. Few approvals have been accorded by RDSO. (e.g. NFR).

You are requested to conduct detailed review with the concerned Division and officers for implementation of these New technologies in right earnest. In case of any deviation from the information provided in Annexure, the reference immediately be sent to RDSO with a copy to this office for information.

The above instructions was issued with the approval of Board(ME).

DA: One.

(A.K. Singhal)
Executive Director/B&S

## Copy to:

- 1. DG/RDSO for information.
- 2. General Managers of All Indian Railways for information.

## NEW TECHNOLOGIES IN BRIDGES

61	Long Life Painting	-	<u> </u>	1	1	Y	Y	ı	ı	1		1	Y	1	1	I	1	1	Z	3	*** NOS. OF RSI CASES COMPLETED BY RDSO FOR ZONAL RAILWAYS
As on 26.03.19	Portable Train Alarm System	10	2	z	Z	Z	Y	z	Z	Z		Z	Z	Z	Z	Z	Z	Z	Z		BY RDSO FOR Z
	Rail Structure Interaction (RSI)***	6	N (5)	Z	N(3)	N (10)	N(11)	N(10)	Z	Z		N (62)	Z	Z	z	N (10)	N (24)	N(3)	(Z) N		SES COMPLETED
	Curing Methods	∞	1	1		1	**\[ \]	ı	1	1		1	1	1	ı	1	1	1	,		NOS. OF RSI CA
	3 <sup>rd</sup> Party Audit	7	Y	Y	Y	Z	z	Y	#Z	Z		z	Y	Z	Z	Z	Y	Y	#Z		
	Instrumentation	9	Z	Z	Z	Z	Z	Z	Z	Y (2 Bridges of	Constn)	Z	Z	Z	Z	Z	Z	Z	Z		** FRESH REPORT AFTER RDSO VISIT AWAITED
	Water Level Monitoring	S	Y (2)	Y (4)	Y (12)	Y (5)	Y (12)	Y (2)	Y (5)	Y (12)		N(0)	Y (3)	N(0)	Y (5)	Y (6)	Y (4)	Y (4)	N (0)		RESH REPORT AFT
	UWI by ROV	4	Z	Z	Z	Z	Y	Z	Z	Z		Z	Y	Z	Z	N	N	Z	Z		
	3D Inspection Scanning by Drone	3	Z	¥.X	*\	Z	$\Lambda^*$	Z	Z	*\f		-	$\Lambda^*$	Y	Y*	$Y^*$	N	¥*	Y		# THIRD PARTY AUDIT NOT REQUIRED
	3D Scanning	7	1	Z	1	Z	Y	1	-	1		1	1	1	1	1	1	Z	-		ARTY AUDIT
	Scour Monitoring	1	N	1	1	1	Z	1	1	Y		ı	Z	ı	ı	I	ı	1	1		
	Rly		CR	ER	ECR	ECoR	NR	NCR	NER	NFR		NWR	SR	SCR	SER	SECR	SWR	WR	WCR		* DATA SCRUTINIZED
	S.N.	-		7	m		2	9	7	∞		6	10	11	12	13	14	15	16		* DATA

Trial Authority No./Dt.	7. 2017/07/CE-III/BR/Safety dt. 03.08.18 and 2018/41/CE-III/BR/N Dashboard dt 06.12.18	8. 2018/05/CE-III/BR/Concrete Code dt. 24.05.18 (CAO/C/USBRL)	9. 2011/CE-II/TK/LWR dt. 24.09.13 & No.CT/IM/LWR(Part)	19/25.3.14 and No. 2017/14/CE-III/BR/LWR dt 19/20.2.19	10. 2	-	1 1
	1. 2016/39/CE-III/BR/Improvement Measures dt. 05.02.18	2. 2016/39/CE-III/BR/Improvement Measures dt. 24.01.18	3. 2017/56/CE-III/BR/Mega Bridge dt. 08.01.18		4. 2017/09/CE-III/BR/UWI dt. 10.07.18	5. 2015/CE-III/BR/Water Level Gauge dt. 02.07.15 (10 Important bridges each)	6. 2015/CE-III/BR/Instrumentation dt. 19/20.09.16 (Running higher Axle loads)