

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAY
RAILWAY BOARD**

No. 2018/14/CE-III/BR/Instrumentation

Date: 13.05.2021

**Principal Chief Engineer
Chief Administrative Officer (Con.)
All Zonal Railways**

Sub: Instrumentation of Railway Bridges

Indian Railway has large number of old bridges on existing lines. These old bridges were designed for earlier loading standards and their suitability is required to be checked to meet loading standards of present day/future traffic. Condition of these old bridges are required to be ascertained to obtain their residual life under existing load. In addition, Railways is constructing many Iconic bridges as a technological challenge to provide connectivity to various parts of country. These iconic bridges have unique design and therefore their actual performance in field is required to be monitored with respect to the design parameters.

All zonal railways are accordingly advised to undertake instrumentation of bridges in the following categories:

1. Older Important Bridge having age more than 80 years.
2. New Iconic bridges having Non-Standard spans.
3. Residual life of bridges based on prevailing and expected future loads.
4. Certifying bridges for higher axle load and higher speed.
5. Bridges continuing LWR based on RSI analysis.

All zonal railways should identify bridges based on above criteria and prepare an action plan for instrumentation which shall be submitted to Board also. It is advised that instrumentation shall be planned through premier institutes like IITs or other agencies having proven technologies and experience.

This issues with the approval of M/Infra.



**Onkar Nath Sharma
Director (Bridge & Structure)
Railway Board**

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Chief Bridge Engineer – All Zonal Railways
CMD – IRCON, RVNL, DFCCIL, RITES