

**GOVERNMENT OF INDIA (BHARAT SARKAR)
MINISTRY OF RAILWAYS (RAIL MANTRALAYA)
(RAILWAY BOARD)**

No. 2003/Tele/TP/1

New Delhi, dated 27.07.2010.

The General Managers,
All Indian Railways, Production Units & Metro Railway/Kolkata
DG/RDSO/Lucknow & GM/CORE/Allahabad.
DG/Railway Staff College & Director/IRISET/IRIMEE/IRIEEN/IRIMEE/IRICEN
CAOs/COFMOW/DCW
Director/MRVC/Mumbai

Sub: Use of Quad Cable for Telecom & Signaling applications.

Ref: Board's letter No. 2003/Tele/TP/1, dated 09.03.2004.

Directions were communicated vide this Office letter referred to above for 6 quad cable to be used keeping in view requirements of quads for block instrument, emergency communication, gate telephones, BPAC and TAWS, etc. with and without OFC, in non-Automatic Block Signaling sections. Instances have come to notice that this direction is coming in the way of using 4 quad cables in automatic signaling territories, where 6 quads would not be required generally but is being insisted upon as a policy.

The subject has been considered in Board that for ABS sections, where requirement of BPAC and block instruments would not exist, use of 4 quad cables will suffice. Similarly, for yards/stations, 4 quad cables will be adequate for axle counters and AFTC applications.

In consideration of these requirements, for new and on going works of Automatic Signaling, there will be no objection to use 4 quad cables. If it becomes essential to employ 6 quad cable in ABS sections due to any specific reasons, approval of CSTE of the Railway, may be obtained on case by case duly considering 2X6 versus 3X4 quad options.

Utilization of Quads in ABS sections shall generally be as under:-

a. Through Telecom Circuits in Automated Block Signaling Section:

Quad 1	Quad 2	Quad 3	Quad 4
Remote Control & TPC at Traction Sub-stations.	Data Logger	Emergency Communication	½ LC ½ Spare

b. **Signaling Circuits in the Automated Block Signaling Section and in Yards**

Quad 1	Quad 2	Quad 3	Quad 4
MSDAC/SSDAC AFTC (1 & 2)	MSDAC/SSD AC AFTC (3 & 4)	MSDAC/SSDAC AFTC (5 & 6)	Spare

NB:- Transmit and Receive signal of AFTC of a particular frequency shall be taken in separate cables

As far as Absolute Block Signaling sections are concerned, these shall continue to be governed by the policy letter issued vide reference above, where use of only 6 quad cables has been stipulated.

This issues with the approval of Board (ML).

Rakesh Ranjan

(Rakesh Ranjan)

Jt. Director/Telecom

Railway Board

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