

**Estimation Method of Frequency Characteristics of Transmission Loss
in Loading Telecommunication Line and Its Application**

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On some telecommunication lines used for voice transmission contained in the existing metallic cables owned by railway operators, loading coils are inserted to suppress transmission loss occurring in the voice frequency band. However, these loading lines cannot be used for the high-speed data transmission, because their transmission loss in the high frequency band is large. On this account, the removal of the loading coils depending on the demand for lines is ideal. In this paper, we report an estimation method of frequency characteristics of transmission loss of the loading lines, to be used for the desk examination whether the extension of the insertion interval of the loading coil is possible or not.