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Rolling stock — Measurement of noise inside railway vehicles

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### Contents

		Pag	
Introduction ······1			
1	Scope1		
2	Normative reference	rms and definitions 2	
3	Terms and definition	ons ······2	
4	Measurement quantities ······5		
5	Instrumentation ······5		
6 6.1 6.2 6.3 6.4 6.5	Test conditions6Deviations from the requirements6Test environment6Microphone positions7Vehicle conditions8Track conditions9		
7 7.1 7.2 7.3 7.4 7.5	Test procedure10General10Measurement on vehicles with constant speed10Measurements on accelerating vehicles from standstill10Measurement on decelerating vehicles11Measurement on stationary vehicles11		
8	Test report ······	11	
Annex	x JA (informative)	1/3-octave band centre frequency defined in ISO 266 ·····13	
•		Comparison table between JIS and corresponding International Standard ···············14	

### **Foreword**

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Land, Infrastructure, Transport and Tourism, through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Association of Rolling Stock Industries (JARI)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently JIS E 4021:1994 is replaced with this Standard.

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# Rolling stock — Measurement of noise inside railway vehicles\*

JIS E 4021: 2008

#### Introduction

This Japanese Industrial Standard has been prepared based on the second edition of ISO 3381 published in 2005 with some modifications of technical contents so as to reflect current conditions of measurement of noise inside railway vehicles in Japan.

The portions with dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with explanations is given in Annex JB.

### 1 Scope

This Standard specifies the conditions for obtaining reproducible and comparable measurement results of levels and spectra of noise inside railway vehicles (hereafter referred to as "vehicle").

This Standard is applicable for:

- type test;
- periodic monitoring test;

The results may be used, for example:

- to characterise the noise inside these vehicles;
- to compare the internal noise of various vehicles on a particular track section.

This Standard describes tests during different operating conditions, i.e. constant speed running, accelerating, decelerating and standstill. It is not mandatory to perform tests at all conditions, and the chosen operating conditions shall be in accordance with the agreement between the railway operator and the manufacturer (hereafter referred to as "between the purchaser and the manufacturer").

Infrasound and messages intelligibility are not treated in this Standard.

NOTE: The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows:

ISO 3381: 2005 Railway applications — Acoustics — Measurement of noise inside railbound vehicles (MOD)

The symbols which denote the degree of correspondence in the contents between the relevant International Standard and JIS are IDT (identical), MOD (modified), and NEQ (not equivalent) according to ISO/IEC Guide 21.

<sup>\*</sup>Editor's note: The original title "Rolling stock - Measurement of noise inside railbound vehicles" has been modified to "Rolling stock - Measurement of noise inside railway vehicles" in this document by Japan Association of Rolling Stock Industries (JARI).