ERTMS/ETCS – Class 1
Generic train data for Test Sequences

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Company	Technical Approval	Management approval
ALSTOM		
ANSALDO SIGNAL		
BOMBARDIER		
INVENSYS RAIL		
SIEMENS		
THALES		

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1. MODIFICATION HISTORY

Issue Number Date	Section Number	Modification / Description	Author
0.0.1 31 May 2004	All	Creation.	R. Ramos (Invensys Rail)
1.0.0 04 November 2005	All	Edition for Delivery after the last corrections by the Test Specs WG	R. Ramos (Invensys Rail)
1.0.1 25 February 2009	3	Alignment of references	Oscar Rebollo

2. TABLE OF CONTENTS

3. REFERENCES

[1]   Test sequences, SUBSET-076-6-3,issue 2.3.1

[2]   Functional Requirements for an on board Reference Test Facility, SUBSET-094-0, issue 2.0.2

4. INTRODUCTION

This document describes the generic train data which should be used for the Test sequences specified within [1].

The Reference Lab [2] which will be used for running the Test sequences shall be able to simulate the train behaviour according to the train data specified within this document.

This train data is based on the Renfe locomotive S-252.

5. TRAIN DATA

5.1 S 252 Generic Train Data Set

5.1.1 S-252 Generic Train Data with only a locomotive

S_252_GENERIC_TRAIN_DATA	
Variable	**Value**
INTERNATIONAL TRAIN CATEGORY	Basic Static Speed Profile
TRAIN LENGTH	20
NUMBER OF SERVICE BRAKE SECTIONS	2
SERVICE BRAKE DECELERATION (1)	92 (from 0 to 159,99 km/h; x/100 m/s2)
SERVICE BRAKE DECELERATION (2)	69 (from 160 to 220 km/h ; x/100 m/s2)
SERVICE BRAKE SPEED (1)	0
SERVICE BRAKE SPEED (2)	160 (1:1)
NUMBER OF EMERGENCY BRAKE SECTIONS	2
EMERGENCY BRAKE DECELERATION (1)	107 ((from 0 to 159,99 km/h; x/100 m/s2))
EMERGENCY BRAKE DECELERATION (2)	80 (from 160 to 220 km/h ; x/100 m/s2)
EMERGENCY BRAKE SPEED (1)	0
EMERGENCY BRAKE SPEED (2)	160 (1:1)
TIME TO CUT OFF	0
BRAKE DELAY TIME SERVICE	6 (Resolution 0,5s)
BRAKE DELAY TIME EMERGENCY	2.5 (Resolution 0,5s)
MAXIMUM TRAIN SPEED	220 (1:1)
LOADING GAUGE	1 (Not defined in Subset-026-v 2.2.2)
AXLE LOAD	22 (Resolution 0.5t)
POWER SUPPLY	Electric (Not defined in Subset-026-v 2.2.2)
AIRTIGHT SYSTEM	NOT FITTED
ADHESION FACTOR	NOT SLIPPERY

5.1.2 S-252 Generic Train Data with maximum length

S_252_GENERIC_TRAIN_DATA	
Variable	**Value**
INTERNATIONAL TRAIN CATEGORY	Basic Static Speed Profile
TRAIN LENGTH	197
NUMBER OF SERVICE BRAKE SECTIONS	2
SERVICE BRAKE DECELERATION (1)	92
SERVICE BRAKE DECELERATION (2)	69
SERVICE BRAKE SPEED (1)	0
SERVICE BRAKE SPEED (2)	160 (1:1)
NUMBER OF EMERGENCY BRAKE SECTIONS	2
EMERGENCY BRAKE DECELERATION (1)	107
EMERGENCY BRAKE DECELERATION (2)	80
EMERGENCY BRAKE SPEED (1)	0
EMERGENCY BRAKE SPEED (2)	160 (1:1)
TIME TO CUT OFF	0
BRAKE DELAY TIME SERVICE	6
BRAKE DELAY TIME EMERGENCY	2.5
MAXIMUM TRAIN SPEED	220 (1:1)
LOADING GAUGE	1(Not defined in Subset-026-v 2.2.2)
AXLE LOAD	22
POWER SUPPLY	Electric(Not defined in Subset-026-v 2.2.2)
AIRTIGHT SYSTEM	NOT FITTED
ADHESION FACTOR	NOT SLIPPERY

The TRAIN RUNNING NUMBER does not belong to the generic train data.