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European foreword

This document (CEN/TR 16978:2016) has been prepared by Technical Committee CEN/TC 256 “Railway applications”, the secretariat of which is held by DIN.

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Introduction

The Working Group CEN/TC 256 SC1/WG 28 "*Railway applications/Infrastructure/Track geometry quality*" conducted a European Survey on Isolated Defects (ESID) in order to support the process of the development of the EN 13848 series. The goal of the survey was to get an overview of certain thresholds of selected track geometry parameters in several European networks in terms of Isolated Defects (ID).

This Technical Report does not include urban rail matters.

1 Scope

This Technical Report describes the methodology used for the survey on Isolated Defects (ID) and gives the results.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13848-1, *Railway applications — Track — Track geometry quality — Part 1: Characterisation of track geometry*

EN 13848-5:2008+A1:2010, *Railway applications — Track — Track geometry quality — Part 5: Geometric quality levels — Plain line*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
decolouring
algorithm which converts one signal into a different signal

Note 1 to entry: It is used in EN 13848 series to convert a chord measurement signal into a *D1* or *D2* measurement signal.

3.2
Immediate Action Limit
IAL
value which, if exceeded, requires taking measures to reduce the risk of derailment to an acceptable level

Note 1 to entry: To reduce the risk of derailment can be done either by closing the line, reducing speed or by correction of track geometry.

3.3
isolated defect
part of the signal exceeding a given limit such as IAL with at least one sample (data break)

Note 1 to entry: The length of the exceedance is given by the number of samples exceeding the limit. A minimum length of exceedance may be applied to determine an isolated defect.

4 Symbols and abbreviations

For the purposes of this Technical Report, the following symbols and abbreviations apply.