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Vägfordon – Insamling av olycksdata för utvärdering av passiva skyddssystem i bil (ISO 6546:2018, IDT)

Road vehicles – Collection of accident data for evaluation of occupant restraint performance (ISO 6546:2018, IDT)

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Den internationella standarden ISO 6546:2018 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 6546:2018.

Denna standard ersätter SS-ISO 6546:2006, utgåva 1

The International Standard ISO 6546:2018 has the status of a Swedish Standard. This document contains the official English version of ISO 6546:2018.

This standard supersedes the SS-ISO 6546:2006, edition 1

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Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Fordonssäkerhet, SIS/TK 237.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 36, *Safety and impact testing*.

This second edition cancels and replaces the first edition (ISO 6546:2006), which has been technically revised. The main changes compared to the previous edition are as follows:

- in [5.6](#), items q) and r) have been added;
- in [5.8](#), item e) has been modified;
- in [6.2.1](#), new items a) and b) have been inserted;
- in [7.2.2](#), item c) has been modified and item d) has been added.

Introduction

This document was originally published as an ISO Technical Report in 1979 and specified information for the study of vehicle occupants wearing seat belts and included information on vehicle identification, pre-crash situation, vehicle damage, and accident reconstruction data (e.g. EES, Δv).

Because of a rapid development of more advanced occupant restraint features such as multi-stage airbags, ISO/TR 6546 was expanded and revised into an ISO standard, of which the first edition was published in 2006.

Data elements in this revision are grouped according to the Standardization of Accident and Injury Registration Systems (STAIRS) categorization scheme.

The data elements are not listed in priority order.

Road vehicles — Collection of accident data for evaluation of occupant restraint performance

1 Scope

This document specifies information for the field collection of traffic accident data that is necessary or may assist in the evaluation of occupant restraint systems in passenger cars and trucks. The specific occupant restraints covered are seat belts, head restraints, knee protection, airbag systems and child restraint systems.

This document does not cover an assessment of the structural performance of the vehicle for which items such as crush, intrusion, and structural architecture may be necessary.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6813, *Road vehicles — Collision classification — Terminology*

ISO 12353-1, *Road vehicles — Traffic accident analysis — Part 1: Vocabulary*

ISO 13216-1, *Road vehicles — Anchorages in vehicles and attachments to anchorages for child restraint systems — Part 1: Seat bight anchorages and attachments*

ISO 13218, *Road vehicles — Child restraint systems — Report form for accidents involving child passengers*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6813, ISO 12353-1, ISO 13216-1, and ISO 13218 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Vehicle data

Vehicle data shall be obtained for each case vehicle.

Beyond vehicle identification, pre-crash situation, crash configuration, vehicle damage/intrusion, collision partner, and impact severity data (e.g. EES, Δv), the following occupant restraint related data elements should be recorded:

- a) total number of deployed airbags;
- b) for each impact where an airbag deploys:
 - crash event sequence number;
 - CDC;
 - longitudinal component of Δv ;
 - lateral component of Δv ;

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- c) setting of manual airbag deactivation switch (if applicable);
- d) type of automatic deactivation (if applicable):
 - occupant detection system;
 - child seat detection system;
- e) airbag diagnostic or warning lights/messages (post-crash);
- f) modifications or service performed on the airbag system or parts of the vehicle relevant to the operation of the airbag in this crash;
- g) whether the vehicle has been involved in previous traffic crashes;
- h) retrievable accident data (if available):
 - acceleration pulse (total, X, Y and Z directions as available);
 - change of velocity (total, X, Y and Z directions as available);
 - belt buckle latch engagement;
 - vehicle speed;
 - pre-impact braking;
 - pre-impact yawing and skidding;
 - deployments in prior accidents;
 - multiple event data;
 - rollover event data;
 - restraint deployment timing;
 - restraint deployment level (one-stage, two-stage, etc.);
 - deactivation or suppression of deployable restraint(s);
 - driver seat in forward track position status;
 - occupant detection status;
 - child seat detection/recognition status;
 - other, as applicable.

5 Restraint data by seating position

5.1 General

Beyond recording seat description (such as type, fabric), record the seat and restraint data elements in [5.2](#) to [5.8](#). Data is to be obtained for each seating position in vehicle.

For each set of seat and restraint data, also record the corresponding seating position code according to [Figure 1](#).