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Syntax für die Tastatur- und Internet-kompatible Codierung von Datenelementen in maschinenlesbaren Symbolen unter Verwendung von Daten-Identifikatoren; Text Englisch

Syntax keyboard and Web compatible encoding of data elements in machine readable symbols applied with ASC Data Identifiers; Text in English

Syntaxe pour le codage compatible avec le clavier et Internet d'éléments de données dans des symboles lisibles par machine à l'aide d'identificateurs de données; Texte en anglais

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Contents

	Page
Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Flag Character and Rules	6
4.1 General	6
4.2 Example Encoding Flow	6
4.3 Example Decoding Flow	6
4.4 Summary	6
5 Examples	7
5.1 Example of “Unique Identification Mark — UIM”	7
5.2 Example of a stock location code	7
5.3 Example with concatenated data elements	8
Annex A (normative) Flag Character Unambiguity	10
Annex B (informative) Inner separator characters	11
Annex C (informative) Begriffe	12
Bibliography	13

Figures

Figure 1 — UIM on a test tube applied with Flag Character	7
Figure 2 — Data sequence of the example in Figure 1	7
Figure 3 — Stock location code (source: Klinikum of the Friedrich Schiller University of Jena (UKJ), Germany)	8
Figure 4 — Data sequence of the example Figure 3	8
Figure 5 — Example Code 128 with two concatenated ASC DI headed data elements separated by separator “^”	8
Figure 6 — Data sequence of the example Figure 5	9

Tables

Table 1 — Summary	7
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Foreword

This document has been prepared by the Sub-Committee NA 043-01-31 AA "Automatic Identification and Data Capture Procedures" of DIN-Normenausschuss Informationstechnik und Anwendungen (DIN Standards Committee Information Technology and selected IT Applications).

The syntax defined in this document allows unambiguous identification of data elements encoded in machine-readable symbols using ASC data identifiers and ensures character set compatibility for transmission via keyboard and Internet interfaces.

The document was not published in German, since standardization in this field is mainly carried out in English. The document is based on concepts and already established technical terms from standards from ISO/IEC JTC 1/SC 31 "Automatic identification and data capture techniques". In addition, a later transfer to an international project is intended.

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The German definitions for the Terms mentioned in Clause 3 are given in Annex C.

Introduction

This document provides unique coding that allows data encoded in ASC Data Identifier syntax to be transferred via keyboard and/or Web interfaces safely without the need for conversion or translation of characters. This solution simplifies data capture for meeting requirements of the trend towards faster keyboard interfaces via USB. It both simplifies and secures data transfer from scanners to Enterprise-Resource-Planning (ERP) systems and to the Web.

Basis of the documents are ISO/IEC documents for data structures, specifically according to ISO/IEC 15418, Part ANSI MH10.8.2 Data Identifiers and standards for the character sets used for data transmission through the Internet. This document specifies the parameters of the characters to be used for generation of keyboard-compatible codes for which the relevant ISO/IEC documents do not yet contain any stipulations. Thus, the document specifies parameters to which the data capture software can be tuned. Special definitions for readers are not required because the document only works with characters that are available on the keyboard and can therefore be transmitted by the scanner in a 1 to 1 relation. These specifications ease automatic identification solutions in system independent interface environments that are interoperable with the ISO documents for unique identification applications. This document is also enabling data transfer of coded and scanned data through the Internet without any conversion of the data having been coded and scanned.

The definition of a keyboard-compatible syntax enables to mark AIDC codes so that they can be captured, transmitted and processed safely and easily in open systems wherever keyboard interfaces are used and transmission to the Internet. This ensures uniqueness and data accuracy for applications of automatic identification and for traceability. The basis for the keyboard compatible data constructs are the data identifiers according to ANSI MH10.8.2 and their character sets and the control characters defined by this document, the characters “.” (Dot) and “^” (circumflex).

The typical features of a keyboard compatible syntax are

- a) A unique keyboard and Internet compatible Flag Character for encoded data with ASC data identifiers;
- b) A unique keyboard and Internet compatible separator character.

The data elements in connection with this document are provided with Data Identifiers according to ISO/IEC 15418, Part ANSI MH10.2.