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Financial services — Core banking — Structured creditor reference to remittance information

Services financiers — Opérations bancaires centrales — Référence structurée de créancier à l'information de remise

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Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 11649 was prepared by Technical Committee ISO/TC 68, *Financial services*, Subcommittee SC 7, *Core banking*.

Introduction

The use of electronic communication media and services internationally for the transmission of information and payment and payment-related transactions between financial institutions, as well as between financial institutions and their customers, continues to increase.

In this environment, this International Standard has been developed with a view to facilitating automated processes in support of Straight Through Processing (STP), as a means by which financial institutions and their customers can exchange, through Electronic Data Interchange (EDI), structured creditor reference (hereafter referred to as RF Creditor Reference). The RF Creditor Reference is a means to convey customer payment details in a machine-readable form. It also makes provision for validation of the RF Creditor Reference by making use of a computational check digit.

When developing this International Standard, it was recognized that there currently exist a limited number of structured creditor references in national schemes with different formats and usage rules. This International Standard provides a means of structuring the information in a way that promotes automated processing both in local and cross-border use.

It is anticipated that the use of this International Standard in electronic data interchange will:

a) reduce the need for manual intervention in the processing of data interchange,

b) improve the level of confidence in the accuracy of the information provided, and

c) provide certainty that the information provided is relevant to the customer.

It is recognized that the RF Creditor Reference would also be of use in a paper environment.

Financial services — Core banking — Structured creditor reference to remittance information

1 Scope

This International Standard specifies the elements of a structured creditor reference (RF Creditor Reference) used to facilitate the processing of data in data interchange and in the financial services, as well as between other business domains. The RF Creditor Reference is designed for use in an automated processing environment, but can also be implemented in other media interchanges (e.g. paper document exchange).

This International Standard does not specify internal procedures, file organization techniques, storage media, languages, etc. to be used in its implementation. It is applicable only to the textual data that can be conveyed through a system or network.

2 Normative references

The following referenced documents are indispensable for the application 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/IEC 7064, *Information technology — Security techniques — Check character systems*

3 Terms and definitions

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

3.1
creditor reference
proprietary identifier assigned by the creditor that uniquely and unambiguously identifies a business document or similar set of business data

3.2
RF Creditor Reference
creditor reference expanded with the RF Creditor Reference identifier and check digits, intended for use domestically and internationally, which uniquely and unambiguously identifies a business document or similar set of business data

3.3
RF Creditor Reference identifier
RF
unique identifier to denote the structured creditor reference (e.g. in the appropriate Remittance Information element) as an RF Creditor Reference

4 Conventions

This International Standard uses the conventions listed below for data element representations.

— Character representations:

  — n digits (numeric characters 0 to 9 only);

  — a upper case letters (alphabetic characters A-Z only); or

  — c upper and lower case alphanumeric characters (A-Z, a-z and 0-9);

  — e blank space.

— Length indications:

  — nn! fixed length;

  — nn maximum length.

5 Structure

The format of the RF Creditor Reference shall be:

2!a2!n21c

where

— the first two letters (2!a) shall always be “RF”, the RF Creditor Reference identifier;

— the third and fourth characters (2!n) shall be the check digits, as calculated from the scheme defined in this International Standard (see Clause 6);

— the remaining part of the RF Creditor Reference (up to 21c), creditor reference, shall only contain upper and lower case letters (A to Z and a to z) and numeric characters (0 to 9), without special characters such as separators and punctuation, that may be used in national creditor reference schemes.

For the representation of the RF Creditor Reference in a printed format, see Annex A.

6 Check digits

6.1 General

The check digits are calculated based on the scheme defined in ISO/IEC 7064 (MOD 97-10). See Annex B.

The check digits are used to verify the creditor reference and the “RF” code.

6.2 Checking the check digits

6.2.1 If the RF Creditor Reference is in paper format (see Annex A), delete all blank spaces.

6.2.2 Move the first four characters to the right-hand end of the RF Creditor Reference.

6.2.3 Convert upper and lower case letters to digits in accordance with the following:

A = 10	F = 15	K = 20	P = 25	U = 30
B = 11	G = 16	L = 21	Q = 26	V = 31
C = 12	H = 17	M = 22	R = 27	W = 32
D = 13	I = 18	N = 23	S = 28	X = 33
E = 14	J = 19	O = 24	T = 29	Y = 34
Z = 35				

6.2.4 Apply the check character system MOD 97-10 (see ISO/IEC 7064).

6.2.5 If the remainder is 1 (one), the number is valid.

6.3 Generating the check digits

6.3.1 Add the RF code (2!a) and “00” to the right-hand end of the creditor reference.

6.3.2 Convert letters (alpha-2 code characters) to digits (numeric characters) in accordance with 6.2.3.

6.3.3 Apply the check character system MOD 97-10 (see ISO/IEC 7064).

Annex A
(normative)

Representation of the RF Creditor Reference in the printed format

A.1 General

This annex specifies the use and representation of the RF Creditor Reference in the printed format.

A.2 Applicability

In a printed format, where the specification of a structured creditor reference to remittance information is requested, the RF Creditor Reference shall be used as defined in this annex.

The generation of a payment (or related) instruction on paper may include an RF Creditor Reference.

Mandating the positioning of the RF Creditor Reference in/on a paper or similar instruction is not considered to be within the scope of this annex.

A.3 Structure

In a printed format, the RF Creditor Reference structure (2!a2!n21c) shall remain, but the RF Creditor Reference shall be printed in groups of four characters and each group should be separated by a blank space. The reason for this is to increase the readability of the RF Creditor Reference when presented on paper in printed format.

EXAMPLE 1 Electronic RF Creditor Reference: RF68539007547034.

EXAMPLE 2 Printed RF Creditor Reference: RF68 5390 0754 7034.

Annex B
(informative)

Example of how to calculate and validate the check digits

B.1 Constructing an RF Creditor Reference and calculating check digits

B.1.1 The example given in this annex is based on an example of a customer-defined creditor reference and the explanation of the RF Creditor Reference structure given in Clause 5.

EXAMPLE A customer-defined creditor reference 2348231.

B.1.2 Delete all non-alphanumeric characters.

B.1.3 Add the RF Creditor Reference identification code "RF" followed by the digits "00" to the right-hand end of the creditor reference.

EXAMPLE The same number now becomes 2348231RF00.

B.1.4 Convert the alpha characters "RF" to numeric characters "2715" in accordance with 6.2.3.

EXAMPLE The number now becomes 2348231271500.

B.1.5 Calculate the modulo 97 (the remainder after division by 97).

EXAMPLE After division by 97, the remainder of 2348231271500 is 27 (twenty-seven).

B.1.6 Subtract the remainder from 98 and, if the result is less than ten, insert a leading zero.

EXAMPLE 98 minus 27 equals 71.

NOTE The example given in this annex does not require insertion of a leading zero.

B.1.7 Insert the code "RF" and check digit at the left-hand end of the creditor reference.

EXAMPLE The RF Creditor Reference is equal to RF712348231 (electronic format) or RF71 2348 231 (print format).

B.2 Validating the check digits in an RF Creditor Reference

B.2.1 This method is used to validate the check digits of an RF Creditor Reference.

EXAMPLE The RF Creditor Reference to be validated is RF712348231.

B.2.2 Move the first four characters of the RF Creditor Reference to the right of the RF Creditor Reference.

EXAMPLE The number becomes 2348231RF71.