INTERNATIONAL STANDARD

ISO/DIS
13616- 1

Financial services – International bank account number (IBAN) – Part 1: Structure of the IBAN

Services financiers – Numéro de compte bancaire international (IBAN) – Partie 1: La structure de l'IBAN

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

This edition of ISO 13616 consists of the following parts:

• Part 1: Structure of the IBAN

• Part 2: Roles and responsibilities of the IBAN Registration Authority

ISO 13616 was prepared by Technical Sub-Committee ISO/TC 68/SC7, *Financial services – Core Banking*.

This third edition cancels and replaces the second edition (ISO 13616:2003), which has been technically revised.

Summary of major changes:

The IBAN shall have a fixed length per country.

The bank identifier shall have a fixed length and position within the BBAN component of the IBAN.

A second part of this standard has been created, describing the roles and responsibilities of a Registration Authority.

Background to this revision:

The revision of ISO13616 was requested to achieve alignment between the ISO IBAN standard and the IBAN standard of the European Committee for Banking Standards (ECBS) in order to have one globally accepted standard only.

The revision incorporates the experience gained in the many European countries that have already implemented the IBAN based on the ECBS standard. The critical advantages compared to the previous ISO standard were the requirement for a fixed length of the IBAN as well as a fixed length and position of the bank identifier within the IBAN. This enables plausibility checks resulting in better STP and improved cost efficiency.

The agreement of ISO TC68 SC7 and its Working Group 1 was based on extensive discussions, to clarify how the standard has worked and will continue to work.

Firstly, one of the main concerns was that the fixed length requirement the ISO revision would require changes to domestic account numbers or that the different national account number structures would need to be harmonised. It was clarified that this is not the case as the fixed length will be achieved when creating the IBAN.

Secondly, given the possibility that domestic accounts may use lower case alpha characters, the standard remains unchanged on this point, i.e. lower case characters continue to be allowed, although the check digit algorithm would continue to be case independent.

Introduction

The use of electronic communication media and services internationally for the cross-border 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 order to facilitate automated processes in support of straight through processing (STP) in this environment, this International Standard has been developed by ISO/TC 68/SC7 as a means by which financial institutions and their customers can exchange, through inter-industry electronic data interchange (EDI), customer account identification details in a machine-readable form. It also makes provision for validation of the information provided.

In developing this International Standard it was recognized that a single, universal method for identifying the account and banking relationship for customers of financial institutions was not practical. Accordingly, this International Standard recognizes that financial institutions would wish to retain, wherever possible, their current national identification methods. It therefore provides a method whereby a minimum amount of change to existing systems is required and, at the same time, proposes a means of structuring the information in a way that promotes automated processing of the information provided.

The use of this International Standard in electronic data interchange should

a) reduce the need for manual intervention in the processing of inter-industry and intra-industry 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 country of ownership of the account.

It is recognized that the IBAN would also be of use in a paper environment. The use of information to further qualify details of the financial institution at which the IBAN applies is not precluded by their use outside of the IBAN.

Nationally agreed IBAN formats that are compliant with this International Standard and subsequently registered with the ISO 13616 Registration Authority are published on http://www.ecbs.org.

Financial services – International bank account number (IBAN) – Part 1: Structure of the IBAN

1 Scope

This International Standard specifies the elements of an international bank account number (IBAN), used to facilitate the processing of data in data interchange internationally — in financial environments as well as within and between other industries. The IBAN is designed for automated processing, but can also be conveniently used in other media interchange when appropriate (paper document exchange, etc.).

This International Standard does not specify internal procedures, file organization techniques, storage media, languages, etc. to be used in its implementation. Nor is it designed to facilitate the routing of messages within a network. It is applicable to the textual data which might be conveyed through a system (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 3166 -1:1997, *Codes for the representation of names of countries – Part 1 Country codes*

ISO/IEC 7064:2003, *Data processing — Check character systems*

3 Terms and definitions

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

3.1
account number
identifier that identifies an account

3.2
bank identifier
identifier that uniquely identifies the financial institution servicing an account to be identified

3.3
basic bank account number
BBAN
identifier that uniquely identifies an individual account at a specific financial institution in a particular country and which includes a bank identifier of the financial institution servicing that account

3.4
international bank account number
IBAN
an expanded version of the basic bank account number (BBAN), intended for use internationally that uniquely identifies an individual account at a specific financial institution, in a particular country[1]

Figure 1

4   Conventions

This International Standard uses the following conventions for data element representations.

Status of sub-elements of a data element:

[ ] = optional.

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 IBAN shall be:

2!a2!n30c

Where:

a)   The first two letters (2!a) shall always be the two-character country code (alpha version), as defined in ISO 3166, of the country in which the financial institution servicing the account resides.

b)   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).

---

[1] Although designed for use internationally, there is nothing to prevent the use of the IBAN domestically.

c) The remaining part of the IBAN (up to 30c), the BBAN, 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 account number schemes.

d) The BBAN shall in addition:

➢ have one fixed length per country; and,

➢ include within it a bank identifier with a fixed position and length per country.

If the BBAN is structured in line with Clause 5, sub-clause d), the corresponding IBAN format would meet the requirements for inclusion in the ISO IBAN registry. Those complying with all other clauses may be included in a special section of the registry where information will be included as free text.

For the representation of the IBAN in a printed format, see Annex A.

6 Check digits

6.1 General

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

The check digits are used to verify the BBAN and country code.

Only the financial institution which services (maintains) the account is allowed to generate its IBAN (including check digits).

6.2 To check the check digits

6.2.1 If the IBAN is in paper format (see Annex A), then delete all blank spaces.

6.2.2 Move the first four characters to the right-hand end of the IBAN.

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 7064).

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

6,2,6 Check digits with the value of '01' or ''00' are invalid. To resolve an anomaly in the algorithm, values '01' and '00' are equivalent to '98' and '99', respectively, and the latter must be used.

6.3   To generate the check digits

6.3.1   Add the country code (2!a) and "00" to the right-hand end of the BBAN.

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

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

7   Registration of IBAN formats

National standards bodies wishing to register an ISO 13616 compliant IBAN format for their country should refer to Part 2 of this Standard.

8   Formats and samples of IBANs

ISO 13616-compliant IBAN formats and samples can be found in the registry of national IBAN formats maintained by the Registration Authority described in Part 2 of this International Standard.

Annex A
(normative)

Representation of the IBAN in the printed format

A.1 Introduction

This annex specifies the use and representation of IBAN in the printed format.

A.2 Scope

In a printed format, where the specification of an international bank account number is requested, the IBAN shall be used as defined in this annex.

The generation of a payment (or related) instruction on paper shall always include an IBAN and, in addition, where appropriate, the instruction may include identification of the financial institution servicing the account by an alternative identification scheme other than that implicit in the IBAN (e.g. BIC as defined in ISO 9362).

Mandating the positioning of the IBAN 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 IBAN structure (2!a2!n30c) shall remain, but the IBAN 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 IBAN when presented on paper in printed format.

Example:

Electronic IBAN: BE68539007547034

Printed IBAN: BE68 5390 0754 7034

Annex B
(informative)

An example of how to calculate and validate the check digits

B.1 Constructing an IBAN and calculating check digits

This section is based on an example of a Czech Republic domestic account number and the explanation of the IBAN structure given in Clause 5 *Structure*. The structure of the Czech Republic domestic account number consists of an account number between 6 to 20 digits and within it a bank identifier with a fixed length of 4 digits, which is always in the last four positions. For example, the domestic account number is 19-2000145399/0800, where the bank identifier is 0800.

B.1.1   Format the BBAN by:

a) deleting all non-alphanumeric characters, e.g., the domestic account number 19-2000145399/0800 becomes 1920001453990800

B.1.2   Adding the country code (2!a from ISO 3166) followed by the digits "00" to the right-hand end of the BBAN, e.g., the same number now becomes 08000000192000145399CZ00

B.1.3   Converting the alpha characters to numeric characters in accordance with 6.2.3, e.g., the number now becomes 08000000192000145399123500

B.1.4   Calculating the modulo 97 (the remainder after division by 97), e.g., the remainder after division of 08000000192000145399123500 by 97 is thirty-three (33).

B.1.5   Subtracting the remainder from 98 and if the result is less than ten insert a leading zero (which is not the case in this example), e.g., 98 minus 33 equals 65

B.1.6   Inserting the country code and check digit to the left-hand end of the BBAN, e.g., the IBAN is equal to CZ6508000000192000145399 (electronic format) or CZ65 0800 0000 1920 0014 5399 (print format)

B.2 Validating the check digits in an IBAN

B.2.1   The following is a method for validating the check digits of an IBAN, e.g.: CZ6508000000192000145399

B.2.2   Move the first four characters of the IBAN to the right of the IBAN, e.g., 08000000192000145399CZ65

B.2.3   Convert the alpha characters to numeric characters in accordance with 6.2.3, e.g., 08000000192000145399123565

B.2.4   Calculate the modulo 97 (the remainder after division by 97), e.g., the remainder after division of 08000000192000145399123565 by 97 is one (1)

B.2.5   If the remainder is one (1) then the check digits are correct for this IBAN.

INTERNATIONAL STANDARD

ISO/DIS

13616- 2

ISO TC68/SC7/WG1 N036

29 September 2005

Financial services – International bank account number (IBAN) – Part 2: Role and responsibilities of the Registration Authority

Services financiers – Numéro de compte bancaire international (IBAN) – Partie 2: Le rôle et les responsabilités de l'organisation d'enregistrement

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

This edition of ISO 13616 under the general title *International bank account number (IBAN)*, consists of the following parts:

- Part 1: Structure of the IBAN

- Part 2: Role and responsibilities of the Registration Authority

ISO 13616 was prepared by Technical Sub-Committee ISO/TC 68/SC7, *Financial services – Core banking*.

 iii

Introduction

The use of electronic communication media and services internationally for the cross-border 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 order to facilitate automated processes in support of straight through processing (STP) in this environment, this International Standard has been developed by ISO/TC 68 as a means by which financial institutions and their customers can exchange, through inter-industry electronic data interchange (EDI), customer account identification details in a machine-readable form. It also makes provision for validation of the information provided.

In developing this International Standard, it was recognized that a single, universal method for identifying the account and banking relationship for customers of financial institutions was not practical. Accordingly, this International Standard recognizes that financial institutions would wish to retain, wherever possible, their current national identification methods. It therefore provides a method whereby a minimum amount of change to existing systems is required and, at the same time, proposes a means of structuring the information in a way that promotes automated processing of the information provided.

The use of this International Standard in electronic data interchange should:

a)   reduce the need for manual intervention in the processing of inter-industry and intra-industry 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 country of ownership of the account.

This part of ISO 13616 describes:

- the Registration Authority responsible for the registry of IBAN formats;

- the procedures for registering IBAN formats; and

- the data elements making up the registry of IBAN formats.

Nationally agreed IBAN formats that are compliant with this International Standard and which are registered with the ISO 13616 Registration Authority are published on http://www.ecbs.org.

Financial services – International bank account number (IBAN) – Part 2: Role and responsibilities of the Registration Authority

1   Scope

This part of ISO 13616 describes the Registration Authority (RA) responsible for the registry of IBAN formats that are compliant with ISO 13616-1, the procedures for registering ISO 13616-compliant IBAN formats and the structure of the registry.

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 3166 -1:1997, *Codes for the representation of names of countries – Part 1 Country codes*

ISO 13616-1:2006, *Structure of the IBAN*

3   Terms and definitions

For the purposes of this part of ISO 13616, the terms and definitions given in ISO 13616-1 apply.

4   Registration Authority (RA)

4.1   Appointment

One of the members of ISO TC68/SC7, or an approved body, shall be appointed to act as the Registration Authority under legal agreement with ISO in accordance with ISO/IEC Directives Annex H.

4.2   Responsibilities

The Registration Authority is responsible for the creation and maintenance of the registry of ISO 13616-compliant IBAN formats, to be referred to as the *IBAN registry*. The responsibilities of the RA shall be to:

- create and maintain the IBAN registry;

- publish the IBAN registry on the Internet;

- submit a copy of the IBAN registry to the Secretariat of ISO TC68/SC 7;

- submit for review to each meeting of ISO TC68/SC 7, a Registration Management Report, 30 days prior to a meeting;

- retain a permanent record, that is, copies of all applications submitted to it, along with the disposition of each application.

5   Registration procedures

The national standards body of the country shall submit their nationally agreed ISO 13616-compliant IBAN format for that country.

In applying for inclusion in the ISO IBAN registry, the following data as defined in ISO 13616-1, must be provided:since they are mandatory or recommended in ISO 13616-1

- Name of the country;

- ISO country code;

- Length of the IBAN, which must be 34 characters or less;

- Position and length of the bank identifier within the BBAN;

- IBAN structure; and

- Contact details of the person or entity to be contacted by the RA to answer queries and be responsible for updating information in the registry. This is required for the registration of an IBAN format but the information will not be publicly available, unless agreed by the national standards body or national central bank.

In addition the following data are required for registration of an IBAN format:

- bank identifier (as used in the BBAN) example;

- domestic account number example;

- basic bank account number (BBAN) example;

- BBAN structure and BBAN length;

- IBAN examples, in both electronic and print formats.

IBAN formats registered with the European Committee for Banking Standards (ECBS) in ECBS TR201 *Register of European Bank Account Numbers*, will be accepted as part of the IBAN registry with immediate effect.

6   Structure of the IBAN registry

The IBAN registry shall be created and maintained in the following format:

Data element	Example
Name of country	Czech Republic
Country code as defined in ISO 3166	CZ
Domestic account number example	19-2000145399/0800
BBAN	

Data element	Example
• BBAN structure	4!n16!n
• BBAN length	20!n
• Bank identifier position within the BBAN	Positions 1-4
• Bank identifier length	4!n
• Bank identifier example	0800
• BBAN example	08000000192000145399
IBAN	
• IBAN structure	CZ2!n4!n16!n
• IBAN length	24!c
• IBAN electronic format example	CZ6508000000192000145399
• IBAN print format example	CZ65 0800 0000 1920 0014 5399
For internal use by the RA only and will not to be publicly available, unless agreed by the national standards body or national central bank	
Contact details	Mr. Ivan FENCL Czech National Bank Na Prikope 28 Praha 1 Tel: +420 224 413 580 Fax: +420 224 413 351 Email: fencl@cnb.cz

7   Service level agreement

The Registration Authority shall publish in the IBAN registry a valid ISO 13616-compliant IBAN format that is submitted by a national standards body or national central bank.

The RA shall acknowledge the original submission within five working days of receipt. The RA shall also validate the information in the original submission within ten working days of receipt and indicate if there is any additional information required.

The RA shall publish the original submission if it has been determined to be valid, within five working days of its determination as valid. If the original submission has been deemed not to be valid, its publication will be undertaken within five days after a submission has been deemed valid by the RA.

The national standards bodies or the national central banks shall be responsible for ensuring that their entries in the registry are kept up to date.

The RA will publish the updated IBAN registry on a website designated by the organisation providing the RA services.

The RA shall make best efforts to ensure the on-line availability of the IBAN registry.

8   Ownership of data

National standards bodies or national central banks that contribute information to be incorporated in the IBAN registry will keep any Intellectual Property Rights (IPR) they have on this information. A contributing national

standards body warrants that it has sufficient rights on the contributed information to have it published in the IBAN Registry through the ISO 13616 Registration Authority in accordance with the rules set in ISO 13616. To ascertain a widespread, public and uniform use of the IBAN Repository information, the contributing organisation grants third parties a non-exclusive, royalty-free license to use the published information.

On termination of the agreement between ISO and the organisation appointed as the RA, ISO may request that a full copy of the repository with a record of all changes is supplied in electronic form.

Annex A
Designation of the Registration Authority

The Registration Authority responsible for the IBAN registry described in this International Standard is the European Committee for Banking Standards:

The European Committee for Banking Standards (ECBS)
Avenue de Tervueren, 12
1040 Brussels, Belgium
Telephone: + 32 (0) 2 733 3533
Fax: + 32 (0) 2 736 4988
E-mail: ecbs@ecbs.org
Website: http://www.ecbs.org