

IBAN Standards Ver. 2.0 - QATAR



QATAR CENTRAL BANK

INTERNATIONAL BANK ACCOUNT NUMBER (IBAN) - QATAR

STANDARDS DOCUMENT

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Update History

Version	Description	Date
1.0	First Draft	30.06.2013
2.0	Update from IBAN committee and inclusion of ISO standard	10.07.2013

1. Introduction

The International Bank Account Number (IBAN) is an internationally agreed means of identifying bank accounts across national borders with a reduced risk of propagating transcription errors. IBAN has been standardized ISO 13616-1. Advantage of implementing IBAN is to facilitate Straight Through Processing (STP) of Electronic Payments by minimizing delays and extra costs associated with incorrect account numbers. IBAN implementation will help in bringing more efficiency in remittance related transactions. Approx 54 countries in total are currently using IBAN mainly member countries of the European Union. In the Gulf region, UAE, Saudi Arabia, Kuwait and Bahrain are using IBAN.

The IBAN was originally developed to facilitate payments within the European Union but the format is flexible enough to be applied globally. It consists of a ISO 13166-1 alpha-2 country code, followed by two check digits and up to thirty alphanumeric characters for the domestic bank account number (incorporating routing information), called the BBAN (Basic Bank Account Number). It is up to each country's national banking community to decide on the length of the BBAN for accounts in that country, but its length must be fixed for any given country.

In line to rollout of IBAN in Qatar, Qatar Central Bank (QCB) have formed a working committee with participation of selected banks. As part of QCB directive, the committee will work and publish 3 (Three) sets of documents which shall work as principle guideline for all operating banks in Qatar to abide by;

1. Standards Document
2. Communication
3. Technical Specifications

This document is the Standards Document.

Registering IBAN with the SWIFT - QCB will register the IBAN for Qatar with SWIFT, the registrar for IBAN.

Definitions

Basic Bank Account Number (BBAN)

The BBAN (Account Number) is the identifier used by financial institutions which identifies uniquely in an individual country the account of a customer at a financial institution.

International Bank Account Number (IBAN)

An expanded version of the Basic Bank Account Number (BBAN) used internationally to uniquely identify the account of a customer at a financial institution.

Generation of IBAN

This is one time process of creating an IBAN for an account. This process is under the sole responsibility of the bank servicing the customer's account.

IBAN

International Bank Account Number

QCB

Qatar Central Bank

QATCH

Qatar Automated Clearing House

Straight through Processing (STP)

The procedure for transferring funds electronically without manual intervention.

TERMS

Transactions' Electronic Robust Mandate System

2. Standards

The format structure and content of IBAN Sample

POSITION	1-2	3-4	5-8	9-29
	INTERNATIONAL ENVELOPE			BBAN
	Country Code	Check Digits	Bank Identifier Code (First 4 character of BIC)	Core Customer Account Number
Example	QA	01	DOHB	000012341234123412341
Type	2 character	2 digit	4 character	21 Character - Account length differ bank to bank, left pad with zeros.
	Total 29 Digits for Qatar			

2.1 IBAN Specification

IBAN consists of two components. The first component is the country code and check digit, known as International Envelope. The second component is the Basic Bank Account Number (BBAN). IBAN has a unified and a fixed length per country.

1) International Envelope:

- Two letter country code. E.g. QA for QATAR.
- Two-number Check Digit for the entire IBAN. Calculated according to ISO/IEC 7064 (MOD 97-10) Standard, see section 5.1.
- Check digit feature ensures, through validation, that account number provided (to remitting bank) is correct.

2) Basic Bank Account Number (BBAN):

A Basic Bank Account Number (BBAN), consists of Bank Identifier, branch codes and Bank Account Number.

The remaining part of the IBAN from the 5th - 29th position is known as BBAN. It is the domestic part of the IBAN which uniquely identifies an account number of a customer's respective Bank in Qatar. The characteristics of the BBAN:

- It has a fixed length (25 Characters for Qatar).
- It consists of two parts:
 - Bank Identifier: The first 4 letters of SWIFT Code (BIC) or Bank Code identified by QCB. Please refer table in section 2.1.1

- 2) Core Customer Account Number: is an account number which identifies the customer's account at a Bank in Qatar. It may be necessary to pad leading zeros. The Core Customer Account Number may contain alphanumeric characters, but all alpha characters to be in upper case letters.

2.1.1 Qatar Banks Swift Code and Identifier

Name of Bank	Swift Code	Bank Identifier
QATAR NATIONAL BANK	QNBAQAQAXXX	QNBA
COMMERCIAL BANK OF QATAR	CBQAQAQAXXX	CBQA
DOHA BANK	DOHBQAQAXXX	DOHB
QATAR ISLAMIC BANK	QISBQAQAXXX	QISB
AHLI BANK OF QATAR	ABQQQAQAXXX	ABQQ
QATAR INTL ISLAMIC BANK	QIIBQAQAXXX	QIIB
ARAB BANK	ARABQAQAXXX	ARAB
MASHREQ BANK	MSHQQAQAXXX	MSHQ
INTERNATIONAL BANK OF QATAR	IBOQQAQAXXX	IBOQ
HSBC	BBMEQAQAXXX	BBME
STANDARD CHARTERED BANK	SCBLQAQAXXX	SCBL
UNITED BANK LTD	UNILQAQAXXX	UNIL
BNP PARIBAS	BNPAQAQAXXX	BNPA
RAYYAN BANK	MAFRQAQAXXX	MAFR
AL KHALIJ COMMERCIAL BANK	KLJIQAQAXXX	KLJI
BANK BARWA	BRWAQAQAXXX	BRWA
QATAR DEVELOPMENT BANK	QIDBQAQAXXX	QIDB

2.1.2 Use of Uppercase

The ISO 13616-1 specification allows lowercase and uppercase letters for the BBAN. The ECBS specification allows only uppercase letters for the BBAN, thus reducing the possibility of more transcription and capturing errors. Qatar will follow ECBS and only use uppercase. Therefore the valid letters and numerals for the IBAN are A-Z and 0-9 in Uppercase.

2.2 Presentation Format of IBAN

IBAN shall be represented in the following two formats:

(a) Electronic Format

The IBAN shall be presented in the form of a continuous string of characters in Electronic Payment messages.

Example: QA01SCBL00001234123412341234

(b) Print format

Considering the long length the IBAN shall be divided into groups of four characters and printed on paper documents/statements/advices and displayed on screen for easy readability. Each group shall be separated by a blank space of one character. The last group of an IBAN of a Bank customer account in Qatar shall have a length of one character.

Example: QA01 SCBL 0000 1234 1234 1234 1

3. Scope**3.1 Where IBAN is required**

IBAN is required for below listed payments:

- Domestic Payments incoming and outgoing customer accounts of Qatar via SWIFT or local payments which get cleared through QATCH and TERMS.
- Cross-border outgoing Payments from customer accounts of Banks in Qatar to customer accounts of banks/financial institutions in **"Countries that have adopted IBAN" where the use of IBAN is mandatory**
- Cross-border incoming Payments to customer accounts of Banks in Qatar from customer accounts of banks/financial institutions in **"Countries that have adopted IBAN" as well as "Countries that have not adopted IBAN"**.

	Cross Border IBAN		
	QATAR- Domestic	Participant country	Cross Border Non IBAN Country
INCOMING	√	√	√
OUTGOING	√	√	x

Countries that are considered participants in IBAN are:

- Countries listed in the IBAN registry at SWIFT; and
- Any other country, which adopted IBAN but not registered at SWIFT, specified by the QCB

3.2 Validation

All banks are required to validate IBAN for incoming payments as well as for outgoing domestic and cross border payment, where the country is an IBAN participant as described in section 5.2 the validation approach.

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List of countries who are IBAN participants provided below as of 23rd June 2013;

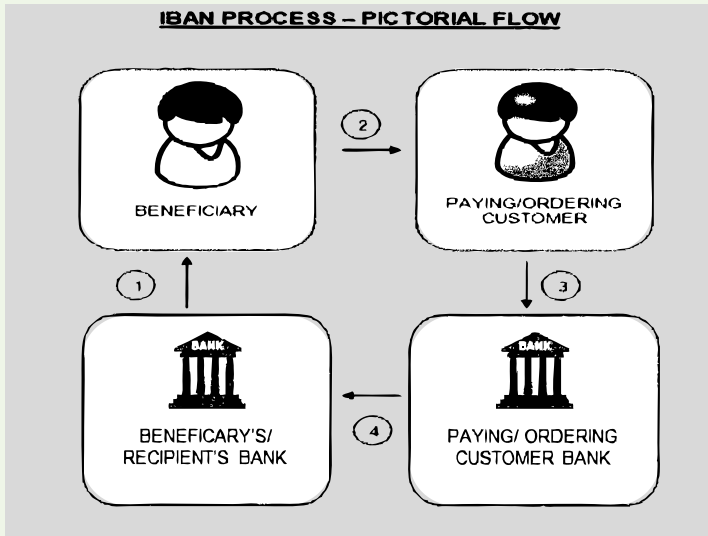
Country	ISO country code
Albania	AL
Andorra	AD
Austria	AT
Belgium	BE
Bahrain	BH
Bosnia and Herzegovina	BA
Bulgaria	BG
Croatia	HR
Cyprus	CY
Czech Republic	CZ
Denmark	DK
Estonia	EE
Faroe Islands	FO
Finland	FI
France	FR
Georgia	GE
Germany	DE
Gibraltar	GI
Greece	GR
Greenland	GL
Hungary	HU
Iceland	IS
Ireland	IE
Israel	IL
Italy	IT
Kazakhstan	KZ
Latvia	LV
Lebanon	LB
Liechtenstein	LI
Lithuania	LT
Luxembourg	LU
Macedonia	MK
Malta	MT
Mauritania	MR
Mauritius	MU
Monaco	MC
Montenegro	ME
Netherlands	NL
Norway	NO
Poland	PL
Portugal	PT
Romania	RO
San Marino	SM
Saudi Arabia	SA
Serbia	RS
Slovakia	SK
Slovenia	SI
Spain	ES
Sweden	SE
Switzerland	CH
Tunisia	TN
Turkey	TR
United Kingdom	GB
United Arab Emirates	AE

4. Example of IBAN Usage

Banks shall use IBAN to identify a customer account, which sends or receives an Payment through a Bank. Accordingly, any customer who makes or receives an electronic financial transaction needs to use IBAN. The role of Banks in using IBAN in the processing of Payment involves recognition, capturing and validation of IBAN. Banks shall request the customer initiating an Electronic Payment to a customer in another country, where the use of IBAN is mandatory, to provide the IBAN of the beneficiary.

1. The Bank holding the beneficiary's (recipient's) account generates and provides the IBAN to the beneficiary;
2. The beneficiary communicates the IBAN to the paying customer/ordering customer;
3. The paying/ordering customer submits an electronic/manual fund transfer/payment order, which includes the beneficiary's IBAN; which the paying /ordering customer bank validates before sending.
4. The paying/ordering customer's Bank validates the IBAN in the outgoing payment message. After the receipt of the incoming payment message, the beneficiary's (recipient's) Bank validates the IBAN and credits the money to the beneficiary's account.

4.1 Pictorial Flow



5. Check Digit Generation and Validation

For check digit generation all the accounts that need an IBAN Banks' shall generate and keep ready the IBAN which should be updated into the Bank's main banking application for future use and reference. The generation of IBAN should be done using ISO/IEC 7064 (MOD97-10). Also, in the case where a Bank acts as a correspondent Bank and receives a payment against an account of another Bank in Qatar, prior to entering the outgoing payment, the respective Bank shall validate the IBAN.

5.1 Check Digit Generation

Steps to be followed in generating check digits are summarised below:

1. Check that the total IBAN length is correct as per the country. If not, the IBAN is invalid.
2. Replace the two check digits by 00 (e.g. QA00 for QATAR).
3. Move the first four initial characters to the end of the string.
4. Replace the letters in the string with digits, expanding the string as necessary. Each alphabetic character is therefore replaced by 2 digits. Refer below Table for the decimal equivalent of each alphabet.
5. Convert the string to an integer (i.e. ignore leading zeroes).
6. Calculate MOD-97 of the new number.
7. Subtract the remainder from 98 and, if necessary, pad with a leading 0 to make a two digit number.

Computing MOD 97-10 for a very large number

For Qatar the length of IBAN is long, thus for precision sake, software implementation of integers (a (signed) integer of 32 bits or 64 bits represents a maximum of 9 or 18 digits), then the calculation can be split up into consecutive remainder calculations (CRC) on integers with a maximum length of 9 or 18 digits

5.1.1 Alpha Characters to Digits Conversion Table

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

Example:

Sample IBAN: QA00SCBL000000000001375025601

Step 1:

Move the first four characters 'QA00' to the right end of the number as follows and convert to numeric using conversion table.

SCBL000000000001375025601QA00

Step 2:

Convert the letters 'SCBL' to numbers (numeric) using the conversion Table

SCBL000000000001375025601261000

Step 3:

Apply MOD 97-10 algorithm

28121121000000000001375025601261000

Step 4:

Accordingly, it is required to divide the first 9 digits of the number by 97 and Calculate the remainder. Here remainder of $(281211210/97=62)$

281211210/97 = 62

Step 5:

Replace the digits 281211210 with remainder of 62 giving below result

620000000001375025601261000

Step 6:

Repeat step No. 3 with the first 9 digits and computing using MOD 97

620000000/97=56

Step 7:

Replace the digits 620000000 with remainder of 56 giving below result

560001375025601261000

Step 8:

Repeat step No. 3 with the first 9 digits and computing using MOD 97

560001375/97 = 5

Step 9:

Replace the digits 560001375 with remainder of 5 giving below result

5025601261000

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Step 10:

Repeat step No. 3 with the first 9 digits and computing using MOD 97

$$502560126/97=22$$

Step 11:

Replace the digits 502560126 with remainder of 22 giving below result and use MOD 97

$$221000/97=34$$

Step 12:

Subtract this final remainder (34) from 98. (98-34=64)

These digits provide the required Check Digits of the BBAN: I.e. 64

RESULT FULL IBAN= QA64SCBL000000000013750256

5.2 Check Digit Validation

A customer may provide the IBAN in either electronic format and/or paper format. If the customer has stated the beneficiary's IBAN in paper format, it is necessary to convert it to electronic format (by deleting all empty spaces and any non alphanumeric characters).

Method of Validating the IBAN Check Digits is summarised below:

1. Move the first 4 characters (country code and two check digits) to the end of the BBAN.
2. Convert the letters to numbers using conversion table 1 above.
3. Apply check character system MOD 97-10 as per the ISO/IEC 7064.
4. If the remainder is '1', the check digits of the IBAN are considered valid.

Example

Sample IBAN: QA64SCBL00000000001375025601

Step 1:

Move the first 4 digits 'QA64' to the right end of the number:

SCBL00000000001375025601QA64

Step 2:

Convert the letters to numbers using the conversion table

281211210000000001375025601261064

Step 3:

Divide the first 9 digits of this number by 97 and calculate the remainder

$$281211210/97=62$$

Step 4:

Replace the digits **281211210** by the remainder 62:

6200000000001375025601261064

Step 5:

Repeat step No. 3 with the first 9 digits and computing using MOD 97

620000000/97 = 56

Step 6:

Replace the digits **620000000** by the remainder 56:

560001375025601261064

Step 7:

Repeat step No. 3 with the first 9 digits and computing using MOD 97

560001375/97 = 5

Step 8:

Replace the digits **560001375** by the remainder 5:

5025601261064

Step 9:

Repeat step No. 3 with the first 9 digits and computing using MOD 97

502560126/97 = 22

Step 10:

Repeat step No. 3 with the first 9 digits and computing using MOD 97

221064/97 = 1

Since the remainder is '1', the Check Digits of '64' of the IBAN are considered as Valid.

6. Appendix - IBAN Contact Person:

Mr. Abdulhadi Ahen Ali Ahen
Acting Director, Banking, Payments and Settlement Systems Dept.
Head of IBAN Committee,
Qatar Central Bank.
Tel : +974 44456371
Fax : +974 44430382
E-Mail : ahena@qcb.gov.qa