

# Recommendations

This section provides a more detailed explanation of the elements (tags) of the NBS IPS QR code and NBS's recommendations in accordance with the prescribed specification, to ensure adequate preparation of the code via textual string.

- 1) In the NBS IPS QR code, each field is specified as a pair of the defined tag and content. The defined tag and content are separated by a colon (:);
- 2) It is recommended to use only the optional tags necessary for the payee, to facilitate the reading of the content of the NBS IPS QR code. Tags of optional fields are not specified in the NBS IPS QR code unless they contain a value. It is not allowed to enter e.g. |S:|;
- 3) Textual entry is made at the very start – there can be no empty characters, lines or several lines above the string and **tags are entered in a sequence, without spaces or new line separation, unless this is permitted within the content of a given tag;**
- 4) **Fields are separated by the delimiter** – vertical bar symbol (|), technically called the “pipe” (e.g. K:PR|V:01| etc.);
- 5) **Textual entry may not start with a delimiter** – vertical bar symbol (|);
- 6) The last field in the content of a string finishes with the end of the string and no delimiter – vertical bar symbol (|), or empty characters or new line mark, can be entered after the final character;
- 7) **Tag “K” – identification code** (mandatory), marks the content of the NBS IPS QR code. When used by payees, including on bills-invoices, the value is **“PR” (K:PR)**. In the content of this tag, there may be no space at the end, nor any other letter, character or new line mark (after letters PR);
- 8) **Tag “V” – version: 01** (mandatory), value 01 is entered (V:01);
- 9) **Tag “C” – code set: 1. UTF-8** (mandatory), value “1” is entered (C:1). UTF-8 is used mandatorily to present characters in the code;

**10) Tag “R” – number of payee’s account** (mandatory); as this is an electronic entry, the number of payee’s account is entered exclusively as a string of 18 figures fixed, without dashes.

**NOTE:**

With regard to the content of tag “R”, attention should be paid to the

- **entered figures are not separated with dashes;**
- **no space is entered at the start of the content of the tag;**
- **the content of the tag is not separated by a new line;**
- **no letter is entered in the content of the tag;**
- **only one number of payee’s account may be entered in the NBS IPS QR code and if, for example, the payee specifies several of its account numbers on the bill-invoice, it will designate one of these accounts for the NBS IPS QR code.**

**Example 1:**

If the number of payee’s account is e.g. 840-955845-10, this account must be entered in the NBS IPS QR code as:

**|R:840000000095584510|**

**Example 2:**

If the number of payee’s account is e.g. 165-55-74, this account must be entered in the NBS IPS QR code as:

**|R:165000000000005574|**

**Example 3:**

If the number of payee’s account is e.g. 310-1234567891211-86, this account must be entered in the NBS IPS QR code as:

**|R:310123456789121186|**

**11) Tag “N” – payee’s name** (mandatory) means name and surname and/or business name of the payee, according to the prescribed specification.

Optionally, data may also include other data on the payee (street, number and place). Data may be entered in a single line and/or in two or three lines and are separated by a new line mark. A tag may have a maximum of 70 “ans” characters, including spaces. If optional data are used, it is recommended to use the head office address of the payee only in order to facilitate the reading of the content of the NBS IPS QR code. In this case, if data are separated by a new line mark, the business name of the payee is entered in one line and place is entered in another line.

**NOTE:**

With regard to the content of tag “N”, attention should be paid to the following:

- **tag N must not contain more than three lines;**
- **the number of characters in tag N must not exceed 70;**
- **tag N can contain numbers, letters and special characters (ans), in line with regulations.**

The table of special characters in line with regulations is given below:

!	(	/	@	}
“	)	:	[	~
#	*	;	]	”
\$	+	<	^	”
%	,	=	-	”
&	-	>	`	,
‘	.	?	{	'

Example 1:

**|N:Čigra|**

Example 2:

**|N:Čigra doo Leskovac|**

**12) Tag “I” – currency and amount of funds** (mandatory).

**NOTE:**

With regard to the content of tag “I”, attention should be paid to the following:

- **it must contain the RSD designation;**
- **decimal points must be entered after which invalid decimal zeroes need not be written;**
- **it is not permitted to leave out a figure for an entire place in the amount;**
- **there is no space between currency designation and amount;**
- **the content of tag “I” has between 5 and 18 alphanumerical characters, in line with the prescribed specification.**

Examples:

**|I:RSD1025,1|.. |I:RSD1025,1| ili |I:RSD1025,12|**

Incorrect:

**|I:RSD,01|;**

Correct:

**|I:RSD1025,1| or |I:RSD1025,12|**

**13) Tag “P” – data on the payer** (optional), according to the prescribed specification, means name and surname and/or business name of the payer, address and/or head office address of the payer (street and number and place).

If tag “P” is used, attention should be paid to the following:

- **tag P must not contain more than three lines;**
- **if data are entered in two or three lines, they are entered in a sequence, which means that the payer’s name is entered first (name and surname), followed by the street, number and place of the payer;**
- **the number of characters in tag P must not exceed 70;**
- **tag P may contain numbers, letters and special characters (ans), in line with regulations, and the table of special characters is given as part of the explanation for tag N.**

**NOTE:**

Data on the payer may be left out of the NBS IPS QR code if the issuer of the bill, as the payee, records the paid obligation of the service consumer to which the bill/invoice refers according to the reference credit number. Data on the payer are not only optional but may also be changed by the bank in line with the regulation. In that case, the bank will not take into consideration the data on the payer from the NBS IPS QR code, but the payer will be the account owner which in effect executes the payment.

When tag “P” is not used, the payee must take care not to enter |P:| in that case, but to leave this tag out entirely.

**14) “SF” – payment code** (mandatory), means three-digit numerical data.

**NOTE:**

With regard to the content of tag “SF”, attention should be paid to the following:

- **the first figure can be either 1 or 2 (189 – cash or 289 – cashless payment);**
- **payment code 189 or 289 is only prescribed for transactions where households are the ordering party. If the service is used by legal persons or entrepreneurs, another payment code must be entered;**
- **it is not allowed to enter space and then two figures;**
- **tag content should not be separated by a new line;**

Payment codes are prescribed in [Annex 3 of the Decision of the National Bank of Serbia regulating the form, content and manner of using payment order forms for dinar payment transactions](#). Payees use payment codes depending on the basis on which they collect an obligation.

The most frequently used payment codes in the NBS IPS QR codes, regardless of whether the service is used by households/legal persons/entrepreneurs, are:

- **121** or **221** – Trade in goods and services – final consumption
- **122** or **222** – Public enterprise services

**15) Tag “S” – payment purpose** (optional) means data on the purpose and basis of transfer of funds. It contains 35 “ans” characters. The total number of characters also includes spaces. It is entered in a single line and content may not be separated by a new line. The table of special characters is given as part of explanations for tag N;

**16) Tag “RO” – payee’s model and reference credit number** (optional) means supplementary data for the payee, in accordance with regulations.

**NOTE:**

With regard to the content of tag “RO”, attention should be paid to the following:

- **the first two figures in the content of the tag represent the number of the model under which the payee’s reference credit number is determined (e.g. 97,11); if the reference credit number is not determined under any model, the first two figures are zeroes (00);**
- **the number of characters in tag RO cannot exceed 25;**
- **if the reference credit number is calculated under model 97, payees must take into account regulations relating to the calculation of such reference number;**
- **the content of the reference credit number is entered in a sequence, without spaces (e.g. 0074879);**
- **a dash may only be used to separate a group of characters (e.g. 0014-1234-12). An exception to this rule is the reference credit number determined under model 97 where no dashes are allowed when entering the content (e.g. 9714123412);**
- **the contents of tag RO are entered in a single line and may not be separated by a new line;**
- **when the final field in the content of the string is tag RO, it will end with the end of the string, which means that no empty characters and/or new line marks can be entered after the final character of the content of the reference credit number;**

Example 1:

**|RO:001234**

It is clear from Example 1 that the reference credit number is 1234 and that it was not calculated under any model because two zeroes are entered at the beginning.

**Example 2:****|RO:9714123412**

Example 2 shows a correctly entered reference credit number under model 97.

The reference credit number is 14123412 and it is calculated under model 97 (control number is 14), and the first two figures are model designations (97).

**Example 3:****|RO:009714123**

Example 3 shows a correctly entered reference credit number which is not under model 97, though it might seem so because of figures 97. The reference credit number is 9714123 and it is not calculated under any model, which is why zeroes are entered at the beginning.

**Example 4:****|RO:00009714-1342**

Example 4 shows a correctly entered reference credit number which is not under model 97 and the first two figures of the reference number itself are 00.

The reference credit number is 009714-1342 and it has two zeroes at the beginning because it is not calculated under any model.

**Additional comment on tag RO:**

If the reference credit number is not calculated under any model, and figures 00 are not entered at the beginning of the content of tag RO, this NBS IPS QR code will be correct in the technical sense as there are different models of calculating the reference credit number, through the most frequently used models in practice are e.g. 97, 11. When it comes to reference credit numbers that are not calculated under any model, if the payee fails to enter figures 00 at the beginning, it does so at its own responsibility, because, in line with the regulations, the payment service provider is responsible for the transferred content of the reference credit number only if such content is entered in accordance with model 97.