

EU NATIONAL ID - SOCIAL SECURITY – INSURANCE NUMBER STANDARDS



Every citizen has a **National Register Number**, which is created by using the **citizen's date of birth (encoded in six digits)**, followed by a **serial number (three digits)** and a **checksum (two digits)** in format **XXXXXX-XXX-XX**. The serial number is used so that men get the odd numbers, while women get the even numbers; thus, there can be only 500 men or women on each day.

The **NRN** can be found on the top left rear of an ID Card.

Bosnia & Herzegovina, Macedonia, Montenegro, Serbia and Slovenia

Citizens of former Yugoslav republics of the SFR Yugoslavia countries share a common ID scheme. The citizens of each receives a **13 digit Unique Master Citizen Number** in **DDMMYYYY RR XXX C** format where **DD/MM/YYYY** represents citizen's birth date. **RR** indicates one of 10 Bosnian regions where the citizen was born, **XXX** is a unique sequential number where 000 - 499 is used for males and 500 - 999 for females and the **final number** is a check-sum.

In **Bosnia & Herzegovina** the UMCN is known as the **JMBG Number**

In **Macedonia** the UMCN is known as the **ЕМБГ Number**

In **Montenegro** the UMCN is known as the **JMBG Number**

In **Serbia** the UMCN is known as the **ЈМБГ Number**

In **Slovenia** the UMCN is known as the **ЕМŠO Number**

Croatia has switched to a new identification number called the **Personal Identification Number scheme** known as an **OIB number** (see later in document for details).

The new version Bosnia and Herzegovina ID Card (since 2013):



[illegible]

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the form is without the check digit - **YYXXDD/SSSS**. This enables the system to work until the year 2054. The whole number must be divisible by 11.

The Czech ID Card:



Denmark

A **Personal Identification Number** (*Det Centrale Personregister* (known to all as **CPR**)) is used in Denmark.

The **CPR number** is a **ten-digit number** with the format **DDMMYY-SSSS**, where DDMMYY is the date of birth and SSSS is a sequence number. The first digit of the sequence number encodes the century of birth (so that centenarians are distinguished from infants, 0-4 in odd centuries, 5-9 in even centuries), and the last digit of the sequence number is odd for males and even for females.

Foreigners who are not eligible to get a CPR-number, but who need one, includes persons who have witnessed a crime, persons who have been charged with a crime, or are victims of a crime. These persons are registered with a CPR-number with the format: **DDMMYY-XXXX** where **XXXX** are **four letters instead of four numbers**.

Denmark is one of few EU countries that currently do NOT issue national identity cards. Danish driver's licenses and passports are the only identity cards issued by the government containing both the personal identification number and a photo.

Estonia

In Estonia, a **Personal Identification Code** (Estonian: *isikukood* (known by all as **IK**)).

An Estonian Personal identification code consists of **11 digits**, generally given without any whitespace or other delimiters. The form is **GYMMDDSSSC**, where **G** shows sex and century of birth (odd number male, even number female, 1-2 19th century, 3-4 20th century, 5-6 21st century), **SSS** is a serial number separating persons born on the same date and C a checksum.



Finland

In Finland, the **Personal Identity Code** (Finnish: *henkilötunnus* (**HETU**), Swedish: *personbeteckning*) also known as **Personal Identification Number** consists of eleven characters of the form **DDMMYYCZZZQ**, where **DDMMYY** is the date of birth, **C** the century sign, **ZZZ** the individual number and **Q** the control character (checksum). The sign for the century is either + (1800–1899), - (1900–1999), or A (2000–2099). The individual number **ZZZ** is odd for males and even for females and for people born in Finland its range is 002-899 (larger numbers may be used in special cases).

An example of a valid code is 311280-888Y.

The control character is calculated as the remainder of DDMMYYZZZ divided by 31, i.e. drop the century sign and divide the resulting nine digit number by 31. For remainders below ten, the remainder itself is the control character, otherwise pick the corresponding character from string "0123456789ABCDEFHJKLMNPRSTUVWXY". For example, 311280888 divided by 31 gives the remainder as 30, and since A=10, B=11, etc. ending up with Y=30.



France

Each French person receives at birth a **national identification number**, the "numéro d'inscription au répertoire" (**NIR** or National Repertory registration), also called a "**numéro de sécurité sociale**" (or Social Security number) for taxation purposes, for employment, etc.

The **INSEE Code** is used as originally created in Vichy France under the guise of the Registration Number to the National Directory of Identification of Physical People (*Numéro d'inscription au répertoire des personnes physiques*, **NIRPP** or simply **NIR**).

This national identification number is present on each person's **social security card** (*carte Vitale*).



This INSEE number is composed of **13 digits + a two-digit key**. Although the total number is of 15 digits, its composition makes it easy for individuals to remember at least the first seven digits (they just have to know their sex, year and month of birth, and department of birth).

Their format is as follows: **syymmllloookkk cc** where

- s is 1 for a male, 2 for a female,
- yy are the last two digits of the year of birth,
- mm is the month of birth, usually 01 to 12 (but there are special values for persons whose exact date of birth is not known),
- ll is the number of the département of origin : 2 digits, or 1 digit and 1 letter in metropolitan France, 3 digits for overseas.
- ooo is the commune of origin (a department is composed of various communes) : 3 digits in metropolitan France or 2 digits for overseas.
- kkk is an order number to distinguish people being born at the same place in the same year and month. This number is the one given by the *Acte de naissance*, an official paper which officialise a birth (and is needed throughout life for various administrative procedures, such as getting an identity card).
- 'cc' is the "control key", 01 to 97, equal to 97-(the rest of the number modulo 97) or to 97 if the number is a multiple of 97.
There are exceptions for people in particular situations.

The "sex" codes (s: 1 for male, 2 for female) can be given in special occasions for temporary registrations, such as for someone who a person who works as a wage-earner but is not registered for miscellaneous reasons. Under Vichy France, but only in Algeria (not in metropolitan France) this s code was also used to register Jews, Algerian Muslims, foreigners, or ill-defined people. Thus, 8 or 9 was given to Muslim people of Algeria and of all colonies; 1 or 2 for indigenous Jews; 7 or 8 for foreigners; 1 or 0 for miscellaneous and ill-defined status (people in none of these classes).

The part **llooo** is used together, referred to as the **COG**, which identifies the person's location of birth.

They are also specific codes for people whose date or place of birth is unknown, although this is today more and more rare (for example, the birth code is greater than 20 if the month of birth is unknown, and the communal code is 990 if the

The last code is obtained by a mathematical method (dividing by 97 the number formed by the first 13 digits, taking the remainder from this division, and then the "complement to 97", that is the difference between 97 and this remainder): this gives the control key code.

German identity documents only contain a document number.



An example of the number format is **65170839J008**:

65 - original insurance provided by Bundesversicherungsanstalt für Angestellte
Berlin
170839 - date of birth

J - family name begins with "J"
00 - male (00-49=male, 50-99=female)
The last digit is a computer check-digit.

Greece

In Greece, there are a number of **national identification numbers** in every day use.

- The **standard identity card**, which has the format **A-999999** where A can be any of the 24 letters of the Greek alphabet, is issued to all Greek citizens at the age of 12. The ID card number is not unique and changes if the person gets a new identity card.



- New Greek identity cards** have a number formatted like this: **XX-999999** where X is a letter, whose uppercase glyph occurs in both the Greek and the Latin alphabet (ABEZHMKNOPTYX). The letters and numbers are assigned with sequential order.



- The **Tax Identity Number (AFM - ΑΦΜ - Αριθμός Φορολογικού Μητρώου - Tax Registry Number)**, which is used by citizens and companies for tax purposes. It has nine digits, of which the last one is a check digit. The tax identity number is unique for every citizen and company.

- The **Social Security Number (AMKA - Αριθμός Μητρώου Κοινωνικής Ασφάλισης)** which is the work and insurance ID of every employee, pensioner and dependent member of their family in Greece. AMKA has the following 11-digit format: **YYMMDDxxxzy**, where the **first 6 digits** encode the person's date of birth (YYMMDD), the following **4 digits** are a sequence number for people born on that date (xxxxy) and the **last digit** is a control digit (z). The sex of the person is encoded in the last digit of the sequence number (y of xxxy): **even digits are assigned to women and odd digits are assigned to men**.

The social security number is unique.



Hungary

In Hungary, there are **three types of valid ID documents**:

The oldest valid ones are hard-covered, multi-page booklets and issued before 1989 by the People's Republic of Hungary.

The second type is a soft-cover, multi-page booklet issued after the change of regime; these two have one, original photo of the owner embedded, with original signatures of the owner and the local police's representative.

The third type is a plastic card with the photo and the signature of the holder digitally reproduced. These are generally called **Personal Identity Card**.

The old ID Card:



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The New ID Card:



The **Personal Identity Card** has a **6 digit number + 2 letter unique ID** and a separate machine readable zone on the back for identity document scanning devices.

It does not have any information about the owner's residential address, nor their **personal identity number** – which is **ONLY** contained on a separate card, called a **Residency Card (Lakcímkártya)**.



Personal identity numbers have the following format in numbers: **gender (1 number) – birth date (6 numbers) – unique ID (4 numbers) and a checksum digit**.

The structure of such number is therefore **GYMMDDXXXC** where G is the gender (1-male, 2-female, other numbers are also possible for citizens born before 1900 or citizens with double citizenship), YYMMDD is the birth date year, month, day, XXX is the serial number, and C is a checksum digit.

A Hungarian TAJ Card which has a unique **TAJ Number** on it is similar to a UK National Insurance Number/Card; known to the older generation and citizens from other countries as a Social Security Card/Number. The TAJ number **contains nine digits without spaces and delimiters**



All Icelanders, as well as foreign citizens residing in Iceland have a **kennitala** (lit. **identification number**) identifying them in the National Register.

The Icelandic system is similar to that in other Scandinavian and European countries but the use of the identification number is unusually open and extensive in Iceland.

A database matching names to numbers is freely accessible (after login) on all Icelandic online banking sites. Given this openness, the kennitala is never used as an authenticator. It is worth noting that the completeness of the National Register eliminates any need for Iceland to take censuses.

In Ireland the **Personal Public Service Number** (PPS No) has gained the characteristics of a **national identification number** as it is used for a variety of public services - although it is **stated in Irish law that it is not a national identifier**.

For certain public services **the collection or retention of numbers of the general public is not allowed**, thus the Irish police is only given an exemption for its own employees or other people defined under the Immigration Act, 2003 - the latter who are people who are not European Union nationals.

Ireland is the first country in the world to introduce a passport card. It is similar in size to a credit card. The passport card can be used when traveling in the European Union, the European Economic Area (which includes Iceland, Liechtenstein and Norway) and Switzerland.



Italy

In Italy, the **fiscal code** (Italian: **Codice fiscale**) is issued to Italians at birth. It is in the format "**SSSNNNYYMDDZZZZX**", where: **SSS** are the first three consonants in the family name (the first vowel and then an **X** are used if there are not enough consonants); **NNN** is the first name, of which the first, third and fourth consonants are used—exceptions are handled as in family names; **YY** are the last digits of the birth year; **M** is the letter for the month of birth—letters are used in alphabetical order, but only the letters A to E, H, L, M, P, R to T are used (thus, January is A and October is R); **DD** is the day of the month of birth—in order to differentiate between genders, 40 is added to the day of birth for women (thus a woman born on May 3 has ...E43...); **ZZZZ** is an area code specific to the municipality where the person was born—country-wide codes are used for foreign countries; **X** is a parity character as calculated by adding together characters in the even and odd positions, and dividing them by 26.

Numerical values are used for letters in even positions according to their alphabetical order. Characters in odd positions have different values.

A **letter is then used** which corresponds to the value of the remainder of the division in the alphabet. An exception algorithm exists in case of perfectly matching codes for two persons. Issuance of the code is centralized to the Ministry of Treasure.

The fiscal code uniquely identifies an Italian citizen or permanently resident alien, and is thus used. However, since it can be calculated from personal information (whether real, or not), it is not generally regarded as an extremely reserved piece of information, nor as official proof of identity/existence of an individual.



The **Carta d'Identità Elettronica** (Electronic identity card, CIE) is a **personal identification document** that replaced the paper-based identity card in Italy and are available to all Italian citizens from 15 years of age.



The CIE contains the **number of birth registration**, **fiscal code** and a **microchip**.

The chip contains the information in all the fields printed on the card and a digital version of the photo. On the chip are optional fingerprint templates and the infrastructure required for digital signatures.

Latvia

In Latvia the **Personal Code** (Latvian: Personas kods - **PK**) consists of **11 digits** in form **DDMMYY-XNNNC** where the **first six digits** are person's date of birth, the **next one** stands for a century person was born in (0 for XIX, 1 for XX and 2 for XXI), **NNN** is birth serial number in that day, and **C** is checksum digit. The number is assigned by the state and used for identification purposes in all Baltic Countries.

As of 1st of July 2017, Latvia assigns new personal codes that start with “32” and do not contain birth date.

The **Latvian identity card** (Latvian: *Personas apliecība*), also called **Personal certificate**, is officially recognised biometric identity document issued to Latvian citizens.



Lithuania

In Lithuania the Personal Code (Lithuanian: *Asmens kodas*) consists of **11 digits**, and currently is in the form **G YYMMDD NNN C**, where **G** is gender & birth century, **YYMMDD** is the birthday, **NNN** is a serial number, **C** is a checksum digit. In this scheme, the first number (**G**) shows both the person's gender (odd if male, even if female) and birth century. For example, 4 would mean female, born between 1900–1999.

As of May 2015, there are plans to start issuing opaque codes instead, keeping the same overall format and checksum, but containing no personal information.

Lithuanian personal identity cards are officially recognised biometric identity documents issued to Lithuanian citizens.



Macedonia

Macedonia uses a **13-number identification code** known as **ЕМБГ** composed of 13 digits (**DDMMYYYYRRSSSC**) arranged in six groups: **two digits** (DD) for the citizen's day of birth, **two digits** (MM) for the month of birth, last **three digits** (YYY) of the year of birth, **two digits** (RR) as a registry number, **three digits** (SSS) as a combination of the citizen's sex and ordinal number of birth, and **one digit** (C) as a control number.

The two digit registry number depends on the citizens place of birth. The combination of the citizen's sex and ordinal number of birth is presented as a 3 digit number - from 000 to 499 for the male, and from 500 to 999 for the female citizens. The last digit is a computer generated control digit.

The **Macedonian identity card** (Macedonian: **Лична карта**) is a compulsory identity document issued in the Republic of Macedonia:



Moldova

In the Republic of Moldova, all citizens receive at birth a **Personal Code (IDNP - Numarul de Identificare)**, which is composed of **13 digits**. This code is shown on all identity documents. In Moldova Identity Cards are being issued since 1996.



Montenegro

Montenegro uses a **13-number identification code** - Jedinstveni matični broj građana/Јединствени матични број грађана (known to all as **JMBG**) in a form "**DD MM YY RR BBB K**" (whitespaces are for convenience; digits are written without separation) where:

DD – day of birth, MM – month of birth, YY – last three digits of the year of birth,
RR – political region of birth, BBB – unique number of the particular RR and K
– checksum.



Netherlands

In the Netherlands, all people receive a Burgerservicenummer (known as **BSN / Sofi Number**) **Citizen Service Number** when they are born. It is printed on driving licenses, passports and international ID cards, under the header **Personal Number**.

The number is random and does not contain any information about the person to whom it is assigned (i.e. no information, such as gender or date of birth, can be derived from a BSN).



Norway

Norway's **eleven-digit birth number** (fødselsnummer) is assigned at birth, or on migration into the country. The number is not as widely and openly used as in some other Scandinavian countries.

Historically, the number has been composed of the **date of birth** (DDMMYY), a **three digit individual number**, and **two check digits**.

The **individual number** and the **check digits** are collectively known as the **Personal Number**.

People who do not permanently reside in Norway have been assigned a D-number upon registration in the population register. The D-number is like a birth number, but with the day of the month increased by 40. D comes from the Norwegian name of an authority for sailors, which previously issued those numbers, usually to sailors on board Norwegian ships. Nowadays foreign seasonal workers, for example in the tourist industry, get D-numbers.

In 2017, the Norwegian Ministry of Finance approved changes to the numbering system. Since the changes, the **number no longer indicates gender**, and the **first check digit** will be 'released' to become part of the individual number.

National ID cards accrediting Norwegian citizenship, usable for travel within the EU, and for general identification have also been introduced.



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In 2006, the single Citizen Card was implemented. This card includes the civil identification, the tax identification, the Social Security and the Healthcare user numbers, replacing the old corresponding identification cards.

The replacing of the previous separate identification documents by the single Citizen Card is a gradual process, only being mandatory for a citizen, when one of his/her old documents expires. The driver's license continues to be an entirely separate document.



The rear of the card contains

- Tax number
- Social Security number
- National Health Service number

Romania

In Romania each citizen has a **Personal Numerical Code** (*Cod Numeric Personal, CNP*), which is created by using the **citizen's gender and century of birth** (1/3/5/7 for male, 2/4/6/8 for female and 9 for foreign citizen), **date of birth** (six digits, YYMMDD), the **country zone** (two digits, from 01 to 52, or 99), followed by a **serial number** (3 digits), and finally a **checksum digit**.



Serbia

Serbia uses a single **13-number identification code** known as **JMBG** in format **(DDMMYYRRSSSC)** arranged in six groups: **two digits** (DD) for the citizen's day of birth, **two digits** (MM) for the month of birth, last **three digits** (YYY) of the year of birth, **two digits** (RR) as a registry number, **three digits** (SSS) as a combination of the citizen's sex and ordinal number of birth, and **one digit** (C) as a control number.

The **Serbian ID Card**:



Slovakia

Czech Republic and Slovakia uses a system called **Birth Number** known by all as an **RC**. The system was introduced in the former Czechoslovakia.

In Slovakia there are **two kinds of National identification numbers**.

The first one is the **Birth Number** (Slovak: *Rodné číslo (RČ)*), issued at birth by the civic records authority and recorded on the birth certificate. Its format is **YYMMDD/XXXX** with YYMMDD being the date of birth and XXXX being a semi-unique identifier. For females, the month of the date of birth is advanced by 50. Full identification number in the form YYMMDDXXXX must be divisible by 11.

The second system is the **Citizen's Identification Card Number** (Slovak: *Číslo občianskeho preukazu (ČOP)*) which is in the form **AA XXXXXX** (A-alphabetic, X-numeric) and is used on Slovak identity cards. In contrast to the Birth Number, this identifier can change over the citizen's lifetime if a new ID card is issued, for reasons such as expiration, loss or change of residence.

Identification Cards are issued by the state authority (police) for every citizen who reaches 15 years of age.



Slovenia

Slovenia uses a **13-number identification code** *Enotna matična številka občana (EMŠO)* as follows **DDMMYYRRSSSX** where DD - day of birth, MM - month of birth, YYY - year of birth, RR - a constant value 50, SSS - serial number or combination of sex and serial numbers for persons born on the same day (000-499 for men and 500-999 for women) and X - checksum of first 12.



Spain

In Spain, all resident Spanish citizens can obtain (mandatorily after 14 years old) a **National Identity Document** (Spanish: Documento Nacional de Identidad (**DNI**)), with a unique number, in the format **00000000-A**, where 0 is a digit and A is a checksum letter.

Since 2010, **foreign residents** are no longer issued with identity cards, although they are assigned a number in the format X-0000000-A (again, 0 is a digit, A is a

checksum letter, and X is a letter, generally X but lately also Y), called an **NIE** Number (Número de Identificación de Extranjeros, Foreigner's Identification Number).



Sweden

In Sweden a **Personal Identity Number** (Swedish: personnummer) is used in dealings with public agencies, from health care to the tax authorities. It appears on all approved identity documents.

The number uses ten digits, **YYMMDD-NNGC**. The first six give the birth date in YYMMDD format. Digits seven to nine (NNG) are used to make the number unique, where digit nine (G) is odd for men and even for women. For numbers issued before 1990, the seventh and eighth digit identify the county of birth or foreign-born people, but privacy-related criticism caused this system to be abandoned for new numbers. The tenth digit (C) is created using the Luhn, or "mod 10", checksum algorithm.



Switzerland

All persons resident in Switzerland are allocated a Social Security Number (**AHV-Nr.** [de] / **No AVS** [fr]), which is also used for other governmental purposes.

The eleven-digit format in use since 1968 is of the form **AAA.BB.CCC.DDD** and encodes information about the name, birth date and sex of its holder:

- The "AAA" digits encode the family name.
- The "BB" digits are equal to the last two digits of the year of birth.
- The "CCC" digits encode the birth day as a trimester number (1-4) followed by the number of the day in the trimester. An offset of 400 is added for female persons (e.g. 101 is January 1 for men and 501 is January 1 for women).
- The "DDD" digits are used to be an origin code depending which country the person came from and or if this person was a Swiss citizen through birth or naturalisation.

As of 2008, an **anonymous thirteen-digit number** is being issued to all Swiss residents. It is of the form **756.XXXX.XXXX.XY**, where 756 is the ISO 3166-1 code for Switzerland, XXXX.XXXX.X is a random number and Y is an EAN-13 check digit.

Switzerland issues a **Swiss ID Card** to all citizens which contains a unique **8 digit Personal Identification Number** in format **SXXXXXXX** where X is a number.



United Kingdom

There is no legal requirement in UK to obtain or carry any identification document or other proof of identity.

A National Insurance number, generally called an **NI Number (NINO)**, is used to administer state benefits, but has not gained the ubiquity of its US equivalent, and is not considered proof of identity.

The number is stylised as **LL NN NN NN L**, for example AA 01 23 44 B.

Each baby born in the England and Wales is issued a National Health Service number, taking the form **NNN-NNN-NNNN**, for example 122-762-9257 (the last number being a check digit). They were formerly of the style "LLLNNL NNN", for example KWB91M 342, which continued patterns used in World War II identity cards.