

The Swedish address system

Fundamentals

Addresses are structured – in different ways – geographic information used to locate places in the real world. For special purposes, such as distribution of post, there are standardized and among people accepted structures. The implementation of new positioning and navigation techniques, as well as intense travelling all over the world, has increased the demand for well structured syntactically correct, valid and up-to-date addresses. Standards, formal or de facto, are strongly needed.

Sweden has two national standards concerning addresses. One deals with locational addresses as a geo-referencing system and the other deals with postal addresses. The two standards fit quite well but there are some minor differences which may cause trouble when people try to use postal addresses for locating purposes or locational addresses on postal items. The understanding that there are different types of addresses is somewhat limited throughout society. “Addresses, isn’t that just a postal matter?”

Responsible parties and stakeholders

Sweden has no comprehensive law about addressing.

The Property register law of the year 2000 states that an address part of the register containing locational addresses and their associations to cadastral units and registered buildings will be kept in the property register for municipalities willing to participate. Today all municipalities participate. The ultimate latecomer municipality established the address part in the spring of 2007! The Property register law states no formal requirement for completeness. There is a regulation concerning cadastral matters stating that the cadastral authority must inform the concerned municipality on cadastral decisions. This helps the municipality to change associations between property units and addresses when needed and to keep the quality of those associations.

However, the Dwelling-register law of the year 2006 states that all municipalities have to establish locational addresses to all building-entrances from which the main entrance of a dwelling can be reached. There are respites for buildings with just one dwelling and for holiday-houses not used for permanent living. But from the year 2015 addresses will be mandatory for all types of dwellings.

Neither law describes what a locational address is. Anyhow it is clear that an address points at a place on the ground, in two dimensions. It does not give any information on what is inside a building.

A lot of other laws and ordinances demand addresses to persons or organisations, in most cases this is interpreted as postal addresses.

The Swedish Tax Agency is responsible for civil registration including each person's residential address which should be a locational address and shows *where* the person normally lives (has his "night rest") and his postal address which tells *how* he can be reached by mail. The residential address should always be associated to a cadastral unit. This registration constitutes a.o. the electoral system.

Most formally unregulated matters are in fact solved by agreement or standard (which in fact is a certain type of agreement!).

Since 1995 there is a basic agreement between the concerned parties describing their roles and responsibilities in address assignment and registration.

The municipality decides the address, to which cadastral unit and building it shall be connected and normally also its position. The responsibility to assign addresses is in most cases delegated to an official. The municipality registers the address and its connections directly into the address part of the property register, which is maintained by

National Land Survey (NLS). When new addresses or changes of spelling, connections, position and so on are registered a notification is made to the administrator of the Swedish post code system,

Posten AB (or more exactly its subsidiary Posten Meddelande AB). Posten provides every address with the appropriate post-code and postal town. That is done regardless of the fact that some locational addresses have no postal interest. The post code and postal town information is normally accessible in the Real Property Register within a week from the day the municipality registered the address. Posten also adds all new or changed address-names to the gazetteer of Swedish postal addresses and removes old address-names that have been substituted by new names appointed by the municipality.

All new and changed addresses provided with post code and postal town are delivered from the Real Property Register to the

Swedish Tax Agency once a week The addresses are used to update residential addresses. As every person is registered on a cadastral property unit, his locational address must correspond to a locational address associated to that unit. The Tax Agency also constructs a postal address to the person by extracting parts of the locational address and completing it with its post code and postal town. If the person wants to have his mail sent to another address, e.g. a PO Box or his parents or his companies address, he can report a *special* address to the Tax Agency.

The Swedish Tax Agency is the main contributor of persons' postal addresses to the Swedish society. Persons' addresses are distributed to authorities by the system "NAVET" and to other users via the SPAR-register. If a person has a special address, that address will be distributed because most subscribers to the systems use the addresses for sending written messages or printed information and not for visits.

An obvious shortcoming in this system is that no equivalent routine exists for addresses connected to buildings and properties intended for business, industry, education, social gatherings or administration. The effect in society is that the quality of address information connected to persons is far better than in other cases.

All parties mentioned above have contributed to postal address standardization and all, except for the Tax Agency, to the locational address standard.

The broader society of address information users – authorities, companies and organisations – has so far shown quite little interest in standards. They seem to look at an address as something that just *is* there and do not care to investigate who is responsible and what is the standard! For example many companies and even official authorities have customer registers which are not constructed in accordance with the existing standard for postal addresses. The addresses in such registers can sometimes be shortened or deprived of essential parts. New navigation techniques have created demand for geocoded addresses. It would be trivial if customer registers kept only correct postal addresses derived from correct locational addresses. But as they don't, much effort is spent on geo-coding bad address information instead of replacing it with correct addresses! Commercial companies collect address positions in the field which leads to a situation where one address can be recorded with different positions in different registers.

It is sometimes said that in the future there will be no need for addresses . – However, persons who do not have navigation or GPS device are not helped by coordinates, they do need good locational addresses that are well signed on the ground to find their way.

Information system builders tend to rely on and fully trust in the parties producing standards and routines and seem not to be interested in giving input to standardization although their experience would be valuable for the further developments.

What do Swedish addresses look like?

The table below is intended to show how locational as well as postal addresses are constructed.

It is necessary to point out one fact that very often makes discussions a bit confused: The postal address on the envelope should always be read from the bottom line and upwards. (Or, if it is written as a string, backwards starting with the last element and then the penultimate and so on!) In such a case it is essential that the elements are correctly registered in the correct fields and that also empty fields are accounted for. The distributor at first cares little who is the addressee, his main objectives are to find the right country, region, town, street and finally the right letter-box. To facilitate efficient sorting and distribution only registered names, spellings and codes should be used. Unnecessary information appearing in that chain means confusion, costs and delay.

The locational address is normally written in a parent-child order. It begins with a bigger area and zooms into smaller areas to finally describe just one place. A locational address does not point out objects inside a building, neither gives height information.

The postal address can point out letter-boxes and different floors *inside* a building. Such information has to be given its proper position on the envelope or in the address string.

Now that Sweden is building a Dwelling-register, the dwelling-numbers will be used in registration as well as in postal addresses. The dwelling numbers will specify locations *inside* a building. The standardized dwelling-numbers provide much better address information for persons living in apartment buildings than today's mix of unstandardized floor or door descriptions. For those living in houses containing just one dwelling it will not be necessary to add the dwelling-number to the registered address.

Locational address elements	Examples in locational addresses	Examples in postal addresses	Postal address elements
Area where the standard is valid	Sweden	SE-Sweden	Country code and country
Municipality	Stockholm Uppsala Uppsala		
District (part of municipality)	Kungsholmen Gottsunda Rasbo	112 31 Stockholm 756 55 Uppsala 747 94 Alunda	Postcode and postal town. The distinction between postal districts do not necessary coincide with municipal borders. Information for postal sorting and distribution – from which town shall mail be delivered - is shown in the first three digits of the postcode. The last two digits indicate type of delivery or a distribution area/route.
Address-area/ Street Addressareas /village, farmstead, group of buildings	Bergsgatan Gottsundavägen Baggbol	Bergsgatan Gottsundavägen Baggbol	Thoroughfare name or country village name/ settlement name sometimes with a house/farm name
Addressplace designation	56 17B 12	56 17B 12	Streetnumber/addressplace designation
		F 267 1101	Delivery information, in these two examples room designation and dwelling designation
Registered common name (alias name), not a part of the locational address	Polishuset Gottsunda gård Eriksro	(Polishuset) (Gottsunda gård) (Eriksro)	Sometimes used but unnecessary extra names not stored in the register of valid postal addresses. (A common name is written after the address but before the addressee, seen from the bottom upwards on the envelope).

The locational addresses exemplified above are:

Stockholm, Kungsholmen, Bergsgatan, 56
 Uppsala, Gottsunda, Gottsundavägen, 17B
 Uppsala, Rasbo, Baggbol, 12

The corresponding postal addresses written on envelopes should be like this:

Bergsgatan 56 F267
 112 31 Stockholm
 SE-Sweden

And if (though unnecessary) the common name is added:

Bergsgatan 56 F267 Polishuset
 112 31 Stockholm
 SE-Sweden

Gottsundavägen 17B 1101
 756 55 Uppsala
 SE-Sweden

NOTE: Room identification and dwelling identification is used in the postal address.

Gottsunda gård
 Gottsundavägen 17B 1101
 756 55 Uppsala
 SE-Sweden

NOTE: Gottsunda gård has been moved upwards, because otherwise the address-row should have exceeded 35 characters which is maximum length according to the postal address standard.

Baggbol 12
 747 94 Alunda
 SE-Sweden

Baggbol 12 Eriksro
 747 94 Alunda
 SE-Sweden

Most Swedish municipalities have both types of addresses described above. Some totally urbanized and a few other municipalities only use street or road names with "normal" numbering. Some fifteen municipalities, most of them in southern Sweden, use road names with distance-based numbering in rural areas.

Example: 214-13, which indicates that the place is situated approximately 2 140 meters along the named road and on the right hand side and approx. 130 meters beside it on the left side of a smaller road or drive. If the place is immediately adjacent to the road the number would be 214-0. The hyphen between two numbers is mandatory to show that numbering is distance-based.

(Everything is not perfect. Though the standard says that all addresses shall contain an address place designation, there are more than 100 000 registered addresses in rural areas that don't contain a number. That is possible where the address area contains only one address, which means the name is unique for just one address in a district.)