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Criteria for Better Postal Addresses: What Countries Should Consider

by

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Postal addresses take many forms around the world and can have many variations within any one country. Each country defines its own postal addresses, and many systems have developed. The traditional building number and street name addresses of European nations were exported to their colonies along with their languages. Some countries base building addresses on the number of metres from an intersection of streets. Addresses may use a hierarchy of geographic divisions, with the block and plot or building number identifying the delivery point. Descriptive addresses, where the address describes the building (the red house across from the cathedral), are sometimes used where a more formal system does not exist.

Ultimately, addresses must be accepted by the local populace and used by them, including all elements. No matter how well-designed from a theoretical point of view, if addresses are not used, those addresses are worthless.

One hears national addresses referred to as good or poor or deficient, but rarely are any criteria provided to define what is “good”. Within the broad variety of postal addresses globally, characteristics of better postal addresses can be agreed—at least by the authors who have very different backgrounds in their professional work with addresses. Briefly, better addresses

- are understandable and acceptable to the local populace,
- are hierarchical with the lines and elements arranged from the largest geographic unit to the smallest,
- provide a unique identification of each delivery point,
- include a postal code that indicates the region and the locality,
- follow a logical structure that does not require interpretation by an electronic device,
- contain some redundancy to allow for error resolution, and
- comply with national standards specifying how to create new addresses and how addresses should be written.

Each address should unambiguously identify a single delivery point, with no confusion between two, or more, delivery points corresponding to an addresses. To create this uniqueness, addresses may contain elements that are redundant, such as both a postal code unique to a town and a town name. This tactical redundancy can help in error detection and may enable error recovery in the case of poorly addressed mail. Such redundancies may also make addresses more comprehensible to individuals visiting an area or those attempting to locate a specific address: a town name is most often easier for a person to understand than a postal code.

A logical structure and rules for creating and writing addresses—a national address standard—make maintaining addresses and adding new addresses simpler. If, for example, buildings and streets are numbered in a certain pattern, new buildings can be given addresses that follow that pattern. Obviously, the process is more complex in the real world where streets may have names, rather than numbers and a town may have some streets with the same names as another nearby town. (This type of duplication is resolved by a well-designed postal code.) However, the logic of adding addresses in a known pattern, with known rules and without duplicating an already existing address, remains easier than without any rules. The addresses that meet these requirements will often replace older systems, such as descriptive addresses.

Additionally, all the addresses in the nation should be contained in an up-to-date and authoritative database. This database should allow for additional information on the addresses. This information might include, but not be limited to, additional information on routing, delivery logistics, an alternative way to contact the resident or business owner, supplementary delivery information, a geocode location of each address, or the type of delivery point (commercial or residential, single or multiple units, etc.). As Geographic Information Systems (GIS) become more and more developed and computer-assisted routing improves, an address database prepared to take advantage of these will be important to the continued upkeep of a nation's address data.

Recently, with the development of proprietary discrete global grid geocodes that are being proposed (and sometimes marketed) as solutions for providing national addresses, a country not having ownership of its own addresses has become possible. Ownership of national addresses and the address database by the nation is essential, as the nation maintains its addresses and develops more uses for them and for the address database.

Countries with better postal addresses can have different formats for different circumstances in all the varied methods of addressing mentioned earlier. All of these different address types within a country may contribute to better addressing nationwide—and better delivery of mail. What works well to identify premises and delivery points in a densely-populated urban environment may not suit a sparsely-populated rural area. Government, military, and university addresses may have unique requirements. Some of these addresses will correspond to the actual location where the business is located or an individual lives. Others will be a box at a post office or in large cluster of mail boxes in a building complex or at a service providing accommodation addresses that does not correspond to the mail recipient's office or home. A postal code would be consistent across all types of addresses, with some postal codes indicating a particular type of address. Post office delivery or building delivery, for example, may be differentiated by an indicator in the postal code.

Since addresses are used for much more than the delivery of mail, letters and packages, they acquire an importance in governmental and commercial spheres for official identification documents, registering to vote, opening bank accounts, arranging utility connections, and much more. Visitors use them to find someone's house or business, emergency services use them to respond to calls for assistance, tourists use them for locating hotels, restaurants, and sites. Whether postal or delivery point addresses meet the needs of emergency services, utilities, government property registries, other types of delivery services or those of visitors or tourists, depends on their design. With all these uses, addresses must be able to meet many criteria to be considered good or better.

It is important to remember the primary function of postal addresses is identifying the delivery points of mail. Other uses had been secondary, but have become increasingly important, as security concerns have increased around the world. When introducing new addresses or modifying existing ones, taking into account the groups who may benefit from these secondary uses can spread the cost and effort of development and deployment among multiple entities. Providing benefits to other groups may also assist with the more rapid acceptance and use of the new or changed addresses.

To a mailer of letters or packages, a "good" postal address must be deliverable. Ideally, that means it is complete, correct and current.* A complete address has all elements needed for delivery. A correct address is a valid delivery point for the postal service of the relevant country, and matching a national repository of valid addresses if such a repository is available. A current address is accurate at the time it is used for the person or organization to whom the mail is addressed (the addressee). Applying these criteria as a mailer can be complicated, particularly for international addresses with the broad range of different address types and formats that are used worldwide. The advantage of applying these criteria

* These three criteria were developed by the United States Postal Service's Mailers Technical Advisory Committee (MTAC).

is an address can be marked as “valid” (adhering to the country’s addressing rules) or “verified” (confirmed as a postal delivery point).

With the development by the Universal Postal Union (UPU) of standards S42 on international postal address components and templates and S53 on the exchange of name and address data, address descriptions in a single, common syntax are available for multiple countries, along with a method of exchanging that information. Using a syntax consistent across countries makes understanding the addresses in many countries easier for anyone interested in properly formatting foreign address. More information is available on the UPU’s web site, www.upu.int.

For a national postal service, complete, correct and current postal addresses make delivery easier. But at the national level, these three criteria take on different meanings than they do for mailers. Ideally, a country has a repository—a database—of all addresses. Here, complete can be used for both the completeness of each individual address as defined by the government or postal authority but also the inclusion of all addresses in the nation. That is, the total set of addresses define all delivery points. These addresses should be correct as defined by the address standards used by that country, and the addresses should be kept current as changes occur due to the addition of new buildings or the razing or abandonment of buildings.

In addition, design of the addresses should aid the process of sorting and distributing mail to locations for final delivery. Addresses in most countries are hierarchical. The largest geographic area (coarse grain) is followed by increasingly smaller geographic areas (finer granularity), until one reaches the precise delivery point description and the name of the addressee. Postal codes often follow the same principle, defining an area numerically or alphanumerically. The first characters may indicate a province and subsequent characters might indicate the city or town and, finally, the delivery post office. Building and street designations can add to this logical progression. The ultimate delivery point may be a door or unit within a street-fronted delivery point, such as in a multi-apartment building or multi-unit residential or office compound.

A logical structure to addresses makes the automated processing and sorting of the mail easier to program. If sorting is not automated but done by people, it is imperative that those people can understand the address structure and its relationship to the country’s mail delivery system to more efficiently sort the mail. If the logic of the addresses is also understood by the local populace, it both facilitates the use of the addresses and aids in the other uses of addresses, as discussed above. Since mail is delivered by people who usually live in or near the area of delivery, easily understood addresses aid the final delivery of the mail. Making the location of an address, relative to other addresses understandable without resorting to electronic devices or other aids is easier for local residents (people with local knowledge) and for visitors.

Beyond that, well-designed postal addresses help build community by making clear one’s neighbors and neighborhood. This information improves local economic activity through knowledge of locally-available services, helps people to see what they have in common, and to exchange experiences and opportunities. Designers of new address systems need to be aware of and preserve these values, while gaining the new benefits that make new services and improved logistics possible.