

# Mongolia Adopts Universal Address System

The Government of Mongolia has passed a resolution to adopt the technology of NAC Geographic Products Inc. - the Universal Address System for all location related services and products in Mongolia after a comprehensive research of all address systems in the world.

Universal Addresses possess all the functionalities of traditional addresses, and are unified representations of all locations and areas in the world that can be used conveniently by both consumers and professionals to bridge all the gaps caused by different representations of locations and areas. As Universal Addresses are digital and global addresses, the adoption of the Universal Address System will make Mongolia well positioned in the digitisation and globalization era.

A Universal Address is an eight or ten character Natural Area Code (NAC) which can represent both areas and locations anywhere in the world. A two-character NAC can specify any area about 1000 km in length and width like a province, a four character NAC represents a 30km long and wide area (like a city) approximately, a six-character NAC is roughly equivalent to any square kilometer area on the earth, an eight-character NAC can uniquely identify a 30 metre long and wide area (size of a house or building) in the world, and a ten character NAC can pinpoint any location in the world to the resolution of one metre. Therefore, Universal Addresses are highly compact and human-friendly codes that can be used as addresses, postcodes, geographic coordinates, area codes, property identifiers, etc.

Marking Universal Addresses on house number plates, street signs and all other roadside objects will physically digitise the land because Universal Addresses are the coordinates of the Universal Map Grids. Thus, comparing the Universal Address of any destination and the one marked on the local roadside object can immediately get the distance and direction to the destination and will significantly help taxi, courier, delivery, especially ambulance, fire fighters and police find locations.

Using Universal Addresses as identifiers of street lights, fire hydrants, parking meters and other roadside objects can straightforward the processes in reporting, managing and physically locating these objects because they can function as both database keys and coordinates of physical locations.

Printing Universal Map Grids on a map can help people directly pinpoint the location of any Universal Address on the map to avoid the time consuming procedure in looking up the street name on the street index and guessing the location of the street number along the street. The location information obtained from different maps with the Universal Map Grids can be directly connected and exchanged no matter what projections and scales the maps have, while the location information obtained from a country map with longitude/latitude grid, a state map with UTM grid and a street map with a local grid are nearly impossible to be connected.

When Universal Addresses are used as global postcodes for automatic mail sorting, they can sort mail from the world level to the final mail boxes with better coverage and accuracy than any existing postcodes. Since Universal Addresses exist everywhere, mail with Universal Addresses can also be conveniently sorted and delivered to any temporary locations in the world. This is well suited to Mongolia with many yurts residing on temporary locations.

If the capability of handling Universal Addresses is implemented in GIS software, local search engines and navigation systems, Universally Addresses can be used to efficiently, reliably, uniquely and universally specify locations and areas, a sharp contrast to traditional addresses that are long, language dependent, full of variations, frequently duplicated, and available only to limited (less than 1%) locations in the world. For example, you can simply input H5Q2 R48Q instead of Eiffel Tower, Paris, France to get the map of Eiffel Tower in Paris.

If Universal Addresses are listed on all yellow pages, tourist guides and business directories, and included on all business cards, advertisements and websites, customers can easily find these businesses with their Universal Addresses on either printed maps with Universal Map Grids, Universal Address enhanced navigation systems or physically on the land with Universal Addresses marked on all its street signs.

If Universal Addresses have been used as landmarks, addresses, geographic coordinates, area codes, postcodes, property identifiers and Universal Map Grids have been printed on all kinds of maps, all people, no matter professionals or consumers, tourists or local residents, can directly communicate all location information in the world without needs to do complicated data conversion between different systems and eliminate the huge time and cost currently wasted in the geographic data conversion.