Global Location Numbers (GLN)
A key enabler for improving efficiency and visibility of the supply and demand chains

All organisations exchange information in their business processes, externally and internally. The Global Location Number (GLN) makes possible the unique and unambiguous identification of physical locations, operational locations and legal entities.

This is a prerequisite for efficient, Electronic Commerce, Global Data Synchronisation and enables other applications too (e.g. Direct Store Delivery, Cross Docking, etc.).
What is a Global Location Number (GLN)?

The GLN is the GS1 Identification Key used for any location (physical, operational or legal) that needs to be identified for use in the supply chain.

The GLN is a globally unique number that can be used to access master data about a location.

GLNs are designed to improve the efficiency of communication with trading partners. They identify:
- **Physical locations** - such as a particular room in a building, warehouse, warehouse gate and delivery points
- **Operational locations** - such as EDI mailboxes, an account receivable dept. or Electronic Product Code / Radio Frequency Identification (EPC/RFID) read point
- **Party** - any legal entity or organisation: such as company operating in the supply chain including suppliers, customers, financial services companies, hospitals and freight forwarders

GLNs are used for retrieving information from databases including:
- Hospital wards for delivery of medical supplies
- Delivery Point / Address for supply chain shipments
- Individual locations of a company (manufacturing centre, warehouse, headquarters)
- Bank account information for eInvoicing
- The information provider in a Data Synchronisation Network

What is the structure of the Global Location Number?

Organisations and companies members of GS1 Member Organisations can assign GLNs using the 13-digit numeric structure:
- **GS1 Company Prefix** - assigned by a GS1 Member Organisation to a user/subscriber.
- **Location Reference** - allocated by the company to a specific location.
- **Check Digit** - calculated according to a standard algorithm, helps ensure integrity.

When are Global Location Numbers used?

**GS1 eCom (Electronic Data interchange)**

GLNs are a key concept in EDI. They provide the globally unique identification needed to securely exchange business information on the Internet as well as unambiguously identifying all legal entities, physical / operational locations described in business documents. GLNs ensure lean and efficient communication and processing since names, addresses and other information about particular locations do not need to be communicated with every transaction. The necessary information is communicated only once, stored in the relevant system (e.g. Enterprise Resource Planning system) and subsequently retrieved by referring to a globally unique GLN.
Global Data Synchronisation Network (GDSN)
Along with GTINs (Global Trade Item Numbers), GLNs play an essential role in the Global Data Synchronization Network. GLNs are mandatory within GDSN and they are used to identify data owners/information providers, such as distributors, brokers, and manufacturers, as well as legal entities and physical locations. Using GLN this way enables the publication and subscription of information across the network and provides the global data synchronization network with Master Data.

Efficient capture
Like all GS1 Identification Keys, GLNs can be presented in bar code or EPC/RFID format for efficient capture. Two common applications are:
1) Encoding the GLN in GS1-128 bar codes as part of the GS1 Logistic Label to scan and automate shipping or cross-docking applications.
2) All read points in an EPC/RFID enabled supply-chain are identified with GLN thus providing full visibility as an item/shipment moves through the supply chain.

Below is an example of how the GLN is used on a shipping label. By using the GS1 System, the Ship To Location of a shipment is easily expressed in a bar code or EPC/RFID tag that can be quickly and accurately entered into a company’s internal system. This enables an efficient shipping process that links a shipment to its intended destination.

When GLNs are assigned by all members of the supply chain, visibility is possible into the current and past location of the item or shipment.
What are the benefits of Global Location Numbers?

Why use GLN instead of an internal system?
Any company can design its own internal system and code structure to identify all the locations covering its operating requirements. Although an internal solution might seem to be the easiest and fastest way forward, when information is exchanged between computers of distinct companies this may present several problems, such as:
• Duplication: two or more trading partners may use the same code to identify their locations;
• Complexity: internal codes will have a variety of structures and formats, making application programming more complex and application changes costly;
• Significance: internal codes that contain information related to the location built into the code structure itself will become difficult to handle as the internal structure evolves to incorporate new meanings.

The use of GLNs provides companies with a method of identifying locations, within and outside their company that are:
• Unique: with a simple structure, facilitating processing and transmission of data;
• Multi sectoral: the non-significant characteristic of the GLN allows any location to be identified and consequently any business - regardless of its activity;
• International: location numbers are unique worldwide. Moreover, the international network of GS1 Member Organisations, covering more than 100 countries, provides support in their local languages.

Global Location Numbers around the world
Being globally unique and supported by the network of GS1 Member Organisations, GLNs are widely used for both domestic and global trade in many sectors such as: Retail, Transport & Logistics, Utilities and Finance. A specific guideline on the use of GLNs in Healthcare is available on: www.gs1.org/docs/gsmp/healthcare/GLN_Healthcare_Imp_Guide.pdf

GLNs are recognised by the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) and by the International Standard Organisation (ISO 6523).

GS1 is a neutral, not-for-profit, international organisation that develops global standards and solutions to improve the efficiency and visibility of supply chains across industries. It engages a global community of trading partners, industry organisations and technology providers to understand their business needs and develops global standards in response to those needs. GS1 is driven by close to two million users, in over 20 industries including retail & consumer goods, healthcare and transport & logistics. Today, the GS1 System of standards is the most widely used supply chain standards system in the world. GS1 has local Member Organisations in more than 100 countries and its head office is in Brussels. For more information, visit: www.gs1.org.

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