GS1 Canada

HEALTHCARE SUPPLIER IMPLEMENTATION GUIDE

GS1 Global Location Number (GLN)
# Table of Contents

EXECUTIVE SUMMARY ..................................................................................................................................................... 3
ABOUT GS1® .......................................................................................................................................................................... 4
INTRODUCTION TO STANDARDS & THE HEALTHCARE SUPPLY CHAIN .................................................................. 5
HOW STANDARDS HELP TO SOLVE SUPPLY CHAIN PROBLEMS ............................................................................. 5
HOW STANDARDS BENEFIT THE HEALTHCARE SUPPLY CHAIN ............................................................................. 6
ABOUT GS1 STANDARDS ................................................................................................................................................... 7
GLOBAL LOCATION NUMBER (GLN)...................................................................................................................................... 7
GLOBAL TRADE ITEM NUMBER (GTIN) .................................................................................................................................  7
DATA SYNCHRONIZATION ...................................................................................................................................................... 7
THE CASE FOR GLOBAL LOCATION NUMBERS (GLNS) .......................................................................................... 8
THE PROBLEM: NUMEROUS APPROACHES TO LOCATION IDENTIFICATION ACROSS THE COMPANY ................. 8
THE SOLUTION: STANDARDIZED LOCATION IDENTIFIERS ....................................................................................................... 9
WHAT IS A GLN? ................................................................................................................................................................ 10
WHAT IS THE GS1 CANADA GLN REGISTRY? .......................................................................................................... 11
HOW ARE GLNS USED? .................................................................................................................................................... 11
IDENTIFICATION OF PARTIES/LOCATIONS ............................................................................................................................. 11
LINK TO PARTY/LOCATION INFORMATION ........................................................................................................................... 11
ADVANTAGES OF GLN USE IN THE HEALTHCARE SUPPLY CHAIN .................................................................. 12
BENEFITS TO HEALTHCARE SUPPLIERS ................................................................................................................... 13
SUPPLY CHAIN MANAGEMENT ............................................................................................................................................. 13
OPERATIONAL EFFICIENCY ................................................................................................................................................... 14
COMPETITIVE ADVANTAGES ............................................................................................................................................. 14
DECEMBER 2010 GLN SUNRISE IN CANADA AND THE U.S ................................................................. 15
IMPLEMENTING GLNS IN YOUR COMPANY ............................................................................................................. 15
ANALYZING THE GLN ROI FOR YOUR COMPANY ................................................................................................. 18
Hot Spots for ROI............................................................................................................................................................. 18
Supply Chain Management ............................................................................................................................................. 18
Operational Efficiency ..................................................................................................................................................... 19
Competitive Advantage .................................................................................................................................................... 19
LESSONS LEARNED & BEST PRACTICES ................................................................................................................ 19
FREQUENTLY Asked QUESTIONS (FAQS) ................................................................................................................ 20
GLOSSARY ........................................................................................................................................................................... 24
REFERENCES ...................................................................................................................................................................... 26
APPENDIX A: GENERIC 850 PURCHASE ORDER WITH GLN & GTIN ................................................................. 27
APPENDIX B: GENERIC 856 ADVANCED SHIP NOTICE (ASN) WITH GLN & GTIN ........................................... 28
Executive Summary

The Canadian and U.S. healthcare industries are transitioning to the use of GS1 Global Location Numbers (GLNs) by the sunrise date of December 31, 2010. The current use of non-standardized location information in the healthcare supply chain results in costly errors, wasteful inefficiencies, and has implications for patient safety. The healthcare industry has therefore committed to implementing a common business language for location identification: the GS1 GLN standard, part of the GS1 System of standards.

The purpose of this document is to provide guidance to Canadian healthcare suppliers that are implementing standardized party and location identification in order to meet the Canada/U.S. 2010 GLN sunrise date. This document introduces and explains the GS1 GLN and describes how this globally unique identification code facilitates reliable and efficient management of precise location information. In addition, the benefits to supply chain management, operational efficiency and competitive advantage are discussed. Finally, this document provides detailed steps for implementing GLNs in your company.

In alignment with activities in the U.S. and globally to move toward standardization of the healthcare supply chain, the GS1 Canada Carenet Healthcare Sector Board has indicated its support for the adoption of the GLN as the national standard for location identification across the sector. Using this document, you will better understand how the healthcare sector’s current use of multiple proprietary location identification numbers is error-prone and inefficient, and how use of GLNs for party/location identification will best fulfill the sector-wide need for a comprehensive approach to location identification that accommodates all of your organization’s supply chain roles and activities.
About GS1®

GS1 is a neutral, not-for-profit organization dedicated to the design and implementation of global standards and solutions to improve the efficiency and visibility in supply chains. GS1 is driven by more than a million companies, who execute more than six billion transactions a day with the GS1 System of Standards. GS1 is truly global, with local Member Organizations in 108 countries, with the Global Office in Brussels, Belgium. Learn more at www.gs1.org.

About GS1 Canada

GS1 Canada is a member of GS1, the world’s leading supply chain standards organization. As a neutral, not-for-profit organization, GS1 Canada enables its more than 10,000 members – trading partners of all sizes from over 20 sectors across Canada – to enhance their efficiency and cost effectiveness by adopting electronic supply chain standards and best practices. Learn more at www.gs1ca.org.

About Carenet

Carenet is GS1 Canada’s healthcare sector strategy to standardize the healthcare supply chain. Based on an amalgamation between CareNET Services Inc. and GS1 Canada in 2008, GS1 Canada now represents over 470 Canadian healthcare providers and 95 suppliers, supporting the use of standards-based electronic commerce practices in healthcare to enhance patient safety and business process efficiency. The main goal of the Carenet Strategy is to build an interoperable framework that will ensure pan-Canadian system integration of e-supply chain standards. Learn more at www.carenet.ca.

About GS1 Healthcare

GS1 Healthcare is a global, voluntary healthcare user group developing global standards for the healthcare supply chain and advancing global harmonization. GS1 Healthcare consists of participants from all stakeholders of the healthcare supply chain: manufacturers, wholesalers and distributors, as well as hospitals and pharmacy retailers. GS1 Healthcare also maintains close contacts with regulatory agencies and trade organizations worldwide. GS1 Healthcare drives the development of GS1 standards and solutions to meet the needs of the global healthcare industry, and promotes the effective utilization and implementation of global standards in the healthcare industry through local support initiatives, including GS1 Canada’s Carenet healthcare strategy. Learn more at www.gs1.org/healthcare.
Introduction to Standards & the Healthcare Supply Chain

Trading partners in the healthcare supply chain must share numerous, complex pieces of data to support their work. For example, manufacturers and distributors need to communicate product data and company location information, and hospitals need to share location information for delivery of product. In order to be efficient and effective in that effort, a common language and globally-accepted standards are essential. Without such standards, supply chain partners face high, unnecessary costs due to inaccurate data and supply chain information inefficiencies.

In response, a growing number of hospitals, healthcare suppliers and healthcare-related organizations have chosen the GS1 System of standards to help improve supply chain efficiency and patient safety. For over 35 years, the GS1 System has provided globally accepted identifiers and a common language for the communication of supply chain information about products, services and locations between organizations, in order to improve the accuracy, speed and efficiency of business processes.

Standards for the accurate identification of product and location information are essential for all supply chains in order to support orders, invoices, deliveries, as well as customer service and marketing activities. Healthcare suppliers, like suppliers in other industries, have found that using GS1 standards improves information quality and promotes efficient business processes. These improvements translate to significant real world benefits, including simplified supply chain management, reduced labour costs, more efficient payment and reporting processes, better cash flow, and increased customer satisfaction.

How Standards Help to Solve Supply Chain Problems

Without standards, supply chain partners are left to develop their own identifiers and data formats, resulting in numerous proprietary "standards" for healthcare suppliers and providers to manage. The existence of proprietary "standards" causes supply chain inefficiencies and inaccurate data that introduce unnecessary cost and confusion into business processes, and prevent interoperability within and between healthcare facilities. For healthcare, the absence and/or under-utilization of data standards has resulted in medical errors, widespread systemic problems and millions of dollars wasted in the healthcare supply chain each year. Global standards provide a common language for that information that can be used by any supply chain partner, in any industry, in any location around the world.

Global standards promote simplicity, consistency and accuracy in supply chain communications. In today’s complex markets, supply chain lines are blurring and channels of distribution for various sectors are overlapping. This is especially true of the healthcare industry where manufacturers of healthcare products often supply both hospitals and consumer goods retailers in both Canada and across the globe; pharmacies and hospitals purchase consumer goods as well as healthcare products, and the pharmaceutical supply chain has expanded to include supermarkets and consumer goods retailers in addition to traditional pharmacies. Global standards are essential in this environment. In Canada, the emergence of Shared Service Organizations, Regional Health Authorities and provincial consolidation strategies drives the need for system integration and interoperability – never before in Canada’s healthcare system has the need for standards been more prevalent.
How Standards Benefit the Healthcare Supply Chain

Global standards provide a common language for product and location information that can be used by any supply chain partner, in any industry, in any location around the world. Global standards support healthcare business processes and can bring many benefits to the healthcare sector, such as:

- Fewer medication errors through efficient automated identification: the right product for the right patient at the right time through the right route and in the right dose
- More effective product recalls
- Efficient traceability
- More time with patients, less time spent on manual documentation
- Cost reduction through increased supply chain efficiency
- Improved order and invoice processes
- More efficient receiving
- Reduced inventory
- Increased productivity in business processes
- Improved shelf management
- Improved service levels/fill rates
- Improved management of manufacturing/supply costs
- Elimination of the need for re-labeling with proprietary codes
- Supports regulatory compliance

In the journey to improve supply chain efficiency and patient safety, global standards have a large role to play. This document is intended to guide you on that journey so that you can start realizing these benefits today.
About GS1 Standards

The GS1 System of standards is an integrated suite of global supply chain standards that provides for accurate identification and communication of information regarding products, assets, services and locations. Using GS1 Identifiers, organizations around the world are able to uniquely identify physical things like trade items, assets, logistic units and physical locations, as well as logical things like corporations or a service relationship between the healthcare provider and patient.

Global Location Number (GLN)

The Global Location Number (GLN) is the globally unique GS1 Identifier for locations and supply chain partners (parties). The GLN can be used to identify a legal entity (like a Regional Health Authority or Shared Services Organization), a function within a legal entity (like a hospital pharmacy or accounting department) or a physical entity (like a warehouse or hospital wing or even a nursing station). The attributes defined for each GLN [e.g., name, address, location type (e.g., ship to, bill to, deliver to, etc.)] help users to ensure that each GLN is specific to one unique location within the world.

Global Trade Item Number (GTIN)

The Global Trade Item Number (GTIN) is the globally unique GS1 Identifier for “trade items” (i.e., products and services that may be priced, ordered or invoiced at any point in the supply chain). GTINs are assigned by the brand owner of the product, and are used to identify products as they move through the global supply chain to the hospital or other end user. The GTIN uniquely identifies a product at each packaging level (e.g., a blister of two aspirin tablets; a bottle of 100 aspirin tablets; etc.).

Data Synchronization

GS1 Canada enables organizations to exchange standardized product and location information by publishing and retrieving such information from a central source, through a process known as data synchronization. Through data synchronization, any changes that an organization makes to its product or location information in the central registry are automatically and immediately provided to all of this organization’s trading partners. This automated approach to data management ensures that supply chain information is identical among trading partners, increasing data accuracy and driving costs out of the supply chain.

In Canada, an organization’s GLNs are stored in ECCnet Locations, a GLN registry managed by GS1 Canada and accessible to all GS1 Canada members. This central, online database ensures up-to-date, accurate and precise location information for any trading partner transaction where location information is required.

Similarly, GS1 Canada’s ECCnet Registry, Canada’s healthcare product registry will be the source of truth for the Canadian healthcare sector in accessing accurate product information. This registry of medical device product information will be complemented with information from other categories – such as foodservice and pharmaceuticals. Acting as a one-stop-shop for accessing clean, consistent data, ECCnet Registry will save healthcare organizations time and ensure data accuracy.

To support Canadian organizations to more effectively engage in data synchronization with their international trading partners, GS1 Canada also provides access to the GS1 Global Data Synchronization Network™ (GDSN).
The Case for Global Location Numbers (GLNs)

The Problem: Numerous Approaches to Location Identification Across the Company

Healthcare suppliers run complex businesses supported by several distinct “supply chains.” Generally speaking, there is the supply chain between the healthcare supplier and its customers, as well as between the healthcare supplier and its suppliers (e.g., machinery, industrial parts, maintenance supplies, computers and office equipment, office supplies, etc.). Because healthcare suppliers have a variety of supply chains, they also have a variety of supply chain roles:

- Supplier/Seller of finished goods to healthcare providers
- Consumer/Buyer of parts and/or raw materials
- Consumer/Buyer of services (e.g., labeling, packaging, transportation, etc.)
- Consumer/Buyer of products to support operations (e.g., machinery, industrial parts, maintenance supplies, computers and office equipment, office supplies, etc.)

All of these supply chains require up-to-date, accurate location information every day. Unfortunately, this information is not always readily available.

For example, healthcare suppliers’ customers (i.e., hospitals, clinics, etc.) are often structured with a parent corporation (e.g., a Regional Health Authority or Shared Services Organization) that has numerous affiliates under its umbrella (e.g., numerous affiliated hospitals, labs, etc.). In addition, even hospital affiliates may sub-contract out certain functions to other corporate entities (e.g., food services; billing; etc.). Suppliers may know who the provider organization is, but may not be aware of all of the corporate relationships and specific locations therein. Suppliers need party/location information for the specific group with whom they work – not just the Regional Health Authority, Shared Services Organization or affiliate hospital. As a result, general corporate location information about healthcare providers is not an adequate resource for the precise location information needed by suppliers. Likewise, general corporate information about the healthcare suppliers themselves is insufficient information for all of the location/party information their own suppliers need about them.

Moreover, the level of location information required by supply chain partners can vary depending on the sourcing model. For example, in a Central Stock sourcing model, all deliveries are made to one receiving point, and then the receiver distributes the supplies to its various departments as needed. In a Just in Time sourcing model, supply chain partners deliver directly to a customer’s various departments and locations. In a hybrid sourcing model, some supplies are delivered to a central receiving point, and others are delivered directly to user locations. These examples illustrate how the various sourcing models affect the level of location information needed. Under a Central Stock model, supply chain partners only need the location information for the central receiving point. However, under a Just in Time model, supply chain partners would need location information for each of the receiving points to whom they deliver. And under a hybrid model, supply chain partners would need location information for the central receiving point, as well as for each of the direct delivery points. This impacts healthcare suppliers in terms of the location information they need about their customers, as well as the location information their suppliers need about them.

Accurate party/location information is also essential for group purchasing organizations (GPOs). GPOs rely on distributors and manufacturers to track the sale of products in their roster of hospitals to apply rebates. Nonetheless, many GPOs encounter the same problems in managing party/location information in their rosters.
For example, a roster may not reflect the difference between corporate identity and physical location. In addition, it may not have precise location information for each of the various hospitals affiliated with the healthcare parent organization, or for each of the various departments within a hospital.

This is especially problematic because both suppliers and GPOs need to know who exactly is buying the products so they can target rebate and chargeback incentives. Additionally, there is a need for this information for the suppliers’ sales staff.

In response to the need for more precise location information, many healthcare supply chain participants (e.g., hospitals, manufacturers, distributors, etc.) began assigning their own proprietary numbers to trading partner locations. Although the creation of proprietary numbers began as an effort to solve the challenges previously identified, they in fact created new problems. So many location numbers were created that maintaining all of the various numbers became a nightmare. In addition, suppliers and providers now had to create and manage maps between all of the various location identification numbers in their systems. Despite all of the effort, the end result was an error-prone, inefficient approach to location identification that undermined supply chain management, operational efficiency and customer satisfaction, and inhibited optimization of corporate IT systems.

The Solution: Standardized Location Identifiers

The solution to these problems is GS1 GLNs – global standards-based party/location identifiers. The use of a globally accepted, standardized approach to location identification provides a common language to facilitate the communication of party/location information among supply chain partners. This provides a comprehensive approach to location identification that accommodates all of a healthcare supplier’s roles and improves supply chain management. Standards-based identifiers enable healthcare suppliers to maintain and manage precise information for all of their various corporate identities and physical locations, as well as those of their customers and suppliers. In addition, they support the efficient exchange of accurate party/location information for supply chain communications, deliveries, rebates and claims – which enhances customer satisfaction and competitive advantage.
What is a GLN?

A Global Location Number (GLN) is a GS1 standards-based, globally-unique number used to identify locations and supply chain partners. GLNs can be used to identify a legal entity (like a regional health authority or shared services organization), a function within a legal entity (like an accounting department or hospital pharmacy) or a physical entity (like a warehouse or delivery point or even a particular room in a building). For example, a GLN can be used to identify the following:

Table 1: Types of Entities Identified by GLNs

<table>
<thead>
<tr>
<th>Legal Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Legal Entity is defined as a legal organization that subscribes to the GS1 System. Legal Entities can include parent corporations, subsidiaries and/or divisions.</td>
</tr>
<tr>
<td>Examples: Supply chain partners such as customers, GPOs, distributors, manufacturers, third-party logistics, providers/hospitals, etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Functions Within Legal Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Function Within a Legal Entity is defined as a function or department within an organization.</td>
</tr>
<tr>
<td>Examples: Pharmacies, purchasing departments, accounting departments, hospital wards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Physical Location is defined as a single point of access with a physical address. Physical Locations can include specific locations within a legal entity.</td>
</tr>
<tr>
<td>Examples: Warehouse, warehouse gate, loading dock, hospital, delivery point, hospital unit, nursing station, particular room in a building, and even a cabinet or cabinet shelf.</td>
</tr>
</tbody>
</table>

In terms of data structure, GLNs are 13-digit numbers comprised of three basic segments:

- **GS1 Company Prefix**: The globally unique number assigned to a company by GS1 Canada (or another GS1 Member Organization). The GS1 Company Prefix is part of the data structure for all GS1 Identifiers (e.g., GLN, GTIN, etc.).
- **Location Reference**: A number that uniquely identifies a location.
- **Check Digit**: A calculated one-digit number used to ensure data integrity.
What is ECCnetLocations?

ECCnet Locations is a single source of standardized party/location information for Canadian trading partners. This central, online, searchable database ensures accurate and detailed location information for trading partner transactions where location information is required, including GLNs and GLN-related details (e.g., name, address, etc).

As a central resource for this information, ECCnet Locations solves the industry-wide challenges of maintaining such data in proprietary systems, as well as use of inaccurate party/location information in supply chain. In order to ensure the integrity of the data in ECCnet Locations, GS1 Canada manages the assignment of member-GLNs as well as the integration of these GLNs into the registry, based on information provided by members through the GLN registration process.

ECCnet Locations provides the following features:
- Anytime location look-up, available online 24/7.
- Downloading capabilities for members to integrate trading partner location information into internal systems.
- Automated notifications to alert members when trading partners have updated or added new locations.

ECCnet Locations was created to facilitate more efficient business practices and to help drive down supply chain costs. By providing accurate, standardized location information on demand, ECCnet Locations supports supply chain partners in getting the party/location information they need, when they need it.

How are GLNs Used?

Once assigned by GS1 Canada, GLNs are used to (1) identify parties and/or locations, and (2) provide a link to the information pertaining to these parties/locations.

Identification of Parties/Locations

GLNs identify the various locations and functional entities in a company/organization/facility. One especially convenient feature of GLNs is that they can be encoded onto data carriers (i.e., bar codes and/or RFID tags). This enables companies to mark the various locations and functional entities throughout their facilities with GLN bar codes for accurate location identification (e.g., warehouse; production line; etc). Entering a GLN into an IT system automatically using data carriers enables users to record a GLN with as minimal manual intervention as possible, increasing both speed and accuracy.

Link to Party/Location Information

The GLN not only identifies a specific party or location, but it is also the link to the location information pertaining to this party/location in ECCnet Locations. This enables supply chain partners to simply reference a GLN in...
supply chain communications such as purchase orders and invoices, as opposed to manually entering all of the necessary party/location information. Using a GLN to reference party/location information promotes efficiency, precision and accuracy in communicating and sharing location information. For this reason, a GLN is required in many types of e-commerce transactions, and is most commonly used on purchase orders and delivery documents. Moreover, because GLNs are utilized in many industries across the globe, suppliers can leverage GLNs for both their healthcare trading partners as well as customers in other supply chains (e.g., retail; grocery; sporting goods; etc.).

Advantages of GLN Use in the Healthcare Supply Chain

Standards-based numbering systems are essential for efficient and effective communication of party/location information in supply chains. Without a standardized approach, supply chain partners often assign their own proprietary location identification numbers, resulting in numerous numbers to manage and maintain for the same location. The use of GLNs avoids these problems. With a flexible approach to party/location identification, GLNs facilitate reliable and efficient management of precise location information to support supply chain management, operational efficiency and customer satisfaction. Moreover, because the GLN is a global standard used in over twenty industry sectors, use of the GLN enables suppliers to implement a single, comprehensive approach to location identification for all of their supply chain needs. As a result, there are many advantages to using GLNs:

- **Multi-sector:** GLNs can be used by any company or organization, in any sector, in any part of the world. That makes inventory systems, ordering systems and accounting systems compatible across different industries. This enables healthcare manufacturers to use GLNs in supply chain communications with all customers and suppliers.

- **Flexible:** GLNs may be assigned to any location, providing maximum flexibility to meet the needs/requirements of all businesses anywhere in the world -- from loading docks at a warehouse, to production lines or specific points along a production line, to healthcare buildings on a government base, to nursing stations in a hospital. This avoids the nuisance of mapping and managing multiple proprietary numbers. In addition, it promotes precision and accuracy in identifying locations, and facilitates communication of reliable party and location information to supply chain partners and within the company/organization.

- **Simple:** GLNs enable companies/organizations to efficiently and effectively manage precise supply chain information for all of their various corporate identities and physical locations using standardized identifiers.

- **Open:** A user can share their GLNs with anyone with whom they do business.

- **ECCnet Locations:** ECCnet Locations serves as a central resource of location and party information for all supply chain partners in Canada, providing accurate, standardized party/location information for the healthcare supply chain on demand.

- **Automatic Data Capture:** Suppliers can encode GLNs in data carriers, such as bar codes and Radio Frequency Identification (RFID) tags, to support automatic data capture.

- **Enhanced Organizational Visibility:** Active use of GLNs in your business creates a structured party/location hierarchy that provides a precise business view of your organization. Such enhanced visibility of your organizational structure helps you to identify redundant business practices and inefficiencies in order to improve your business model.
Benefits to Healthcare Suppliers

GLNs enable healthcare companies and organizations to efficiently and effectively manage information about all of their legal entities, functions within legal entities and physical locations using a unique, global standard for party/location identification. Using GLNs to identify your locations, your suppliers’ locations as well as your customers’ locations in your IT systems and commercial transactions facilitates communication of reliable party/location information among supply chain partners, and translates to significant benefits in supply chain management, operational efficiency and competitive advantage.

Supply Chain Management

Use of GLNs facilitates communication of accurate party/location information among supply chain partners. In addition, it enables healthcare suppliers to efficiently and effectively manage information about all of their locations and facilities. This promotes more efficient business practices and helps to drive down supply chain costs. As a result, there are many supply chain management benefits from using GLNs:

- **More efficient payment and reporting processes:** With the use of GLNs, invoices will be delivered to providers with fewer errors, resulting in quicker processing.

- **Reduced labour costs:** Use of GLNs frees staff time by eliminating the need to build and maintain cross reference tables in order to keep track of multiple proprietary location identification numbers. In addition, use of GLNs improves order accuracy, reducing the amount of staff time it takes to manage orders and resolve issues.

- **Improved information quality:** Using the GLN as the link to centralized party/location information improves information quality by ensuring that party/location information is identical among supply chain partners. This benefits both internal and external business processes.

- **Improved order and invoice accuracy:** Using GLNs improves order and invoice accuracy, reducing ordering mistakes and invoice disputes. This not only increases productivity within order and item administration, but also enhances customer satisfaction.
Operational Efficiency

Use of GLNs across an organization supports company-wide visibility and automatic data capture of location identifiers, thereby improving staff utilization and productivity. As a result, there are many operational benefits to be gained from using GLNs:

- **Improved staff utilization and productivity:** Supervisors and operators on production lines often spend considerable amounts of time reporting and documenting downtime on the line. Encoding GLNs in data carriers facilitates the transition from manual data collection to automatic data collection, enabling problems and downtime to be reported more efficiently and effectively. This improves staff utilization and productivity by reducing time spent on non-value added reporting activities and increasing time available for activities that improve the bottom line.

- **Enhanced organizational visibility:** Use of GLNs in all of your IT systems promotes consistency, precision and accuracy in identifying locations within your company. Use of a common data format across all systems provides enhanced visibility of your corporate structure and operations, enabling you to identify redundant business practices and inefficiencies.

Competitive Advantages

Use of GLNs improves order accuracy and the processing of invoices and chargebacks, which improves customer satisfaction. In addition, there is growing momentum to adopt GLNs by healthcare providers and GPOs in order to support patient safety and supply chain efficiency. As a result, there are competitive advantages to be gained by suppliers using GLNs:

- **Improved customer satisfaction:** Using GLNs improves order and invoice accuracy, reducing ordering mistakes and invoice disputes. The GLN data format is standardized, which eliminates confusion and dispute among trading partners about the proper format for the identifier itself. In addition, ECCnet Locations provides a quick reference to confirm the specific address and associated hierarchy of the GLN. This ensures that the purchasing experience runs smoothly for healthcare providers, improving customer satisfaction.

- **Alignment with and support of customer initiatives:** Increasingly, healthcare providers and GPOs are demanding and implementing GLNs to support patient safety and supply chain efficiency. This can translate into competitive advantages and positive PR for healthcare suppliers moving quickly to align with these efforts ahead of the curve.
December 2010 GLN Sunrise in Canada and the U.S.

To improve patient safety and supply chain efficiency, organizations throughout the Canadian and U.S. healthcare supply chain have announced their support of adopting the GLN by the industry-accepted sunrise date of December 31, 2010. The “2010 GLN Sunrise” date established by the healthcare industry calls for the adoption of GLNs in lieu of proprietary account/location numbers. In Canada, healthcare supply chain participants are working to meet the following GLN criteria by December 2010:

- Acquire GLNs from GS1 Canada.
- Use GLNs in appropriate business transactions and processes between trading partners.
- Define and maintain GLN hierarchy.
- Use ECCnet Locations to facilitate correct location identification.

In alignment with supply chain standardization activities in the U.S. and global healthcare industries, the GS1 Canada Carenet Healthcare Sector Board supports the adoption of the GLN as the national standard for party/location identification.

Implementing GLNs in Your Company

So, what does it take to implement Global Location Numbers (GLNs) in your company? What are the steps and who is involved? This checklist answers these questions with detailed, step-by-step instructions for implementing GLNs.

Note: Because each organization varies, begin by reviewing all of the implementation steps in their entirety, and then decide where to start based on your company’s current GLN implementation status, as well as your organizational requirements and priorities. The benefit a company realizes initially varies depending on the requirements of their customers and their internal system readiness. Some suppliers believe that roster alignment is of initial benefit. Some companies initially start with transactions based on their customer requirements. The following steps are provided as a general guideline.

Implementation Steps

- **Step One: Establish Executive Support**
  The goal is to inform and educate executive management on standards adoption and the need for industry-wide implementation, and to obtain executive approval to proceed with GLN implementation. Many times this step is initiated in response to external pressures like a “Dear Supplier” letter from a major customer or an industry initiative to adopt GS1 standards. As with any project that will impact the business processes of the organization, the support and engagement of senior management is critical. Many managers may already be familiar with the term GLN through dialogues with your customers. To help achieve executive support, review GLN business cases. Visit [www.gs1us.org/healthcare](http://www.gs1us.org/healthcare) and click on Healthcare Document Library in the left column.

- **Step Two: Form a GLN Management Advisory Group**
  The goal is to establish an advisory group. Formation of a cross-functional group including individuals outside of supply chain functions promotes buy-in, supports communication efforts, and ensures proper input from the areas most impacted by implementation.
Step Three: Establish a Primary Point of Contact

Establish a primary point of contact within the organization who has the primary responsibility to request and obtain GLNs from GS1 Canada, including providing the required attribute information for ECCnet Locations. In addition, the primary point of contact will maintain location data by informing GS1 Canada of location changes and upholding the integrity of your organization’s location(s) data.

Step Four: Develop & Initiate Project Communication

The goal is to inform your community of your commitment to GLN implementation. Utilize internal communication tools such as newsletters and intranets to introduce the concept and benefits of the GLN and ECCnet Locations to your company, and external communication tools like websites, corporate letters and policies for your customers and suppliers. The advisory group member from public relations should be enlisted in this effort. This effort should announce that your company is readying to use GLNs in both its external and internal communications.

Step Five: Initiate Education for the Advisory Group & Operational Team

The goal is to educate company personnel who will be impacted by implementation of GLNs by collaborating and identifying existing and new opportunities to use GLNs – from all points in the supply chain up to clinical care. Therefore, providing education to afford a base level of knowledge about GLNs, ECCnet Locations and GS1 standards is necessary for all active participants.

Step Six: Assess Information System Issues & Make Necessary Changes

The goal is to evaluate the readiness of your information systems, and make the appropriate system changes required to accommodate the use of GLN. The capability of your information system to contain and utilize GLN numbers must be assessed, and the necessary changes made. The necessity of parallel files between the old location numbers and GLNs must be planned.

Step Seven: Establish Implementation Strategy

The goal is to establish a GLN implementation strategy, including a corresponding hierarchal organizational chart (e.g., warehouse system hierarchy, divisional hierarchy, etc). The establishment of your organization’s GLN hierarchy is a critical step in the implementation process. It is necessary to consider not only how business is currently conducted, but also future business processes and supply system possibilities. In order to do that, current and possible distribution and billing systems must be clearly understood. It should be noted that implementation and use of GLN in healthcare is an ongoing process.

Step Eight: Identify Your GLN Requirements

The goal is to identify how many GLNs you require and for what. In this effort, you must consider your company’s GLN strategy and current customer requirements and then align the two. Specifically, you must determine whether your company will need a GLN for the main corporate address only, or for divisions, departments, receiving locations, etc. as well. This decision should be made as part of your company’s overall business plan. If your company has not yet made a firm decision as to a GLN strategy, it is recommended that you use the GLN assigned to corporate, and then obtain others as the strategy develops and as business needs dictate.

Step Nine: Assess Information System Issues

The goal is to evaluate the readiness of your information systems, and make the appropriate system changes required to accommodate the use of GLN. This requires the identification of system touch points that require GLNs. The capability of your information system to contain and utilize GLN numbers must also
be assessed, and the necessary changes made. The necessity of parallel files between the old location numbers and GLNs must be discussed.

- **Step Ten: Establish Implementation Strategy**
  The goal is to establish a GLN implementation strategy, including a corresponding hierarchical organizational chart (e.g., warehouse system hierarchy; divisional hierarchy; etc). The establishment of your company’s GLN hierarchy is a critical step in the implementation process. It is necessary to consider not only how business is currently conducted, but also future business processes and supply system possibilities. In order to do that, current and possible distribution and billing systems must be clearly understood. It should be noted that implementation and use of GLNs in healthcare is an ongoing process.

- **Step Eleven: Build Your GLN Database**
  The goal is to build an internal database to house GLNs. Specific information for each location that has been identified for enumeration must be gathered for this effort.

- **Step Twelve: Share GLN Information With Your Trading Partners**
  The initial goal is to share your GLN information with your trading partners and to gather their GLN information. Load your GLN information in ECCnet Locations to share your GLNs with your trading partners. Also, look up your trading partners’ GLNs using ECCnet Locations.

- **Step Thirteen: Engage Customer & Other Supplier Involvement**
  The goal is to prepare your customer or supplier community and identify partner(s) for testing. This is the most important step in this process. Collaboration and communication with your customers and suppliers is critical to the implementation success. Now that an implementation plan and initial hierarchy has been established, review recent use cases and engage strategic partners in a process of communication about your company’s plans. It is recommended that a trusted partner be selected first to align the initial implementation.

- **Step Fourteen: Conduct Transactional Testing With Customers & Suppliers**
  The goal is to successfully exchange EDI transactions – including purchase orders, purchase order acknowledgments, advance ship notices and invoices – with your customers and suppliers. At this point, you are ready to conduct transactional tests. The testing process will provide validation of the initial hierarchy, information system capabilities and operational impact.

- **Step Fifteen: Make Adjustments to Initial GLN Hierarchy & Implementation Plan**
  The goal is to keep the hierarchy consistent with your company’s business model and to ensure that it remains accurate in order to obtain maximum benefit and to ensure accurate delivery locations. This is an iterative process based on your transactional testing with customers and suppliers.

- **Step Sixteen: Create Standard Operating Procedures**
  The goal is to document standard operating procedures and obtain sign off, both internally and externally. Following testing and the implementation of the necessary adjustments, it is necessary to prepare standard operating procedures for internal and external staff. The advisory group and operational team should be heavily involved in this process. Several areas to consider when establishing a standard operating procedure include:
  - Establishing the owners of GLNs for your company.
  - Procedures for the transition of roles due to a personnel change within the company.
  - Establishing a consistent enumeration and hierarchy strategy for your company. For example:
At what level should all Deliver To addresses be displayed? At what level should supplier reporting occur for your company?

ECCnet Locations is an online, searchable database for up-to-date, accurate and detailed location information – including GLNs – for trading partner transactions.

Analyzing the GLN ROI for Your Company

In today’s dynamic healthcare environment, healthcare suppliers have expressed a need to establish a return on investment (ROI) for the use of GLN. Indeed, demonstration of positive ROI for GLN supports companies challenged daily by the allocation of scarce resources. This section provides guidance and a model to help each company determine their own ROI based on their individual needs and circumstances. The model is provided as a starting point for any company wishing to pursue ROI analysis.

It is important to note that beyond the analysis provided in this section for the ROI of GLN alone, additional benefits and ROI can be found in the implementation of GLN as part of the implementation of the full GS1 System of standards. Moreover, most “early adopter” organizations have realized additional value in unanticipated areas like process improvement and infrastructure development. As well, many have noted the value of a new “business philosophy” or way of doing business which places the company in an advantageous position to address some of the upcoming challenges anticipated in healthcare over the next few years.

Hot Spots for ROI

There are various functions and business processes that will be directly impacted and improved through the use of GLN. These functions and business processes serve as “hot spots” for capturing return on investment of GLN implementation. In order to support your ROI analysis, a list of ROI hot spots is provided below. Begin your ROI analysis by determining the amount of staff time and resources currently allocated to each of these functions. In addition, determine the amount of manual error corrections being done in each function as well.

Supply Chain Management

Record the number of items that do not arrive to the intended location, and the amount of staff it takes to track these items down. Consider each of the following scenarios both before and after GLN implementation:

- Right product, wrong place.
- Errors due to product being shipped to wrong location because of error in address within right hospital system.
- Error due to product being shipped to wrong location because of error in name of facility within the right hospital system.
- Error due to product being shipped to wrong location because of error in name of facility outside of right hospital system.
Problem with a shipment due to the supply chain partner designating the physical and legal locations, and not the provider.

In addition to those scenarios, also consider the following:

- How long is the list of proprietary or custom “customer location numbers” assigned to your customers that must be maintained -- before and after GLN implementation?
- How long is the list of proprietary “customer location numbers” assigned to your company by your suppliers -- before and after GLN implementation?

### Operational Efficiency

In terms of labour management, consider the following before and after GLN implementation:

- Hours devoted to tracking customer identification numbers.
- Hours devoted to dealing with location problems and errors.
- Hours devoted to manual data collection at manufacturing and packaging facilities.

### Competitive Advantage

In terms of competitive advantages, consider the following metrics which are indicators of customer satisfaction:

- Customer retention statistics
- Response time to customers
- Number of complaints
- Issue resolution rate (% and time)
- Error rates
- Customer value (computed as sales per customer, or lifetime value of customer)

### Lessons Learned & Best Practices

The following materials illustrate lessons learned and best practices for GLN implementation. Documents can be found on the GS1 US website at [www.gs1us.org](http://www.gs1us.org).

**Document Library Folder: Location Identification**

- GS1 US Minnesota GLN Pilot Report Phase 1: Lessons Learned
- GS1 US Minnesota GLN Pilot Report Phase 2: Process Map
- Mayo Clinic / Cardinal Health GLN Implementation White Paper
- Seton Family of Hospitals / BD Success Story
Frequently Asked Questions (FAQs)

About GLNs

What is a GLN?
The Global Location Number (GLN) is a 13-digit number for identifying supply chain parties and/or locations. There is a name and address associated with each unique number and it is specific to only one very precise location in the world.

Which business processes involve the use of GLNs?
Trading partners use GLNs to support streamlined supply chain processes that require location information, such as ordering, shipping, receiving and invoicing.

What are examples of locations that can be assigned GLNs?
The GLN is a unique data structure that identifies any legal or physical location, such as:

- **Legal entities**: Legal organizations that subscribe to the GS1 System of standards, including healthcare providers/hospitals, suppliers, parent corporations, subsidiaries, divisions, customers, group purchasing organizations (GPOs), distributors, manufacturers, third-party logistics, banks, etc.
- **Functions within legal entities**: function or department within an organization, including pharmacies, hospital wards, purchasing departments, accounting departments, returns departments, etc.
- **Physical entities**: Single points of access with a physical address, including a hospital unit, hospital delivery point, nursing station, warehouse, warehouse gate, loading dock, particular room in a building, and even a cabinet or cabinet shelf, etc.

What are the advantages of GLNs?
GLNs provide organizations with a method of identifying locations, within and outside their company or hospital, and are:

- **Simple**: GLNs are based on an easily defined data structure with integrity checks built into this structure; facilitating processing and transmission of data between supply chain partners.
- **Unique**: GLNs are globally unique, reducing confusion and errors that result from duplication of proprietary identification codes.
- **Multi-sectoral**: The non-significant characteristic of the GLN enables any location to be identified for any organization, regardless of its product channel, anywhere in the world.
- **Global**: GLNs are implemented around the world and supported by the international network of 108 GS1 Member Organizations, including GS1 Canada.
- **Efficient**: GLNs save organizations time and money by automating transactions where address/location information is required, benefitting processes such as ordering and invoicing.
- **Flexible**: GLNs may be assigned to any type of location, from a compound of buildings down to a warehouse shelf, to meet an organization’s unique requirements.
- **Versatile**: GLNs can be encoded in GS1-128 bar codes to be physically marked onto:
  - Trade units to identify the parties involved in the transaction (buyer, supplier).
  - Transport units (consignor and consignee).
  - Physical locations (place of delivery, place of departure and point of storage).

Why should my organization adopt GLNs now?
As a key component to standardizing the healthcare supply chain, the Canadian and U.S. healthcare sectors are transitioning to the use of GS1 Global Location Numbers (GLNs) by the industry-established sunrise date of December 31, 2010. The GS1 Canada Carenet Healthcare Sector Board has established a roadmap to support Canadian implementation.
Improving Patient Safety and Supply Chain Efficiency

Adopting the GLN will eliminate the maintenance of hundreds of single-purpose, proprietary supplier numbers – reducing potential confusion and errors in supply chain transactions and healthcare administration.

In addition, the GLN along with the GS1 Global Trade Item Number (GTIN) are the standards used for location and product identification, respectively, within the latest Canadian healthcare Electronic Data Interchange (EDI) transaction set standards and implementation guidelines – developed for and by industry.

Are there other location coding methods?
Yes. There are 196 different location coding methods recognized by ANSI X12, and 212 different location coding methods recognized by UN/EDIFACT, such as:

- Proprietary seller-generated location codes (i.e. DUNS +4 number)
- Location codes assigned by accepted third-party organizations

Then why use GLNs instead of another identifier?
Until recently, there was no recognized location identification standard for healthcare providers and healthcare related entities. Use of a multitude of location coding methods across the supply chain was resulting in costly errors, wasteful inefficiencies and inability to efficiently track and trace.

An internal solution at a healthcare organization may seem to be the easiest and fastest way to move forward with identifying all locations to cover operating requirements. However, when information is exchanged between computers of distinct healthcare organizations and companies, this may present such problems as:

- **Duplication**: Two or more supply chain partners may use the exact same location code to identify an internal location in their company/organization. There is no guarantee of uniqueness.
- **Complexity**: Internal codes will have a variety of structures and formats, making application programming more complex and application changes costly.
- **Inflexibility**: Location codes that contain information related to the location in the code structure itself will become difficult to handle as the coding structure evolves to incorporate new meanings.

Therefore, in 2009, the Canadian and U.S. healthcare industries committed to adoption of the GS1 Global Location Number (GLN) as the standard for location identification across the healthcare sector. The GLN enables globally unique, standardized location identification for providers, manufacturers, and distributors. GLNs replace the need to use proprietary numbering systems, decreasing confusion and costs by standardizing location identifiers across the entire supply chain.

Using GLNs

**How and when do I use my GLN?**
The GLN is a number you can use to uniquely identify your organization (or locations within your organization) within the global supply chain, when exchanging such information with your trading partners through Electronic Data Interchange (EDI) or other supply chain processes.

More specifically, the GLN is useful when:

- Ordering products
- Processing supply related order and invoicing inquiries
- Corresponding with suppliers or hospitals
- Performing any other standard business transactions with manufacturers, distributors, GPOs and other stakeholders across the supply chain
- Tracking and tracing the movement goods within the system to facilitate activities, such as product recalls or sterilization quality control.

**How are GLNs assigned?**
GS1 Canada is the assignment authority for GLNs in Canada. To obtain a GLN for your organization, contact...
Can a GLN change?
Yes, GLNs can change. Every time there is a change to the information associated with a GLN – if a given organization is closed down or moves to a new location, if a department moves to a different floor of the building – a new GLN must be assigned.

A GLN that has stopped being used will remain dormant for seven years before being reallocated by GS1 Canada. This delay is to allow time for all references of the old location number to be removed from trading partners’ files.

TrueSource Locations

How is GLN information shared?
ECCnet Locations is the central resource for accessing accurate, up-to-date, precise GLN information about your trading partners. It is the single reference for all GLNs in Canada. You can think of it as a national, online address book.

What is ECCnet Locations?
ECCnet Locations is a single source of comprehensive, standardized location information, including the GLNs and GLN-related details (e.g., name, address, class of trade, etc.) of healthcare facilities and their suppliers who are GS1 Canada members. It is an electronic catalogue of standardized party/location information about healthcare providers and healthcare-related entities in Canada.

How does ECCnet Locations work?
Accessed through the GS1 Canada website, TrueSource Locations enables users to search for trading partners’ location information based on the GLN provided or, conversely, enables users to search for a GLN, based on location information. If required, users can request an extract of the data in a flat file for integration into their internal systems.

How does ECCnet Locations support the healthcare industry?
GLNs enable all healthcare trading partners to use a common location identification standard to identify the same legal entity, trading partner or location, supporting transactions such as ensuring that product orders are submitted to the correct supplier branch, or ensuring that a product arrives at the correct location within a hospital, ultimately enhancing traceability and patient safety.

ECCnet Locations supports this process by being the central resource for GLN information for the entire healthcare supply chain, ensuring accurate, up-to-date, precise location information for use in trading partner transactions, and driving system-wide visibility best practices.

Who is responsible for maintaining my location hierarchy?
The individual within your organization assigned as the GLN administrator will work with GS1 Canada to ensure hierarchy integrity and assignment.
Implementation Resources

Are there tools to help me begin implementing GLNs?
Yes. The following resources, available at www.gs1ca.org/e/hcsunrise, will help your organization as it begins to implement GLNs:

- GLN/GTIN Sunrise Dates for Healthcare webpage
- GLN Implementation Checklist – Providers
- GLN Implementation Checklist – Suppliers
- Get Ready for GLN Sunrise 2010 brochure
- GLN in Healthcare Implementation Guide
- GLN Implementation Guide for Healthcare Providers
- GLN Implementation Guide for Healthcare Suppliers
- Mayo Clinic / Cardinal Health GLN Implementation White Paper
- Education Modules

Learn More

I still have questions; who can I call?
To access GS1 standards experts, contact GS1 Canada

P: 416.510.8039
Toll-free: 1.800.567.7084
E: info@gs1ca.org

Monday – Friday from 8:00 a.m. to 6:00 p.m. EST.
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Glossary Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribute</td>
<td>A piece of information reflecting a characteristic of the object to which an identification number (i.e., GLN, GTIN, etc.) relates.</td>
</tr>
<tr>
<td>Bar Code</td>
<td>A precise arrangement of parallel lines (bars) and spaces that vary in width to represent data.</td>
</tr>
<tr>
<td>Company Number</td>
<td>A number allocated by GS1 Canada. It is combined with the GS1 Prefix (for the GS1 member organization) to create the GS1 Company Prefix. The GS1 Company Prefix (i.e., the GS1 Prefix + the Company Number) uniquely identifies a company/provider.</td>
</tr>
<tr>
<td>Data Carrier</td>
<td>A physical or electronic mechanism that carries data (e.g., a bar code or RFID tag).</td>
</tr>
<tr>
<td>Data Standard</td>
<td>The entirety of all GS1 System data standardized in meaning and structure.</td>
</tr>
<tr>
<td>Data Structure</td>
<td>The GS1 System data structures defined in the various lengths required for the different identification purposes, which all share a hierarchical composition. Their composition blends the needs of international control with the needs of the user.</td>
</tr>
<tr>
<td>EDI</td>
<td>Acronym for Electronic Data Interchange (defined below).</td>
</tr>
<tr>
<td>Electronic Commerce</td>
<td>A method of business communications and management using electronic methods, such as electronic data interchange and automated data collection systems.</td>
</tr>
<tr>
<td>Electronic Data Interchange (EDI)</td>
<td>The computer-to-computer exchange of structured information, by agreed message standards, from one computer application to another by electronic means and with a minimum of human intervention.</td>
</tr>
<tr>
<td>Enumeration</td>
<td>The process of allocating GLNs to the key business sites of your entity.</td>
</tr>
<tr>
<td>GLN</td>
<td>Acronym for the GS1 Global Location Number (defined below).</td>
</tr>
<tr>
<td>Global Location Number (GLN)</td>
<td>The globally unique GS1 Identifier for legal entities, functions within legal entities and physical locations. The GLN is a 13-digit number, comprised of a GS1 Company Prefix, Location Reference, and Check Digit. Supply side trading partner locations generally include corporate headquarters, regional offices, warehouses, plants, and distribution centres. Demand side trading partner locations generally include hospitals, corporate headquarters, divisional offices, stores, and distribution centres.</td>
</tr>
<tr>
<td>Global Trade Item Number (GTIN)</td>
<td>The globally unique GS1 Identifier for products and services. A GTIN may be 8, 12, 13, or 14 digits in length, represented as GTIN-8, GTIN-12, GTIN-13, and GTIN-14, respectively.</td>
</tr>
<tr>
<td>GS1 Company Prefix</td>
<td>A globally unique number assigned to companies/providers by GS1 Member Organizations to create the identification numbers of the GS1 System. It is comprised of a GS1 Prefix and a Company Number.</td>
</tr>
<tr>
<td>GS1 Prefix</td>
<td>A number with two or more digits, administered by GS1 that is allocated to GS1 Member Organizations or for Restricted Circulation Numbers.</td>
</tr>
<tr>
<td>GS1 System</td>
<td>The specifications, standards, and guidelines administered by GS1. GS1, through the Global Standards Management Process, manages the GS1 System to maintain the most implemented standards in the world.</td>
</tr>
<tr>
<td>GS1-128 Bar Code Symbol</td>
<td>A subset of the Code 128 Bar Code Symbol that is utilized exclusively for GS1 defined data structures. UCC/EAN-128 Symbols can be printed as stand-alone linear symbols or as a composite symbol with an accompanying 2D Composite Component printed directly above the GS1-128 linear component.</td>
</tr>
<tr>
<td>Term</td>
<td>Glossary Definition</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GTIN</td>
<td>Acronym for the GS1 Global Trade Item Number (defined above).</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>A classification structure that is arranged in levels of detail from the broadest to the most detailed. Each level of the classification is defined in terms of the categories at the next lower level of the classification.</td>
</tr>
<tr>
<td>Identification Number (ID)</td>
<td>A numerical designation that uniquely identifies an object in the supply chain. Identification numbers are used to retrieve information previously exchanged between trading partners and stored in their computer database files.</td>
</tr>
<tr>
<td>Location Number</td>
<td>See GLN, above.</td>
</tr>
<tr>
<td>Location Reference</td>
<td>A number within a GLN assigned by various parties to identify a different entity.</td>
</tr>
<tr>
<td>Party</td>
<td>A Party (or location) is any legal entity, function within a legal entities or physical entity involved at any point in any supply chain and for which there is a need to retrieve pre-defined information. A Party is uniquely identified by a Global Location Number (GLN).</td>
</tr>
<tr>
<td>Supply Chain Partner</td>
<td>A party to transactions in the supply chain, such as a supplier (seller) or a customer (buyer).</td>
</tr>
<tr>
<td>Trade Item</td>
<td>Any item (product or service) upon which there is a need to retrieve pre-defined information and that may be priced, ordered or invoiced at any point in any supply chain.</td>
</tr>
</tbody>
</table>
References

- 2010 GLN Sunrise / 2012 GTIN Sunrise Dates
  
  http://www.gs1us.org/hcsunrise

- GS1 US Minnesota GLN Pilot Report Phase 1: Lessons Learned
  

- GS1 US Minnesota GLN Pilot Report Phase 2: Process Map
  

- Mayo Clinic / Cardinal Health GLN Implementation White Paper
  

- Seton Family of Hospitals / BD Success Story
  
Appendix A: Generic 850 Purchase Order with GLN & GTIN

ST^850^0001~
BEG^00^SA^1234500^20090815~
PER^BD^John Doe^TE^(902) 222-222^EM^john.doe@abchospital.ca~
ITD^08^3^2^10^30~
DTM^002^20090818~
N1^VN^Needles Inc.^UL^0057129123448~
N1^BT^ABC Hospital^UL^0068780152135~
N1^ST^ABC Hospital^UL^0068780152142~
N3^125 Main Street~
PO1^1^200^CA^21^UK^10012345000010^IN^476653~
PID^Needles by the case~
PO1^2^100^EA^6.66^UK^10012345000034^IN^476690~
PID^Individual Needles~
CTT^2~
SE^16^0001~
Appendix B: Generic 856 Advanced Ship Notice (ASN) with GLN & GTIN

ST*856*347001
BSN*00*0021849*20040211*0706*0001
HL*1**S
TD1*CTN*55****G*7291.8*KG
TD1*PLT*2*****G*7291.8*KG
TD5*B*2*SCAC*M
TD3*TL**6993006
REF*BM*0021849
DTM*011*20040211*0655
DTM*067*20040211*1730
N1*SF*P&G WHSE*UL*0068780152340 – Ship From party
N1*ST*Community Hospital*UL*0068780152357 – Ship to party
N3*KENNEDY ROAD
N4*DETROIT*MI*L6T 3G6*CA
HL*2*1*O
PRF*102345
TD1*CTN*55
TD1*PLT*2
HL*3*2*T
MAN*GM*00100370006802524594
PAL*6***25**********5
HL*4*3*P
LIN**UK*10005780003108*LT*7295W340
Disclaimer

GS1 Canada is providing this document as a service to interested industries. This document was developed through a consensus process of interested parties.

Although efforts have been made to assure that this document is correct, reliable, and technically accurate, GS1 Canada MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT THIS DOCUMENT IS CORRECT, WILL NOT REQUIRE MODIFICATION AS EXPERIENCE AND TECHNOLOGICAL ADVANCES DICTATE, OR WILL BE SUITABLE FOR ANY PURPOSE OR WORKABLE IN ANY APPLICATION, OR OTHERWISE. Each user of this document assumes all risk and responsibility for its use of the materials.

Use of this document is with the understanding that GS1 Canada accepts no liability whatsoever for any direct, indirect, special or other consequential damages of whatever kind resulting from whatever cause through the use of the document or any information therein, even if GS1 Canada has been advised of the possibility of such damages.

IAPMO

In this publication, the letters “U.P.C.” are used solely as an abbreviation for the “Universal Product Code” which is a product identification system. They do not refer to the UPC, which is a federally registered certification mark of the International Association of Plumbing and Mechanical Officials (IAPMO) to certify compliance with a Uniform Plumbing Code as authorized by IAPMO.