Users have identified two areas for improvement to the GS1 General Specifications updates made by the GLN Modernisation MSWG.

- Multiple stakeholders are still expressing a lack of clarity on whether multiple GLNs can have the same address/coordinates/geoshape associated to it. Specific, plain language is needed to normatively state this is permissible.
- The definition of GLN was not updated to reflect digital locations. This was acknowledged in the GLN Modernisation MSWG work, though updated was not completed.

The GS1 GLN Allocation Rules Standard, the GLN Data Model Solution Standard, GLN Registry, larger Gen Specs, and other collateral already reflect digital location.

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4.4.5 Information associated with asset identifiers

The data related to the asset should be recorded and shared digitally using the asset identifier as the key to the information. Examples of the type of information held include the GLN of the party who owns or manages the asset, the value of the asset, the location of the asset and the life cycle history of the asset.

4.5 GLN rules

4.5.1 Allocating Global Location Numbers

4.5.1.1 Allocation general rule

A separate, unique GLN is required to be allocated whenever there is a need to distinguish one party and/or location from another. (e.g., each store location is required to have a separate GLN to identify the physical locations).

GLNs SHALL be allocated by the party that defined the party/location in support of their business operations.

The below defines which party is responsible for allocating the GLN to a legal entity, function, physical location, or digital location. If a GLN is used to identify a combination of legal entity, function, physical location and/or digital location, all applicable rules SHALL apply.

- **Legal entity**: Allocating a GLN to a legal entity is the responsibility of the legal entity itself or another legal entity that is part of the same organisation. If multiple legal entities within an organisation have licensed GS1 Company Prefixes or individual GLNs, the parties SHOULD coordinate GLN allocation.

- **Function**: The organisation identifying their own, internal functions to support their business operation is responsible for allocating GLN. When representing itself as a legal entity or function in transactions, an organisation SHALL only use GLNs for which it has appropriate licences. This means that an organisation SHALL NOT use a GLN from another organisation's licence to represent itself as a party.

- **Physical location**: The owner or primary user(s) of the physical location is responsible for allocating the GLN.
  - When a party allocates a GLN to a location they do not own, that party SHOULD inform the owner and/or primary users of the location.
  - Parties SHALL use a GLN allocated by their own organisation, the owner of the location, or a primary user that is a business partner directly involved in a specified transaction. A party SHALL NOT use a GLN allocated by an organisation that does not directly relate to their business relationships.

- **Digital location**: The owner or primary user(s) of the digital location is responsible for allocating the GLN.

**Note**: The owner is the organisation that has the legal or rightful title to the physical or digital location. A primary user is an organisation that directly transacts with a physical or digital location. There may be multiple primary users associated to a single location.

Example: an owner would be the organisation that has legal ownership of a mall. A primary user would be the organisation that is leasing a space within the mall for their retail store.

When allocating a GLN, an organisation SHOULD:

1. Verify that the party and/or location is not already identified by a GLN.
2. Associate master data for the identified party/location to the GLN (see section 4.5.3).
3. Communicate the GLN and associated date to trading partners in a timely manner.
The GLN allocated to a party/location SHOULD be communicated to partners by the organisation that allocated the GLN in advance of a transaction/delivery so that all systems can be prepared for the interaction. See section 4.5.2 for additional details.

Individual companies need to determine how they allocate GLNs. An organisation may use a single GLN for order, delivery and invoice because each process is undertaken at the organisation (legal entity) level. However, an organisation may also allocate distinct GLNs to locations and functions within its organisation.

See the GS1 GLN Allocation Rules Standard for management rules and scenarios defining when a GLN SHOULD be allocated to a new party/location or as the result of a change.

Note: These rules are intended for global use. National, federal or local regulations may take precedence. Examples include regulations affecting a company’s registration, taxation, or fiscal obligations, as well as its industry requirements.

4.5.1.2 Party/location without Global Location Number

When a party/location needs to be identified by a GLN, the organisation defining the party/location in support of their business operations SHALL allocate the GLN. See section 4.5.1.1 for details.

If the organisation does not have a GS1 Company Prefix, it must either request a GS1 Company Prefix or an individual GLN from a GS1 Member Organisation. A GLN SHALL NOT be sold, leased, or loaned to a separate party.

Note: GS1 Member Organisations offer various alternatives by which a company can obtain its own GLN.

4.5.1.3 Assigning GLN values

GLNs SHOULD be allocated without any classifying elements. There is no need to coordinate GS1 identification key values across different GS1 identification keys. This is true even when the keys have an identical format. For example, there is no risk of conflict when a GTIN-13 and a GLN have the same value: GS1 Application Identifiers, data qualifiers and XML tags (EDI) prevent misinterpretation.

While companies may place GLNs in logical groupings for internal purposes, there are no supply chain standards to do so. GLNs are assigned at the discretion of GS1 user companies to support their business applications. Any additions or deletions from the group do not impact individual GLN allocation.

4.5.2 Lead time in reusing a Global Location Number

A Global Location Number (GLN) that has been previously used and has become obsolete must not be reused for another location until at least 48 months have elapsed. A longer period may be needed in accordance with government requirements, such as invoicing and taxation, or requirements related to the nature of the location (e.g., a bonded warehouse). This period provides time for all references of the old GLN to be removed from trading partner files.

All issuers of Global Location Numbers (GLNs) must ensure that GLNs allocated for locations used in the healthcare supply chain SHALL never be reused, e.g., locations where treatment of patients takes place, etc.

Important: The standard for GLN reuse will be changed on 1 July 2022. On that date, a GLN allocated to a party and/or location SHALL NOT be reallocated to another party and/or location. It is recommended that GLN reuse cease in advance of 1 July 2022 as soon as companies can transition their practices. If reuse is not currently occurring, it SHOULD NOT be started. The only exceptions to the GLN non-reuse rules will include:
If the GLN was never published in an externally accessible manner (e.g., to a registry or directly to a trading partner), it may be reused immediately.

Parties and/or locations that have been withdrawn and are reintroduced may use the original GLN if they are reintroduced without any modifications or changes that require a new GLN as specified by the GS1 GLN Allocation Rules Standard.

**Note:** These rules are intended for global use. Exceptions may occur only when local regulatory or legal requirements mandate otherwise.

### 4.5.3 Information associated with a Global Location Number

GLNs are assigned to parties and locations to provide a key to access master data in a business process (e.g., order, invoice, deliver). For each GLN, master data will be assigned to support business processes.

Master data associated to a GLN SHOULD be established in a database, then the GLN may then be used to facilitate efficient communication of this information.

The information held for legal entities, functions, physical locations and digital locations may include but is not limited to name, address, bank details, certifications and contact details.

Information associated with each GLN is held internally by trading partners or on central databases. If the party or location changes and the details are not updated, communications or deliveries will go to the outdated information held on file. Therefore, it is essential for organisations to inform trading partners as soon as possible about new GLN assignments or changes to information associated with a GLN.

The GLN Management Rules that define what changes to a party or location require a new GLN are included in the GS1 GLN Allocation Rules Standard. The GLN Management Rules are designed to help industry make consistent decisions about the unique identification of parties and locations and SHOULD be referenced when changes to parties, locations and the information associated to them occur.

Local, national or regional regulations may require more frequent GLN changes. Such regulations have precedence over the rules provided within the GS1 GLN Allocation Rules Standard.

**Important:** Identical postal addresses, geocoordinates, geoshapes or other representations of where something is, operates or can otherwise be reached can be associated to multiple GLNs.

### 4.6 GSRN rules

#### 4.6.1 Allocating Global Service Relation Numbers

**4.6.1.1 General rule**

Global Service Relation Numbers (GSRNs) can be used to identify the service provider and/or service recipient in any service relationship. A separate, unique number can be issued, normally by the organisation offering the service to identify the service provider and/or the service recipient, to identify any given service relationship. Once assigned, the GSRN becomes a unique and universal reference that can be used by all parties involved in the service relationship.

A GSRN with either AI (8018) or AI (8017) are mutually exclusive, that is, a GSRN can only be assigned to a single role, recipient or provider, but not both.

**4.6.1.2 Changes in a service relationship**

From time to time the details related to a Global Service Relation Numbers (GSRNs) may change. The following are general cases that may occur if the circumstances under which the GSRN were originally set up change:
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLN extension component</td>
<td>The GLN extension component is used to identify internal physical sub-locations within a location (such as a selling floor area, a specific area on a shelf, etc.) which is identified with a GLN (such as stores, factories, buildings, etc.).</td>
</tr>
<tr>
<td>Global Coupon Number (GCN)</td>
<td>The GS1 identification key used to identify a coupon. The key comprises a GS1 Company Prefix, coupon reference, check digit and an optional serial number.</td>
</tr>
<tr>
<td>Global Document Type Identifier (GDTI)</td>
<td>The GS1 identification key used to identify a document type. The key comprises a GS1 Company Prefix, document type, check digit and optional serial number.</td>
</tr>
<tr>
<td>Global Electronic Party Information Registry (GEPIR®)</td>
<td>A web-browser interface and a machine to machine set of protocols for GS1 Member Organisation (MO) membership databases to communicate company information for selected GS1 keys including information about the allocation of the GS1 Company Prefixes used to create GS1 keys and/or individually assigned GS1 keys.</td>
</tr>
<tr>
<td>Global Identification Number for Consignment (GINC)</td>
<td>The GS1 identification key used to identify a logical grouping of logistic or transport units that are assembled to be transported under one transport document (e.g., waybill). The key comprises a GS1 Company Prefix and the freight forwarder’s or carrier’s transport reference.</td>
</tr>
<tr>
<td>Global Individual Asset Identifier (GIAI)</td>
<td>The GS1 identification key used to identify an individual asset. The key comprises a GS1 Company Prefix and individual asset reference.</td>
</tr>
<tr>
<td>Global Location Number (GLN)</td>
<td>The GS1 identification key used to identify physical locations or parties. The key comprises a GS1 Company Prefix, location reference and check digit.</td>
</tr>
<tr>
<td>Global Model Number (GMN)</td>
<td>The GS1 identification key used to identify a product model or product family. The key comprises a GS1 Company Prefix, model reference and a check character pair.</td>
</tr>
<tr>
<td>Global Returnable Asset Identifier (GRAI)</td>
<td>The GS1 identification key used to identify returnable assets. The key comprises a GS1 Company Prefix, asset type, check digit and optional serial number.</td>
</tr>
<tr>
<td>Global Service Relation Number (GSRN)</td>
<td>The GS1 identification key used to identify the relationship between an organisation offering services and the recipient or provider of services. The key comprises a GS1 Company Prefix, service reference and check digit.</td>
</tr>
<tr>
<td>Global Shipment Identification Number (GSIN)</td>
<td>The GS1 identification key used to identify a logical grouping of logistic or transport units that are assembled by the consignor (seller) for a transport shipment from that consignor to one consignee (buyer) referencing a despatch advice and/or BOL. The key comprises a GS1 Company Prefix, shipper reference and check digit.</td>
</tr>
<tr>
<td>Global Trade Item Number® (GTIN®)</td>
<td>The GS1 identification key used to identify trade items. The key comprises a GS1 Company Prefix, an item reference and check digit.</td>
</tr>
<tr>
<td>GS1 Application Identifier (AI)</td>
<td>The field of two or more digits at the beginning of an element string that uniquely defines its format and meaning.</td>
</tr>
<tr>
<td>GS1 Application Identifier data field</td>
<td>The data used in a business application defined by one GS1 Application Identifier.</td>
</tr>
<tr>
<td>GS1 check character calculation</td>
<td>An algorithm used by the GS1 system for the calculation of the check characters to verify accuracy of data.</td>
</tr>
<tr>
<td>GS1 check digit calculation</td>
<td>An algorithm used by the GS1 system for the calculation of a check digit to verify accuracy of data. (e.g., modulo 10 check digit, price check digit).</td>
</tr>
<tr>
<td>GS1 Common Currency Code</td>
<td>An identification number for coupons issued in a common currency area (e.g., the euro currency) that uses the GS1 Prefixes 981-983.</td>
</tr>
<tr>
<td>GS1 Company Prefix (GCP)</td>
<td>A unique string of four to twelve digits used to issue GS1 identification keys. The first digits are a valid GS1 Prefix and the length must be at least one longer than the length of the GS1 Prefix. The GS1 Company Prefix is issued by a GS1 Member Organisation. As the GS1 Company Prefix varies in length, the issuance of a GS1 Company Prefix excludes all longer strings that start with the same digits as being issued as GS1 Company Prefixes. See also U.P.C Company Prefix.</td>
</tr>
<tr>
<td>GS1 Composite symbology</td>
<td>A GS1 system composite symbol consists of a linear component (encoding the item’s primary identification) associated with an adjacent Composite Component (encoding attribute data, such as a batch number or expiration date). The composite symbol always includes a linear component so that the primary identification is readable by all scanning technologies, and so that imager scanners can use the linear component as a finder pattern for the adjacent 2D Composite Component. The composite symbol always includes one of three multi-row 2D Composite Component versions (e.g., CC-A, CC-B, CC-C) for compatibility with linear- and area-CCD scanners and with linear and rastering laser scanners.</td>
</tr>
<tr>
<td>GS1 conformant barcode</td>
<td>A family of symbols comprising all barcodes in accordance with an application standard; the data carrier specifications and relevant GS1 symbol specification table.</td>
</tr>
</tbody>
</table>

Commented [DM22]: WR22-376 Multi barcode mgt