GSCN #	GSCN Name	Issue Date	Status
WR13-082	**Non Reuse Rules GS1 Keys in Healthcare**	May-2016	Ratified

Associated Work Request (WR) Number:

13-082

Background:

Change the current reuse rules within the GS1 General Specifications for all GS1 Keys (GRAI, GIAI, GLN, GSRN, SSCC, GSIN, GINC) to prohibit their reassignment (reuse) for companies in the Healthcare Industry.

GS1 General Specification Change:

The recommended changes are highlighted in the attached excerpt from the GS1 General Specifications, v16.

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4.4 SSCC rules

4.4.1 Allocating Serial Shipping Container Codes

4.4.1.1 General rule

An individual Serial Shipping Container Code (SSCC) is a unique number, which remains the same for the life of the logistic unit to which it is assigned. When assigning an SSCC, the rule is that an individual SSCC number must not be reallocated within one year of the shipment date from the SSCC assignor to a trading partner. However, prevailing regulatory or industry organisation specific requirements may extend this period.

4.4.1.2 Responsibility

The Serial Shipping Container Code (SSCC) provides functionality to support the management (tracking, tracing, storage, etc.) of logistic units through the supply chain. To ensure global uniqueness and traceability, the physical builder of the logistic unit or the brand owner of the logistic unit is responsible for the allocation of the SSCC.

4.5 Allocating GS1 system asset identifiers

4.5.1 General rule

4.5.1.1 GS1 system asset identifiers

GS1 system asset identifiers can be used to identify any fixed assets of a company. It is left to the discretion of the issuer to determine whether the Global Returnable Asset Identifier (GRAI), AI (8003), or Global Individual Asset Identifier (GIAI), AI (8004), is more suitable for the application concerned.

4.5.1.2 Uniqueness of asset identifiers

Asset identifiers must not be used for any other purpose and must remain unique for a period well beyond the lifetime of the relevant records. If a company assigns asset identifiers to trade items supplied to its customers, the company must ensure that the asset identifiers are never re-used.

All issuers of asset identifiers must ensure that asset identifiers (GRAIs, GIAIs) allocated for medical devices / equipment used for treatment of a patient SHALL never be reused.

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4.5.1.3 Best practice

Best practices may dictate that the trade item manufacturer apply the asset identifier during the manufacturing process (see section 2.32.3).

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4.5.1.4 Allocating Global Returnable Asset Identifiers (GRAIs): AI (8003)

The structure of the element string for a Global Returnable Asset Identifier (GRAI) can include two parts: the mandatory Identification of an asset type and an optional serial component, to distinguish individual assets within the same asset type (see section 2.)

Figure 4.5.1.4-1. Format of the element string

Application Identifier	Global Returnable Asset Identifier (GRAI)			
	GS1 Company Prefix → ← Asset type	Check digit	Serial component (optional)	
8 0 0 3	0 N_1 N_2 N_3 N_4 N_5 N_6 N_7 N_8 N_9 N_{10} N_{11} N_{12}	N_{13}	X_1 variable X_{16}	

The exact method used to allocate the GRAI is left to the discretion of the issuing organisation. However, a unique number, the asset type, must be assigned for each type of asset being identified, and for ease of administration, the GS1 system recommends that numbers be allocated sequentially and not contain classifying elements.

When it is not possible to assign an asset type (e.g., for museum exhibits), or when the type of asset is not required by the application (e.g., when the item is only used for a single type of asset), then the Global Individual Asset Identifier (GIAI), AI (8004), SHOULD be used.

To encode the following Examples of Identification Numbers in a GS1-128 barcode a zero in the leftmost position must be added to generate the defined length for the 14-digit asset identification number field.

4.5.1.5 Identical assets identification

A single Global Returnable Asset Identifier (GRAI) SHOULD be assigned to a series of identical assets.

Figure 4.5.1.5-1. Examples of GRAI excluding serial number

Asset type	GRAI
50 litre aluminium beer keg	1234567890005
10 litre aluminium beer keg	1234567890012
10 litre wooden beer keg	1234567890029

4.5.1.6 Serial component (optional)

The owner of the asset assigns the optional serial component. It denotes an individual asset within a given asset type. The field is alphanumeric and is used to distinguish individual assets with the same asset types.

Figure 4.5.1.6-1. Examples of GRAI including serial component

Asset Type	GRAI (incl. the serial component)
50 litre aluminium beer keg	12345678900051234AX01
50 litre aluminium beer keg	12345678900051234AX02
50 litre aluminium beer keg	12345678900051234AX03

4.5.1.7 Allocating Global Individual Asset Identifiers (GIAIs): AI (8004)

The Global Individual Asset Identifier (GIAI) is structured according to Figure 4.5.1.7 - 1.

Figure 4.5.1.7-1. Format of the element string

Application Identifier	Global Individual Asset Identifier (GIAI)		
	GS1 Company Prefix	Individual asset reference	
8 0 0 4	N_1 ... N_i	X_{i+1} ... variable length	$X_{j\ (j<=30)}$

The exact method used to allocate the GIAI is left to the discretion of the issuing organisation. However, each GIAI must be unique for each individual asset being identified and, for ease of administration, the GS1 system recommends that GIAIs be allocated sequentially and not contain classifying elements.

4.5.2 Change of asset ownership

Asset identification numbers are used in a diverse range of business applications ranging from tracking the movements of re-usable packaging trays to recording the life-cycle history of aircraft parts. If a company sells an asset to another company then the asset identifier SHOULD ideally be replaced by another Global Individual Asset Identifier (GIAI) or Global Returnable Asset Identifier (GRAI) or be removed. It is permissible for the asset identifier to remain on the item when the ownership changes if the new owner takes responsibility for the GS1 Company Prefix associated with the asset identifier.

For further information regarding changes of ownership, please refer to section *1.61.6*.

4.5.3 Information associated with asset identifiers

The attributes of the asset should be established on a computer file using the GS1 system asset identifier as the key to the information. Examples of the type of information held include the full name and address of the party who owns the asset, the value of the asset, the location of the asset, and the life-cycle history of the asset.

4.6 GLN rules

4.6.1 Allocating Global Location Numbers

4.6.1.1 Allocation general rule

Global Location Numbers (GLNs) can be used to identify any location that has meaning within a business scenario. The term location is used in a very wide sense, besides physical locations also covering IT systems, departments and legal entities.

The general rule is that a separate GLN is required whenever organisations need to be able to distinguish between one location and another (e.g., each store of a retail group is required to have a separate GLN to enable efficient delivery to the individual store).

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

- Only the organisation that is the licensee of a GLN may use that GLN to represent itself in business transactions. For example, if a franchisee engages as buyer in business transactions with parties other than the franchising company it must use its own assigned GLN, it cannot use a GLN assigned by the franchising company.

- A company may assign a GLN to a physical location of which it is not the owner or primary user. This can be useful in cases where the same location is used for multiple purposes, e.g. a store is also used as receiving location for a mobile clinic.

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

When a new GLN is issued, it is recommended that:

- The GLN be associated with the master data for the identified location.

- This master data be communicated to trading partners in a timely manner.

The GLN allocated to a location SHOULD be communicated throughout the supply chain by the company that allocated the GLN in advance of a transaction/delivery so that all systems can be prepared for this interaction.

From time to time, the details (associated data) related to a GLN might change. The following subsections are general cases, or examples, about GLN allocation due to a change in the circumstances or business conditions in which the number was originally established.

See section *4.6.34.6.3* for GLN allocation rules and scenarios regarding when GLNs should remain the same or should be changed. These rules are based on business practices.

> ✅ **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.

4.6.1.2 Assigning GLN values

It is recommended to allocate GLNs sequentially 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: Application Identifiers (barcodes), data qualifiers and XML tags (EDI) prevent misinterpretation.

4.6.1.3 Relocations

Relocations within the same building (e.g., a department moves from the second to the seventh floor of a building), or other changes in address that have little or no impact on such things as deliveries and payments, do not require assignment of a new GLN. The changed information may be updated and communicated to trading partners.

Whenever the point of access changes, a new GLN SHOULD be assigned. Also when a given operation is closed in one location and replaced by a similar operation at a new location, a new GLN SHOULD be assigned.

> ✅ **Note**: Address changes of legal entities or functions do not always require a new GLN. See section *4.6.34.6.3* for more information.

4.6.1.4 Grouping of Global Location Numbers

While companies, for their internal purposes, may collect Global Location Numbers (GLNs) into logical groupings, there are no supply chain standards to do so. GLNs are assigned at the discretion of GS1 user companies to support their business applications. The principle of non-significance (see section 1.) is critical to supply chain use, and it therefore follows that any additions or deletions from the group do not impact individual GLN assignment.

4.6.1.5 Locations without Global Location Numbers

If a GLN is required, the party responsible for that location must allocate the GLN to it. Assigning the GLN at source by the responsible trading partner ensures supply chain efficiency.

If a trading partner responsible for a particular location does not have a GS1 Company Prefix, it must either request a GS1 Company Prefix or an individually assigned GLN from their local 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.

4.6.1.6 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.

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4.6.2 Information associated with a Global Location Number

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

Master data for a location should be established on a computer file and the Global Location Number (GLN) may then be used to facilitate efficient communication of this information.

The type of information held for physical locations, legal entities and function may include the name and address, bank details and account number, sales department, and company profile.

Changes to attributes of digital locations may have a large impact on trading partners. For example, if a retailer changes his Electronic Data Interchange (EDI) Value Added Network (VAN) provider, the accounting department will get a new VAN address to which invoices and payments have to be remitted. In the digital world, this is as significant a change as a physical address change in the physical world.

Information associated with each GLN is held internally by trading partners or on central databases. If the location changes and the details are not updated, communications or deliveries will go to the address 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.

See section 4.6.34.6.3 for GLN allocation rules and scenarios where changes to a location or attributes relating to a GLN may require a new GLN.

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4.6.3 GLN Allocation rules

The GLN Allocation Rules provide specific rules on GLN assignment per business scenario.

The business scenarios address various organisational and attribute data changes that may occur in practice. For each situation, the rules indicate whether a new GLN should be assigned or whether the change can be communicated in other ways, such as an EDI message or GLN registry.

The scenarios are organised as follows:

- General rules.

- Rules for legal entity GLNs.

- Rules for function GLNs.

- Rules for physical location GLNs.

- Rules for digital location GLNs.

The same GLN may be used to identify several location types, for example a physical location and a legal entity. The GLN allocation rules provide guidance on the allowed combinations and the way to address change scenarios involving multi-use GLNs.

The GLN Allocation Rules can be found at *http://www.gs1.org/glnrules*.

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

4.7 GSRN rules

4.7.1 Allocating Global Service Relation Numbers

4.7.1.1 General rule

Global Service Relation Number (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.

4.7.1.2 Changes in a service relationship

From time to time the details related to a Global Service Relation Numbers (GSRN) may change. The following are general cases that may occur if the circumstances under which the GSRN were originally set up change:

■ if an organisation providing a service ceases trading (possibly because of liquidation), any GSRNs allocated by that organisation SHOULD be phased out. If the activity covered by the GSRN is transferred, the new organisation providing the service may continue to use existing GSRNs if it has taken over the GS1 Company Prefix of the original organisation providing the service; if not, the GSRN SHOULD be phased out and a new GSRN allocated using the new organisation's GS1 Company Prefix.

■ if the range of services identified by a GSRN changes, the organisation that provides the service SHOULD change the details associated with the GSRN on the related computer file record. The assignment of a new GSRN is not required in this case.

■ a GSRN used to identify a particular service relationship that has terminated SHOULD not be reallocated for a period well beyond the lifetime of the relevant records.

4.7.1.3 Recommendation for allocating Global Service Relation Numbers

The exact method used to allocate the Global Service Relation Number (GSRN) is left to the discretion of the issuing organisation. However, the GSRN must be unique for each individual service provider and for each individual service recipient and each must remain unique for a period well beyond the lifetime of the records relevant to the service relationship.

All issuers of Global Service Relationship Numbers (GSRNs) must ensure that GSRNs allocated for healthcare service providers and service recipients SHALL never be reused.

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For ease of administration, GS1 recommends that GSRNs be allocated sequentially and not contain classifying elements.

4.7.1.4 Information associated with a Global Service Relation Number

Global Service Relation Number (GSRN) may be used as a standalone element strings where all information required is established on a computer file using the individual GSRN as the key to access the information. The type of information stored is determined by the nature of the service relationship. Typical information includes the service recipient's or provider's full name, address, and details of the services received or rendered.

If the identification of a Global Service Relation Number for the service recipient (GSRN) needs to be further identified with a sequence indicator corresponding to specific encounters during a service relationship, a Service Relation Instance Number (SRIN), AI (8019) may be associated to the GSRN. As an example, in a healthcare setting this could be used to allow for differentiation of "Subject of Care" identification capture from an identification band, both before and after its replacement (i.e. due to a radiology examination, etc.).

4.8   GDTI rules

4.8.1   Allocating Global Document Type Identifiers

The Global Document Type Identifier (GDTI) is used to identify any document for document control purposes. A separate, unique GDTI is required whenever any of the characteristics of a document are different in any way that is relevant to the business process. As a guiding principle, if the end user is expected to distinguish between documents and process them accordingly, each document SHOULD be allocated its own GDTI.

The Global Document Type Identifier (GDTI) is assigned by the document issuer. The GDTI is used as a key to access database information (normally held by the issuing organisation).

The same document type is used for all document classes that are issued with an identical purpose. This can then be used to reference the main characteristics of the document, such as:

- The exact right or obligation the document imposes.
- The document purpose (e.g., insurance policy, governmental paper, product image).

A different document type SHALL be used whenever the main characteristics of the document are different.

Example:

An application form for membership to an organisation would be identified with a specific document type, and all filled forms would be uniquely identified through the serial component.

If the limits of the membership were to change (now subject to legal constraints) the document type shall change, to document the modification. Subsequent applications with the modified form would then be tracked through the serial component.

The identification of each individually issued document requires a unique serial component in addition to the Document Type. Any duplicates of the individually issued document SHOULD use the same serial component as the original. The serial component is optional and assigned by the document issuer and is unique in a series of documents issued under the same Document Type. Ideally the serial component SHOULD be sequentially allocated for each new document generated. The serial component is used to communicate detailed characteristics pertinent to the individual document such as:

- The name and address of the recipient.
- The document details.

The definition of main characteristics (identified with the document type) and detailed characteristics (identified with the serial component) is at the discretion of the document issuer.

All issuers of Global Document Type Identifiers (GDTIs) must ensure that GDTIs allocated for documents relevant to patient treatment / care SHALL never be reused.

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4.8.2   GDTI change rules

If the function, type, or major content (determined by the document issuer) of the document changes, the document type identifier SHALL change.

The document issuer will determine if changes to the content of the document require changing the document type identifier, or adding or changing a serial component.

Embedded metadata changes do usually not impact the functionality of the document, and are not considered content changes. These would not require a change in the GDTI.