



GS1 Architecture Subteam GRAI in eCom trade messages?

Issue 1.1, 15 June 2011



Document Summary

Document Item	Current Value
Document Title	GS1 Architecture Subteam GRAI in eCom trade messages?
Date Last Modified	15 June 2011
Current Document Issue	Issue 1.1
Status	Approved
Document Description	Recommendation to GS1 Architecture Team on GRAI in eCom Trade Messages Request For Findings submission.

Contributors

Name	Organisation
David Buckley	GS1 Global Office
Sue Schmid	GS1 Australia
Eugen Sehorz	GS1 Austria
Kevin Dean	GS1 Canada
Andrew Hearn	GS1 Global Office
Hein Gorter de Vries	GS1 Nederland
Staffan Olsen	GS1 Sweden
Andrew Osborne	GS1 UK
Paul Michicich	Kraft
Vera Feuerstein	Nestle

Log of Changes in Issue 1.1

Issue No.	Date of Change	Changed By	Summary of Change
0.11	28 January 2011	D. Buckley	Creation (based upon GS1 Arc Team meeting report of 26 January 2011).
0.12	11 February 2011	D.Buckley, K.Dean & V. Feuerstien	Updates based on sub-team call + new Scenarios (Section 2)
0.13	15 February 2011	D.Buckley, S.Olsson & E. Sehorz	New and updated Scenarios (Section 2)
0.15	16 March 2011	D.Buckley	Updates based upon weekly telecoms (Section 2 & Section 3)
1.0	21 March 2011	D.Buckley	Update based upon final team review and presented to GS1 Architecture Team on 24 March 2011
1.1	15 June 2011	D.Buckley	Errata: delete note in Section 3 (page 12):  Note: A new code is needed, in the PIA segment, for the Product Identifier Code Qualifier (4347) to indicate the GS1 Global Returnable Asset Identifier (GRAI).

Disclaimer

Whilst every effort has been made to ensure that the guidelines to use the GS1 standards contained in the document are correct, GS1 and any other party involved in the creation of the document HEREBY STATE that the document is provided without warranty, either expressed or implied, of accuracy or fitness for purpose, AND HEREBY DISCLAIM any liability, direct or indirect, for damages or loss relating to the use of the document. The document may be modified, subject to developments in technology, changes to the standards, or new legal requirements. Several products and company names mentioned herein may be trademarks and/or registered trademarks of their respective companies.

Table of Contents

1. Background	5
1.1. Request for Findings	5
1.2. Formation of Sub Team	6
1.2.1. Team members	6
1.3. Purpose of this document	6
2. Scenario approach	6
2.1. Scenario A: A RTI-Pool purchases a new RTI from a 3 rd party manufacturer	6
2.1.1. Key assumptions	6
2.1.2. Key considerations	7
2.1.3. Recommendation	7
2.2. Scenario B: Company A orders trade items from Company B. The trade items are shipped on an RTI from the RTI-pool	7
2.2.1. Key assumptions	7
2.2.2. Key considerations	8
2.2.3. Recommendation	8
2.3. Scenario C: Supplier A rents RTIs from the pallet pool for shipment of goods to Retailer B.	8
2.3.1. Key assumptions	8
2.3.2. Key considerations (business consideration)	9
2.3.3. Recommendation (special case)	9
2.4. Scenario D: RTI-Pool rental to companies in the Supply Chain based upon the time each company has control of the RTI	10
2.4.1. Key assumptions	10
2.4.2. Key considerations	10
2.4.3. Recommendation	10
2.5. Scenario E: RTI Ownership where all RTIs are owned by an upstream trading partner.	10
2.5.1. Key assumptions	10
2.5.2. Key considerations	10
2.6. Bucketing of Scenarios	12
2.6.1. Introduction to the buckets	12
3. Recommendation	13
4. Appendix 1: Copy of the Request for Findings	14
5. Appendix 2: Overview presentation	17
6. Appendix 3: Extract of GS1 Architecture Team meeting report of 26 Jan 2011	18

1. Background

1.1. Request for Findings

In early January 2011, a Request for Findings was submitted to the GS1 Architecture Team Galya Lazarkova (GS1 Austria) following the work effort to create the *GS1 in Europe Guideline for the Management of Reusable Transport Items (RTIs) with eCom messages*. The specific question for clarification was:

- *Can GRAI, under specific conditions, be used instead of GTIN in the LIN Segment of EANCOM Message to identify RTIs for ORDERS, INVOIC and DESADV?*



Note: Whatever business requirement is decided this must be applicable to all related eCOM trade messages.



Note: The relationship between the identification key used in the data carrier on the items and the ID key used in eCom messages must be considered.

See full text in

[Appendix 1: Copy of the Request for Findings](#). This was supported by an overview presentation (see [Appendix 2: Overview presentation](#))

1.2. Formation of Sub Team

At the 26 January 2011 GS1 Architecture Team call a Sub Team was established to draft a recommendation for consideration by the full Team by late February (see full text in [Appendix 3: Extract of GS1 Architecture Team meeting report of 26 Jan 2011](#)).

1.2.1. Team members

- *David Buckley* *GS1 Global Office*
- *Sue Schmid* *GS1 Australia*
- *Eugen Sehorz* *GS1 Austria*
- *Kevin Dean* *GS1 Canada*
- *Andrew Hearn* *GS1 Global Office*
- *H. Gorter de Vries* *GS1 Nederland*
- *Staffan Olsen* *GS1 Sweden*
- *Andrew Osborne* *GS1 UK*
- *Paul Michicich* *Kraft*
- *Vera Feuerstein* *Nestle*
- *Jim Skyes* *Chep*

1.3. Purpose of this document

The purpose of this document is to capture the recommendations of this Sub Team.

2. Scenario approach

The approach to reach consensus adopted by the sub team is to examine a number of detailed scenarios and explore the possibilities of each. The objective is to use these individual scenarios to highlight and document all the arguments, factors and thinking required to reach and justify a definitive conclusion.

For each of the scenarios listed below, the steps involved can be expanded to multiple users in the supply chain performing similar steps.

2.1. Scenario A: A RTI-Pool purchases a new RTI from a 3rd party manufacturer

2.1.1. Key assumptions

The RTI-Pool is the 'owner of the specifications' for the RTI. The RTI-Pool is therefore responsible for the identification of the RTI.

The manufacture of the RTI is requested to bar code the RTI by the RTI-Pool using the RTI-Pools assigned number

The RTI-Pool is the only company who will order this particular (branded) RTI.

All trading partners wish to keep identification, marking and communication costs to a minimum

2.1.2. Key considerations

The GRAI includes a 'type' identifier which – according to the GS1 General Specifications (Jan 2010): *This number may then be used for ordering new assets of an identical type.*

However, the LIN Segment of an EANCOM ORDERS message can only contain a GTIN

2.1.3. Recommendation

As the GS1 standards in this area appear to be inconsistent, change:

- GS1 General Specifications
 - *or*
- Change EANCOM

2.2. Scenario B: Company A orders trade items from Company B. The trade items are shipped on an RTI from the RTI-pool

2.2.1. Key assumptions

The RTI-Pool is the owner of the RTI.

The RTI-Pool has identified all their RTIs with GRAIs. The 'type identification' is the same for all RTIs with the same characteristics and the serial component is used to log the history of each individual RTI.

Company B has paid a deposit to the RTI-Pool for the use of the RTI.

Upon ordering a Trade Item with a GTIN from Company B, Company A receives the Trade Item delivered on an RTI. The DESADV sent from Company B includes the GTIN of the trade item **and** the GRAI of the RTI.

In this scenario:

- Company A orders trade items (GTINs) from Company B. Subject of ordering process is the trade item (GTIN).
 - Information about packaging - RTI/GRAI is normally not placed in the ordering message since due to previous data synchronisation the client already knows which type of RTI the ordered goods will be shipped on/in.
- Company B ships the trade items ordered on RTIs to Company A and sends a DESADV (Despatch Advice Message). Subject of the delivery process is the trade item (GTIN)
 - Information about (individual) RTIs with serialised GRAIs is provided in the packaging part of the DESADV message for tracking & tracing purposes.
- Company B sends:
 - Two separated invoices to Company A – one commercial invoice for invoicing trade items and another separate invoice with the deposits for the RTIs
 - One invoice, where both the delivered trade items and the RTIs are invoiced.

In this case, as well as trade item (GTIN) as RTI type (GRAI) are subjects of the invoice and appear as main positions in the invoice.

2.2.2. Key considerations

However, the LIN Segment of an EANCOM DESADV message can only contain a GTIN. The GRAI of the RTI – along with the value of the deposit - has to be communicated some other way

In this scenario:

- In ORDERS – no information about RTI/GRAI; trade item subject of ordering process
- In DESADV – trade item is subject of delivery-> trade item (GTIN) in LIN
- Information about (individual) RTI only on packaging level for tracking & tracing purposes)
- In INVOIC- as well trade items as RTIs are subject of invoicing /raising deposit

Therefore in LIN as well trade items as RTIs. However, the LIN Segment of an EANCOM INVOIC message can only contain a GTIN. The GRAI of the RTI – along with the value of the deposit - has to be communicated some other way.

2.2.3. Recommendation

Make a change in EANCOM accept GRAI in DESADV INVOIC?

Provide an alternative way to meet the business functionality?

2.3. Scenario C: Supplier A rents RTIs from the pallet pool for shipment of goods to Retailer B.

2.3.1. Key assumptions

The pallet pool is the owner of its own RTIs.

The pallet pool has identified all their RTIs with GRAIs. For all RTIs with the same characteristics originating from the same pallet pool, the 'type identification' is the same and the serial component is used to identify (and log the history of) each individual RTI.

Multiple pallet pools operate together in pallet pool networks (offering RTIs with the same characteristics).

Each member of a pallet pool network can enter new pallets into the system. Each party entering new pallets identifies them with their GRAI. This results in the same RTI type (e.g., EUR pallet) carrying GRAIs issued by different pallet pools (i.e. RTIs with the same characteristics have GRAIs with different 'type identification').

All RTIs can be handled by all pallet pools in the network.

A user of RTIs establishes a business relation with one or more pallet pools.

Each RTI type is identified with a GTIN which is used for ordering and deposit management [the "RTI type GTIN"]. Multiple GRAI type identifier values can appear for the same RTI type identified with this GTIN since RTIs originating from different pallet pools can be mixed.

The RTI type GTIN is common across all pallet pools in the same network. It is preferably issued by the pallet pool network organization or the organization that owns the specification of the RTI. If no such organization exists as a legal entity, the RTI Type GTIN may be issued by a GS1 MO under its own company prefix.

2.3.2. Key considerations (business consideration)

1. Supplier A sends Trade Item Master data to Retailer B. The item master data identifies the trade items with GTINs and details the type of RTI that will be used for the trade item. The RTI type is identified by the RTI type GTIN, irrespective of the pallet pool from which it was sourced.
 2. Supplier A places an order for pallets with the pallet pool. The RTIs ordered are identified with the RTI Type GTIN. The pallet pool fulfils the order and delivers the pallets to Supplier A. The pallet pool sends an invoice to Supplier A requesting payment for the RTIs delivered. In the invoice, the invoiced RTI type is identified with the RTI Type GTIN.
 3. Retailer B places an order with Supplier A for goods that need to be shipped on RTIs. The goods are packed and shipped and invoiced. The RTI type GTIN is used by Supplier A for invoicing the deposit value to be paid by Retailer B.
 - The dispatch advice details what trade items are delivered to Retailer B. Based on the Item Master Data, Retailer B knows which RTI types are delivered. Only when the delivery contains any “unexpected” RTIs, the dispatch advice contains the RTI Type GTINs (including delivered quantity of each RTI type).
 - The invoice contains line items for all goods that have been delivered. All RTIs included in the delivery (expected and unexpected) appear as line items. Each RTI type is identified with its RTI Type GTIN as item identifier.
 - In cases when the GRAI of the RTI appears in an RFID/EPC tag at the trade unit level (case) and is used to monitor traceability etc, all GRAIs must be present at the line level in the dispatch advice and be connected to best-before date, batch number and GTIN of the trade items delivered.
 - *If the serialised part of the GRAI is used (in RFID/EPC tags or bar code) appear on the pallet level, the dispatch advice may provide a cross reference between GRAI and SSCC of the pallet. The serialized part of the GRAI may be used to tracking. Any specific pallet that is “lost” will be invoiced at a replacement cost. If a lost pallet is recovered, the replacement fee will be credited.*
 4. Retailer B informs their pallet pool the number of RTIs per RTI type (identified by RTI Type GTIN) that are in their possession and requests them to be collected by the pallet pool. Note that Retailer B may use a different pallet pool than Supplier A as long as both pallet pools are part of the same network (with common RTI Type GTINs).
 5. The pallet pool collects the RTIs and brings them through cleaning and maintenance before they are re-used.
 6. Retailer B sends an invoice to the pallet pool requesting payment for the deposit associated with the pallets that have been collected by the pallet pool. The invoice specifies each RTI type with its RTI Type GTIN.
-  **Note:** In cases when there is only one pallet pool involved the RTI Type GTIN may be issued by that pallet pool. In such cases, it is allowable for the pallet pool to use the same numbers in the RTI Type GTIN as in the type identification part of the GRAI (just like with any other GS1 Identification Keys).

2.3.3. Recommendation (special case)

Each RTI-pool uses the GRAI to track individual pallets. As it is impractical to use the GRAI as the order number because those placing the orders do not worry which RTI-pool they use. Therefore a ‘generic’ GTIN is required for the ordering the type.

2.4. Scenario D: RTI-Pool rental to companies in the Supply Chain based upon the time each company has control of the RTI

2.4.1. Key assumptions

The RTI-Pool is the owner of the RTI.

The RTI-Pool has a 'usage based' business model

2.4.2. Key considerations

An upstream trading partner (e.g. a manufacturer or distributor) that requires RTIs places an order with the RTI-Pool. The RTI-Pool fulfils the order and delivers them to the ordering entity.

A downstream trading partner (e.g. a distributor or retailer) places an order for goods that need to be shipped on RTIs. The goods are packed and shipped. The upstream trading partner informs the RTI-Pool of the number of RTIs shipped and the downstream trading partner to whom they were shipped. The downstream trading partner informs the RTI-Pool of the number of RTIs received and the upstream trading partner from whom they were received.

A terminal trading partner (e.g. a retailer) informs the RTI-Pool of the number of empty RTIs to be returned and returns them.

The RTI-Pool invoices the various parties in the supply chain for the number of RTIs in their possession and the duration of that possession. In some scenarios, the retailer may insist that the manufacturer or distributor bear all costs associated with the pallets but that affects invoicing only, not any of the other processes.

2.4.3. Recommendation

Each RTI type needs to be identified using GRAI.

To facilitate efficient eCOM messages:

The GRAI maybe be used in the trade message?

or

A GTIN should be assigned to each RTI type for Trade Messages (Order or Invoice)

2.5. Scenario E: RTI Ownership where all RTIs are owned by an upstream trading partner.

2.5.1. Key assumptions

All RTIs are owned by the upstream trading partner.

The upstream trading partner is responsible for the identification and data carrier used on the RTI

2.5.2. Key considerations

An upstream trading partner (e.g. a manufacturer or distributor) that requires RTIs places an order with the RTI supplier. The RTI supplier fulfils the order and delivers them to the ordering entity.

A downstream trading partner (e.g. a distributor or retailer) places an order for goods that need to be shipped on RTIs. The goods are packed and shipped. The upstream trading partner informs the

downstream trading partner of the number of RTIs shipped. The downstream trading partner informs the upstream trading partner of the number of RTIs received.

The downstream trading partner informs the upstream trading partner of the number of empty RTIs to be returned and returns them. Exchange and return of pallets to the warehouse is the responsibility of the carrier. Recommendation

Each RTI type needs to be identified using GRAI?

To facilitate efficient eCOM messages:

The GRAI maybe be used in the trade message?

or

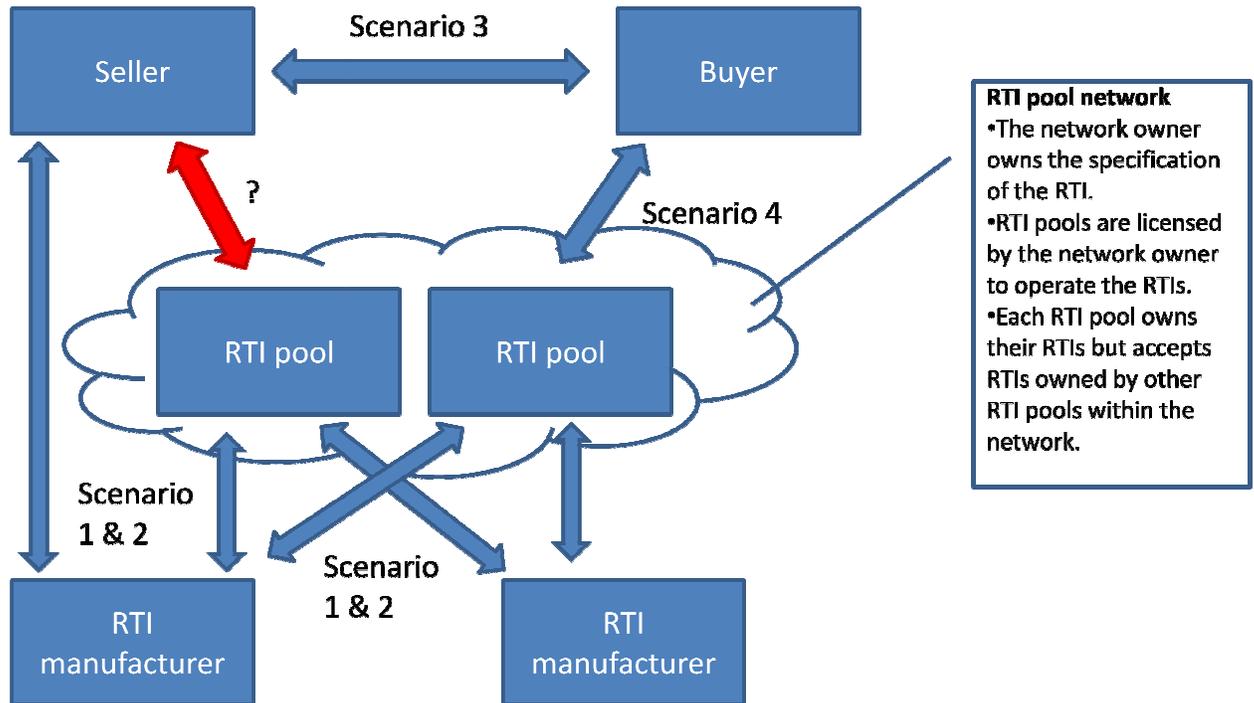
A GTIN should be assigned to each RTI type for Trade Messages (Order or Invoice)

2.6. Bucketing of Scenarios

2.6.1. Introduction to the buckets

This sub-section provides some common “buckets” of scenarios above that appear to be four main scenarios that require clarification to the problem statement.

Figure 1: Overview of the scenario buckets



Scenario 1 – Ordering of a RTIs

This scenario is applied to the process of the first instance of the creation of an RTI where the provider of the RTI service (RTI-Pool) or other party needs to obtain RTIs to fill its inventory of RTIs from the RTI manufacturer. Orders can be generic, i.e., order 100 of RTI (pallet) of A x B dimension or specify additional customised features such as apply an RFID (EPC) tag with GRAI and/or a GS1-128 bar code.

Scenario 2 – Replenishment of RTIs into the “available pool”

In this scenario the RTI pool needs to replenish RTIs in its service

Scenario 3 – Tracking of the RTI between supply chain stakeholders

In this scenario the buyer receives and order for goods from using GTINs in the ORDER and the goods themselves are shipped on RTIs. As well as using the SSCC in the DESADV, the details of the GRAI/s on the RTIs that the goods are packed on also need to be communicated.

Scenario 4– Return of RTIs

From wherever the RTI is there is now a need to return this asset to the ‘RTI pool’. This does not appear to be an ORDER but an advice from one party to another.

3. Recommendation

Taking into account all the detailed scenario above, the group concludes that:

- 1) No, the GRAI may not be used under any circumstances in the LIN Segments of EANCOM Messages to identify RTIs for ORDERS, INVOIC and DESADV

! **Important:** The GRAI may be used in ORDERS, INVOIC and DESADV in the PIA Segment of EANCOM and the LIN Segment left blank

- 2) A GSMP Work Request is required to address the misleading statement as also recommend by the now closed GS1 Key Clarification Team

GS1 General Specifications (Feb 11), Section 2.3:

...The GS1 System provides a method for the identification of assets. The object of asset identification is to identify a physical entity as an inventory item.

Each company holding a GS1 Company Prefix may assign asset identifiers to the assets or trade items supplied to their customers. *Best practices may dictate that the trade item manufacturer apply the asset identifier during the manufacturing process. This number may then be used for ordering new assets of an identical type.* The GS1 System asset identifiers act as keys to access the characteristics of an asset stored in a computer file and/or to record movements of assets.

Asset identifiers may be used for simple applications, such as the location and *usership of a given fixed asset* (e.g., a personal computer) or for complex applications, such as recording the characteristics of a returnable asset (e.g., a reusable beer keg), its movements, its life-cycle history, and any relevant data for accounting purposes. ...

- ✓ **Note:** If these recommendations are accepted, then no change is required to EANCOM. However, XML still under investigation as GTIN may be mandatory for trade messages.
- ✓ **Note:** The relationship between the identification key used in the data carrier on the items (GRAI) and the ID key used in the eCom messages (GTIN) need to be linked via master data.
- ✓ **Note:** The issue of GTIN assignment for services by umbrella organisations needs to be considered. In some cases it would appear a sensible business decision to use the GRAI for Ordering RTIs because of the some of the issues around GTIN Allocation. For example:
 - **Ordering** is easy by using a generic GTIN to receive a RTI Type.
 - **Invoicing** is complex as there is not necessarily a one-to-one match between the GTIN in the order and the invoice (as the invoice may be for days used, return date, number of RTIs sent to a 3rd party, etc.)

4. Appendix 1: Copy of the Request for Findings

Instructions for Submitter:

1. Please complete the following fields:
 - *Request for Finding Brief Summary, Submitter Name, Submitter Company, Submitter e-Mail, Submitter Telephone, Statement of Question or Concern, Relevant GS1 Standards or Other GS1 System Components*
 2. After completing all required fields, e-mail this form to the Architecture Group at: gs1ag@community.gs1.org.
The **Architecture Group** will complete the following fields:
 - *Request #, Date Submitted, Date Accepted for Consideration, Date Completed*
- If the Architecture Group accepts the submission for consideration, it will separately publish an Architecture Finding in response.

Request for Finding – Brief Summary (one phrase or sentence)

Clarification which GS1 Identification key should be used: Within a closed loop application, i.e. for ordering, delivering and invoicing processes of Returnable Transport Items (RTIs), GRAI or GTIN should be used for RTI **Type** identification within the eCom / EANCOM messages ORDERS, DESADV and INVOIC.

Submitter Name	Galya Lazarkova
Submitter Company	GS1 Austria GmbH
GS1 Member Organization of submitter (if known)	
Submitter e-Mail	lazarkova@gs1.at
Submitter Telephone	+4315058601-37

Statement of Question or Concern (please be specific as to what you want answered)

BACKGROUND & BUSINESS NEED

For the application of the Returnable Transport Item (RTI) processes into eCom / EANCOM messages it is important the way an RTI is handled: an RTI is an asset (means for transporting goods) as well as a trade item (when the focus lies on the trading of an empty RTI itself. This occurs where, for example, the RTI manufacturer sells an RTI to a RTI Pool Operator or a Supplier who on his part becomes the owner/manager of the RTI) and launch the RTI in the Supply Chain as a returnable asset for transporting goods.

From the moment when RTI is launched in the Supply Chain as an asset it should be identified with GRAI for its whole lifecycle.

RTIs are moved in the Supply Chain as assets in two main ways:

- **unloaded** (aka “empty”): the RTI is moved without merchandise on/in it.
- **loaded**: the RTI is moved as the carrying part of the logistic unit with which the goods are delivered.

Depending if the RTIs are moved unloaded or loaded with goods (as a packaging of goods) they are involved in different processes and information flows between different parties and in terms of eCom / EANCOM - in different messages or message occurrences.

So far it is clear that RTI should be identified with a GRAI when it is moved loaded with goods and the GRAI is to be placed in the packaging part of the Despatch Advice eCom message (DESADV) for tracking & tracing purposes.

But the management of RTIs is a more complex process and implies also other information flows where RTIs are involved and which are necessary for an effective RTI management.

These processes include ordering and delivering of **unloaded RTIs as assets, not as trade items and invoicing (raising deposit) of RTIs.**

These processes may appear similar to the ordering, delivering and invoicing of a trade item, but they have different intention and imply different information flows between different parties.

So there are two ways to deal with RTIs:

- 1) RTI Type is identified with **GRAI** (in this case a non serialised asset type); individual RTI is identified with GRAI (GRAI = non serialised asset type + optional serial part)
- 2) RTI Type is identified with **GTIN**; individual RTI identified with GRAI (serialised GRAI) -> GTIN ≠ GRAI

OPEN ISSUE:

Arguments for using the GRAI as GS1 Identification Key for the process (order, deliver, invoice):

- 1) To identify a reusable asset the GS1 key is the GRAI, to identify trade item the key is GTIN
- 2) When trading RTIs, RTI = trade item -> GTIN (assigned by RTI manufacturer); when RTI is used as returnable asset -> use always GRAI(assigned by RTI owner/manager)
- 3) Same identification key for RTI Type and individual RTI -> there is a link between both in the messages; when using GTIN for RTI type and GRAI for individual RTI, no link is possible
- 4) Differentiation between trade item and reusable transport item (e.g. invoice) is necessary

Arguments for using the GTIN as GS1 Identification Key for the process (order, deliver, invoice):

- 1) Only GTIN can be ordered, delivered and invoiced, no other GS1 identification key can be used -> for this processes GTIN must be assigned for RTI Type, GRAI must be assigned (for the same RTI) for identification of individual RTIs
- 2) GTIN is already used for identification of RTI type in some countries
- 3) RTIs are registered in GDSN with GTIN in some countries

Further it should be noted that:

- GRAI is the identification key for RTI.
- In EANCOM LIN segment so far only GTIN for trade items can be used. Usage of GRAI in LIN segment is not possible at the moment, but would mean to open EANCOM system for further GS1 identification keys and not GTIN only.

REQUEST FOR CLARIFICATION:

As defined in the EANCOM Standard in the LIN Segment of ORDERS, INVOIC and DESADV at the moment only GTIN is described as only Trade Items needed to be identified.

BUT:

New Processes need additional Information. It is necessary in line with the new processes to have additional GS1 Identification Keys used in the LIN Segment of these message Types (i.e. GRAI).

In PIA Segment ID Keys (Non-GS1) can be used as primary Key only, if there is no GS1 Identification Key in the LIN Segment, but mostly on a bilateral base.

Therefore it should be possible to use other GS1 Identification Keys in the LIN sector. Currently it is not possible to identify RTIs with GRAI in this segment but would be necessary to follow the processes.

Question for Clarification:

Can GRAI be used in this Segment to identify RTIs?

Relevant GS1 Standards or other GS1 System Components (omit if unsure)

eCom / EANCOM messages ORDERS, DESADV, INVOIC
GS1 General Specifications (Jan 10), Section 2.3:

...

The GS1 System provides a method for the identification of assets. The object of asset identification is to identify a physical entity as an inventory item.

Each company holding a GS1 Company Prefix may assign asset identifiers to the assets or trade items supplied to their customers. Best practices may dictate that the trade item manufacturer apply the asset identifier during the manufacturing process. *This number may then be used for ordering new assets of an identical type.* The GS1 System asset identifiers act as keys to access the characteristics of an asset stored in a computer file and/or to record movements of assets.

...

5. Appendix 2: Overview presentation



eCom BRG
CR_RTI type ident

6. Appendix 3: Extract of GS1 Architecture Team meeting report of 26 Jan 2011

Request for findings - Possible use of GRAI with eCom trade messages- Eugen

Discussions	Decisions	Actions
<p>Henri asked the group to review this 1st request for findings in three stages and noted this may take more than one meeting:</p> <ol style="list-style-type: none"> 1) Clarify that everyone understands the issue 2) Reach consensus on the recommendation 3) Ensure that the recommendation was clearly documented <p>Covering the 1st item, Eugen provided an overview presentation of the issue. The following points were discussed:</p> <ul style="list-style-type: none"> • It was observed that Returnable Transport Items (RTI) could be treated as assets or as trade items. • An example was given of a shelf produced for a retailer, it could require <ul style="list-style-type: none"> • A GTIN when the shelf was bought • An SSCC when it was shipped • A GRAI for logging as an asset • A GLN for the shelf as a storage location <p>Building upon this point, it was argued that rational suppliers would argue to use one GS1 ID key associated with the primary use case, not multiple keys in multiple carriers</p> <ul style="list-style-type: none"> • A number of complexities arose from various use-cases: who assigned the number to the RTI? (the manufacturer or the RTI or the owner of the RTI); what the number was being used for? (ordering the RTI itself or ordering services related to the RTI). • Eugen closed the session by stressed that the question being posed to the Architecture Team was the use of the mandatory GS1 key (GTIN) within eCOM messages. <p>Next steps: In order to reach consensus on the recommendation it was agreed to set up a small team to prepare a draft recommendation: Sub Team Leader: David, Team members: Hein, Eugen, Paul, Andrew Hearn, Kevin, Vera, Staffan, Sue & Andrew. Eugen would reach out some user companies (Chep & Kraft) with an interest in this area.</p>	<p>SubTeam created</p>	<p>SubTeam: to make a draft recommendation to the full Arc Group within one month.</p>

(end)