

**WCO RECOMMENDATION ON THE UNIQUE
CONSIGNMENT REFERENCE NUMBER (UCR)**

Part I : Management Summary

Part II : Text of the WCO Recommendation on the UCR

Part III : Accompanying Guidelines

Management Summary

The Unique Consignment Reference UCR is a reference number for Customs use and may be required to be reported to Customs at any point during a Customs procedure. The UCR should be :

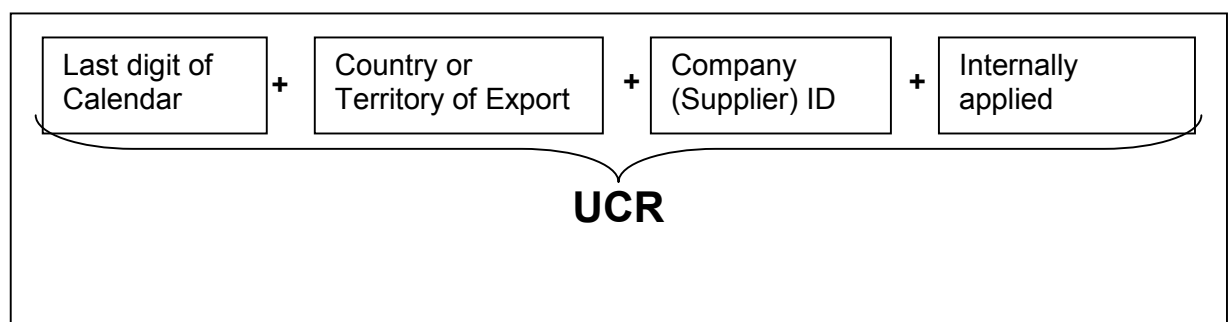
- Applied to all international goods movements for which Customs control is required;
- Used only as an access key for audit, consignment tracking and information, reconciliation purposes;
- Unique at both national and international level;
- Applied at consignment level;
- Issued as early as possible in the international transaction.

The main objective of the UCR is to define a generic mechanism that has sufficient flexibility to cope with the most common scenarios that occur in International Trade. The basis of the UCR is to make maximal use of existing Supplier, Customer and Transport references.

The fundamental considerations behind the current UCR concept derive from the need for Customs authorities to facilitate legitimate International Trade, while, at the same time, not "opening the flood gates" as a by-product of relaxation of controls. The UCR will provide Customs with an efficient tool to exchange information between enforcement agencies.

As one of the leading international trade organizations expressed : "Like an electronic staple designed for e-commerce, a UCR binds information together all the bits of data about a trade transaction, from initial order and consignment of goods by a supplier, to the movement of those goods and arrival at the border, through to their final delivery to the importer".

The physical structure of the reference should be kept simple by using a maximum of the 35 alphanumeric characters as follows :



Benefits of UCR

The UCR enables the various information systems of a Customs service and its trading partners to work together in the most effective way possible. If properly applied, it permits the information from the goods declaration to be joined with that from the manifest at the earliest stage in the Customs process. The many benefits of the UCR include :

- Promoting safe and secure borders by providing enhanced access to information at time of release;
- Helps co-operating export and import Customs to offer authorized traders end-to-end premium procedures and simple integrated treatment of the total transaction;
- Enabling the processing of pre-arrival data prior to the assignment of a Goods Declaration number;
- Contributing to rapid release;
- Helping in the management of the logistical chain and enhancing just-in-time operations;
- Eliminating redundant and repetitive data submitted by the carrier and the importer;
- Reducing the amount of data required to be presented at time of release;
- Provides an additional aid in general cargo reception, handling and servicing at ports;
- Allows commercial and official contacts/enquiries at any point in the logistical chain;
- Reducing compliance costs;
- Promoting greater Customs co-operation.

Implementation of the UCR

The implementation of the UCR should take place at the national level. However, the UCR is most effectively implemented on a bilateral or multilateral basis thereby assisting co-operation between Customs administrations, to provide services and procedures fully adapted to the increasing trend to centrally manage international trade transactions.

The implementation of the UCR should take place only after close consultation with trade as requested in the UCR Recommendation. It is recognized that the implementation will happen over a period of time thus requiring flexibility from all parties.

As mentioned above, the focus should be on the eventual full implementation and both Customs and trade should reflect this in their long-term business and investment plans. Since the WCO Customs Data Model already incorporates the UCR, due consideration should be given to a simultaneous implementation of the two initiatives.

Further detail is contained in the Accompanying Guidelines.

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RECOMMENDATION OF THE CUSTOMS CO-OPERATION COUNCIL
CONCERNING THE
UNIQUE CONSIGNMENT REFERENCE NUMBER (UCR) FOR CUSTOMS PURPOSES
(30 June 2001)

THE CUSTOMS CO-OPERATIONS COUNCIL,

HAVING REGARD to the globalization of international trade

DESIRING to contribute to the facilitation of the international movement of goods through Customs

DESIRING to increase the effectiveness and efficiency of Customs Administrations in dealing with international trade transactions

RECOGNIZING the increasing importance for international Customs co-operation to ensure better Customs compliance and facilitation of legitimate trade

RECOMMENDS that Members of the Council and members of the United Nations Organization or this specialized agencies, and Customs or Economic Unions, should adopt and implement a Unique Consignment Reference Number (UCR) in close consultation with their trade bodies which should be,

- used for all international trade transactions
- used only as an access key for audit, consignment tracking, information and reconciliation purposes, and should not be the source of any information about the consignment itself
- able to uniquely identify a consignment at both the national and international level
- applied at consignment level, with a consignment being identified as “the total number of items specified in the contract of sale between the seller and the buyer”
- issued as early as possible in the international transaction process by the “seller”
- a reference number for Customs use and may be required to be reported to Customs at any point during a Customs procedure.

FURTHER RECOMMENDS that the Unique Consignment Reference Number be structured as follows :

- have a maximum of 35 alphanumeric characters in length
- the first character being reserved to identify the year within a ten-year period, and have the values from 0 to 9 (it is considered that this will give uniqueness to the consignment reference over time sufficient to meet legal requirements for storing data for audit)
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Part II UCR Recommendation

- the next two characters being reserved for the ISO alpha-2 country code and be the identifier of the location of the seller (it is considered that this will give uniqueness to the consignment reference geographically to country level)
- should use the remaining 32 characters to contain an officially recognized national company identifier and an internally applied company reference.

REQUESTS Members of the Council and members of the United Nations Organization or its specialized agencies, and Customs or Economic Unions which accept this Recommendation to notify the Secretary General of the Council of the date from which they will apply the Recommendation and of the conditions of its application. The Secretary General will transmit this information to the Customs administrations of the members of the United Nations Organization or its specialized agencies and to Customs or Economic Unions that have accepted this Recommendation.

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UNIQUE CONSIGNMENT IDENTIFICATION FOR CUSTOMS PURPOSES

TERMS USED IN THIS DOCUMENT

Term	Definition
Carrier	<p>The organisation responsible for the actual transportation of the Goods. This could be a Road Haulage Company, Rail Company, Shipping Line or Airline.</p>
Consignment	<p>The despatch of Goods from the Supplier to the Customer. This can occur in more than one way, for example :</p> <p>An order to a Supplier may be for 1,000 items (all of the same, or different articles). If the 1,000 are despatched from the Supplier in whole, the reference used for this despatch becomes the 'Internally Applied Company Reference' part of the UCR. In such a case, a single UCR is all that is required. The Goods may be transported by several means, but it is the Goods covered by the despatch that constitutes the Consignment.</p> <p>A further example is that those 1,000 items may be required to be despatched in equal lots of 250 over a 4-month period. In this case, each despatch would constitute a Consignment and thus require a UCR.</p>
Contract of Sale	<p>The agreement between the Supplier and Customer for the supply of the designated Goods. This contract is given a reference that is either:-</p> <ul style="list-style-type: none"> • Defined by the Supplier • Defined by the Customer • Agreed between both parties <p>It is entered into both parties' records, becoming the start and the end of the 'source to destination' audit trail.</p>
Customer	<p>The end recipient of the Consignment and will supply the UCR to Customs in the Import Country. In the majority of cases, this is expected to be the Importer who will be operating a computer system and be responsible for discharging Customs Revenue & Statistical obligations. There are, however, exceptions to this generalisation. In such cases, a 3rd party 'agent' will take responsibility for Customs obligations. Whatever the commercial arrangements, the organisations responsible to Customs must supply the UCR either directly or on behalf of the Customer.</p>

Part III Accompanying Guidelines

Term	Definition
Despatch Reference	The reference given to a Consignment by the Supplier. This is the 'Internally Supplied Company Reference' and constitutes the basis of the UCR (please see definition of Consignment above). The critical aspect here is that the Despatch Reference must be associated with the commercial reference agreed between the Supplier and the Customer as part of the original "Contract of Sale".
Forwarder	The organisation responsible for arranging the transport of the Goods. The Forwarder may also act as the 3 rd party 'agent' in respect of the discharge of Customs obligations.
Fully Compliant Trader	A Trader who is designated by Customs as having all physical & administrative procedures in place to properly and accurately discharge Customs obligations. A major element of this is the ability to provide a comprehensive audit trail to allow Customs to verify the data received from the Trader. The Trader must also have a proven record of full compliance with all Customs obligations.
Internally Applied Company Reference	This is the reference given, by the Supplier, to a Consignment. It must relate to the agreed "Contract of Sale" reference agreed between the Supplier and the Customer. It becomes the most critical element of the UCR.
International Supply Chain	This term refers to the Movement of Goods Worldwide and all the organisations involved in such movements.
Supplier	The Supplier is at the very start of the International Supply Chain and is the organisation that initiates the despatch of the Consignment. The Supplier also initiates the UCR and will supply the UCR to the Customer and Customs in the Export Country. In the majority of cases, this is expected to be the Exporter who will be operating a computer system and be responsible for discharging Customs Revenue (e.g. Drawback) & Statistical obligations. There are, however, exceptions to this generalisation. In such cases, a 3 rd party "agent" will take responsibility for Supplier obligations. Whatever the commercial arrangements, the organisations responsible to Customs must supply the UCR either directly or on behalf of the Supplier.

Term	Definition
Transport Reference	A generic term used to refer to, for example:- An Air Waybill No. A Bill of Lading No. A Road Haulier's carriage note No. A Rail Company's carriage note No.
UCR	Unique Consignment Reference.
URL	Uniform Resource Locator. This is an Internet term and is used to direct a message to the required system/server and, quite often, a specific partition of that system/server. It appears on the screen, for example, as 'http://www.yahoo.com'
Waybill	A generic term used to refer to the contents of, for example : <ul style="list-style-type: none">• An Air Waybill• A Bill of Lading• A Road Haulier's carriage note• A Rail Company's carriage note.
WCO IMSC	The Information Management Sub Committee of the World Customs Organization.
WCO PTC	The Permanent Technical Committee of the World Customs Organization.

1. PURPOSE OF DOCUMENT

This document is intended to provide :

- An outline of the structure and use of the UCR
- A description of the relationship between the UCR and Transport References and how this relationship can be used for Customs purposes
- An illustration of the potential of the UCR for the Customs business
- Guidelines for the integration of the UCR (and Customs procedures) within the International Supply Chain.

2. BACKGROUND TO DEVELOPMENT OF CURRENT CONCEPT

The UCR itself is not a new concept. However, the original concept was that it should replace existing references used in the International Supply Chain, which would have led to sweeping changes required within the Commercial sector as well as Customs. In 1999, the current concept was introduced with the suggestion that, rather than attempt to replace those existing references, it should co-exist alongside them.

This suggestion was developed and presented to WCO IMSC members in June 1999. It has since been agreed by the IMSC and was adopted by the WCO PTC in 2001. The PTC have since authorised the production of Guidelines for use which are instrumental in progressing the concept to become a formal WCO recommendation.

3. GENERAL OVERVIEW

The fundamental considerations behind the current UCR concept derive from the need for Customs authorities to facilitate legitimate International Trade, whilst, at the same time, not 'opening the flood gates' as a by-product of relaxation of controls. Our obligations to protect society (admissibility) and to collect the right amount of Revenue are paramount. Whilst there is an increasing trend for Customs authorities to move Revenue aspects away from Frontier, transaction based, controls to Inland, audit based ones, admissibility must always be a Frontier activity, for both Imports & Exports. From this division of Customs responsibilities arises the need to maintain a comprehensive audit trail between Source & Frontier (Exports) and Frontier & Destination (Imports).

A further consideration is that, as is the case with the G7 datasets, the UCR is primarily designed to operate in an electronic environment. The assumption is therefore made that electronic controls are used in both the Commercial & Customs environments.

In the context of Trade facilitation it is envisaged that the UCR will, initially, provide an opportunity to reduce the amount of transactional information required to be presented to Customs at the Frontier. In the long term, this concept has the capability to replace the traditional Declaration (for Revenue/Stats purposes) for a Fully Compliant Trader and, in conjunction with the related Transport Reference(s) provide the necessary data for Frontier obligations. However, this can only be contemplated by Customs on the condition that the 'end-to-end' audit trail is complete. For this reason, the allocation of the UCR at source is deemed mandatory.

4. BASICS OF THE CONCEPT

From the Customs point of view, the UCR is intended to provide continuity of the audit trail from source to destination to facilitate the move to Inland, audit based, Revenue controls.

The main objective is to define a generic mechanism that has sufficient flexibility to cope with the most common scenarios that occur in International Trade. The focal point of defining the mechanism is to consider the objectives of the International Supply Chain rather than the current processes employed.

Whilst there are several possibilities in achieving this objective, the concept recognises the need to take account of Trade exigencies and have minimal impact on them. The basis of the UCR is to use existing Supplier/Customer references (e.g. invoice ref.) which, in conjunction with existing Transport References, provides :

- The Trade with a tracking capability
- Customs with a 'Source to Destination' audit trail
- Access to the underlying Commercial data that is of interest to Customs. The UCR provides the access 'key' to the Supplier/Customer commercial data whilst the Transport Reference(s) provide the access 'key' to the Carrier data.

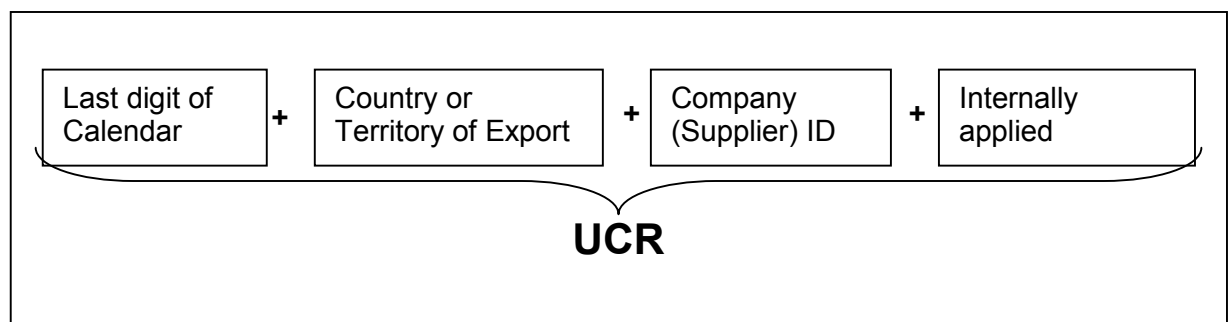
The concept is fundamental to the integration of Customs procedures within the International Supply Chain in that the two major factors of interest to Customs are :

- The Goods and their Supplier/Customer (referenced by the UCR)
- The transport of those Goods (the Transport Reference).

The UCR is thus able to provide access to details about the Goods (e.g. origin, Supplier, Customer, description) whilst the Transport Reference(s) can provide access to details such as Forwarders, Carriers, packaging, transport routes.

Whilst these two elements can provide such details individually, using them in conjunction with each other (such a relationship is another fundamental feature of the concept) a 'source to destination' audit trail and a tracking capability can be maintained. A description of this appears later in this document.

The UCR structure is outlined in the following diagram :



The 'Internally Applied Company Reference' is the most crucial element. The 'year', 'country'/'territory' and 'company identifier' serve only to provide uniqueness to the 'Internally Applied Company Reference'. For Customs audit purposes, the minimum information necessary is the URL (Internet Uniform Resource Locator) of the importing/exporting Trader + the UCR. The URL gives access to the Trader's system, whilst the 'Internally Applied Company Reference' element of the UCR gives access to the underlying data. Naturally, there are legislative issues here, but the UCR concept has been designed to be conducive to longer term as well as immediate developments.

Taking the Trade facilitation theme further, for trusted, compliant Traders all the information Customs require is already present in the commercial sector. As this UCR concept provides 'references' to both Customer/Supplier and Carrier data the need for the traditional Customs Declaration at the Frontier, for the above type of Traders at least, can be obviated in the longer term. One approach to this would be to allocate a 'blanket' authority to fully compliant Supplier/Customers allowing them to submit the UCR as part of an 'authentication' message. This 'step' provides for Customs to operate wholly as a by-product of day-to-day commercial activities. Whilst such relaxations by Customs may be some way in the future, the objective is to provide a mechanism that is able to not only provide for immediate need, and also to be amenable to 'customisation' to suit specific exigencies, but also to have the flexibility to cope with such future trends. Such an approach also provides for Commercial advances such as 'e-market' & use of 'bar codes'/transponders etc. in the Transport industry by maximising the use of the Commercial data & References.

In the present day environment, the UCR provides an opportunity to minimise the amount of transactional information required by Customs at the Frontier. It features in the G7 Declaration structure, residing at the 'Commercial' level. Where a Declaration at the Frontier is required, the UCR/Transport Ref relationship allows the Forwarder/Broker to compile that Declaration electronically by accessing the relevant Supplier/Customer systems using the UCR as the 'key' to the Goods etc. details and to access the Carrier systems using the Transport Ref. as the 'key'. From the 'tracking' and audit aspects, the UC/ Transport Ref relationship provides the ability to :

- Use the UCR to identify all related Transport References
- Use a Transport Reference to identify all related UCR's.

5. APPROACH

The need to maintain Customs controls whilst having minimal impact on Trade practices was the major influence on the approach to the UCR concept. The two basic references, in isolation, each provide :

Commercial Reference

This is the UCR and is used as an access 'key' to the underlying data in respect of the Goods and associated data (e.g. description, origin, Supplier, Customer).

Transport Reference

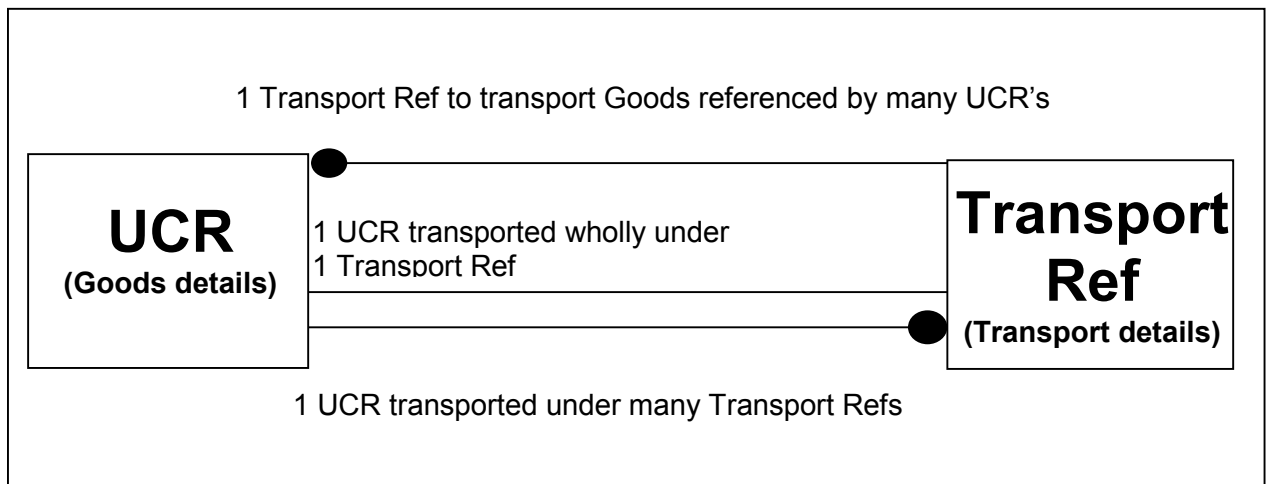
This is the Air Waybill/Bill of Lading/Land transport Ref. And is used as an access 'key' to the underlying data in respect of the transport of Goods (e.g. Manifest data)

By establishing how these two References relate, we are able to create the capability to navigate from Goods to Transport & vice-versa. This, in turn, maintains the audit trail by providing a unique record of specific Goods carried under specific Transport References, as illustrated by the following 2 diagrams.

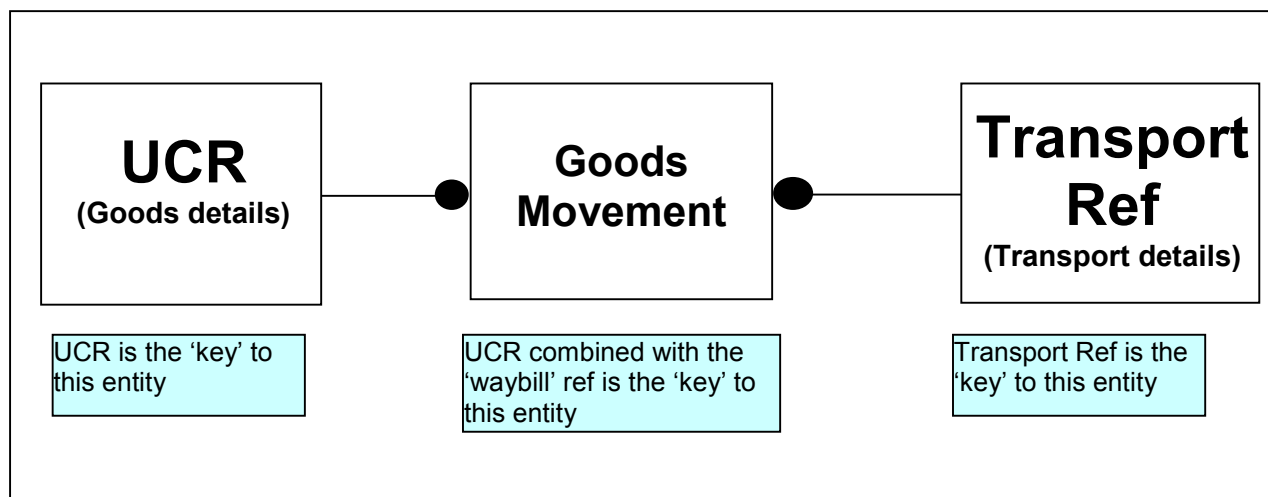
The total Goods within a single despatch (the 'consignment') can be transported in 3 ways :

- Completely under a single Transport Reference (the term is used generically to cover all transport methods)
- Along with other (unrelated) Goods under a single Transport Reference (typically a 'consolidation')
- Part shipped under various Transport Reference.

To maintain the continuity of the audit trail, a relationship between the UCR & the Transport Reference is created. An essential element of creating this relationship is the agreement of Carriers to include the UCR as a data field (not a 'key' field) within the 'Goods' element of the data covered by the Transport Reference. Such a relationship must be able to handle all 3 transport methods defined above. Thus we need a 'many-to-many' relationship between the UCR & the Transport Reference as depicted in the following diagram.



In a 'many-to-many' scenario, a proper relationship cannot be established between the 2 entities (in this case, the UCR & Waybill). To achieve this, it must be converted (resolved) into 2 'one-to-many' relationships. The conversion is illustrated in the following diagram :



The data model depicted in the above diagram uses standard relational database techniques, which are supported by 'off the shelf' software packages. Another advantage with such an approach is that combining the UCR and the Carrier ref means that no 'new' reference has to be created by intermediaries (although, of course, there's nothing to stop them continuing to do so if they wish). This 'combination' (or concatenation) also provides the 'keys' to the underlying data in the Trade sector. Therefore, besides providing Customs with a comprehensive 'end-to-end' audit trail, it also provides the Trade with a tracking capability by being able to navigate through a wealth of vital data.

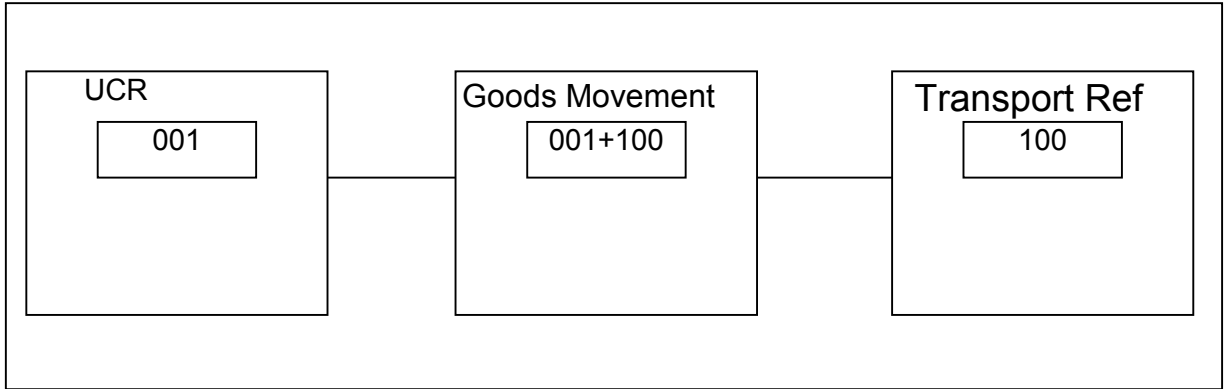
As previously stated, the UCR entity contains information about the total Goods whilst the Transport entity contains information about the transport (route, type, packaging etc.). The 'Goods Movement' entity links the 2 and contains information specific to the transport of those particular Goods.

For Customs audit purposes, the information in the 'Goods Movement' entity provides a unique record of the transport of the Goods, or part thereof, and can thus provide a reconciliation with the Trader's own records. For Frontier controls, access, subject to agreement and/or legislation, to 'manifest domains' within the Carrier systems can provide much, if not all, the information required for Admissibility (Frontier) aspects. This gets away from the current limitations of the Customs Declaration (or abbreviated Frontier Declaration) which ties Customs activity to arrivals & departures at the Frontier. Benefits to the Trade are that, for authorised Traders, only a single return is required for the whole Goods covered by the UCR, as opposed to a Declaration for each 'part shipment' and that return is able to be reconciled with individual shipments. Also, having established the relationship between the UCR and the Transport Ref, commercial organisations have the ability to 'track' their consignments. Given that, in the future, Customs do have regular access to commercial 'domains', this frees up the commercial sector to adopt their preferred trading methods providing the data required for Customs is present, as it effectively integrates Customs into the International Supply Chain.

The following examples illustrate the operation of the relationship between the UCR and Transport Ref (i.e. the Goods and their transportation)

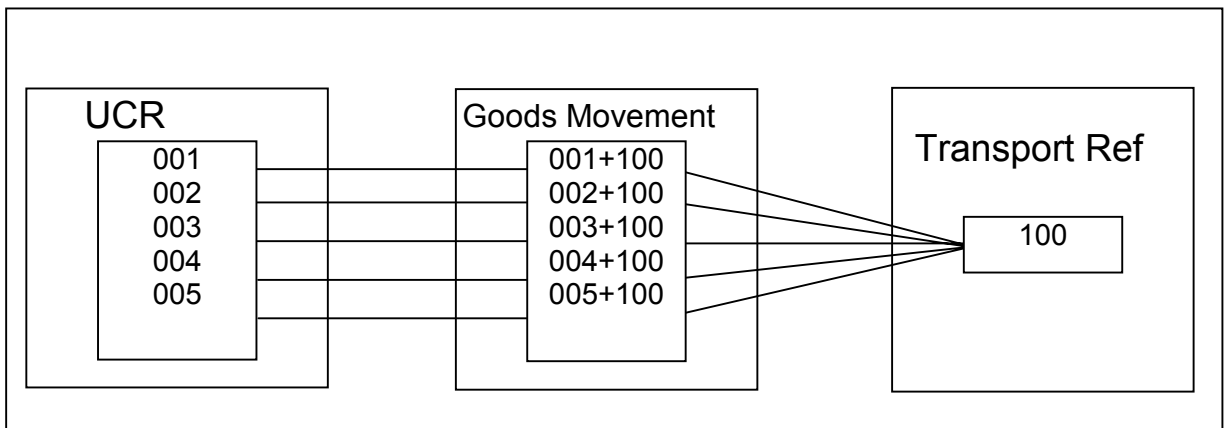
Example 1

Single Supplier with total Goods (single UCR) transported in whole under a single Transport Ref



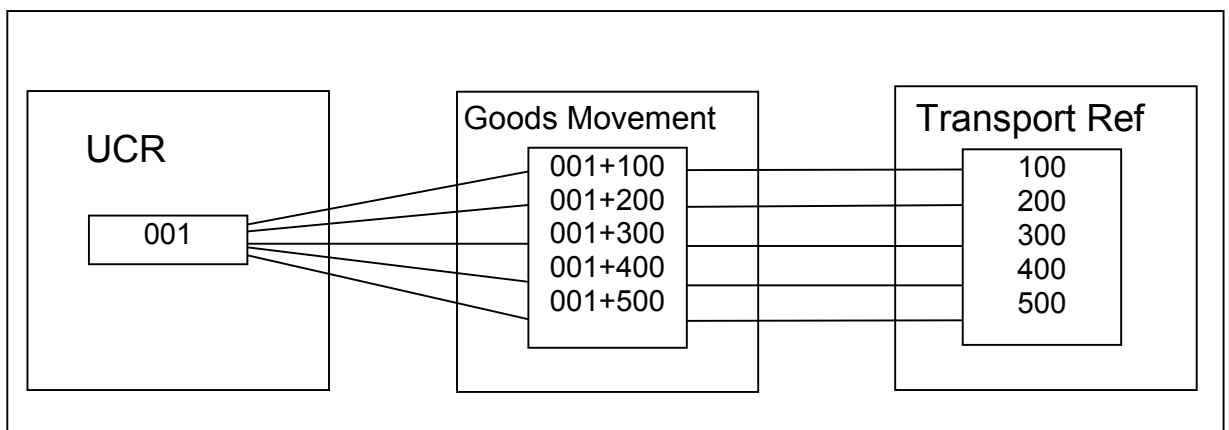
Example 2

A typical consolidation. Many Goods (each referenced by an individual UCR) transported under a single Transport Ref



Example 3

A 'Split' – Total Goods (single UCR) transported under many Transport Refs



Example 4

This brings all Goods & transport combinations together.

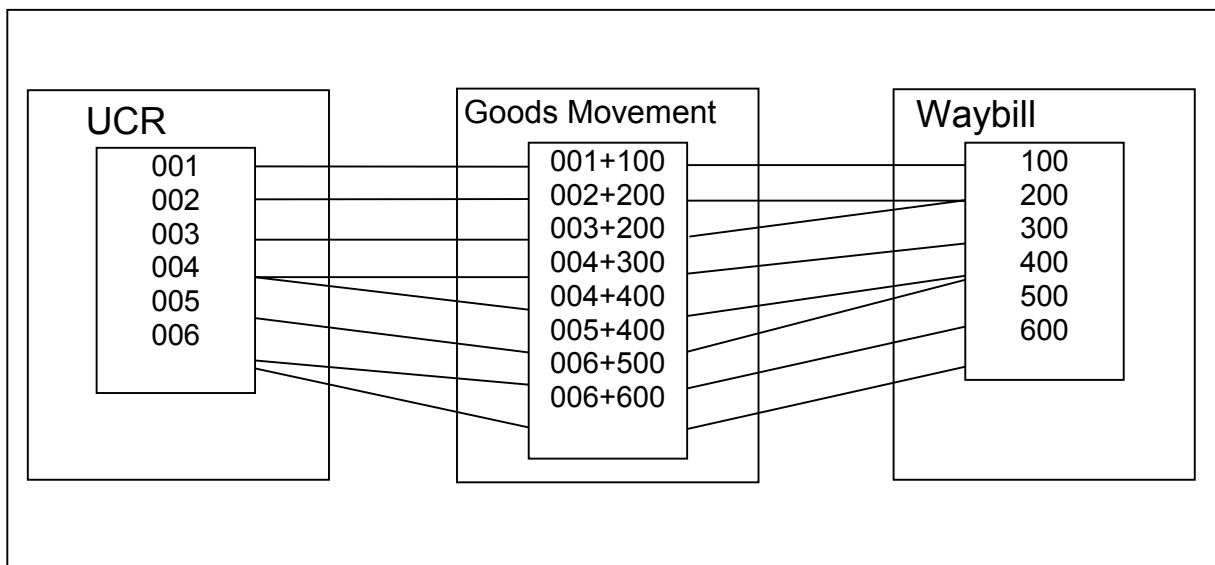
UCR 001 is wholly carried under Transport Ref 100

UCR's 002 & 003 are consolidated under Transport Ref 200

UCR 004 is part shipped under Transport Ref 300 and part consolidated with UCR

005 Under Transport Ref 400

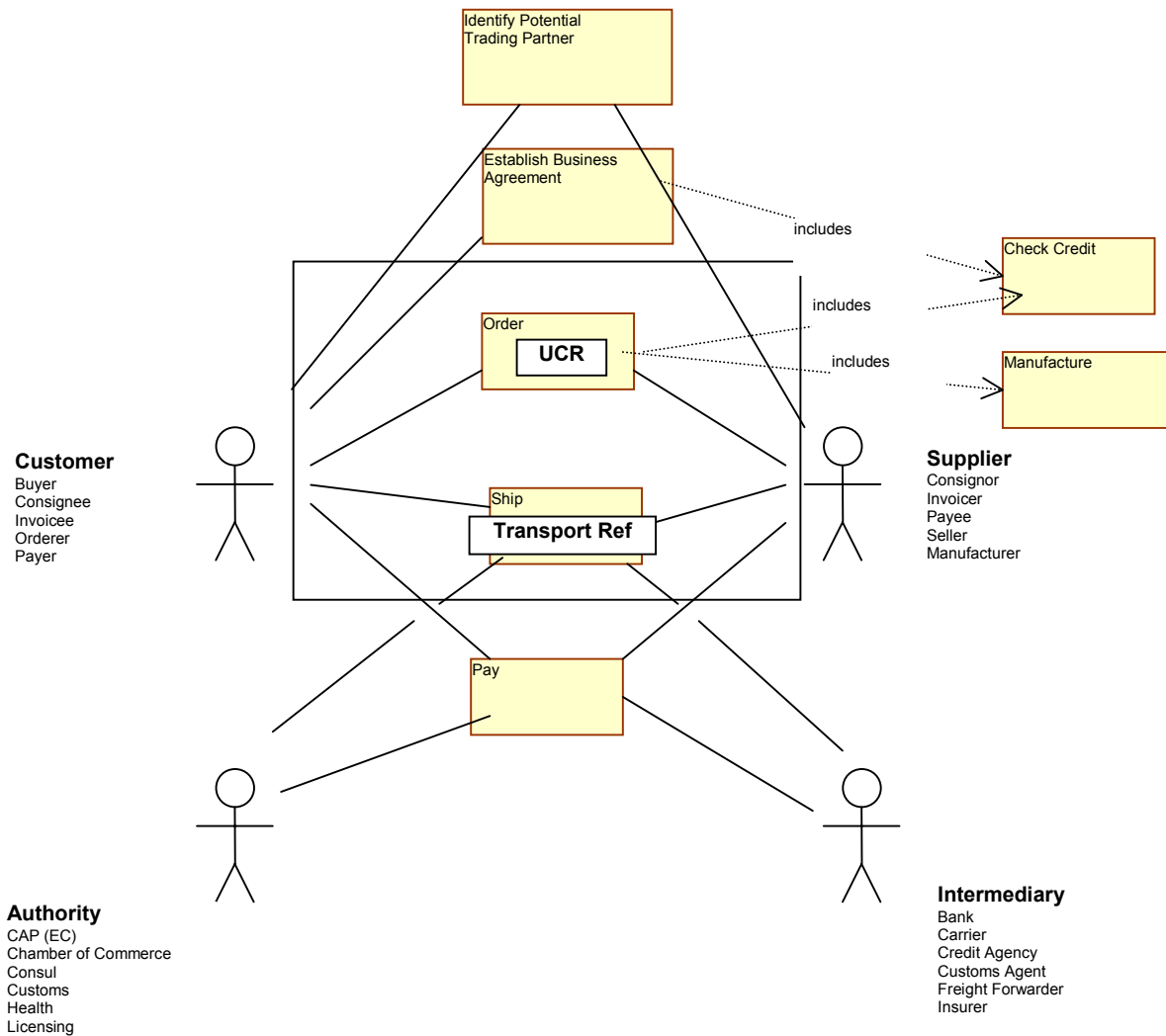
UCR 006 is part shipped under Transport Ref 500 & 600.



Even though it looks rather daunting, it is simply an amalgam of scenarios 1, 2 & 3, The entity that provides the uniqueness of all combinations is the 'Goods Movement' and it is this that gives the navigation between the UCR & the Transport Ref providing Customs with the 'end-to-end' audit trail and the Trade with a tracking capability. As stated previously, given that the UCR & Transport Ref are themselves 'keys' to underlying commercial data domains which contain most, if not all, data needed for Customs purposes, we have provided a mechanism that integrates Customs fully into the Trade Chain. Whilst it is accepted that there is some way to go procedurally and legally before such an operation becomes common practice, the underlying mechanism can support both this integration and any migration to such an objective. As also stated previously, it is standard relational database technique and requires no bespoke software to make it work.

6. CONTEXT

In order to put the UCR into perspective within the overall Trade 'chain', the following diagram has been taken from the paper UN/CEFACT/BPAWG/BP044 entitled 'BPAWG Reference Model of the International Supply Chain'



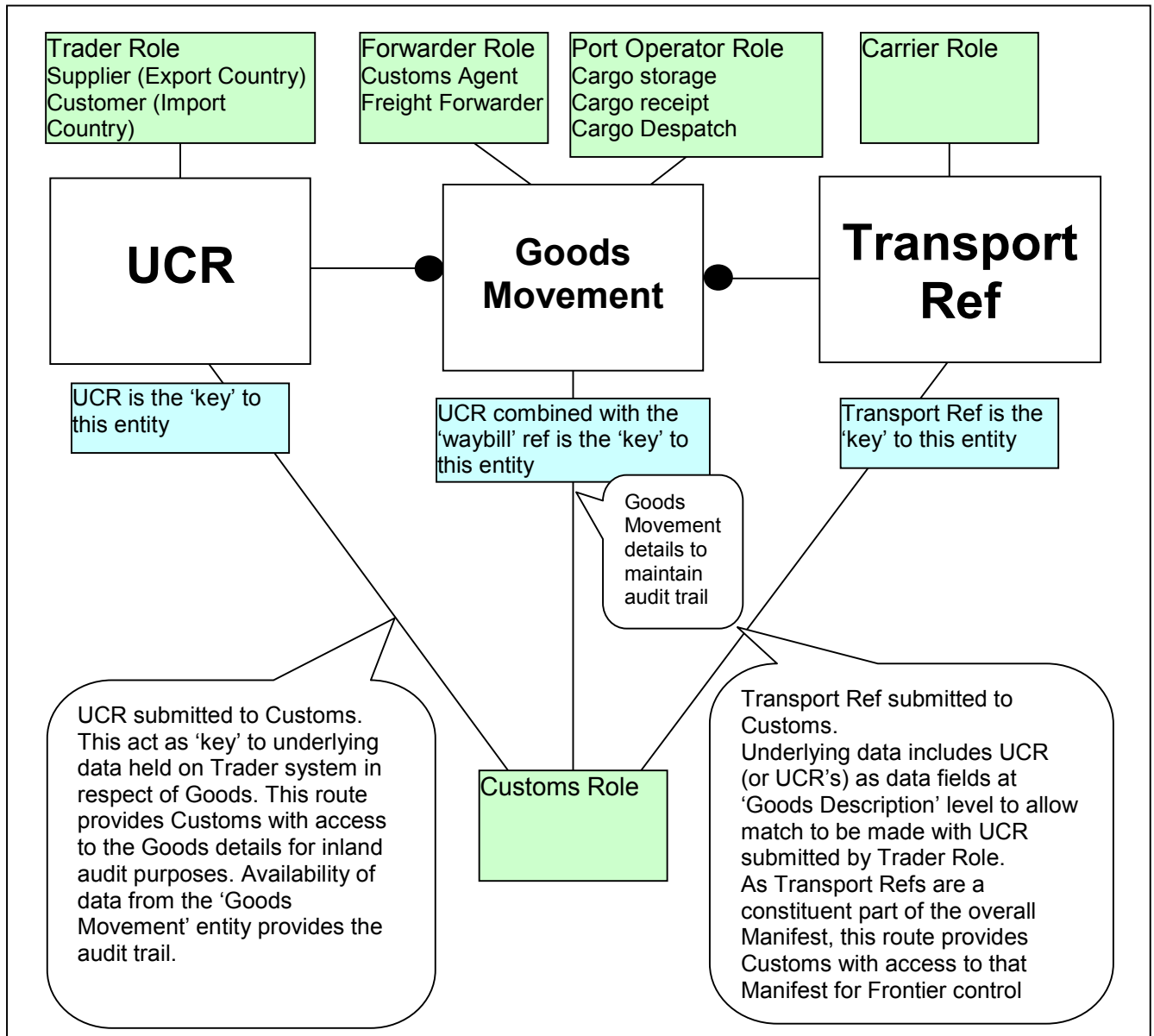
For the present, it is limited to the 'Order' & 'Ship' events within the 'chain'. However, the principle of Customs (and other Authorities) obtaining data from the Commercial Sector by the use of access 'keys', as outlined previously in this document, could be extended to cover other events given the need in the future.

7. ROLES

Within the scope of the UCR, five distinct Roles exist – 4 Commercial + Customs. Establishing the Roles in this way allows specific events/functions to be allocated to each and is thus fundamental to providing flexibility in the use of the concept. For example, a single organisation may arrange the shipping and actually transport the Goods, whilst an Exporter may arrange shipping and thus interact commercially directly with a Carrier. Basing the concept on Organisations rather than Roles would give rise to many variations. Use of Roles focuses attention on the 'common' themes and minimises the variations.

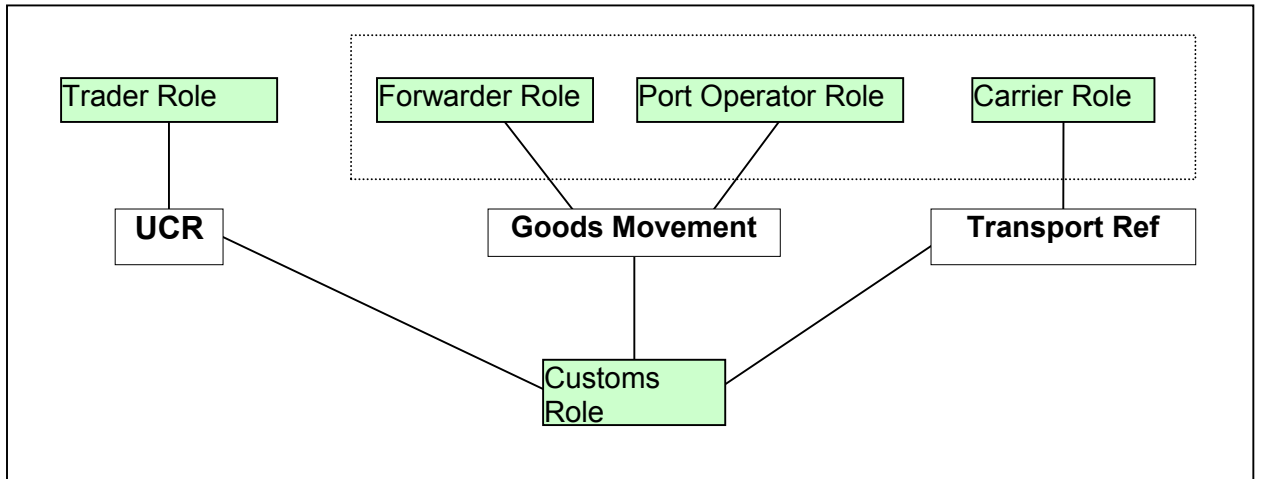
A further point is the actual issue of the UCR. This section therefore includes some sample scenarios to illustrate variations that may arise and suggestions as to how they are handled within the concept.

The following diagram illustrates these Roles in context of the overall 'chain'. It is followed by further diagrams illustrating how some of the variations in practice can be accommodated by this basic 'model' by superimposing the organisations on the Roles.



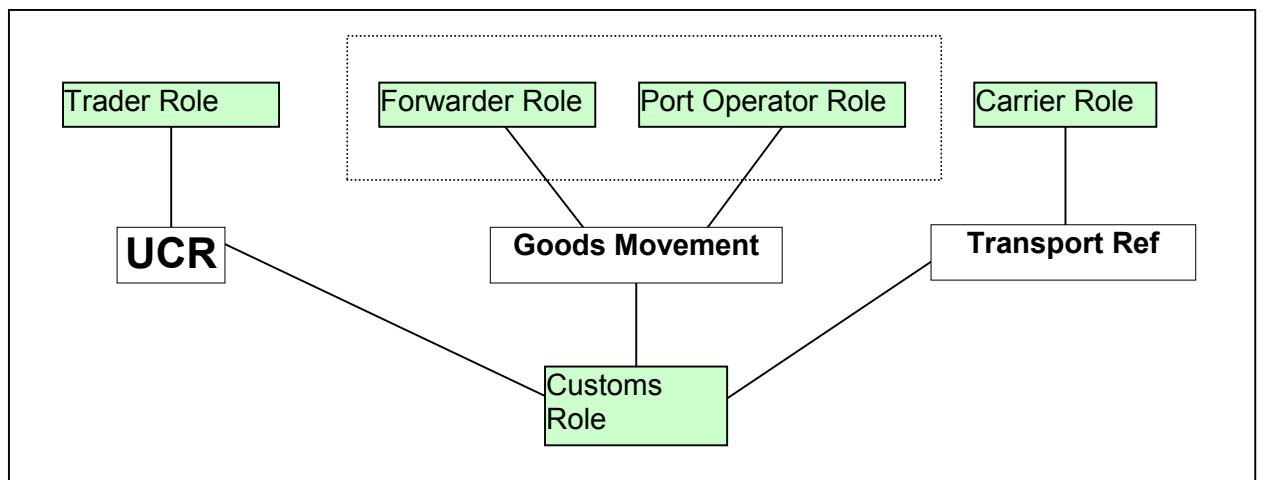
Example 1

The Carrier organisation operates its own Cargo handling premises and also acts as a Forwarder



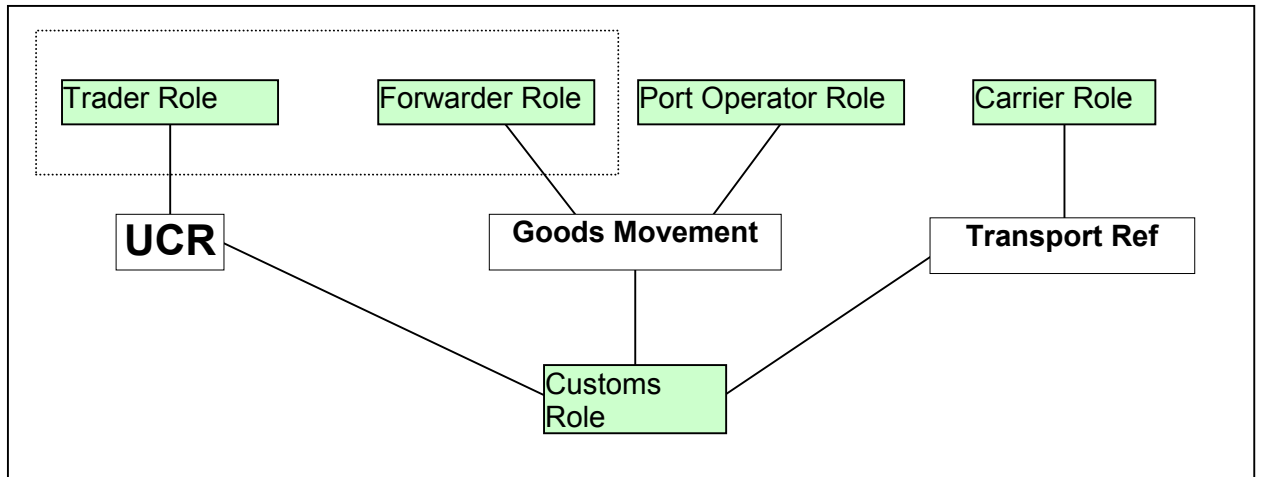
Example 2

Forwarder organisation operates its own Cargo handling premises



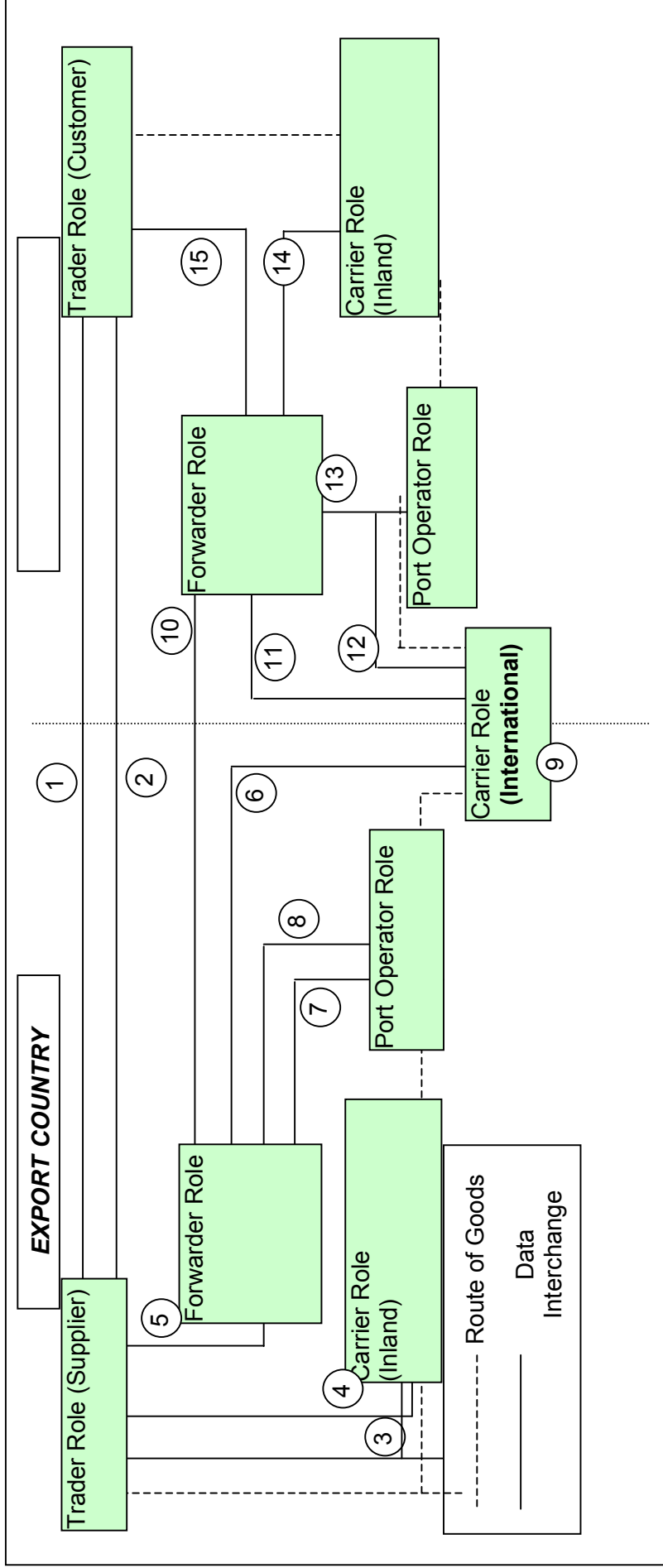
Example 3

Trader organization operates its own 'Shipping Dept' and thus interacts directly with the Carrier



8. THE UCR AND THE RELATIONSHIP WITH THE COMMERCIAL ROLES

The following diagram illustrates the envisaged operation of the UCR concept in conjunction with the Roles engaged in the Trade Chain. It is based on the scenario where Goods supplied from one Country are transported to a different Country in 3 stages – transport to Port of Export, International transport and transport from Port of Import. The Supplier and Customer are both directly responsible to the Customs authorities in their respective Countries for Revenue and Statistical obligations and are both recognised as 'Fully Compliant' traders. Forwarder Role is handling International transport only. A further assumption is that the Inland carriers do not use electronic methods. This is, of course, just one scenario of many. The 'circled' numbers provide a 'key' to the explanatory text immediately following the diagram.



General notes on diagram

In establishing and maintaining the relationships between the UCR and Transport References, there are several methods that can be used. In this example, and purely for illustrative purposes, those relationships are made using the various individual systems involved. As such, each system that holds any component of the overall references within the 'chain' needs to make other systems aware of its identity, hence the inclusion of 'system addresses' (URL/E-mail addresses) in the following 'key' notes.

An alternative method of maintaining the UCR/Transport relationships could involve a 'national' database to which all parties contribute. This could be operated by the Customs authority, or an independent 3rd party service supplier. The essential objective is to establish and maintain such relationships, the actual method of implementation being driven by the preferences/exigencies of any one Country.

Key to diagram (Overview)

This part catalogues the significant events. For details of the procedures associated with those events, please see following part – **'Key to diagram (detail)'**

1. Customer and Supplier agree 'Order Reference'
2. Supplier prepares order for despatch. 'Despatch Reference' becomes UCR and is linked to 'Order Reference'
3. Supplier books Inland transport to Port of Export
4. Supplier obtains Inland transport reference(s) and links that ref to UCR
5. Supplier instructs Forwarder to arrange International transport and gives Forwarder UCR. Forwarder uses UCR to obtain Inland transport ref(s)
6. Forwarder books International transport and informs Supplier of delivery address at Port of Export. Forwarder constructs Waybill and includes UCR as data element in Waybill
7. Supplier gives delivery address at Port of Export to Inland transporter. Forwarder informs Port Operator to expect Goods, quoting Inland transport ref(s)
8. Port Operator confirms receipt of Goods
9. International Carrier loads vessel, including Waybill in Manifest. Waybill given 'loaded' status. Departure of vessel causes Manifest, and thus all associated waybills, to be given 'departed' status
10. Forwarder in Export Country gives Waybill details to Forwarder in Import Country
11. Forwarder in Import Country uses UCR from Waybill to create link with UCR provided by Customer. Forwarder invokes Customs 'pre-arrival' checks

12. Port operator advises Carrier system of vessel arrival. Carrier system uses links from vessel/voyage ID to Manifest & thus Waybills to update waybill status to 'arrived'
13. Port Operator advises Forwarder of arrival of Goods. Forwarder invokes Customs 'arrival' procedures
14. On award of Customs 'cleared' status, Forwarder arranges delivery to Customer linking Inland transport ref with UCR
15. Customer receives Goods and updates own system to denote 'received' status.

9. RESPONSIBILITY FOR ALLOCATING THE UCR

Primarily, the responsibility for allocating the UCR rests with the Supplier. However, variations will occur so there is a need to provide for flexibility in implementation. Some of the more common variations are, for example :

- Supplier and Customer agree commercial consignment reference. Both enter it onto their respective databases and 'link' it to their own internal references if required.
- Customer specifies commercial consignment reference for Supplier to use. Supplier enters onto database a 'links' to own reference if required.
- Export Country does not employ full electronic data facilities within the trade 'chain' but Import Country does. In this case, the initialisation of the UCR will be performed by the Customer for the Import 'stage'. The Import Country Customs procedures would be fully operable, but the 'end-to-end' tracking capability would be lost.
- Export Country does employ full electronic data facilities but Import Country does not. This is the converse of the above scenario in that only the Export Country Customs procedures would be fully operable. Again, the 'end-to-end' tracking capability would be lost.
- For an integrated transport operation (e.g. Fast Parcels/Couriers), the linking of the Integrator's own reference (which is a 'through reference') with the UCR, by the Supplier, would be the only relationship required between the UCR & Transport Ref as all other relationships are already established within the Integrator's systems. This scenario can also apply to a Forwarder who has the capability to allocate a single reference for the transport of the WHOLE Consignment throughout from source to destination. Provided the Forwarder system is able to maintain the relationships between all other transport references in the 'chain', then the only relationship that needs to be established with the UCR is that Forwarder Reference. To take this a stage further, if both the Supplier and the Customer agree to use the 'through reference' in their own system as opposed to their own references, then the 'through reference' becomes the UCR.
- There may also be occasions where the fully compliant Supplier is able to create the UCR, but does not have full electronic facilities. Use of an Internet web site may be an option here. Another option may be that the Forwarder could

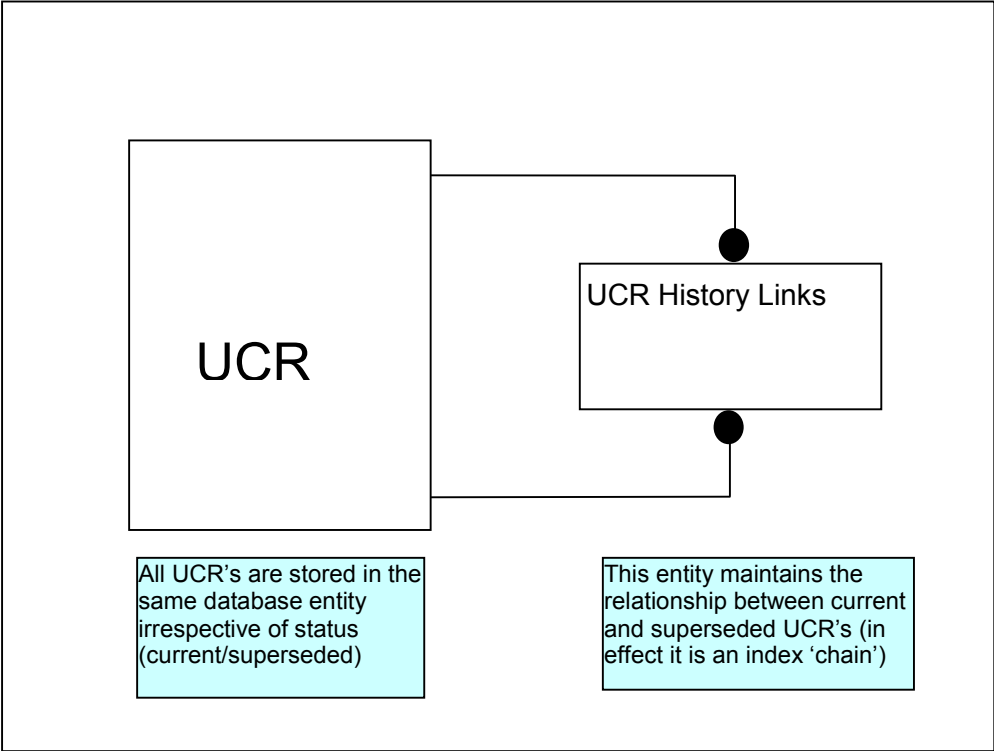
allocate the UCR on behalf of the Supplier, prior to despatch of Goods from the Supplier's premises and the Supplier would need to manually update the relevant documentation. It is stressed that although this is included as an option, it is suggested that, in this scenario, the Supplier would not be awarded a Customs 'fully compliant' status and would be subject to existing Customs formalities.

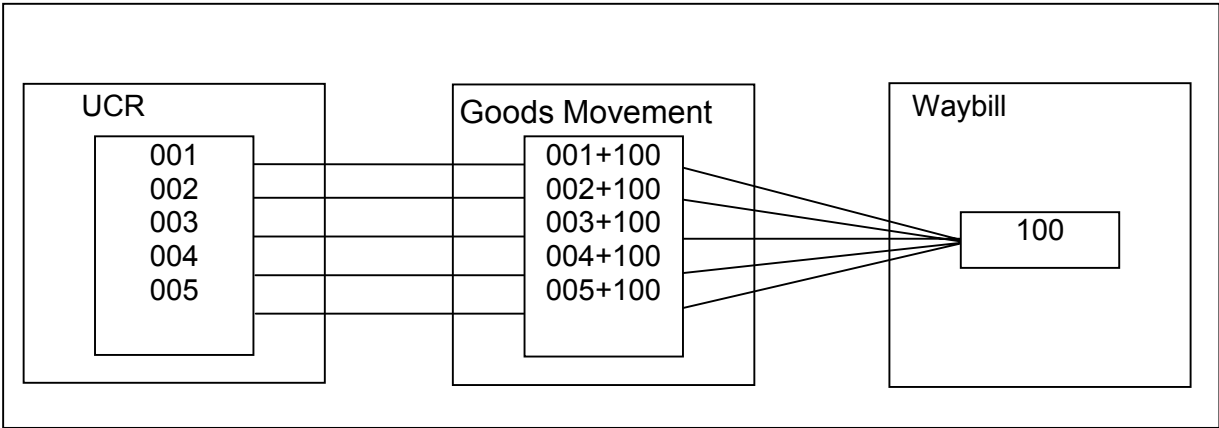
10. FURTHER VARIATIONS

So far, this paper has only addressed the use of a single UCR from source to destination. This section looks beyond that to the scenario that may cause the UCR to change during the transportation from source to destination. The example chosen is where the commodity is re-sold 'on the high seas' (e.g. oil).

The simplest solution is to maintain the original 'Despatch References' and require the Supplier or Customer to link them to the new Order Reference, thus continuing the original UCR.

However, should this not be advisable, or possible, then in order to maintain the continuity (i.e. the existing links between the UCR and the Transport Ref(s)), it is necessary to provide a 'UCR History'. It is envisaged that this will operate by linking the 'new' UCR with the one it is replacing. In the same way that the relationship between the UCR and the Transport Ref is 'many-to-many', the relationship between the current UCR and any previous ones is also 'many-to-many' in order to handle situations whereby 1 UCR is replaced by several UCR's and the converse where several UCR's are amalgamated into a single UCR. The following diagram illustrates the relationship.



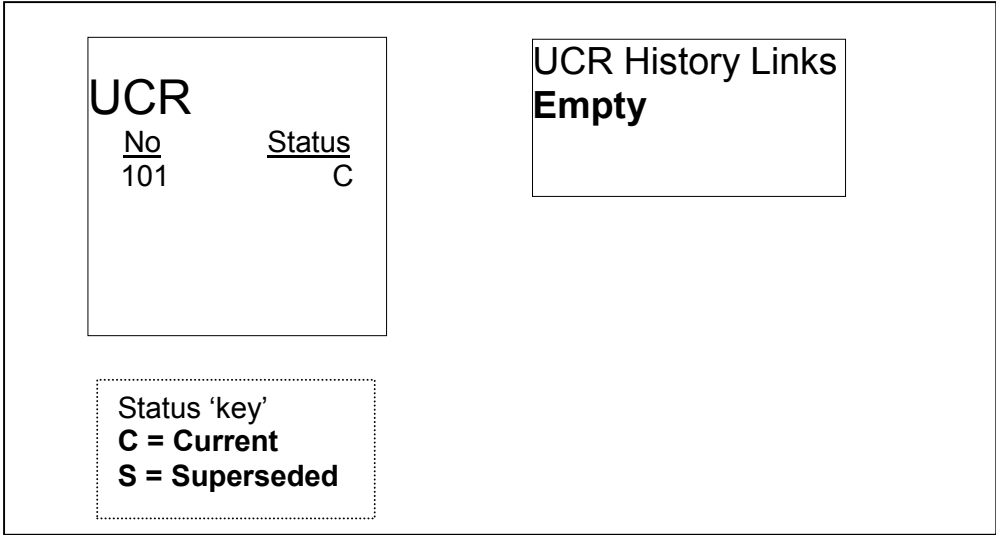


To illustrate the 'UCR History' approach in operation, the following scenario has been drawn up :

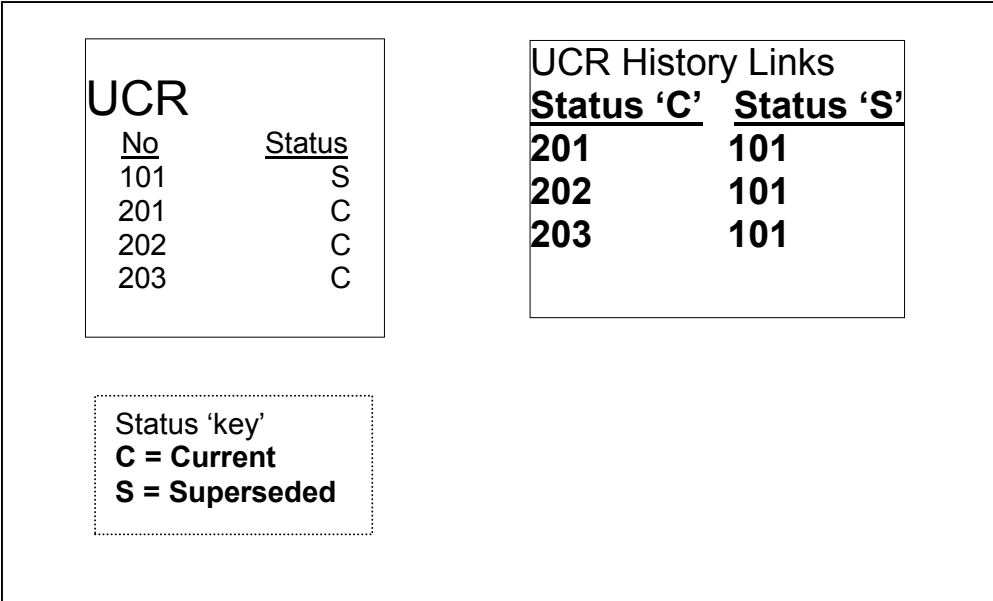
- UCR 101 is created as the original UCR
- The Goods are 'sold on', but to 3 separate Customers, thus requiring 3 'new' UCR's (201,202,203) which need linking to the original UCR
- 2 of those Customers 'sell on' their Goods to a single Customer (UCR's 201,203). This requires the new UCR (301) to link to the 2 it supersedes.

The following diagrams depicts the build up of the 'chain' for this scenario

Step 1 – original UCR 101 is created

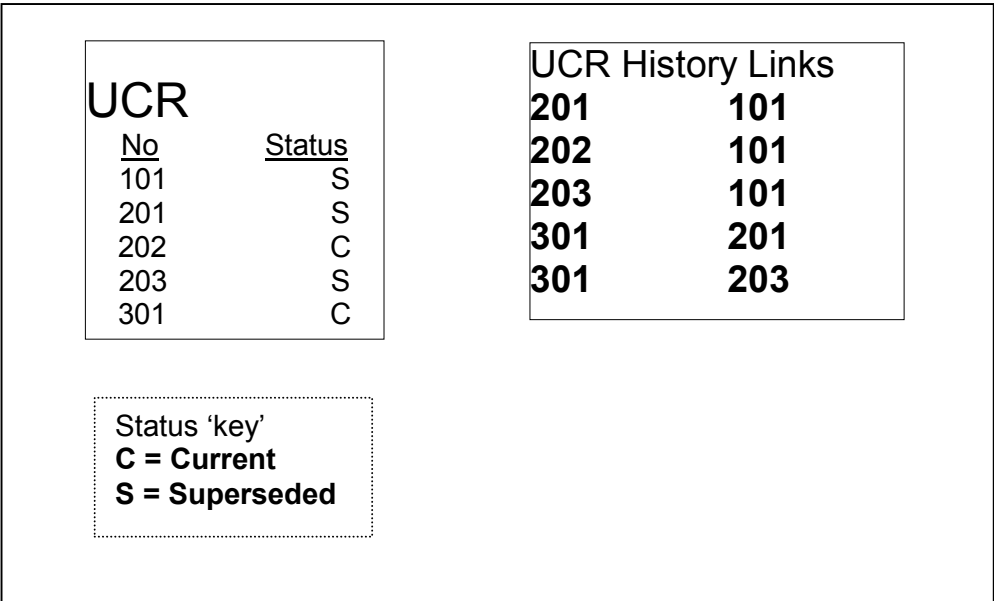


Step 2 –UCR’s 201,202 & 203 supersede UCR 101



Whilst the actual UCR records themselves are retained on the UCR entity, they are each held as individual unique records . The relationship between them is maintained on the UCR History Links entity. Within this entity, the UCR’s appearing on the left denotes that they have superseded a previous UCR, whilst those on the right denote that they have been superseded. Viewing it in the horizontal plane, each UCR on the left is associated with one on the right. This established the relationship between current and superseded UCR’s. In this case, UCR 101 appears 3 times as it has been superseded by UCR’s 201, 202, 203, and has to appear against each one to properly maintain the relationship with them. It is, effectively, a ‘split’ of UCR 101. The approach to constructing the ‘chain’ allows that ‘chain’ to be as long or short as circumstances dictate as the mechanism is able to be reiterated as many times as required.

Step 3 –UCR’s 301 supersedes UCR’s 201, 203



UCR 301 has been created as a result of an 'amalgamation' of UCR's 201 & 203.
Within the UCR History Links entity :

- A UCR appearing on the left only denotes that it has superseded a previous UCR
- A UCR appearing on the right only denotes that it has been superseded by a later UCR
- A UCR appearing on both the left and right denotes that whilst it has superseded a UCR at an earlier event, it has itself subsequently been superseded.

Whilst this approach has been outlined using the 'sold on' scenario, the principle is equally applicable to other similar scenarios, for example, Warehouse control.

Whilst this paper gives a background to the UCR concept, the thinking behind it and suggests ways of implementation, it is, nevertheless, recognised that the emphasis has been given to Customs exigencies. Having stated that, we have been very aware of the need to have minimal impact on commercial processes whilst, at the same time, offering tangible benefits to the Trade. Clearly, the above is but one approach and it is hoped that it will stimulate thoughts and discussion aimed at developing and agreeing the approach with which the UCR can be assimilated into International Trade practices, both Commercial and Customs.

APPENDIX 1

This Appendix provides a detailed description of the processing of each of the events illustrated in the diagram at the beginning of section 6

Key to diagram in section 6 (detail)

1

- Customer places order with Supplier. Both agree the 'Order Reference' and enter it on their respective databases. Supplier and Customer exchange system addresses (URL/E-mail addresses) and details of order & Goods

2

- Supplier prepares order for despatch, in whole or in part and enters the 'Despatch Reference' onto the Supplier database.
- The 'Despatch Reference' is linked to the 'Order Reference' on that database. This 'Despatch Reference' is the initiation of the UCR.
- Supplier adds the last digit of Calendar Year, Country (or Territory) of Export and Supplier Identity and transmits to Customs authority in Export Country, along with Supplier system 'address' (e.g. URL/E-mail address) as part of the overall 'authentication message'.
- Customs authority awards 'status' to UCR (e.g. permission to Export/requires examination).
- Supplier advises Customer of UCR. Customer enters this onto Customer database and links it to original 'Order Reference'.
- Customer transmits UCR + Customer's system address, as part of overall 'authentication message' to Customs authority & Forwarder in Import Country as a 'pre notification' of Import.

3

- Supplier books Inland transport to Port of Export

4

- Inland Transporter advises Inland transport ref (e.g. Waybill/Container ID(s)/Vehicle ID(s)).
- Supplier enters these details onto Suppliers database and 'links' Inland transport ref(s) with UCR (i.e. using the UCR/Waybill link concept outlined earlier in this document).

5

- In conjunction with 3 and 4, Supplier instructs Forwarder to arrange International transport.
- Supplier transmits UCR to Forwarder. This transmission includes Supplier's system address. Forwarder is able to use UCR to obtain Inland transport refs due to 'link' created at 4

6

- Forwarder books International transport, obtains Waybill(s) and system 'address' (e.g. URL/E-mail address) of Carrier (or builds Consolidation, adding this UCR to those already scheduled for transport under an existing Waybill)
- UCR is included as a data element in the Waybill 'record'
- Carrier system is updated with initial Waybill details which are linked to booked voyage. Waybill reference is 'linked' to system address of Forwarder
- Forwarder informs Supplier of Port of Export and location within that Port for delivery of Goods by Inland transporter.

7

- Supplier informs Inland Transporter of destination
- Forwarder uses Supplier's system address & UCR to obtain details of Inland transport ref(s) and transmits these to Port Operator with 'expected to be delivered' status. Forwarder system address is included in this transmission
- Port Operator system is updated with Inland transport ID(s) and Forwarder system address
- Data can be submitted to Customs at this point, if required, to allow Customs to 'target' the Goods/Container(s)/Vehicle etc.
- The UCR will, at this stage provide access to Goods details / ID of Inland transport and details of onward transport documentation. The UCR itself, plus the 'links' to Transport references provide the necessary 'navigation' to the relevant databases.

8

- Port Operator updates Port system database, using Inland transport ID(s) to denote arrival of expected Goods
- Using Forwarder system address and Inland transport ref(s), Port Operator system transmits 'arrived at Port of Export' status to Forwarder system
- Forwarder system uses Inland transport ref(s) to obtain UCR and thus Supplier's system address. Forwarder system then passes 'arrived at Port of Export' status to Supplier's system. An alternative here is to transmit directly from the Port Operator to the Supplier, but the Forwarder needs to be kept updated, hence this particular approach. If this alternative is preferred, then the Supplier's system address needs to be passed to the Port Operator's system via the Forwarder (versed as such as it is not reasonable to expect the Supplier to be aware of the Port Operator's system address at source)
- If the Customs link is in operation, this event will invoke the allocation of the Customs status (e.g. examination required/permission to load)
- Reconciliation of Goods arrived with those expected provides evidence to both Customs and the Supplier of any Goods that have been 'diverted' from their intended purpose (i.e. Export)

9

- Carrier loads vessel and updates Carrier system to show 'loaded' status for Waybill. This contributes to the 'build up' of the manifest
- Carrier updates manifest on Carrier system to confirm 'Vessel Departure'
- The previous establishment of the relationship between the UCR and the Waybill(s), plus the exchange of the relevant system addresses provides the 'navigation' for:-
- Supplier to check progress of goods using the UCR
- Forwarder to check progress of Goods using UCR or Waybill
- Customs in Export Country to confirm Export of Goods and also to determine point of any 'tax refunds'

Part III Accompanying Guidelines

- Customer to check progress of Goods using UCR (at this stage, via the Supplier's system as the 'navigation path' has not yet been established in the Import Country)
- On successful completion of Export 'Frontier' formalities, Forwarder transmits 'cleared to load' status to Port Operator and Carrier

10

- Forwarder in Export Country transmits Waybill details (which include UCR) to Forwarder in Import Country

11

- Forwarder in Import Country (simply referred to as Forwarder from this point on) updates Waybill(s) on Carrier system to establish Forwarder's responsibility for handling of Goods. Forwarder system uses UCR from Waybill to 'match' with UCR transmitted from Customer.
- Upon successful 'match', Forwarder system establishes relationship between UCR & Waybill and transmits 'matched' status to Customer (Customer system already holds Forwarder system address so there is no need to transmit it here). This event establishes the 'navigation path' in the Import Country allowing relevant parties to track progress of the Goods from Port of Import to Customer.
- In addition, Forwarder transmits UCR & Waybill Ref (plus Customer & Carrier system addresses respectively) to Customs authority in Import Country. Forwarder system address is also included in this transmission.
- Customs system uses UCR & Waybill to (and related system addresses) to access underlying data (e.g. Goods details etc. for UCR and Manifest details for Waybill) in Customs domains in relevant commercial systems. It is stressed however, that the primary use of the UCR is for Customs audit purposes, whilst the main vehicle for Frontier controls is the Waybill.
- Customs checks are carried out and a 'pre arrival' status is awarded. These checks could be operated using 'profiles' to assess both the contraband & revenue risks. Trader compliance ratings may also be handled in a similar manner, with the end result that a proven Trading Partnership with innocent Goods from a known source Country could be deemed sufficient for award of Customs clearance status.

12

- On arrival of vessel, Port Operator updates Waybill(s) on Carrier system to 'arrived' status. This update also includes current location of Goods.

13

- Port Operator system transmits 'arrival' notification to Forwarder. At this point, Forwarder (in some Countries) is permitted to remove the Goods to a location outside the Port of Import, typically within a container for de-consolidating at the Forwarder's premises, to those premises, where Customs procedures will be carried out. Port Operator therefore 'books out' Goods using Waybill/Container ID(s) as Inland transport reference although an entirely new reference may be used. Alternatively, Customs procedures take place at the Port of Import.
- Irrespective of the method used to arrive at the point of Customs control, Forwarder updates own system to show 'Goods received' using Inland transport ref.
- This invokes Customs procedures to ensure that the details notified pre-arrival are still valid and that Customs requirements themselves have not changed in the intervening period between the pre-arrival notification and the actual arrival of the Goods. If all is still OK, Customs clearance status may be given. In effect, providing Customs checks are all OK, the physical arrival of the Goods becomes synonymous with Customs clearance.

14

- On clearance by Customs, Forwarder arranges transport for delivery of Goods to Customer. Identity of transport (e.g. Vehicle/Container ID(s)) is obtained.
- Forwarder enters Inland transport ref(s) on to Forwarder database quoting UCR. This establishes the relationship between them.
- Forwarder despatches Goods to Customer

15

- Customer receives Goods, updates Customer database, using Inland transport ref(s), with 'received' status.
- Customer system transmits confirmation of receipt of Goods to Forwarder, again using Inland transport ref(s)
- Customer subsequently checks in Goods themselves, updating Customer database as a result. This completes the reconciliation between Goods despatched and Goods received and forms the basis of Customs audit.
- Customer transmits periodic Revenue etc. return to Customs, which includes UCR's, which provide the starting point for a Customs audit.

This example has used 3 distinct 'transport' stages, a common enough scenario. As a means of illustrating the flexibility of the concept, another common example, Cross Border land transport is readily accommodated. The same concept model applies, but there would only be the need to accommodate 1 transport stage as much of this type of traffic uses the same transport from point of despatch to point of destination. The model can handle as few, or as many, transport stages as is necessary. Recording each Transport stage provides the capability to handle traffic other than straightforward Exports & Imports as Transits, Through Waybills, Transhipments etc can also be accommodated (i.e. events) that, whilst not requiring formal Customs procedures, do warrant Customs interest.

It must be stressed that the example is but one way of implementing the UCR concept. However, irrespective of the method of implementation, the essential point is that by use of the primary commercial references, both individually and related, as 'keys' to the underlying data, it makes it possible for both Commerce and Customs to carry out their respective obligations in an integrated way.

THE UCR AND ITS RELATIONSHIP WITH THE DECLARATION

The UCR is primarily designed to operate in a fully electronic environment. However, it is recognised that this is a long-term aim and, in the interim, many Countries will continue to use the formal Customs Declaration.

This paper suggests an approach to incorporating the UCR within the Declaration in such a way as to take cognisance of :

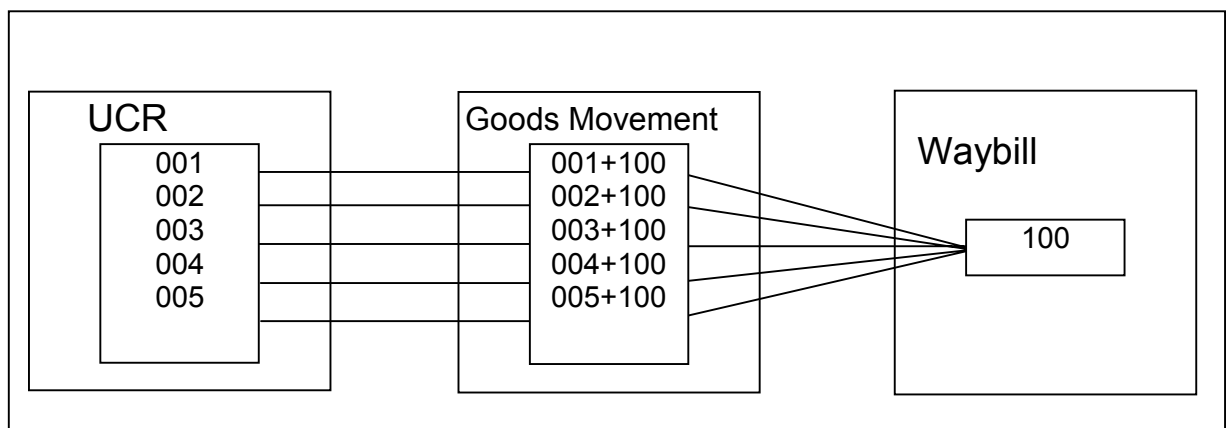
- There are several Declaration types and structures in use around the World
- The need to establish a migration path from the traditional Declaration to full electronic use of the UCR and the underlying Commercial data.

Full electronic application of UCR

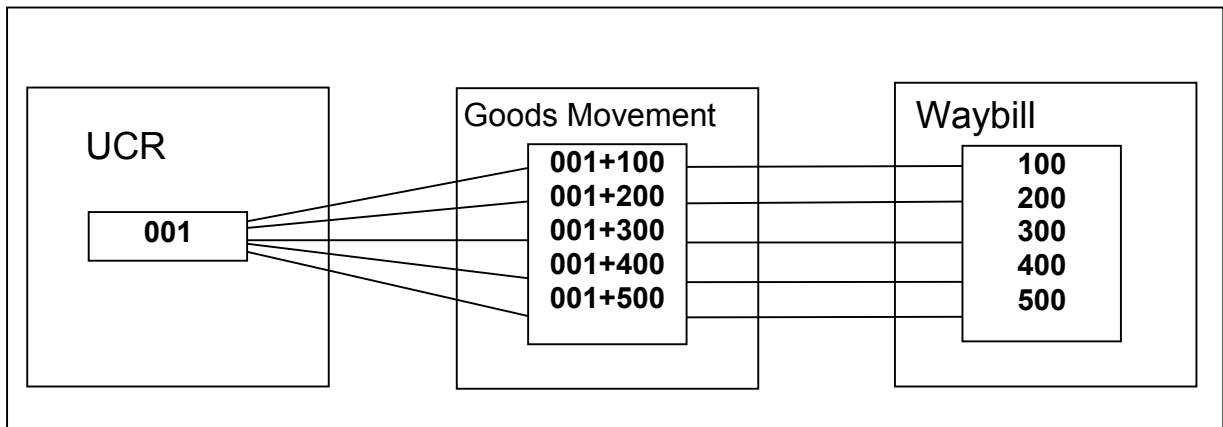
The UCR is initiated by establishing a 'trading partnership' between the Supplier and the Customer. It comprises the 'despatch reference' given to the Goods by the Supplier. This is notified to the Customer and entered into the Customer's commercial records. Typically, it would be the Invoice No., but could be another reference 'linked' to the Invoice No.

It thus is able to become the 'key' to the underlying detailed data relevant to the Goods exchanged by that 'Trading Partnership'. It has a 'many to many' relationship with the Waybill (i.e. One UCR transported under many Waybills or Many UCR's transported under one Waybill). It is, therefore, implemented using 'relational' techniques (avoidance of duplication by 'linking' data via indexes), which are widely used in the Information Technology sector.

The following diagrams illustrates the technique :



In this example, many UCR's have been consolidated under a single Waybill



Whilst here, a single UCR is transported under several Waybills

In both cases, each UCR & each Waybill is recorded only once. It is the 'Goods Movement' entity that creates the relationship between the two. This entity is, in effect, an index that links the UCR (Goods) & Waybill (Transport) and avoids duplicating either Goods data within the Waybill or Waybill data within the Goods.

Incorporating the UCR into the Declaration

To incorporate the UCR into the Declaration will lead to an inevitable degree of duplication due to the hierarchical 'flat' structure of that Declaration. Given that, the aim must be to minimise that duplication.

Traditionally, the Declaration is optimised for transaction based Customs controls at the Frontier. As such, it is aligned to the arrival and departure of Shipments at the Frontier, the emphasis thus being on the Waybill.

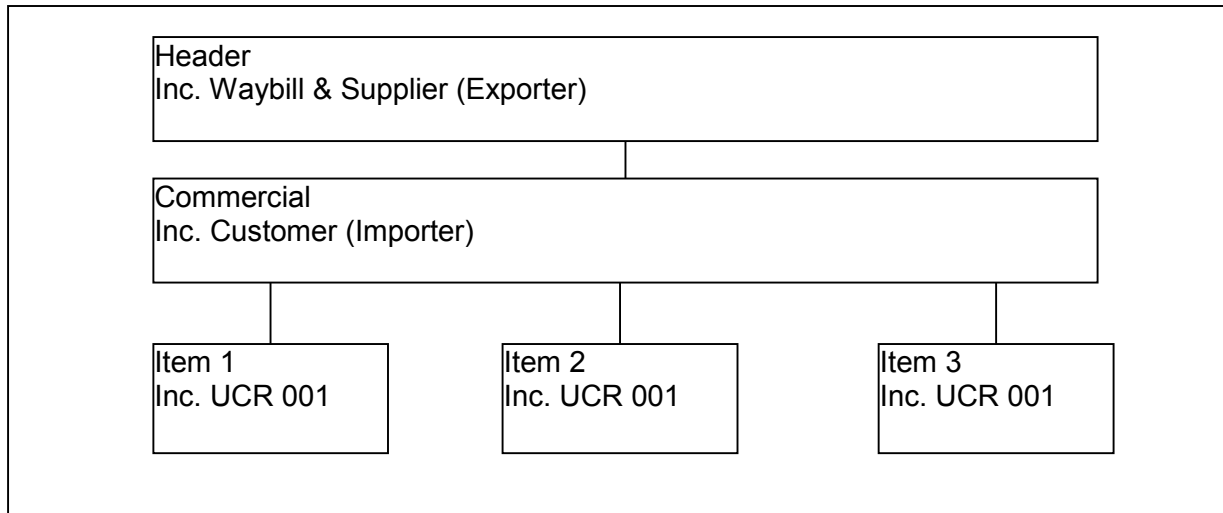
As only one Waybill may be present on a Declaration, this means that where the Waybill covers several UCR's for the same trading partnership (i.e. Supplier/Customer combination), these UCR's must be quoted against the relevant Items within the Declaration.

Within the G7 message, there are two approaches to 'mapping' this :

Inclusion of UCR at Item level

Scenario 1

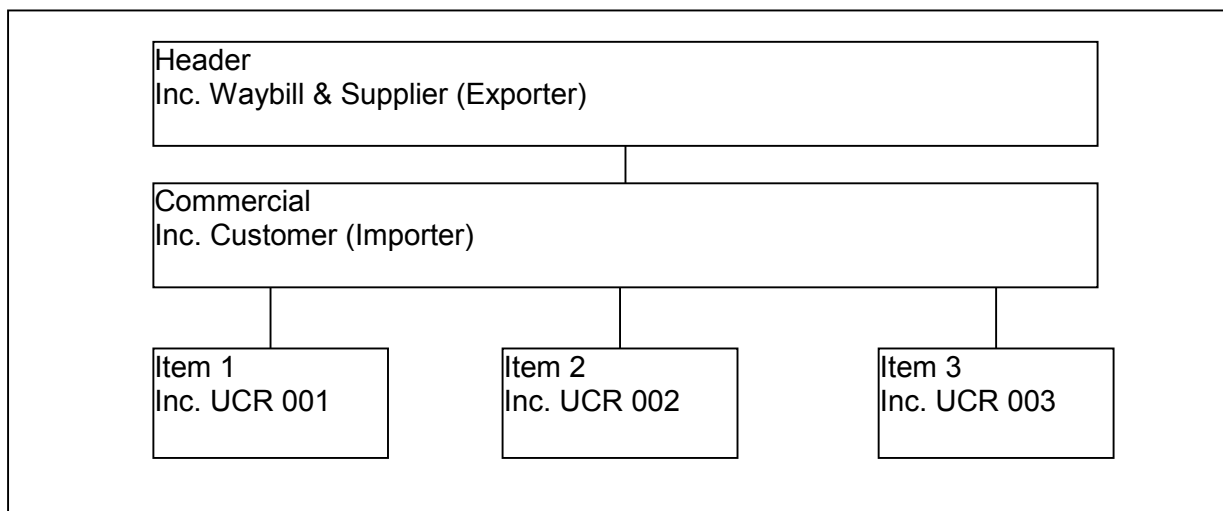
An Export Declaration requiring 3 Items (e.g. different Commodity Codes) but with a single UCR applicable to all 3 items (UCR 001)



Repetition occurs here, as the UCR needs to be included in all 3 Items. It could be argued that, in cases such as this, the UCR only requires inclusion at the 'Commercial' level. However, this would require an optional approach (i.e. if the UCR applied to all items then it is carried at the Commercial level, else it is carried at the Item level) which depended on the how the UCR and the Items related. This is contrary to the preferred approach of a standard layout.

Scenario 2

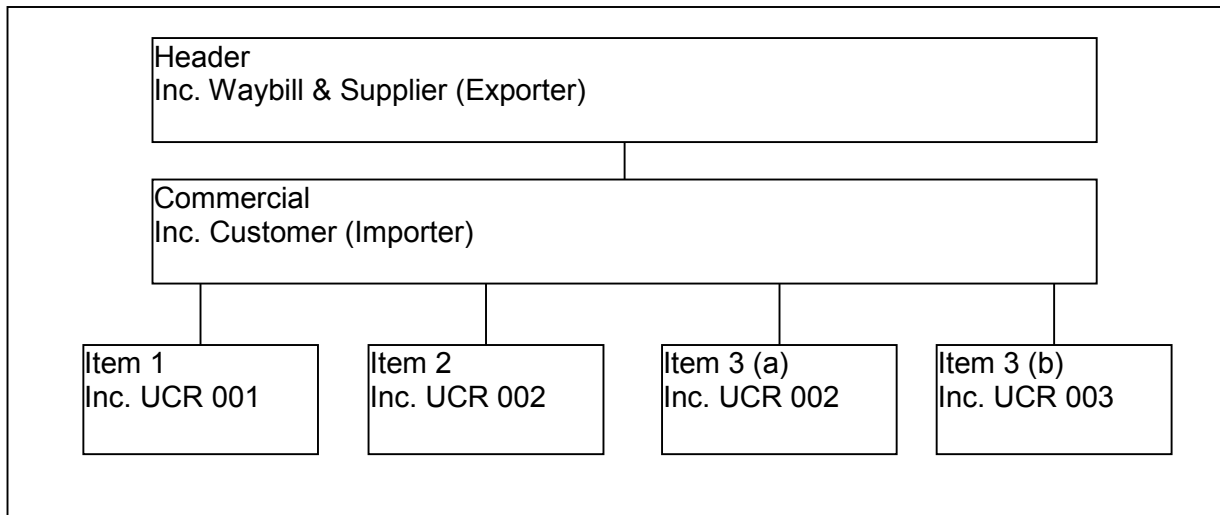
An Export Declaration requiring 3 Items (e.g. different Commodity Codes) with UCR 001 applicable to Item 1, UCR 002 applicable to Item 2 and UCR 003 applicable to Item 3



No repetition occurs as each Item is addressed by its own specific UCR.

Scenario 3

An Export Declaration requiring 3 Items (e.g. different Commodity Codes) with UCR 001 applicable to Item 1, UCR 002 applicable to Items 2 & 3 and UCR 003 applicable to Item 3



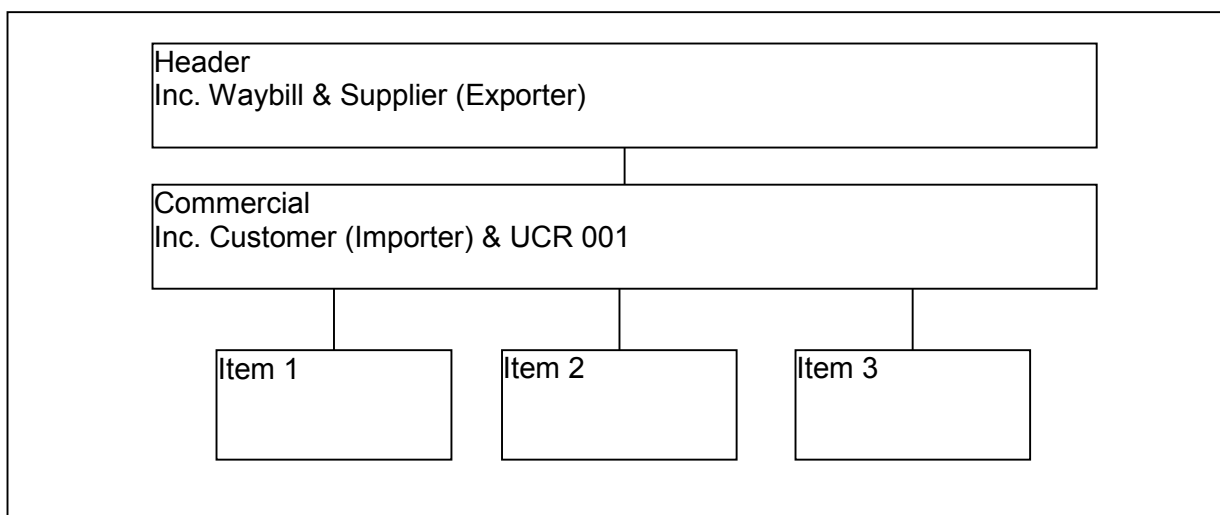
In this scenario, 4 physical Items are required. This is caused by the need to ‘split’ Item 3 as UCR’s 002 & 003 are both applicable to it and the details relevant to each UCR (e.g. quantity/value) must be recorded independently for clarity. If both UCR’s were simply quoted on Item 3, there would be no way of determining the specific details of each one.

Inclusion of UCR at Commercial level

This section runs through the same scenarios, but this time, the UCR is included at the ‘Commercial’ level

Scenario 1

An Export Declaration requiring 3 Items (e.g. different Commodity Codes) but with a single UCR applicable to all 3 items (UCR 001)

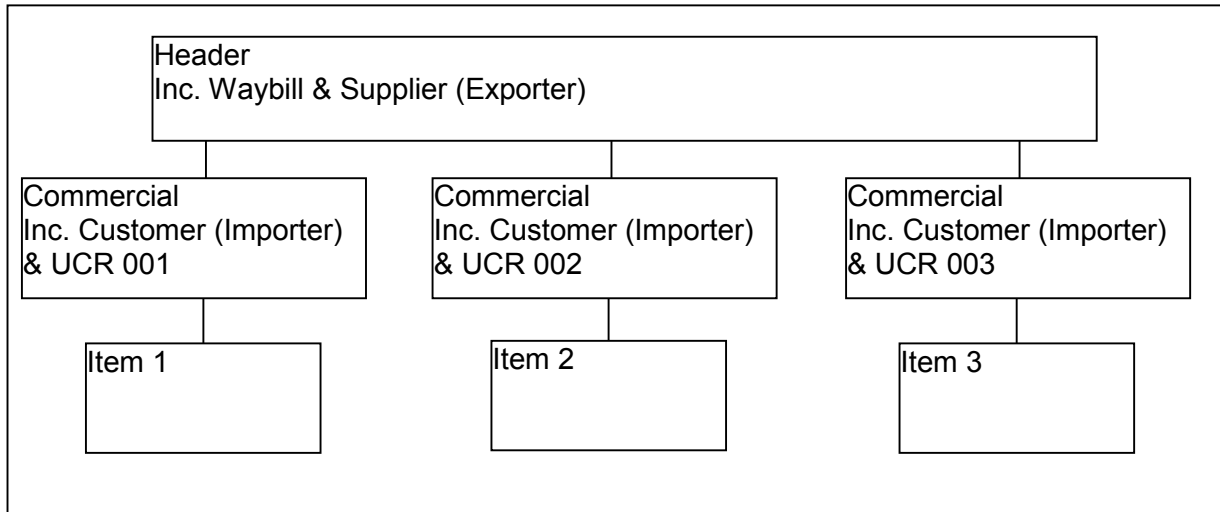


Part III Accompanying Guidelines

As the UCR applies to all 3 Items, it only needs to appear once at the Commercial level.

Scenario 2

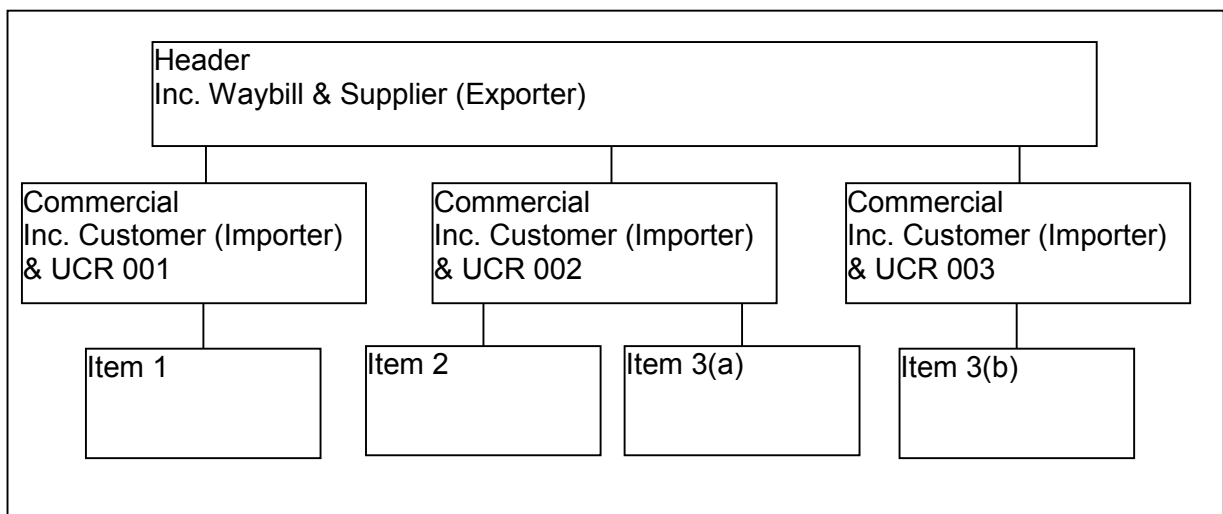
An Export Declaration requiring 3 Items (e.g. different Commodity Codes) with UCR 001 applicable to Item 1, UCR 002 applicable to Item 2 and UCR 003 applicable to Item 3



Repetition occurs here as it is necessary to create a Commercial level for each UCR in order to maintain the proper relationship between the UCR and the Goods details.

Scenario 3

An Export Declaration requiring 3 Items (e.g. different Commodity Codes) with UCR 001 applicable to Item 1, UCR 002 applicable to Items 2 & 3 and UCR 003 applicable to Item 3



In this scenario, repetition occurs at both Commercial & Item levels. There are 3 iterations at the Commercial level (one for each UCR) and 4 items occasioned to the need to 'split' Item 3 into Goods details specific to UCR's 002 & 003.

Irrespective of whether the UCR occurs at Item or Commercial level, there are circumstances where repetition will occur within the Declaration. Each location has its advantages and disadvantages leaving, at face value, little to choose between them.

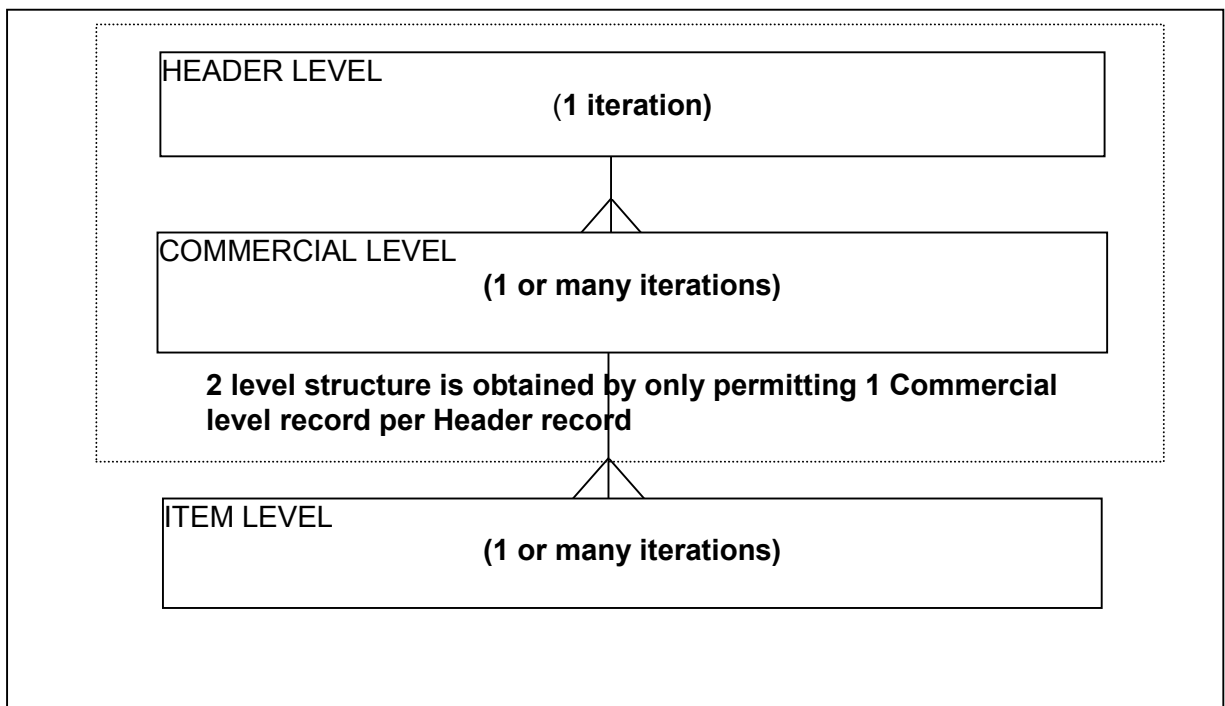
The preferred option

Given that the above scenarios provide no clear 'winner', other factors now need to be examined.

It is considered that the most common occurrence of multiple UCR's on a single Declaration is where the total Shipment comprises Goods for more than one 'Trading Partnership'. As this would require a 'Commercial' level record for each of those partnerships, the UCR can be much more conveniently included at this level than within each Item.

A further factor is that the 'Header + Commercial + Item' (3 level) structure is closer to commercial invoicing structures than the 'Header + Item' (2 level) layout. It is thus more amenable to the transition from formal Declaration to use of commercial data in a fully electronic environment for which the UCR was primarily designed.

The 3 level structure also offers more flexibility. For example, if an Export Shipment to more than 1 Customer is being prepared, the whole Shipment can be handled on a single Declaration by virtue of creating multiple 'commercial' level records, each with their attendant Items. With the 2 level layout, a Declaration for each 'Trading Partnership' would be required. It is further possible to use the '3 level' structure in a '2 level' environment, whereas the reverse is not possible at all. The following diagram illustrates how this can be achieved.



Part III Accompanying Guidelines

Taking all factors into account, the '3 level' structure has definite advantages over the '2 level' one. It is, in addition, compatible with the structure developed for G7. It is thus the recommended option of the WCO.
