Identification and marking of multi-country packs
&
Human Readable Interpretation

Ask the expert

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Oct 2015
This session covers 2 separate topics

**Topic 1**
Identification and marking of multi-country packs

**Topic 2**
Human Readable Interpretation

Scan for online product information or go to:
http://www.gs1.org/demo/09504000059101
Introduction – Grant Courtney

- Member of GS1 Healthcare Leadership Team

- 20 Years experience in healthcare
  - Co-author of the GS1 discussion paper on Multi-market packs
  - Member of WR 10-303
Topic 1

Identification and marking of multi-country packs
Lets start with some basics . . .

- **What is a multi-market pack**
  - A product which is designed to be supplied and used in more than one country

- **What are the key terms I need to understand**
  - **GTIN** – The GS1 Identification Key used to identify trade items. The key comprises a GS1 Company Prefix, an Item Reference and Check Digit
  - **NTIN** – A coding scheme, administered in the Healthcare sector by a national organisation for which a GS1 Prefix has been issued to permit its uniqueness within the GTIN pool but without assurance of full compatibility with GTIN functionality.
  - **NHRN** – National and/or regional identification numbers for product registration purposes and/or for the management of Healthcare provider reimbursement
Why do we need a discussion document?

- If all countries identify the product using a GTIN then it's easy
  - One Multi-Market pack
  - One barcode
  - One GTIN
  - Many countries

- But what if they don't use GTIN or also use other identifiers?

GTIN = 09504000059101

We will look at this in some of our scenarios
The Discussion Paper

• The discussion paper was written to help demonstrate ways in which GS1 bar codes can be used to minimise the need for multiple bar codes to appear on product packaging while still enabling products to be supplied to multiple countries.

• Including how GTIN, NTIN and NHRNs can be used together
Let's look at the second scenario

- A country uses an NTIN
- Can this pack be shared with other countries?
- **Yes**, this pack can also be taken (in principle) with other GTIN countries*

*The government’s host system must be configured to use the correct AI*
The document works its way through different scenarios

<table>
<thead>
<tr>
<th>Fields in GS1 DataMatrix</th>
<th>Market types which can take this pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary key</td>
<td>Other fields</td>
</tr>
<tr>
<td>(01) Containing a GTIN</td>
<td>NHRN 1</td>
</tr>
<tr>
<td>(01) Containing a GTIN</td>
<td>NHRN 1, NHRN n</td>
</tr>
<tr>
<td>(01) Containing an NTIN</td>
<td></td>
</tr>
<tr>
<td>(01) Containing an NTIN</td>
<td></td>
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</tbody>
</table>

Let's examine some of the slightly more complex scenarios.
Why do other identifiers exist?

- Processes exist in countries which are controlled by numbers other than GTIN
- Reimbursement is sometimes an example of this
The reimbursement number can be encoded in the NHRN field as an attribute of the GTIN.

This example also includes a serial number and URL to show how different keys can be combined.
More than 1 NHRN can be encoded within a GS1 DataMatrix

* There may be technical constraints which limit a manufacturers’ ability to encode multiple NHRNs, also the government’s host system must be configured to use the correct AI

- It is possible to encode multiple NHRN’s into the data carrier*
- Several countries with NHRN’s can therefore share the same pack
What if a country does not use GTIN

If a country uses a national number and this is not encoded as an NHRN then the pack can not be shared or would have to carry multiple data carriers.
You can not combine an NTIN and NHRN

- You should not combine an NTIN and NHRN*
- The NHRN is always a GTIN attribute

*As the global usability of an NTIN is not assured it is not advised to use NHRN with NTIN
Where can I get more information?

**Discussion Paper Product Identification in Healthcare**


**Position Paper (II), Healthcare Provider Advisory Council, Implementation in hospitals hindered by bar code symbol issues**


**GS1 General Specifications**

http://www.gs1.org/barcodes-epcrfid-id-keys/gs1-general-specifications
Questions
Thank you

• For further information on the discussion paper please contact:

• Public Policy Manager, GS1 Healthcare, Brussels, Belgium +32 2 788 7800
Topic 2

Human Readable Interpretation
Where can I find this information?

Version 15

What is HRI?

Human Readable Interpretation

• HRI show a human exactly what’s in a barcode

• It’s there in case the barcode does not read

• Some HRI rules are **specific to Healthcare** and these have been updated

Whether a GS1 AIDC Data Carrier encodes a GS1 identification Key, GS1 Key Attributes, or a combination of both, the HRI should be placed below the barcode and grouped together wherever physically possible while maintaining the HRI legibility and minimum barcode height.
Why have the HRI rules been updated

- In retail the barcode usually only contains the GTIN
- This makes adding the HRI simple
- Healthcare is now a lot more complex
- Regulators are driving a more data into the barcodes on products
Lack of space and technical constraints

- It was not always possible to meet all stakeholders requirements using the previous HRI standards, especially on smaller packs
- Factors like online printing, language and local regulations all created issues

Scan for online product information or go to: http://www.gs1.org/demo/09504000059101

GTIN: 09504000059101
SN: 12345678p901
Reg No.: 1312345678913
Exp: 20 Nov 2014
Lot: 1234567p

(01) 09504000059101
(21) 12345678p901
(713) 1312345678913
(17) 141120
(10) 1234567p
(8200) http://www.gs1.org/demo/
So we needed a **Healthcare** solution

- A way of incorporating the HRI and non-HRI text onto a product where regulations, space and technical constraints prevented the application of both
How deviation for Healthcare works . . .

If a deviation from the preferred format is required that results in HRI not being printed, then **a combination of HRI and Non-HRI Text may be used**. When doing so, the following rules apply:

- If the data represented in the Non-HRI Text is exactly as in the HRI, then the appropriate AI shall be printed along with the data title.
- If data represented in the Non-HRI Text does not match the HRI, then only a data title may be used. The AI shall not be printed.
- The selection of data titles may be determined by the manufacturer based on regulatory, local language requirements, relevant standards (e.g. ISO/IEC 15223) or appropriate abbreviations.
Simple example 1

Data carrier

HRI

GTIN (01) 09504000059101
Lot (10) 1234567p
Exp (17) 141120

Regulatory required text

GTIN 09504000059101
Lot 1234567p
Exp 20 Nov 2014

GTIN (01) 09504000059101
Lot (10) 1234567p
EXP 20 Nov 2014
Simple example 2

- Data carrier
- HRI
  - (01) 09504000059101
  - (10) 1234567p
  - (17) 141120
- Regulatory required text
  - GTIN 9504000059101
  - Lot 1234567p
  - Exp 20 Nov 2014

GTIN 9504000059101
Lot (10) 1234567p
EXP 20 Nov 2014
Complex example

**Data carrier**

(01) 09504000059101
(21) 12345678p901
(713) 1312345678913
(17) 141120
(10) 1234567p
(8200) http://www.gs1.org/demo/

**HRI**

GTIN 09504000059101
SN 12345678p901
Reg No 1312345678913
Exp 20 Nov 2014
Lot 1234567p

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**Regulatory required text**

GTIN (01) 09504000059101
Reg No (713) 1312345678913
SN (21) 12345678p901
Lot (10) 1234567p
EXP 20 Nov 2014

Scan for online product information or go to: http://www.gs1.org/demo/09504000059101

**Commercial required text**

Scan for online product information or go to: http://www.gs1.org/demo/09504000059101
Why is this important

- The new Healthcare HRI rules allow us to work in a common way across many markets

- Promoting these standards will help prevent the proliferation of national requirements which drive complexity
Questions
Thank you

• For further information on the HRI rules contact your local GS1 office
Contact Details
GS1 Global Office
Avenue Louise 326, bte 10, B-1050 Brussels, Belgium
T  + 32 2 788 78 00
W  www.gs1.org
HRI Situation

- Regulators require data such as GTIN, Batch, Expiry & serial number to be held in a DataMatrix
- Brand owners may want to hold additional information in the same data carrier e.g. URL
- This data is identified differently with the data carrier than in human readable formats e.g.
  - Expiry date format is 141120 in the data carrier and may be displayed as 20 Nov 2014 in the human readable format
  - The data elements in a data carrier are identified using application identifiers (17 = expiry) whilst human readable format may identify expiry using a prefix of Exp
- Different users of the pack will need to access the data through different means
  - e.g. A patient will need to read the expiry date in human readable format whilst a wholesaler may scan the GS1 DataMatrix to access/ capture the expiry date
- There are existing regulations which constrain how content appears on the product packaging