Discussion Paper : EAN Numbering in the Export Apple Industry.

Phillip Herries, TASC Systems Ltd.

Aim:
1) To briefly introduce the EAN standard.
2) To alert exporters and packhouses to some of the issues involved.

Introduction:
EAN (European Article Numbering) is an international global body that defines standards for identifying products. The standards are widely used and provide the basis for track and trace systems.

In the export apple industry, the identification of pallets and cartons relies on EAN standards. Although the use of these standards was introduced by ENZA, a lot of those now involved the industry are also adopting the standards as …
- The formats are used within packhouse / coolstore / port computer systems.
- It is easy to get an EAN number.
- Track and trace may soon be a requirement in some markets.

A brief guide:
An EAN Number is something like 9419199 where the '94' represents the country and '19199' references the company or supplier of the product (in this case ENZA). To get an EAN number you join EAN NZ and pay a fee.
These codes that reference the company can vary in length from 7 to 9 digits depending on what you request from EAN NZ. 80% of their members request a nine-digit number as opposed to the 5 digit one used by ENZA above.
This is where confusion can set in.

The EAN number is used as a prefix to the pallet card to form a standard SSCC (Serial Shipping Container Code). E.g. 3 9419199 002395 012 7. This is what we refer to as the full pallet card number. The last digit (7) is a calculated error check digit. In the example this leaves 9 digits to be used as the unique serial number (002395012). If the longer 9 digit EAN number was used by the exporter this still leaves 7 digits or up to 10 million pallets (490 million cartons) that can be issued.

So far so good, the length (7 or 9 digits) of the EAN number doesn't seem to matter.

However the other place the EAN number is used is on the Carton. In EAN language this is known as a trade unit. The number used here is referred to as a GTIN or Global Trade Item Number. It is made up of the EAN number plus a product number, also known within the pipfruit industry as a material number.

e.g 1 9419199 50435 2

The total length of this code is 14 digits.
- The first '1' is an EAN packaging indicator.
- The 9419199 is the suppliers registered EAN number.
- The 50435 is the material number.
- The '2' is a calculated error check digit.

So you can see that if an exporter has a nine digit EAN code, the allowable material number range falls from 1 to 99999 to a range of 1 to 999. This will usually not be workable in an industry that has such a wide product range.

Other issues:
The standards in place or proposed around the world refer to the EAN number on the product as belonging to the supplier of the product (or in certain circumstances the consumer, e.g. a product is supplied specifically for TESCO). In my understanding the supplier is the exporter. Yet in some cases we currently have individual packhouses using their own EAN numbers. While this should be acceptable it could lead to

tracking problems within some computer systems where the serial number portion of the product is repeated amongst different packhouses for the one exporter. E.g. Packhouse A and packhouse B both supply pallet number 79 to a coolstore or exporter.

Another possible problem of a packhouse using their own EAN number, would be if they then used material numbers supplied by an exporter. If the packhouse had an 8 or 9 digit EAN number but the exporter supplied 5 digit material codes, the combined code would not fit within the EAN standard.

Also if a packhouse uses their EAN number with an exporters material number, we could get the situation where the same number refers to 2 different products, making track and trace impossible.
e.g. For a packhouse with an EAN number of 9434567

Mat. No. 20345 → Exporter 1 - Royal gala, Count 150	Exporter 2 – Braeburn, Count 100
EAN GTIN No. → 9434567 20345	9434567 20345 (the same)

Conclusion:

EAN NZ has stated that if a member indicates at joining time that the number is for use in the export pipfruit industry then they will be issued with 7 digit EAN numbers.
However, we currently have EAN numbers being used of 7,8 and 9 digits.
In the current climate it is best if the industry standardises on the 7 digit number.
To avoid some of the other issues I would also encourage exporters to consider supplying the packhouses with pallet cards as Enza does, or where the packhouse prints them in-house, for the exporter to supply the number ranges (SSCC's) to be used.

I hope this article helps if you are currently ordering pallet cards or designing material numbers.

This issue highlights the need for exporters and others within the industry to register and support an association like PIITSA (Produce Industry Information Technology Standards Association) to at least ensure information like this can be collated and distributed to those who need it.

Further reading…..

http://www.ean.co.nz/
http://www.ean-int.org/data/ipfinal.pdf
http://www.ean-int.org/agro-food/Opmaak%20tekst%20Fresh%20Produce%20.pdf
http://www.tasc.co.nz/pdf/descprod.pdf

For questions or comments please contact me directly:

Phillip Herries
TASC Systems Ltd
P.O.Box 13046
Hastings

Ph. 06 8786990, Fax. 06 878990, Mobile 025 455473.
Email: pherries@tasc.co.nz, Website:www.tasc.co.nz

or use the discussion group that has been set up to discuss industry standards at the website…
http://groups.yahoo.com/group/pitsa
Note: Once you enter this website, if you are not already a member click on '**Join this Group**'. You may then be prompted to register and sign in. An email message will then be sent to you acknowledging your membership of the PITSA group. After this you can return to the site and browse or post messages and files.