

# SCAN

IDENTIFICATION • AUTOMATION • INFORMATION • COMMUNICATION • INTEGRATION

Issue No. 3 • April 2002

RRP \$8.95

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## Supply Chain Management **Take control of your inventory systems**

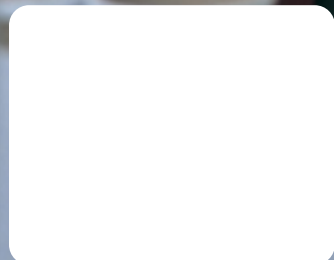
Increase efficiencies in your inventory systems  
and reduce costs with EAN's help.

### **Verification**

EAN NZ ready to support mandatory verification.

### **EAN Consulting**

Zespri's trial of EAN 128.





Margaret Fitzgerald  
CHIEF EXECUTIVE

## FROM THE Chief Executive's DESK

It is very encouraging to see the growth in membership that EAN is experiencing. Year to date, we have experienced a 31% increase in new members over the same period last year.

Judging by EAN memberships, new businesses are starting up across a wide spectrum of industries, such as organics, seafood, apparel, importing and traditional fast-moving consumer goods. I truly hope that this is a sign that the New Zealand economy has a rosier outlook.

As this issue of SCAN attests, a number of EAN New Zealand projects are gaining momentum.

The major players in the New Zealand grocery industry have joined their Australian counterparts in making bar code verification mandatory on new products (see page 8 of this issue). For members who export to Australia, this will mean little or no change – but it is, nonetheless, an important step in raising awareness of the significance of the humble bar code and ensuring that the full benefits of the EAN system can be realised throughout the whole supply chain in New Zealand.

In a related development, the two largest retailers – Progressive and Foodstuffs – have

begun the process of becoming EAN accredited (page 3). Together with the mandatory verification decision, these firms are taking a strong leadership position.

The need for global standards in numbering systems was highlighted recently with the International Federation for Produce Coding approaching EAN organisations worldwide to work with it to standardise price look-up (PLU) codes. The PLU system is not yet integrated with the EAN system – but creating international standards is explicitly designed to make such integration possible in the future. EAN New Zealand has accepted this role on behalf of the New Zealand produce industry.

This month's feature article ties all of these developments together by showing how your company can gain the full benefits of the EAN system. EAN Consultancy (page 6) can help you improve your internal efficiency and external relationships by taking full advantage of all that the EAN system has to offer.

We at EAN New Zealand hope that 2002 has got off to a great start for you and your firm. Please give me a ring on (04) 801 0833 if there's anything my team or I can do for you.

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### FEATURE ARTICLES:

**Turning your inventory system into a profit-generating tool** on page 4 – Glenn Powell of EAN New Zealand talks about taking control of your inventory to increase efficiencies and reduce costs.

**EAN Consulting takes the fuzz out of tracing kiwifruit** on page 6 – This article looks at why Zespri went with a trial of EAN-128 bar codes.

### REGULAR COLUMNS

**E-Commerce** on page 10 – a progress update on EANnet.

**Bar Code Basics** on page 11 – we answer the question "how do I get the bar code onto my product?".

**Health Sector** on page 12 – the use of global EAN identification and messaging systems to uniquely identify patients, diagnoses and treatments.

**Whoops – When Bar Codes Go Bad** on page 14 – we look at a really bad example of a bar code and why it wouldn't scan.

EAN New Zealand is part of a global network of numbering organisations operating in 128 countries that services over one million member companies in the retail and manufacturing sectors using the EAN-UCC system. EAN numbers represented as bar codes enable capture and communication of vital supply chain management information.

**EAN ADDRESSES:** Head Office Wellington, Level 2, Mainzeal House, 181 Vivian Street, Wellington, New Zealand. Phone 64 (4) 801 0833, fax 64 (4) 801 0830  
Auckland Branch 1/6 Rennie Drive, Mangere, Auckland, NZ. Phone 64 (9) 257 0392, fax 64 (9) 257 0179  
Postal Address: P O Box 11-110, Wellington, NZ  
Website: [www.ean.co.nz](http://www.ean.co.nz) • Email: [ean.nz@ean.co.nz](mailto:ean.nz@ean.co.nz)

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## Retailers move on accreditation

Progressive Enterprises has formally decided to become fully accredited by EAN New Zealand.

By becoming accredited, the identification system and bar codes for Progressive's corporate brand "Signature Range" will be certified by EAN New Zealand, with the assurance of being totally correct and reliable.

Progressive will also be licensed to produce its own product verification reports without reference to EAN.

"We see accreditation as a logical next step in our quality-control processes," says Mark Brosnan, Progressive's General Manager Merchandise.

"Quality bar codes are now an essential business tool. By becoming accredited we'll put in place objective standards for bar codes, test every aspect of our bar code usage, and make improvements where necessary."

The move follows a supermarket survey by EAN New Zealand (see SCAN, December 2001), which showed Progressive how it could improve bar code performance.

"Increasing the scan rates at retail point of sale is a key focus," Mark says. "It is very important to us that our products scan first time."

"We will shortly be implementing quality controls and disciplines that give us the ability to capture data about products that cause us problems when scanned. We'll then ensure that the right people are notified, and that the problems are rectified in a timely manner," he says.

"In the future, we will also be implementing bar code scanning on cartons at our distribution centres in order to take full advantage of the EAN system. This will drive our inventory systems and the picking and packing for distribution to our stores."

Mark acknowledges that it will require dedication and drive to ensure that bar code quality becomes a part of Progressive's day-to-day quality assurance.

"We see acquiring EAN accreditation as making an investment in our company,"

Mark says. "It's very logical to seek accreditation now, because as we expand our use of bar codes we'll know that we're implementing the EAN system in the best way possible."

"In the longer run, we would like to see all of our suppliers accredited, too. That way, the whole industry can work together to ensure consistency and efficiency along the whole supply chain," Mark says.

**STOP PRESS:** Foodstuffs (Auckland) has also decided to seek EAN accreditation.

"Our seeking accreditation will set a benchmark for our external suppliers to follow suit," says Bart Wright, Manager Private Label Products for Foodstuffs (Auckland).

"We would especially like to see the major suppliers of our 'private brands' products becoming accredited, to assist us in achieving our goal of producing bar codes that scan every time," Bart says.

"We also want to ensure that the bar codes that we produce on site consistently meet the quality standard in order to achieve excellent scanning results at our stores."

### FOR MORE INFORMATION...

...on accreditation, ring Owen Dance on (04) 801 2894 or contact him by email at [owen.dance@ean.co.nz](mailto:owen.dance@ean.co.nz) or check Frequently Asked Questions on the EAN website [www.ean.co.nz/services/accreditation\\_f.html](http://www.ean.co.nz/services/accreditation_f.html)



## EAN accreditation welcomed by the market

Forty companies (47 sites) have already embraced the EAN accreditation programme ACERT. Three of those companies, Adhesive Print, PSM and Visy Board New Zealand, have already become fully accredited.



Meanwhile, 28 sites have been fully trained on the EAN·UCC system and the accreditation process. Those include AEP Filmpack (Auckland), AEP Flexipack (Christchurch), Carter Holt Harvey Case, Clorox NZ Ltd, Cryovac Sealed Air Services, Foodstuffs (Auckland) Ltd, Frucor Beverages Ltd, Hally Press Ltd, Label & Litho, Montana Wines, Old Fashioned Foods, Photo Polymers Ltd and Progressive Enterprises Ltd. Another 16 have already booked their accreditation training, including Carter Holt Harvey Packaging, Danaflex Packaging and Dominion Breweries.

### First packaging supplier achieves EAN accreditation

Visy Board New Zealand Ltd has completed the requirements of the ACERT programme to become New Zealand's first accredited packaging supplier and second accredited manufacturer.

Visy Board, which manufactures corrugated board and produces corrugated fibreboard cartons, commenced the accreditation programme at the end of January and was accredited only five weeks later in early March.

John Savery, National Sales Manager for Visy Board New Zealand says, "This

accreditation gives both ourselves and our customers the security of supplying and receiving products which comply with EAN's requirements. This naturally reflects on both of us. Visy Board demonstrates its competence as a supplier and our customers can be confident of the packaging they are supplying to their clients."

A subsidiary company, Visy Specialities New Zealand Ltd, will shortly complete the training and begin preparing for accreditation.

# Turning your inventory system into a profit-generating tool

Why do we invest in inventory? Why do we budget to write inventory off? Do we spend too much time and effort trying to control inventory? Why do so many companies get it wrong so often?

And is it possible to reduce inventory and improve service levels simultaneously?

EAN New Zealand's Glenn Powell answers these and other questions from the front lines of supply chain management in New Zealand.

Inventory is just like any other investment in business: it should serve the purpose of maximising profit.

Yet many businesses turn their inventory from a profit-generating tool into a major cash flow constraint.

Most firms do well when they purchase new plant and equipment. They expect to earn a rate of return on everything they buy.

So why is it so hard to do the same with inventory, where the goal is simply to have the correct quantities of the right products in the right place at the right time?

Why do so many firms make it standard practice to buy more inventory than they need to meet demand?

Usually, it's because we rely heavily on information that is not provided in "real time". In that environment, it is necessary to make assumptions, and natural to err on the side of safety when setting inventory control values.

The critical information includes routine business factors like:

- purchase orders that are outstanding
- works orders that are still in progress
- sales orders that are not picked
- dispatches that are not yet processed
- work in progress and overruns from production

- credits and stock returns that are not yet processed
- marketing promotions
- forecasts that are out of date.

If you gave a 100 highly talented managers the same information and applied these variables, they would make a 100 different purchasing decisions – and many of them would fail to meet reasonable performance benchmarks.

The EAN system – the unique numbering system, the instant data capture through the bar code, and EANCOM messaging connection trading partners – can help resolve these issues.

## The good news: you can reduce inventory and improve service levels simultaneously by using the EAN·UCC system.

Instead, organisations too often attempt to reduce inventory by using non-analytical approaches based on poor information. Typically this reduces service levels and upsets their customers.

This can lead management to ensure that there is plenty of stock just in case – leaving inventory levels higher than before.

But here is the good news: you can reduce inventory and improve service levels simultaneously, using proven inventory management methodologies based on the universal and open EAN·UCC standards.

The case study below is a real-life example of how one large New Zealand firm is resolving its inventory management issues.

Its experience is typical, and its solutions can be adapted for any type of business – manufacturing, distribution, or service.

### Six questions about your inventory practices

- 1 Do you increase purchase order quantities to qualify for better prices?
- 2 Do you increase purchase order quantities because you are afraid you might run out of stock if you don't?
- 3 Do your customers experience out of stock or short deliveries?
- 4 Do you have parcels of inventory that are ageing gracefully in the corner of the warehouse?
- 5 Do you constantly have stock variances?
- 6 Do you use a system other than the EAN·UCC system to capture your inventory data?

If you answered "yes" to two or more of these questions, your organisation may save time and money by improving inventory management.

## CASE STUDY: When an inventory system is less than the sum of its parts

PQR Manufacturing<sup>1</sup> invited EAN New Zealand to analyse its inventory management practices and make some recommendations about what it saw as a "major problem" with inventory variances.

This organisation was doing a lot right. It was using a relatively good Enterprise Resource Planning (ERP) system, including basic inventory management functionality as well as full-blown Manufacturing Resource Planning (MRP). The manufacturing side of the business seemed to be under control, with satisfactory controls under a shop orders system and waste being accounted for. It was also already using the EAN

bar codes in its products.

But the results were horrific. Inventory was consistently incorrect. On average nearly \$90,000 per month was being written off in production variances, product recalls, stock discrepancies and additional freight costs.

Staff felt they could not trust the computer system. Full stock-takes were being done every month at a huge cost, customers were consistently receiving short orders, and freight costs were increasing due to back orders and incorrect shipments.

EAN New Zealand Consulting Services performed a detailed "gap analysis" and

documented everything that appeared to be outside best-practice principles or that simply seemed a little unusual from an outsider's perspective.

It became obvious that shortfalls in simple business processes – each small on its own – were compounding into a big problem:

- Sales orders and purchase receipts were recorded manually on paper. Data integrity and timeliness issues arose when these were entered into the electronic system up to two days later.
- The manufacturing Bills of Materials (the firm's "recipes") were not maintained regularly, and proved to be

1 PQR Manufacturing is the pseudonym of a major New Zealand manufacturer. EAN New Zealand thanks the management of this firm for allowing its story to be told to SCAN readers, with only a few details changed to protect the company's identity.

inaccurate. They were calling for incorrect quantities and in some instances calling for wrong products.

- The “back-flushing” method used to decrement manufacturing raw materials led to the wrong products or quantities being removed from stock.
- Actual factory activity was not measured against standards, so there was no internal knowledge about the quality of performance.
- An “open store” policy for manufacturing to access raw materials and finished goods led to stock being withdrawn without being recorded or being recorded incorrectly.
- The information produced by the computer system didn’t have the confidence of staff.
- Work in progress was not cleared on a job-by-job basis, resulting in production variances that could neither be traced nor be used to improve the Bills of Materials standards.

From there, the “garbage in, garbage out” rule took over. When the MRP exception reports were printed off, the suggested actions looked unusual to say the least!

Experienced staff could identify and correct some of the anomalies – while reinforcing their scepticism about computers. Other errors would slip through the cracks, leading to mistaken orders of supplies and to rising inventories.

We may chortle and laugh – but how many of us can say for sure that things are much different in our own back yards?

Based on EAN’s initial analysis, a project team was established and charged with three objectives:

- 1 Reduce the monthly inventory write-off value by 55%.
- 2 Reduce on-site warehoused inventory to the budgeted level.

- 3 Raise and maintain the “in-full, on-time” delivery percentage to at least 94% within six months.

It was obvious to the project team that, below the surface, the majority of problems stemmed from poor data integrity, including an inability to reflect actual activities within a realistic time.

The analysis also uncovered that some business functions were no longer being performed due to staff movements and to undocumented procedures.

After reviewing all the options, the project team agreed that extending PQR’s use of the EAN-UCC system was the obvious solution.

How could bar codes help to run a large and unique manufacturing company? Because the EAN standards addressed the project objectives, while also satisfying other business-critical issues that were outside the original scope of the project: they allowed for real-time automatic data capture within an open and global system used by most of PQR’s trading partners.

PQR decided to extend its use of the EAN standards beyond the retail, trade and logistics applications it was already applying, because of the following additional features and benefits:

- inventory control capability.
- cost reduction.
- data integrity.
- elimination or reduction of data entry time.
- the introduction of real-time data capture.
- ability to meet market requirements for EAN 128 product labelling (see SCAN, December 2001).
- trading partners using the same global standards.
- enabling full traceability.
- enabling e-commerce.

## PROJECTED RESULTS

The projected savings in this table were calculated by the project team and are considered to be conservative.

The estimated full cost to implement the proposed solution is no more than \$300,000. Thus the project is expected to achieve a return on investment of 150% in the first year.

Activity	Annual Cost	% Reduction	Projected \$ Saved
Product Write Off	\$550,000.00	50	\$275,000.00
Product Returns	\$200,000.00	15	\$30,000.00
Production Variance	\$300,000.00	20	\$60,000.00
Data Entry @12 persons	\$450,000.00	10	\$45,000.00
Manual Stock Transactions @ 5 mins / tran	\$200,000.00	20	\$40,000.00
Data Integrity	?	?	?
Customer Dissatisfaction	?	?	?
<b>Total in First Year</b>	<b>\$1,700,000.00</b>	<b>26%</b>	<b>\$450,000.00</b>

The author, Glenn Powell, brings world-best practices to you as EAN’s senior Supply Chain Management consultant.

Glenn has 20 years’ experience in manufacturing and distribution.

He has spent most of the last decade implementing ERP business software in a range of small, medium and large manufacturing and distribution organisations around the world.



- already using EAN bar codes on all its retail products.
- The EAN bar codes met the requirements of its trade partners overseas.

The following are the recommended changes that are being adopted at PQR Manufacturing.

- Scan all purchase orders directly into the ERP system via a hand-held scanner.
- Turn stores into a closed, controlled environment.
- Re-engineer the issuing of materials.
- Constantly review and update manufacturing Bills of Materials.
- Use scanning technology to update work-in-progress records in real time.
- Scan finished goods to update production-count data in real time.
- Sales staff to key their orders directly into the sales-order processing system.
- With the above changes in place, reduce the coverage of the MRP system to a small “control” group in order to prove the validity of the outputs, before scaling it back up to cover all items.

Although the most significant gains will come from automated data capture, PQR Manufacturing is also undertaking some business process re-engineering. In that way, the company can be sure it is getting the most out of its automation, not just making inadequate systems faster.

### FOR MORE INFORMATION...

If you want to extend the use of the EAN system in your organisation, or if you are experiencing inventory anomalies, please contact EAN Consulting: Glenn Powell at glenn.powell@ean.co.nz or on 021 711 070.



# EAN Consulting takes the fuzz out of tracing kiwifruit

Meeting consumer demand for product traceability is a key driver behind ZESPRI's trial of EAN 128 bar codes this year.

With the help of EAN Consulting, the trial will lead to an industry standard for the bar coding of kiwifruit packs that can be implemented in 2003.

The trial runs for most of the 2002 kiwifruit season, beginning with the first vessel to Europe in April.

"Once a modest number of pallets in one pack type have been sent successfully to a single European customer, the trial will be extended to other customers globally and to a range of pack types," says Una Catley, manager of ZESPRI International Ltd's "track and trace" project.

"We're encouraging representatives across the kiwifruit industry to attend workshops and view the trial in operation throughout the season," Una says.

The EAN trial team will be reporting to the Board of ZESPRI International in October 2002 with the outcomes of the trial, and with recommendations on whether and how to extend EAN 128 bar codes to the whole New Zealand industry in the 2003 season.

The project's vision is to:

- meet global track-and-trace requirements through a universally readable bar code
- refine ZESPRI's track-and-trace system to a world-class standard at individual pack level
- add value to inventory management for ZESPRI, suppliers and offshore.

ZESPRI has had robust procedures for many years. But its customers, particularly in Europe, are looking for track-and-trace procedures at pack level for fresh produce – just as they already have for other products.

"European customers are looking to their retailers – ZESPRI's customers – for an assurance of safe food," Una says.

"To meet those expectations, a universally readable bar code is required. EAN 128 provides that standard, and is already in use by many of ZESPRI's customers on all types of products," she says.

ZESPRI staff in New Zealand and overseas have been working with EAN New Zealand, EAN International and software and hardware suppliers to accommodate EAN 128 requirements.

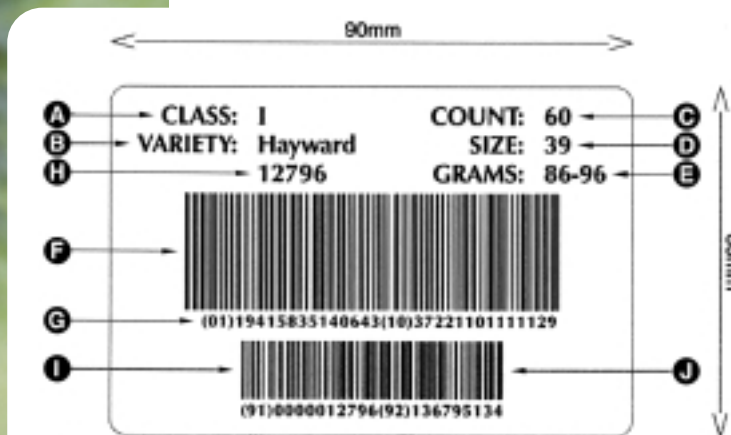
With the help of Glenn Powell from EAN New Zealand, the project team developed a plan that:

- sets clear objectives for the trial
- minimises impacts on ZESPRI's systems both in New Zealand and overseas
- maximises the opportunities for the industry to participate and contribute
- maximises information ZESPRI can gather from the trial by involving as many key players as possible
- keeps it simple.

To attend a ZESPRI workshop or to observe its bar coding trial, contact Una Catley of ZESPRI International at (07) 575 1312 or on email [una.catley@zespri.com](mailto:una.catley@zespri.com)

## FOR MORE INFORMATION...

For more information on using the EAN system in product traceability and other supply-chain applications contact Glenn Powell of EAN New Zealand at 021 711 070 or on [glenn.powell@ean.co.nz](mailto:glenn.powell@ean.co.nz)



## ZESPRI's trial EAN-128 label

LETTER	INFORMATION	TEXT SIZE	TEXT TYPE	OPTIONS
A	Class and class code	12pt	Optima	For class the Roman numerals I and II must be used
B	Variety and variety code	12pt	Optima	Full variety name must be used
C	Count and the actual number of fruit in this pack	12pt	Optima	
D	Size and the size code for the fruit in this pack	12pt	Optima	
E	Grams and the weight range of fruit in this pack in grams	12pt	Optima	
F	Bar code AI (01) and AI (10) pack identifier	20mm		
G	Bar code human readable	8pt	Optima	
H	Grower code – for internal use only for 2002 season	8pt	Optima	
I	Bar code AI (91) internal use for grower code (with human readable)	10mm	Optima	
J	Bar code AI (92) internal use for packhouse use only (with human readable)	10mm	Optima	Note: This bar code can be excluded, the AI(91) code left aligned and the remaining space used for packhouse only information

## FAQ: Are retailers using EAN 128 yet?

Unfortunately, we're not able to give readers a full summary of the retailers' plans, because some (but not all) consider their plans to be confidential.

EAN 128 usage is expanding steadily. EAN 128 labels are already being scanned on both shippers and pallets at more than one major grocery distribution centre (DC)

in New Zealand – not to mention many DCs in Australia – and we expect the use of EAN 128 to expand significantly over the next few months.

The Australasian Grocery Industry Guidelines contain the details of what should be done to meet retailers' requirements on both sides of the Tasman. The guidelines can be downloaded from [www.ean.co.nz/hot\\_f.html](http://www.ean.co.nz/hot_f.html).

## DIARY NOTE

EAN will run a seminar on 'Improving Efficiencies on the Supply Chain with EAN 128' (**sponsored by Walker Datavision**), on **6, 7 and 8 May** in Auckland, Wellington and Christchurch respectively. To enrol or receive more information contact Andrea Flemming on 04 801 0833 or email [andrea.flemming@ean.co.nz](mailto:andrea.flemming@ean.co.nz)

## RFID

### Major progress on international standards for radio tags

Six major vendors are uniting with EAN and UCC to push for an international technical standard for radio frequency identification (RFID) products.

As reported in previous editions of SCAN, RFID radio tags, which contain microchips, create ways of using the EAN system more effectively.

Data can be read from tags much faster than from bar codes – without relying on line-of-sight, and with less human intervention. And unlike a bar code, data stored in RFID tags can be re-written using the same equipment that reads the tags.

"The lack of open RFID standards has been a barrier to the implementation of the technology on a global scale," says Margaret Fitzgerald, Chief Executive of EAN New Zealand.

EAN International and its North American counterpart, UCC, have been working to overcome this problem with their joint Global Tag (GTAG™) project. EAN New Zealand provides the project's secretariat.

EAN, UCC and six RFID product manufacturers (BiStar, Intermec, Philips Semiconductors, Rafsec, TagSys and Texas Instruments) have agreed to merge their previously separate proposals on how the tags should communicate with tag-reading devices.

The combined submission has been made to the Sub-Committee of the International Standards Organisation (ISO), which deals with the

standardisation of data capture systems.

"The alignment with these vendors is a critical step in gaining essential support for GTAG," says Chris Hook, recently appointed GTAG Project Director.

He compares the breakthrough with the development of wireless LAN standards, "where we have seen sustained improvement in performance, higher data rates, and now systems operating on different frequencies, all within a standardised environment.

"Within this standardised environment, there is ample opportunity for major players to promote and sustain competitive differentiation. This is an instructive model for the RFID industry to study," he says.

"EAN International and UCC will continue to work diligently on aspects of data significance and applications utility, in order to meet GTAG's stated objectives of creating a standardised solution for supply chain management, which can be implemented to achieve asset visibility globally, and thereby achieve radical improvements in supply chain efficiency."

The GTAG project team had previously created a Minimum Protocol and Performance Requirements (MP&PR) document, which includes criteria that have been distilled from a wide range of end-user requirements. Further critical aspects of the MP&PR are to ensure that

data stored in GTAGs is standardised according to the EAN-UCC system, and that RFID products that are claimed to be "GTAG-compliant" are truly interoperable.

"By encapsulating all this research within the international standards forums, GTAG will deliver RFID standards that fit users' requirements, are compliant with relevant ISO standards, and take account of existing data standards in the industries we serve," Margaret Fitzgerald comments.

"Aligning RFID standards around the world will enable RFID manufacturers to improve their products and expand their uses, while maintaining global interoperability," she says.

## DIARY NOTE

Chris Hook, Project Director for the international GTAG project, will be in New Zealand for a meeting of the GTAG project team in late April and early May.

You are invited to attend his **seminars on radio frequency identification and GTAG** in Auckland on **Monday 29 April 2002** and in Wellington on **Thursday 2 May 2002**.

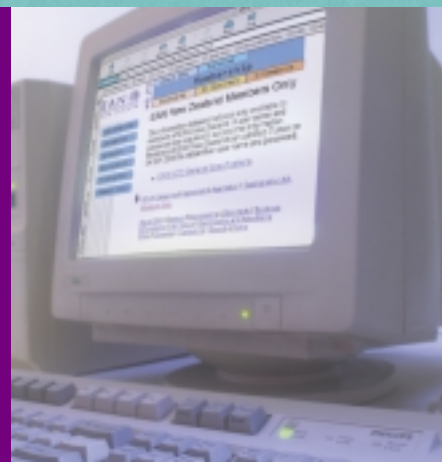
For more information or to book, contact Raman Chhima of EAN New Zealand on (04) 801 0833 or by email [raman.chhima@ean.co.nz](mailto:raman.chhima@ean.co.nz)



## Guidelines online

The EAN-UCC system's general specifications are now available through the EAN New Zealand website (in the members-only section at [www.ean.co.nz](http://www.ean.co.nz)).

In order to access EAN-UCC general specifications you will need to obtain a password from Robert Turner on (04) 801 2896.



# Changing labels for ANZFA?

## Get your bar codes right

Changes in the regulations for food labels are having a large impact in New Zealand and Australia, including advancing the need for bar code verification for many products.

The Australia New Zealand Food Authority (ANZFA) has introduced new labelling requirements that take effect from December 2002. The changes include, for example:

- nutrition information about how much fat, protein, kilojoules, carbohydrate and salt is in the food
- percentage of the key ingredients or their characterising components e.g. how much fruit is in the jam
- list all of the main foods that may cause allergies, plus warnings or advisory statements for products that may cause other severe reactions.

The ANZFA-led changes coincide with the recent announcement from the New Zealand grocery sector that all new products require an EAN verification report before they will be accepted by retailers. This means that a significant number of products will have their labels both changed and verified this year.

The new requirements will take up additional space on the label, but EAN New Zealand advises members not to be tempted to reduce the dimensions of the bar codes.

Bar codes still require printing of good quality within the range of 80-200% magnification without reducing the bar height. These are the dimensions at which a bar codes will scan as they should: first time, every time.

EAN-8 numbers will only be allocated where the item itself (not just the label) is too small to contain an EAN-13.

More information on the labelling requirements can be obtained from ANZFA ([www.anzfa.govt.nz](http://www.anzfa.govt.nz)).



## EAN New Zealand ready for mandatory verification

EAN New Zealand is re-equipping its bar code verification test room with Quick Check PC600 verifiers by Hand Held Products Inc, distributed in New Zealand by DataCol Solutions and Transtech, both of Auckland.

Under agreements reached with the makers of the equipment and with DataCol Solutions, EAN has purchased one verifier and a range of scanners, and will receive another verifier on permanent loan from DataCol and another donated by the American manufacturer.

This will enable two verifiers to operate in the test room at the Wellington office and another to be available for use by staff in the field.

"We are very grateful for the sponsorship and support we have received from Hand Held Products and its agents," says Chief Executive Margaret Fitzgerald. "As a not-for-profit organisation we depend on the support of companies with an interest in our activities in order to better serve our members."

Hand Held Products' Vice President in charge of verification products, Chuck Biss, is due to address an audience of EAN members during a visit to New Zealand in early April.



## EAN supports industry announcement on mandatory verification

EAN New Zealand is assisting major retailers to ensure that mandatory verification of bar codes is introduced smoothly.

Bar code verification enables objective testing of bar codes and provides diagnostic data so that any faults can be rectified. This can save companies considerable money, as it helps to prevent relabelling, repackaging and product returns.

"The industry's decision shows what an important business tool bar codes have become. Better bar codes bring significant benefits to everyone in the supply chain," Margaret Fitzgerald, Chief Executive of EAN New Zealand says.

"The transition will be eased by the fact that mandatory verification applies only to new products, promotional products and new packaging, including redesigns to meet the new ANZFA requirements. Nonetheless, we encourage manufacturers to verify all of their bar codes to ensure reliability."

The turn around time is normally less than 48 hours for satisfactory verification reports. Faulty or problematic bar codes can take longer, but EAN New Zealand staff make direct contact to provide advice.

In addition, manufacturers can take total control over the quality of their bar codes by becoming accredited under the EANacert programme.

For more information on the mandatory verification announcement by major retailers go to the EAN New Zealand website [www.ean.co.nz/services/accreditation\\_f.html](http://www.ean.co.nz/services/accreditation_f.html)



## Reading EAN verification reports

Well done: you've taken our advice and got an EAN verification report. You now hold in your hand high-quality, independent information about the bar code we tested.

If you are the manufacturer, the report tells you how to address any problems found. If you are the intending purchaser, a satisfactory report assures you that the product's bar code will scan first time, every time.

But how do you read and interpret the report?

First, make sure the document you are reading is an official EAN verification report and not some other sort of verification report (see test on the right).

- 1 The first box gives the applicant's information.
- 2 The second box contains report details: the number and date of the test, and the name of the EAN staff member who conducted it. If the report originates from an accredited company rather than from EAN itself, an 18-digit EAN accreditation number will be shown in the "tested by" space.
- 3 The "testing summary" panel contains the results of the verification test. Two ticks and "100%" mean that the sample has passed in all respects. In the sample test, the two crosses and the 50% scan rate show that this bar code failed on specifications and location, and scanned successfully only half the time.
- 4 This panel shows specifically which elements of the bar code need to be improved. Especially important are the comments, which give specific guidance on what needs to be done to make sure the bar code complies.

Usually, the supplier only presents the purchaser a report that shows a complete pass – the "two ticks and 100% scan" scenario. But there are situations (for example, an importer who has no ability to change the bar code on the imported product) where the verification report may show a 100% scan rate but non-compliance in other areas.

The Grocery Industry Council is considering this issue at its April meeting. In the meantime, trading partners will need to negotiate a solution in such situations.

EAN verification reports can only be issued by EAN or by an EAN-accredited company for its own products. EAN members get 10 verification reports per year free included in their membership. Subsequent reports cost \$15 plus GST (\$25 for non-members), and are accepted in New Zealand and Australia.

**EAN NEW ZEALAND**

**BARCODE VERIFICATION REPORT**

1. Applicant Information: Name, Address, City, Country, Tel, Fax, Email, Website.

2. Report Details: Report Number, Date, Tested By, Tested For.

3. TESTING SUMMARY: A table with columns for 'TESTED', 'COMMENTS', and 'SCAN RATE'. It shows results for 'PERMANENT', 'REGISTRATION', 'MAGNIFICATION', 'HEIGHT', 'LIGHT MARGINS', 'REPRESENTATION', 'CHECK DIGIT', and 'LOCATION OF BAR CODES'.

TEST RESULTS: 1. The bar code was tested on 10 samples. 2. The bar code was tested on 10 samples. 3. The bar code was tested on 10 samples.

TESTING SUMMARY:

TESTED	COMMENTS	SCAN RATE
PERMANENT	NO	50%
REGISTRATION	NO	50%
MAGNIFICATION	NO	50%
HEIGHT	NO	50%
LIGHT MARGINS	NO	50%
REPRESENTATION	NO	50%
CHECK DIGIT	NO	50%
LOCATION OF BAR CODES	NO	50%

BARCODE VERIFICATION REPORT: 1. The bar code was tested on 10 samples. 2. The bar code was tested on 10 samples. 3. The bar code was tested on 10 samples.

TESTING SUMMARY:

TESTED	COMMENTS	SCAN RATE
PERMANENT	NO	50%
REGISTRATION	NO	50%
MAGNIFICATION	NO	50%
HEIGHT	NO	50%
LIGHT MARGINS	NO	50%
REPRESENTATION	NO	50%
CHECK DIGIT	NO	50%
LOCATION OF BAR CODES	NO	50%

BARCODE VERIFICATION REPORT: 1. The bar code was tested on 10 samples. 2. The bar code was tested on 10 samples. 3. The bar code was tested on 10 samples.

**EAN NEW ZEALAND**

**BARCODE VERIFICATION REPORT**

Report Number: 12345

TESTING SUMMARY:

TESTED	COMMENTS	SCAN RATE
PERMANENT	NO	50%
REGISTRATION	NO	50%
MAGNIFICATION	NO	50%
HEIGHT	NO	50%
LIGHT MARGINS	NO	50%
REPRESENTATION	NO	50%
CHECK DIGIT	NO	50%
LOCATION OF BAR CODES	NO	50%

COMMENTS:

1. The bar code was tested on 10 samples. 2. The bar code was tested on 10 samples. 3. The bar code was tested on 10 samples.

TESTING SUMMARY:

TESTED	COMMENTS	SCAN RATE
PERMANENT	NO	50%
REGISTRATION	NO	50%
MAGNIFICATION	NO	50%
HEIGHT	NO	50%
LIGHT MARGINS	NO	50%
REPRESENTATION	NO	50%
CHECK DIGIT	NO	50%
LOCATION OF BAR CODES	NO	50%

COMMENTS:

1. The bar code was tested on 10 samples. 2. The bar code was tested on 10 samples. 3. The bar code was tested on 10 samples.

## Why get an official EAN verification report?

Official EAN verification reports provide several advantages over the simple print-outs produced by verifiers (the machines that test bar codes).

An official EAN verification test is conducted with a verifier that complies with ISO/IEC Standard 15426-1, and that tests bar code samples by the "scan reflectance profiling" method that is defined in ISO/IEC standard 15416.

The official EAN verification test assesses specifications that cannot be tested by the verifier alone. For example the verifier cannot:

- know whether the bar code chosen is the correct type for the intended application
- tell whether the bar code is the correct size, measure the bar height, or assess whether the bar code is in the correct location on the unit
- report on the size, placement or legibility of the human-readable numbers below the symbol – or even whether they are there at all.

An EAN verification report gives you assurance on all of those points, with an independence on which your trading partners can rely.

## Artwork verification can prevent errors

Part of the verification process assesses the quality of the print, and these qualities cannot be tested until the bar code is finally printed.

EAN New Zealand now offers a provisional "artwork verification report" to provide interim assurance before packaging is finalised. This provisional report assesses the magnification, height, light margins, check digit, representation and maybe location of bar codes.

Having information about a product's bar codes prior to the final printing provides the opportunity to reduce the occurrences of errors in the final print and save manufacturers, packaging suppliers, printers and designers money and headaches. Artwork verification reports are charged at the same rate as the standard verification reports and can be used as part of members' quota of 10 free verification reports per year. This is, however, a very small investment against the costs of having to fully redesign packages and labels, the costs of new plates, or having to reprint the whole lot, or even worse, having those products returned by retailers.

Products still must be sent for final bar code verification by EAN. For final verification report, the packaging should be provided in its assembled form so that EAN can assess the symbol's location. Labels submitted for verification should be attached to the product or formed packaging, and we also request that an additional copy of the label be sent as this can often help the testing.

## EANnet: Progress update

The rollout of EANnet, the multi-industry, electronic data synchronisation catalogue for the Australian grocery industry is now well underway, with a number of companies completing implementation and commitments from many more.

EANnet supports more than 180 static data and 60 pricing and promotional fields. This enables trading partners to synchronise data on processes such as new product introduction, product amendments, customer-specific pricing, trading terms and promotional activities throughout the supply chain.

"EANnet is seen as a fundamental tool for accurate business-to-business electronic commerce transactions," says Neale Austen of EAN Australia. "This in turn forms the foundation for more efficient and automated supply chain management."

The "early adopters" are already realising many of the expected benefits of EANnet. For example, Unilever and Colgate Palmolive have now fully integrated their back-end systems to EANnet, and the flow through to the

Coles/Bi-Lo supermarkets is now complete. These companies expect to turn off the flow of paper Universal Buying Forms in the very near future.

Other progress:

- A significant number of companies have commenced their integration projects and/or the population of EANnet.
- Over 170 companies have now registered to use EANnet, including approximately 65% of the "top 60" vendors.
- All the major Australian retailers are committed to the use of EANnet, with over 12 retailers currently registered. Metcash is on track to "go live" with full integration with EANnet in late April.
- More than 200 suppliers of the Coles/Bi-Lo group attended EANnet

seminars in Melbourne and Sydney.

- A Retail Liquor and Convenience pilot group is now underway, including representation from major liquor retailers, convenience stores, manufacturers and distributors.

EANnet provides trading partners a significant opportunity to rectify the processes (and even the culture) that result in inaccurate, out-of-date and incorrectly maintained master data, and the inefficiencies and lost sales opportunities that result from a lack of data integrity.

### FOR MORE INFORMATION...

...on EANnet contact Glenn Powell or Rob Turner by email on [glenn.powell@ean.co.nz](mailto:glenn.powell@ean.co.nz) or [robert.turner@ean.co.nz](mailto:robert.turner@ean.co.nz).

## EAN New Zealand administers PLU system

Moves are well advanced to standardise the price look-up (PLU) codes for fresh produce internationally, with EAN New Zealand co-ordinating this country's contribution to the project.

The new PLU codes will be ready for New Zealand firms to adopt in June 2002.

In partnership with produce organisations and EAN organisations, the International Federation for Produce Coding (IFPC) is developing comprehensive solutions on product identification in the produce industry.

EAN New Zealand Chief Executive Margaret Fitzgerald accepted a request at a meeting in December 2001 for EAN New Zealand to administer the PLU numbering system in this country.

"A number of New Zealand industry associations covering producers, exporters, importers, packers and retailers supported the IFPC initiative at the December meeting," Margaret says. "EAN New Zealand is working with industry groups to ensure that the interests of this country are well represented."

The first common PLU list was developed in 1990 in the United States, and was soon adopted by New Zealand, Australia and much of Europe. But the system did not meet needs universally, so many countries adapted it by allocating other four-digit numbers. As a result, the

same item is frequently allocated different numbers in different countries – and, equally, a single number can represent different items in different countries.

Under the international PLU codes, the same four-digit sequence will apply to each item – to distinguish Braeburns from Granny Smiths, for example – all over the world. Three levels of numbers will be allocated:

- International – for global items.
- Regional – for items traded within the same region.
- Retailer-assigned – for any produce item that does not have a PLU code.

The four regions are: North America; Europe, Middle East and Africa; Central and South America; and Asia-Pacific.

Currently, Australia and New Zealand are the only members of the Asia-Pacific region.

"The input of New Zealand industry associations and firms enables us to represent the requirements of New Zealand businesses," Margaret says.

"We've been involved in identifying the produce items in New Zealand that will not have an international number under the new system, and discussions are underway with Australia to allocate regional numbers to some of these," she says.

In New Zealand, PLUs fall in the 3000 and 4000 series. It has been decided internationally that the 3000 series will be reallocated, and progress has been made in assigning new numbers for the affected products in New Zealand.

The system is voluntary – an individual supermarket can have its operators keying in its own four-digit code if it prefers – but all the parties consulted so far recognise the benefits of a global system.

"In the longer run, the international PLU codes may be fully integrated with the EAN system," Margaret says.

The EAN-13 bar code is too large to fit onto, say, a piece of fruit, but reduced space symbology (RSS) bar codes are addressing this issue. The RSS-14 stacked bar code is likely to be the most suitable for individual pieces of produce, and this is expected to be adopted on many items as retailers upgrade their scanning technology.

"If fresh produce can eventually be fully integrated into the EAN system, then all of its benefits – traceability, inventory management, automatic re-ordering, sales history, forecasting, and wastage management – can be extended to this class of products," Margaret says.

"In the shorter term, other benefits will be realised. For example, it will be possible to trade a larger number of items between a larger number of countries, without the need for anyone in the supply chain to re-label the item with a new number," she says.

### FOR MORE INFORMATION...

...on the PLU system project, contact Robert Turner of EAN New Zealand on (04) 801 2896 or by email [robert.turner@ean.co.nz](mailto:robert.turner@ean.co.nz)





## Getting bar codes onto products

A question that is often received by Raman Chhima from EAN New Zealand's customer services, is "How do I get the bar code onto my product?"

Raman has prepared the following general guide to help new members work their way through the different stages of getting the bar code onto the product and into the market.

- 1 Obtain a manufacturer's prefix from EAN New Zealand. You will need to be an EAN member (see [www.ean.co.nz](http://www.ean.co.nz)).
- 2 Assign a number to the product. All your EAN-13 numbers begin with your manufacturer's prefix. You then assign a three, four or five digit item number.
- 3 Calculate the check digit. The 13th (last) digit can be calculated using the check-digit calculator on our website or as explained in our manuals.
- 4 Communicate the product details and the entire number to all trading partners.
- 5 Design the package. The packaging must contain enough space for the full-size EAN-13 bar code in the correct location. In its final form, the packaging must not interfere with the bar code in any manner.
- 6 Choose the colour. Black bars on white background provide the best contrast and should be used. If other colours are suggested, check with our colour guide or use a dark bar with a light background. Do not use red in the bars, as they cannot be read by the red light in the scanner.
- 7 Determine the printing technique. Factors that affect the choice of printing technique for the EAN-13 include package design, size, material, number of colours used, number of packages or labels required, print budget, how many types of print jobs you require, need for additional graphics, and operational efficiency of each method.
- 8 Make the film master. This is a high-quality, accurate photographic representation of the bar code that is used to make the printing plates. The printer must assess the capabilities and limitations of various printing techniques.
- 9 Review and check the press proofs. Check for the accuracy of number, location and symbol dimension. If in doubt, contact EAN NZ for "Artwork verification" ([verify@ean.co.nz](mailto:verify@ean.co.nz)).
- 10 Ensure print quality. EAN General Specifications include recommended print-quality grades for bar codes in different scanning environments. These should be made available to the printer to ensure the bar codes will scan correctly where they are intended to be used.
- 11 Verify. Send the finished product to EAN New Zealand's Wellington office for an official verification report.

Bar codes are meant to scan first time, every time. By printing bar codes to the correct EAN-UCC specifications and ensuring print quality is maintained, your bar codes will meet this standard.

## WANTED: 288 volunteers

**New Zealanders are invited to help improve the quality and speed of future developments of the EAN-UCC system.**

EAN International is looking for 288 volunteers from around the world to join one of six Business Requirement Groups (BRGs) within its Global Standards Management Process.

Each of the six groups incorporates four regional "cells", each containing 12 members from each region.

"EAN International wants to make sure that advancements in the EAN-UCC system can be applied as quickly as possible everywhere in the world" says Margaret Fitzgerald, EAN New Zealand, Chief Executive.

"These BRGs are a chance for our members to have real influence internationally and to bring the latest EAN enhancements to this country," she says.

The BRGs cover the following development processes – planning, ordering, delivery, pay and asset.

BRG members should have an in-depth knowledge of the relevant business process, and a working knowledge of the relevant technology (AIDS, EANCOM, XML and so forth). It is estimated that membership would require about 10% of the volunteer's time – i.e. about four hours per week.

EAN New Zealand members interested in BRG membership should contact Margaret Fitzgerald on (04) 801 0833 or by email [margaret.fitzgerald@ean.co.nz](mailto:margaret.fitzgerald@ean.co.nz)



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## EAN systems key to better health

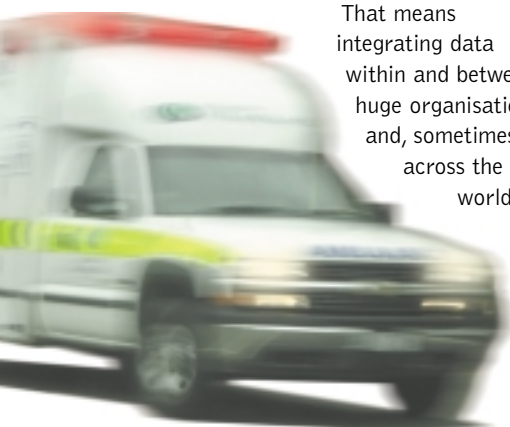
Health organisations around the world are realising the benefits of the EAN·UCC system for managing all aspects of their operations – including patients themselves.

It's hard to think of an industry that's more of a logistical nightmare than health care. Health care is no standard, predictable factory procedure: every patient is different, and the care and the process of delivering it are unique to each individual.

Further, the data doesn't reside in one place; data from the patient's hospital ward, last week's lab test, the family doctor and the outpatient clinic across town should all be available when critical decisions are made.

Much of this information is impossible to bring together with paper-based systems. In the electronic age, clinical staff want – and patients increasingly demand – information in real time from all available sources.

That means integrating data within and between huge organisations and, sometimes, across the world.



That is where the EAN·UCC system is increasingly coming to the fore. Around the world, health care organisations are using the global EAN identification and messaging systems to identify uniquely patients and all of the resources used to diagnose and treat them.

Here are some examples:

- The emergency department of the University Hospital in Utrecht, Netherlands, is a 300-bed facility considered to be one of the most modern and best-equipped in Europe. Each patient wears a bar coded wrist band that uniquely identifies the patient according to international EAN standards. All of the treatment and order forms are uniquely bar-coded to match that patient. The patient's movements are tracked using EAN Global Location Numbers for every unit, ward and bed within the hospital.
- The four hospitals at the Ciutat Universitaria in Barcelona, Spain, use the EAN system to integrate their logistical, supply and administration processes. Scanners and logistics software efficiently route supplies from warehouse to ward, and EANCOM-based messages speed ordering and other administration tasks.

- The pharmacy at St James's University Hospital in Leeds, UK, uses the EAN system to supply 15 hospitals. Because the EAN standards are universal, there is no confusion about drugs with different trade names or national codes, and the right quantity of the right drug is delivered to the right patient with a minimum level of stocks.

There is room to do more, however. As Supply Chain Systems magazine recently noted, "Experts concur that a significant penetration of supply chain automation into health care has not yet occurred, and few providers are fully automated.

"But the goal – integrating facility-wide supply chain systems that will reduce fixed overheads, creating more efficiencies in hospital business offices, freeing up time for professional caregivers, and cutting overall costs – is now clearly in sight."

Although there are proprietary standards in the health sector, they tend to be of limited application. The EAN·UCC system can be used throughout the health sector, enabling integration across all functions – patient records, pharmacy, laboratories, bed management, food and so on – all in one system.

### International seminars

#### Efficient Consumer Response (ECR) – Singapore – 22 to 25 October 2002

The conference will focus on sharing the best-practice experience in supply chain integration and ECR around the region, and will allow you to interact with companies that are implementing best practice.

FOR MORE INFORMATION...

...contact Andrea Fleming at EAN New Zealand on (04) 801 0833.

#### Automatic identification – Scan-China – Beijing – 11 to 14 November 2002

This is the only international exhibition of its kind in China that is sponsored and organised by the country's sole association of automatic identification, the Automatic Identification Manufacture Association of China (AIM China).

This ninth annual Scan-China is expected to be the largest trade fair in its history. For more information see the conference website [www.grandexh.com](http://www.grandexh.com)

### SEMINARS timetable

SPONSORED BY

#### APRIL

5 Verification Accreditation – Auckland

RBS Ltd

16, 17 and 18  
Auckland Sold Out

Intermec

29 GTAG (Auckland)

#### MAY

Intermec

2 GTAG (Wellington)

Walker  
Datavision

6, 7 and 8 Improving Efficiencies on the Supply Chain with EAN 128 (Auckland, Wellington and Christchurch)

#### JULY

24, 25 and 26 Automatic Product Identification – An Introduction to the EAN·UCC system Compliance Requirements for Designing and Printing Packaging and Labels (Christchurch, Wellington and Auckland)

#### AUGUST

14, 15 and 16 Improving Efficiencies on the Supply Chain with EAN 128 (Christchurch, Wellington and Auckland)

#### NOVEMBER

20, 21 and 22 Automatic Product Identification – An Introduction to the EAN·UCC system Compliance Requirements for Designing and Printing Packaging and Labels (Christchurch, Wellington and Auckland)

27, 28 and 29 Improving Efficiencies on the Supply Chain with EAN 128 (Auckland, Wellington and Christchurch)

Seminar dates may change or seminars may be cancelled.

#### FOR SPONSORSHIP INFORMATION...

If you would like to sponsor an EAN seminar contact Luciane Bryant on 04 478 6074. For further details about EAN seminars visit [www.ean.co.nz](http://www.ean.co.nz)



## Bar coding solutions from RBS

For six years, RBS Ltd (Robinson Bar Coding Solutions) has specialised in customising bar coding solutions for each customer. Nigel Robinson founded the company in 1996, after working many years in the industry. Nigel identified a niche market opportunity in areas that were not being properly served, before deciding that it was time that someone went for the not-so-large customers, providing a more personalised service to those small to medium size organisations. RBS is now also servicing larger companies, but still providing the same level of personalised services and support to those smaller companies that helped it get started.

RBS can provide solutions to a "one-person operation" new to the industry, requiring a tailor-made package, and to large companies with multiple locations throughout New Zealand that have systems already in place.

RBS supplies label and bar code printers (Datamax, Tharo, Apollo, Zebra, Argox, Tec, Eltron, PSC, Option and Datalogic), bar code and label software (Easylab, Labelview, and Ticket) and consumables (thermal transfer ribbon, tags and labels). RBS also offers parts, print heads and servicing for most label printers.

Servicing and technical support are a large part of RBS's dedication to providing a complete solution to its customers' requirements.

"RBS is expanding its servicing operation to keep customers' businesses running with minimal interruption", Nigel said. "We have now set up a joint venture with Thermotech to provide a wider range of services in the areas of repairs and maintenance in many thermal printers available in the marketplace.

"RBS is committed to providing quality products at competitive prices, backed by technical support and servicing."

## Meet Your Suppliers of Argox printers



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## Welcome to our newest members, who joined EAN New Zealand between 1 November 2001 and 17 March 2002.

Maxim Filing Systems Ltd	PC On Hand Ltd
New Zealand Sock International	Bennett Mirror Technologies Ltd
Waimea Logistics	Bites of Delights
Kelston Orchards Partnership	Big Ideas Ltd
Chef's HFC Ltd	Detpak (NZ) Ltd
David Pattison Trust	Grandee 1998 Ltd
Vision Fruit Limited	Scally Enterprises Ltd
Pick Mee Fruit Company	Sun Snacks
Green Planet Organics Ltd	Media Publications
ExicomTechnologies (1996)	Plastic Bag Company Ltd
United Fruit Packers H B Ltd	Freilich and Sons Ltd
Fronds New Zealand Ltd	In Full Bloom
Carter Holt Harvey - Case	Paradise Valley Springs Ltd
Waka Prints Ltd	Eager Bever Toys
Longview Packing Ltd	Datacol Solutions Ltd
Pacific World New Zealand	Wagganash Ltd
Dermacare Ltd	Tapman Ltd
Sonny Elegant Knitwear	Origin New Zealand Ltd
Pumpkin Patch Original Ltd	Millennium Foods Group NZ Ltd
Mayon Importing Company	Comfy Pets NZ Ltd
Organic Option	Hydroponic Fresh
Specialised Sales and	Rattle Records Ltd
Jacobsen Manufacturing	Surti Indian Samosa
One Stop Pak	Matipou Orchards Ltd
Carlson Ltd	Bradfield Marketing Ltd
John Brooks Ltd	ODI New Zealand Ltd
DQ Company Ltd	Fossil Ridge
Cider House Orchard	Sid's Sauce
Vermeer's Free Range Poultry	Zizania Paper Products Ltd
Pacer Car Clean Products NZ	Warren John Ltd
Eskdale Winegrowers	Brandon Design Ltd
Sherborne International Ltd	Happy Food Trading
Sober Check New Zealand	Tea Total Ltd
Purple Chilli	Phytomed Medical
D & A McKee Partnership	Anatoliam Bread Ltd
Blis Technologies Ltd	Big Fish Promotions
Kathryn Vinten	Jimik International Ltd
CJ's Pacific Snax	Unimin New Zealand Ltd
Taste Of Handi Ltd	Marlborough Valley Cellars
Salmond Orchard Partnership	Rascasse Ltd
Gowanlea Apiaries	Subarb Productions
SAFE International Fruit	Just Flowers Ltd
Fevah Productions NZ Ltd	Earthwise Direct Ltd
Helvetia Horticulture	Alsyntax New Zealand
Boss NZ Ltd	Titan Growers
Alfriston Garden	NZ Natural Classic Ltd
Transport House Ltd	Hatton Estate Gimblett Road
Stewart Island Community	Ace Marketing Services
Golden Orient Foods Ltd	Jerry Boss
Bluepark Seafoods (NZ) Ltd	180 Degrees Ltd
Real Earth Ltd	Frogz Have More Fun
Rangiora Pet Foods	Essential Health NZ
Waiheke Island Coffee	Myob New Zealand Ltd
Keri Salads	Pacific Rim Food Corporation
Margrain Vineyard Ltd	Global Mint Ltd
Certified Organics Ltd	Kingsbeer Distributors
Spectrum Pharmaceuticals	Flexoprint & Packaging Ltd
Pohutu Lodge	Olive Imports Ltd
Firewire Productions (NZ) Ltd	Velcorp Ltd
42 Below	Hot Shot Foods Ltd
Delica (NZ)	Cellular Improvements Ltd
Ingo Holdings Limited	NZ Colostrum Gold
Bluestone Productions Limited	Blumenfelds Olive Oil
Creative Catering	Harry Machiela
Kopi Cuisine Catering Ltd	Formula Products Ltd
Shield Corporation Ltd	East Base Records Ltd
Idas Disposables Ltd	Kiwi Stuff Ltd
Central Firewood 2000	The Office Products Depot
Vitapower Ltd	

## When bar codes go bad, sometimes they go really bad.

The worst bar code received this month, printed on a product imported in bulk and put into plastic bags for sale in New Zealand, was a shocker!

The identity of the New Zealand manufacturer has been withheld so as not to embarrass, but here are the facts as a public service:

- The bars were printed in red. As scanners emit a red light, the colour of the bars does not provide a significant contrast in the amount of light reflected by the bar code.
- This bar code was printed too small. All EAN-13 bar codes should be in the magnification range of 80-200% (that is with an x-dimension between 0.264mm and 0.660mm). Higher magnifications are recommended on plastic or glossy surfaces, as it is difficult to maintain high print quality.
- The bar code was printed so badly that in places the bars disappeared.
- The bar code's height was truncated. The bar height must be in proportion to the x-dimension to ensure that a scanner sending a pattern of light reads fully across the bar code.
- The light margins were insufficient at both ends of the bar code. The scanner needs to know where the beginning and end of the symbol are.
- This should have been an EAN-13 or a UPC-A bar code, yet this member generated a number that was only 12 digits in length.
- When the bag was filled, the bar code started to disappear around the side of the bag, rather than being in its preferred position in the lower right quartile on the back of the bag.
- The background colour was not solid enough. The contents of the bag could be seen through the background, reflecting light back unevenly to the scanner.

Unsurprisingly this bar code did not scan! Luckily for everyone involved, this problem bar code was identified at the verification stage where it could be fixed before it hit the supermarkets.

## Can we truncate bar codes?

"Truncation" means printing a symbol shorter than the symbology specification's minimum height. The EAN-UCC symbol (EAN-13) is designed to scan in an omni-directional manner. This depends on the bar code width and height. Reducing the height in relation to the width can make the symbol difficult for an operator to scan.

No truncation is specified in the EAN specifications. The manufacturer and designer are expected to design the label to accommodate the full size bar code on the packaging.

Truncation is only acceptable when absolutely necessary. By "necessary" we mean forced by package shape or size, or by legal requirements, when there are no alternatives for packaging or label size.

Remember, the goal is that bar codes should scan first time, every time. Truncated bar codes do not normally meet that standard. If there is space for a larger label, truncation is not permissible. A designer's preference for a smaller label is not considered a necessity.

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Email: barcode.btl@xtra.co.nz Website: www.labelshop.co.nz



## Verification tops up food parcels

The packaged goods you send to EAN in Wellington for verification aren't wasted.

The goods can, of course, be returned to you - but if you don't want them back, EAN New Zealand makes sure they're put to the best possible use.

Suitable products go to the Wellington City Mission for distribution in food parcels or for meals at the Mission's drop-in centres and to other appropriate charities.

"Your assistance is truly welcome," says City Missioner Des Britten. "The demand for foodbank supplies and our drop-in centre meals is growing by the month. It is always a struggle to get sufficient food and often we have to purchase food from the local shops to ensure no one goes away hungry. Long may your support continue."

The move to mandatory verification will be a boon for the City Mission, notes EAN Chief Executive Margaret Fitzgerald. "The volume of goods being verified is rising considerably, and that will mean more goods for charities."

For the record, the City Mission offers a number of other services caring for our youth, the elderly and families at risk:

- Residential and hospital care, home visiting, advocacy and organised social gatherings for the elderly.
- Sale of nutritious "Ezee Meals".
- Budget and money management advice.
- A youth centre, which is a fully fledged high school for kids who cannot cope with mainstream schools.
- A families at risk programme with counselling support for families who have suffered through domestic violence amongst other things.
- Mission 4work programme, offering the long-term unemployed opportunity to gain skills and employment.

*Des Britten receiving products from EAN staff.*

## letters TO THE EDITOR

### Mainland Products Ltd.

EAN CONSULTANCY

February 2002



Mainland Products Limited enlisted the help of EAN New Zealand's consultancy service to help with a project to review and re-define the company's barcode labelling facilities.

Glenn Powell from EAN Consulting helped us thoroughly review all manufacturing sites to establish detailed information about our future system requirements.

Site specification and project management documents were produced to reflect the needs of our production sites and to identify the desired project protocol to be adopted.

Glenn helped us prepare templates for potential suppliers, who responded in a way that allowed for "apples-with-apples" comparison and negotiation. This was important to Mainland, because previously it had proved impossible to compare proposals from competing vendors.

With Glenn's help we achieved all of this work in less than three months - no mean task.

Glenn's expertise, along with other information and services provided by EAN New Zealand, was invaluable to Mainland. We especially appreciated that they maintained a totally non-partisan approach to the systems offered by other suppliers.

Glenn encouraged Mainland personnel to look "outside the square" in terms of how day-to-day procedures may be carried out. We're now looking forward to implementing new and better work practices.

One of our objectives was to ensure that Mainland meets the requirements of the Australasian Grocery Industry Guidelines. We are confident we will do that - while also improving our internal services and work practices, and the way we interact with all of our trading partners.

Madeline Mason  
Business Analyst  
Mainland Products Ltd



## KEY EAN NEW ZEALAND INDICATORS

1 NOVEMBER 2001 TO 17 MARCH 2002

INDICATOR	STATISTICS
Number of new members processed	137
Hits on EAN website	188,968
Verification reports issued	735
Number of public seminars run	Bar Code Basics - Introduction to EAN-UCC System: 3 Printing and Designing Bar Codes: 3
Total number of attendees for "Bar Code Basics - Introduction to EAN-UCC System" and "Printing and Designing Bar Codes" seminars	Auckland 79 Wellington 26 Christchurch 34
Overall level of satisfaction with the above seminars	95% "satisfied" to "very satisfied"



# Which company provides the most comprehensive selection of Mobile Data Solutions in the World?

## PORTABLE COMPUTERS (BATCH)

These units set the standard for portable data collection. They are light and easy to use, but also very rugged - so they can withstand rough handling and harsh environments. Once you have scanned the information you need, it can easily be downloaded to your PC or Local Area Network (LAN).

### Key Features:

- Highly versatile - the standard laser scanners read all popular bar codes from distances of 7.58cm.
- Added flexibility - our optional laser scanners read miniature bar codes to 2mm, and scan from distances of up to 4.5m with reflective labels.
- Easy to programme - using Microsoft Visual Basic (7400 only), C++; Borland C industry standard languages.
- Rugged and reliable - the units are water and shock resistant, and can survive repeated 1.5m drops onto concrete.
- One year warranty.



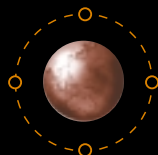
## PORTABLE WIRELESS

### TERMINALS & PERIPHERALS

Our range of Dolphin® RF (radio frequency) devices, accessories, peripherals and software enable you to create a wireless local area network (LAN) or integrate real-time data collection into your existing LAN. Alternatively you can use Dolphins in conjunction with wireless wide area networks (WAN).

### Key Features:

- Choice of industry standards - I.E.E.E.802.11b or WLIF Open Air®.
- Choice of scanners - which can read linear, 2D symbols and OCR; and image capture (including signatures and photographs).
- Easy to programme - using Microsoft Visual Basic (7400 only), C++; Borland C industry standard languages.
- Rugged and easy to use.
- Minimum one year warranty.
- Use in conjunction with wireless WAN, including GSM, GPRS, Mobitex and Tetra.



**universalsoftware**  
l i m i t e d

1009 Frederick Street Hastings New Zealand

T +64 6 876 5563 F +64 6 870 6327 E [info@universalsoftware.co.nz](mailto:info@universalsoftware.co.nz)

[www.universalsoftware.co.nz](http://www.universalsoftware.co.nz)