

THE EAN STANDARD NUMBERING AND BARCODING SYSTEM

Who uses it and how they benefit



WHO IS EAN AUSTRALIA?

EAN Australia administers in this country the standard, international EAN system of numbering and barcoding. It allocates EAN numbers, provides quality assurance services and supports members in introducing numbering, barcoding and scanning.

A non-profit industry body, it was originally set up in 1979 by manufacturers and retailers. Its members now include a wide range of other industry and administrative sectors.

EAN Australia has offices in Melbourne and Sydney providing support and education services to users throughout Australia.

NOTE: EAN Australia was originally called the Australian Product Number Association (APNA). Its name was changed to communicate the fact that it is part of the EAN International System.

WHAT IS EAN NUMBERING AND BARCODING?

EAN numbers and bar codes – seen today on most products sold in retail stores – belong to a standard worldwide system which identifies

- products,
- shipments of goods,
- services,
- companies and organisations, and
- locations

by giving each one a unique number.

They can also carry a wide range of additional information, such as batch numbers, use-by dates and serial numbers.

The bar code represents the EAN number in a form which can be read by a scanner and thus instantly entered into a computer. This means the whole supply chain can be automated – from raw materials through manufacture and distribution to the retail customer.

In effect, EAN numbers provide a common language in which manufacturers, exporters, importers, wholesalers and retailers can communicate about the goods and services they trade.

WHERE IS THE EAN SYSTEM USED?

EAN numbers and bar codes were first developed for the retail industry and are still most commonly seen on grocery products in supermarkets.

But the system can be used in virtually any sector of industry, at every level of manufacturing and distribution. In Australia major adopters include the health, steel, timber and paper manufacturing and telecommunications industries. It is even used by fire brigades and the electricity generation industry.



Some half a million organisations in more than 80 countries use the system. The EAN system is administered by EAN International, based in Brussels. In the United States and Canada the governing body is the UCC (Uniform Code Council), which together with EAN International ensures that the integrity and compatibility of the system is maintained worldwide.



HOW ARE NUMBERS ALLOCATED?

How you allocate numbers depends on whether you have been assigned a nine-digit or seven-digit company prefix (see table below).

EAN Australia introduced the nine-digit prefix in May 1996 to reduce the range of product numbers allocated to each company, conserving the total pool of numbers available for allocation. Most companies need only a few hundred numbers at most. If you require more than 1000 EAN numbers, please make a request to EAN Australia.

Nine-digit prefix	Seven-digit prefix
 <ul style="list-style-type: none">• EAN Australia allocates the first nine digits (the EAN company prefix) to you as a member company.• You then allocate the next three digits (the item number). It is recommended that you number sequentially starting from 000 through to 999.• The last digit is a mathematically calculated check digit that ensures the whole number is correct.	 <ul style="list-style-type: none">• EAN Australia allocates the first seven digits (the EAN company prefix) to you as a member company.• You then allocate the next five digits (the item number). It is recommended that you number sequentially starting from 00000 through to 99999.• The last digit is a mathematically calculated check digit that ensures the whole number is correct.

Instructions on how to calculate the check digit are available in EAN Australia's Technical Information Manuals, on computer disc, or from EAN Australia's Web site: www.ean.com.au

Eight-digit numbers

In particular circumstances, such as when products are in very small packages, an eight-digit number may be issued. Members should apply direct to EAN Australia for the issue of eight-digit numbers.

WHAT ARE THE BENEFITS?

The EAN system offers benefits to everyone involved in the trading cycle, through reduced costs and time and increased accuracy and efficiency. Examples of those benefits are ►



SUPPLY CHAIN MANAGEMENT GIVES MAXIMUM BENEFITS

To the manufacturer

- ▶ Automated counting and sorting on the production line.
- ▶ Ability to track products through manufacturing and to delivery.
- ▶ Ability to obtain real sales data from the retailer and use it to plan production schedules which reflect actual consumer demand.
- ▶ Ability to include information, such as batch numbers, use-by dates and serial numbers, in one bar code which can be read by all trading partners.

To the wholesaler

- ▶ Ability to order, receive, pick and despatch goods faster and much more accurately.
- ▶ Improved inventory control and stocktaking.
- ▶ Significantly reduced inventory holdings.
- ▶ Support for best-practice applications such as cross-docking and radio-frequency warehousing.

To the retailer

- ▶ An accurate, efficient source of sales data.
- ▶ Reduced inventory holdings and administration costs.
- ▶ Fewer products out of stock.
- ▶ Faster, more efficient service at the point-of-sale.
- ▶ Itemised receipts for customers.
- ▶ More efficient shelf space and store management.

EAN numbering and barcoding are core enabling technologies for organisations to gain the maximum efficiency benefits, available only from managing the entire supply chain.

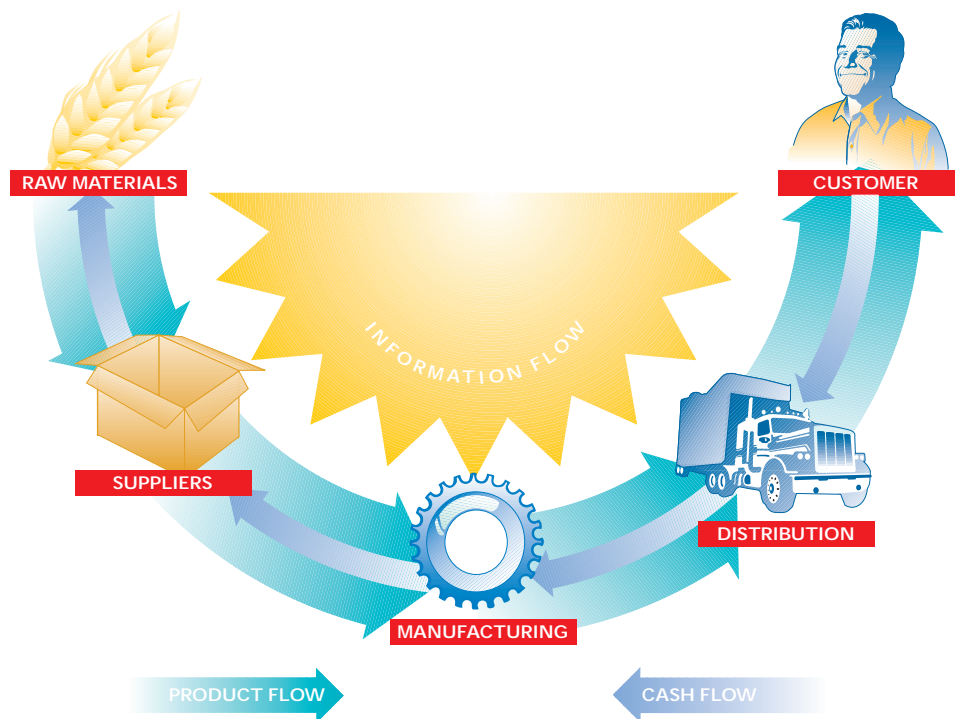
Used in conjunction with other computer and communications-based technologies, such as EDI (electronic data interchange, or computer-to-computer trading) and radio frequency facilities, they speed the flow of goods throughout the supply chain.

Users gain from supply chain management in many ways.

Manufacturers, transport companies, warehouse operators and retailers are all able to:

- Identify goods and individual shipments quickly and accurately.
- Increase the speed with which goods are delivered.
- Reduce handling and shipping errors.
- Manage inventory more easily and more accurately.
- Reduce inventory holdings at all levels.
- Reduce overall order and replenishment cycle times.

SUPPLY CHAIN MANAGEMENT



THE EAN AUSTRALIA SERVICES PACKAGE

EAN Australia offers members a package of services, free of charge, to help them implement and manage numbering and barcoding. Services fall into three main areas:

Quality Assurance

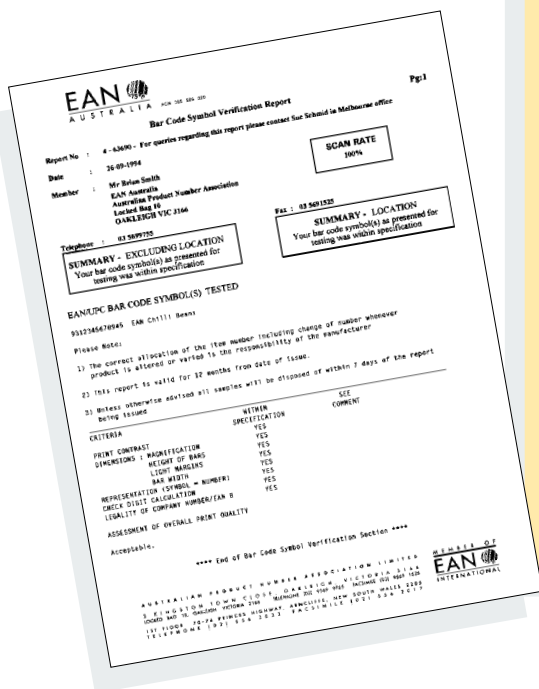
- **The Bar Code Testing Service.** This service tests the scannability and adherence to specification of all EAN/ UCC bar codes.
- **The Number Catalogue.** This catalogue is a register of products including both retail and non-retail items, giving their EAN numbers, descriptions, pack dimensions and in many cases colour images. It also contains EAN location and electronic commerce number. It helps ensure the integrity of data used in electronic commerce.

Support Services

- **Technical and Implementation Advice.** Our technical team advises and assist in implementing EAN numbering and barcoding. Visits to members' sites can be arranged.
- **EAN Training Days.** Free training days are scheduled in all capital cities for companies that require help implementing the EAN system. Training sessions are available on EAN numbering & barcoding, EANnet & EANCOM.
- **EANnet.** A basis for electronic trading, EANnet allows manufacturers to lodge information electronically about products and non-retail items. Retailers and distributors can update their files electronically. All products in the catalogue can be browsed or searched. EANnet can be accessed via the internet.
- **Industry Liaison.** This involves support to suppliers of equipment and services used to implement the EAN system.

Education

- **EANWORKS Supply Chain Models.** At the heart of EAN Australia's educational activities are the two EANWORKS models – one located in the Melbourne suburb of Mount Waverley and the other a mobile unit launched in September 1996. These life-sized replicas of the supply chain, including factory, warehouse and retail outlet, demonstrate barcoding and numbering in action at all levels of manufacture and distribution.
- **Other education services.** EAN Australia also provides a wide range of education services including conferences and seminars, technical and case study information, newsletters, booklets, brochures, industry guidelines and manuals.





For more information on joining
EAN Australia or using our
services, call our national
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