# Vesper Software, LLC

# Look Out, Here Come 14 Digit PLUs!

## (Guess What?  NCR 2127 Systems Can Handle Them!)

## Why should my stores care about EAN-14?

There are two major problems with the current U.P.C. system that is now used in the United States and Canada. The first is that the bucket of available numbers is running dry. According to an independent study commissioned by the UCC over ten years ago, the availability of new company prefixes in the U.P.C. 12-digit numbering scheme will run out in 2005. The second problem is that the rest of the world is using a 13-digit numbering scheme, which either limits these companies from selling their products in North America, or requires that they re-label their products for this market.

The UCC and EAN organizations began working together on a solution to these issues a number of years ago. A new global standard was developed in conjunction with the Global Commerce Initiative (GCI), which represents over 800,000 businesses worldwide involved in all aspects of the food and consumer products industries. This standard is known as GTIN and includes the existing 12-digit U.P.C.s as well as new 14-digit numbers that will be available for worldwide commerce. The EAN and UCC have set a date of January 1, 2005 for retailers to be compliant with these new standards. This date is known as **Sunrise 2005**.

The reality is that the use of 14-digit numbers is inevitable and, therefore, stores must be able to process those numbers. That's why stores must begin as soon as possible to make themselves ready for these new products.

## What is this Alphabet Soup – GTIN, U.P.C., EAN-13, EAN-14, RSS-14?

**GTIN** is the acronym for **Global Trade Item Number**. This is the term that the EAN and UCC have adopted as the umbrella term for the entire family of EAN and UCC identification codes, which can identify products, cases and pallets. GTIN codes are 8, 12, 13 or 14 digits in length and include U.P.C., EAN-13 and EAN-14.

**U.P.C.** is the acronym for **Universal Product Code**. This is the term for the 12-digit number assigned to the vast majority of products produced in the United States and Canada. U.P.C. is one of the identification codes that make up the GTIN. U.P.C. numbers are NOT going away with the implementation of EAN-13 and EAN-14. Companies already marking their products with U.P.C. numbers will not have to assign those products new numbers.

**EAN-13** is the acronym of **European Article Number-13** and is the term for the 13-digit number assigned to retail products around the world, with the exception of the United States and Canada.

**EAN-14** is the term commonly used to refer to a 14-digit GTIN. This is the numbering scheme that is being implemented worldwide by the EAN and UCC.

**RSS** is the acronym for **Reduced Space Symbology**. RSS-14 refers to a small footprint bar code for products that are too small for a traditional U.P.C. bar code symbol (e.g., produce) or where

there is a need for additional data on the label (e.g., expiration date on meat).  RSS-14 directly encodes an EAN-14 number.  Although development of RSS technology is underway and testing is being performed, it will be a number of years before these symbols appear at the grocery checkout.

## How can Vesper Software make my NCR 2127 systems compliant?

There are three levels of compliancy within the Sunrise 2005 initiative.  They are:

**Sunrise 2005** – this is the lowest level of compliancy and requires that:

- systems are able to scan and process 12-digit U.P.C., EAN-8 and EAN-13 symbols at point-of-sale

- product identification numbers scanned from U.P.C., EAN-8, and EAN-13 symbols are processed and stored in their entirety.  Changing or parsing the GTIN number is not longer performed

- accept from suppliers and do not erroneously assign in internal applications U.P.C. numbers using lead digits of 1, 8, and 9

**GTIN Compliant** – this is the second level of compliancy.  The UCC is recommending that all North American retailers be able to scan, process and store in their systems (including POS systems) a 14-digit GTIN by January 1, 2005.  This requires that:

- the company be Sunrise 2005 compliant

- the company have the ability to process and store 14-digit GTINs. This means that the company will be able to process, store, and communicate with others using all GTINs, whether 8, 12, 13, or 14 digits. The UCC recommends that GTINs are stored as 14-digit numbers by right justifying and zero-filling left, as appropriate.

- GTIN Compliance does not assume the ability to scan RSS symbols.

**RSS Compliant** – this is the third level of compliancy.  Per Vesper's conversations with the UCC in August, 2003, this capability will not be required for many years yet in the grocery industry.  Initial efforts in implementing RSS are aimed at other industries.  To be compliant requires that:

- the company be GTIN compliant

- the company be able to scan RSS symbols at the point-of-sale and other scanning locations

Vesper Software agrees with the UCC's recommendation that stores move directly to being GTIN compliant, instead of just Sunrise 2005 compliant.  This will mean that the stores only need to go through one cycle of updating and testing their systems, instead of two cycles, resulting in a significant savings of both time and money.

The NCR 2127's PLU file was designed to hold PLUs of more than 14 digits.  Therefore, the register system itself is GTIN compliant in terms of database capability.  To use this capability requires two additional components – a back office package capable of sending 14-digit PLUs to the PLU file and a User Exit capable of allowing a checker to enter a 14-digit PLU on the keyboard.

A number of companies have added or are adding support for 14-digit PLUs to their back office software for the NCR 2127.  These companies include MEI and BR Data.  With these packages, stores can meet the GTIN compliancy requirement of being able to store 14-digit GTINs on the POS.

Vesper Software has created a User Exit module, which provides support for 14-digit GTINs during checkout.  This module allows a checker to enter a 14-digit PLU during a sale.  By default, the NCR 2127 does not allow more than 13 digits to be entered or scanned, despite the fact that the PLU file can hold longer numbers.

Please note that the User Exit does not allow someone to enter a 14-digit PLU in Supervisor mode (e.g., in Action Codes 63 or 68).  This is because all User Exit functionality is suspended while in Supervisor mode.  However, if the back office software is capable of sending 14-digit PLUs to the register, this should not be an issue.

Preliminary development of scanner interfaces capable of sending EAN-14 symbols to the NCR 2127 is also complete.   Vesper Software remains in regular communication with the UCC to stay current on discussions as to what new bar codes, such as EAN-14 and RSS-14, will appear at the point-of-sale and when that will occur.  As of August, 2003, no dates are available as to when scanning support for those bar codes will be required.

## Where can I find more information?

The best source of information is probably the UCC.  A discussion of Sunrise 2005 with links to check lists and summaries is available at:

www.uc-council.org/ean_ucc_system/stnds_and_tech/2005_sunrise.html

An article that describes GTIN in detail can be found at:

www.uc-council.org/ean_ucc_system/pdf/GTIN.pdf