

This is a companion document to the Case Date Coding Protocol. The protocol can be accessed on the GS1 Canada website.

English: 2011 Fall Case Date Code Protocol - [www.gs1ca.org/e/casedatecoding](http://www.gs1ca.org/e/casedatecoding)

Français: 2011 automne Codage de dates au niveau des caisses [http://www.gs1ca.org/f/codage de dates](http://www.gs1ca.org/f/codage_de_dates)

The layout is designed to provide the question, a short response and a link to a more detailed response, when necessary.

## General Questions

1. **What is the business process that the protocol addresses?** [Q1 Detailed Response](#)

The protocol addresses the improvement of stock rotation through the use of standard date information on cases.

2. **Does the industry protocol specify when trading partners may begin using the defined standard?**

Yes, the protocol defines the date standard format that can be used starting January 1, 2012. Where trading partners face challenges meeting this date, they are encouraged to contact their trading partners directly.

3. **Why is the protocol case date format different than the format used on consumer units in Canada?** [Q3 Detailed Response](#)

Shipping case identification is not covered by Health Canada regulations. GS1 global standards have been selected by industry to express key dates on shipping cases.

4. **Why was the GS1-128 standard selected for (machine-readable) case bar coding?** [Q4 Detailed Response](#)

The GS1-128 bar code is a mature standard that is capable of supporting the information needed to implement multiple supply chain best practices. Stock rotation is the business practice addressed by this protocol.

5. **Are suppliers of raw materials to manufacturers part of the date coding protocol?** [Q5 Detailed Response](#)

No.

6. **What is the state of readiness for scanning bar codes on cases within the grocery and foodservice industry?**

[Q6 Detailed Response](#)

Some major Canadian retailers have indicated that they plan to have inbound case scanning capabilities in their distribution centres in 2012.

7. **What product categories are included in the protocol?**

Products in the frozen and dairy categories.

8. **Is production date required?** [Q8 Detailed Response](#)

No.

## Technical Questions

9. **Since 'Expiration' is spelled the same in English and French, can we print these words only once (vs. 'Expiration/Expiration') to minimize confusion and redundancy on the label?**

Yes.

10. **Can part 2 of the human-readable date format be shortened from "YYYY-MM-DD" to "Y-M-D"?**

Yes.

11. **Can abbreviations be used to express part 1 of the human-readable date type in order take up less space on the label?**

Yes, abbreviations can be used when space does not permit expression of the full human-readable date type. In Canada, the following short forms can be used: EXP, BB and BB/MA

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12. The protocol states that the human-readable date format (part 2) may be shortened to Y-M-D when print space is constrained. Is there a short form for French as well?  
No. The GS1 standard is based on the English language and used globally.
13. Can industry use letters rather than numbers for the month portion of the case date?  
Conditional on whether Health Canada regulations apply.  
  
Health Canada regulations specify the date format required on consumer units. Where the case unit can also be the consumer unit, these consumer regulations apply to cases as well. For all other cases, the protocol format applies.  
  
[Details about consumer labeling produced by the Canadian Food Inspection Agency are available online: www.inspection.gc.ca/english/toce.shtml](http://www.inspection.gc.ca/english/toce.shtml)
14. Is the machine-readable date still required when the case is also the consumer unit?  
Yes.
15. Can a supplier provide the GTIN information using an ITF symbol and provide the remaining information using a GS1-128 symbol  
The GS1 standards discourage the use of multiple symbols containing partial data in multiple locations. As a best practice, all the case information should appear in a single symbol using the GS1-128.  
  
Where this is unavoidable, case date information printed on a label using the GS1-128 symbology should always be applied near the preprinted GTIN to capture both the GTIN and case date data.
16. Is there a standard for the sequence of the Application Identifier (AI) data? *Q16 Detailed Response*  
No. November 17, 2011
17. How do I prevent poor bar code quality that results from inkjet printing or print-and-apply GTIN bar codes?  
Minimum print quality requirements for the GS1-128 symbology recommend printing the GS1-128 directly to labels only – not inkjet to corrugate. The bar code quality printed on the case must meet the industry standards for scanability.
18. Where manufacturers print a (human-readable) production date on cases, do they have to express this date using the protocol format?  
No. The retailers will use the best before or expiry date.
19. Do totes and Returnable Plastic Containers (RPC) require labels as per the protocol?  
No.
20. What are the minimum print height requirements for the human readable code?  
The print height depends on the size of the case. For this reason, a minimum cannot be set.
21. Does the printed code have to be displayed on two or more sides of the master shipper?  
The GS1 General Specifications specify a minimum of one side and recommend 2 or more.
22. Can the abbreviated date format be used on all cases regardless of whether they are space constrained or not?  
This practice is not recommended.

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### **Implementation Questions**

- 23. Does the protocol apply to case product delivered direct to store?**  
No. The human readable is a requirement for all cases regardless of delivery method, i.e. Direct Store Delivery (DSD) or Warehouse. Machine readable for DSD is outside of the protocol.
- 24. If a supplier has a single item pallet of product, can they bar code the code date on the pallet/logistics unit label rather than on each case?**  
No. Each case requires individual identification.
- 25. Have retailers been surveyed on the impact of adding GS1-128 symbols to cases?**  
Yes. Retailers and distributors agree that reducing spoilage through better stock rotation decisions along the supply chain (by means of standard and automated date information) brings value to all stakeholders.
- 26. Are there additional costs to provide date information in GS1-128 format? Do retailers and distributors face new costs?** *Q26 Detailed Response*  
Yes.
- 27. If manufacturers switch to GS1-128 bar codes and include additional data elements, will retailers have the ability to parse the GS1-128 bar code data string and pull out the specific data attributes they need? [E.g. GTIN and Application Identifier (AI) coded data]**  
Yes.
- 28. Would an electronic Advance Ship Notice (ASN) sent by a manufacturer to automatically identify code dates on products and identified with a Serial Shipping Container Code (SSCC) satisfy any bar code date requirements?**  
No. This may be considered at a future date.
- 29. What products in Frozen Food are included?** November 17, 2011  
All products that are frozen when shipped to the retailer or distributor are included in this protocol.
- 30. What are some of the potential (future) supply chain applications where the GS1-128 standard will be used?** *Q30 Detailed Response*  
The ability to exchange dynamic product and shipment information will be central to the introduction of new and more efficient supply chain processes within the Consumer Packaged Goods (CPG) industry.
- 31. Are only the best before or expiry dates to appear on the case?**  
Best before or expiry date must appear on the case. Providing any additional information is at the discretion of the manufacturer.

Detailed Answers

General Questions

**1. What is the business process that the protocol addresses?**

Applying only to *frozen and dairy* case product categories, this industry protocol enables improved stock rotation through better identification of key dates on shipping cases. The protocol improves human-readable information on cases and introduces bar coding to support automatic case identification (i.e. machine-readable).

Canadian retailers, distributors and suppliers recognize this protocol as a means to reduce spoilage across all points of the supply chain.

**3. Why is the protocol case date format different than the format used on consumer units in Canada?**

The Canadian Food Inspection Agency administers the Food and Drug Regulations, which specify the expression of durable life dates on consumer items. These regulations specify an alpha-numeric format on consumer items. However, these regulations do not apply to logistics units.

The exception is where the case will also serve as the consumer unit.

An industry working group considered the options for date expression on shipping cases and recommended the use of global standards. It was considered critical that a shipping case solution for Canada be applicable in other jurisdictions. The ISO/GS1 standard was selected. This standard uses a numeric format for the expression of dates in both human and machine-readable formats.

**4. Why was the GS1-128 standard selected for (machine-readable) case bar coding?**

GS1-128 is a mature GS1 bar coding standard that is used to communicate information about products and shipments as they move through the supply chain. The standard enables any trading party to identify a product using its Global Trade Item Number (GTIN) and provide associated details, such as batch number, production date, and ship from location or country of origin. The standard also enables communication about shipping units.

A sample GS1-128 bar code containing the GTIN and related information appears below.

The GS1-128 bar code should not be confused with other GS1 bar codes that are widely used on consumer and case packaging today. Bar codes intended for scanning at a retail point-of-sale environment are designed specifically for that application and only communicate the GTIN. Similarly, the Interleaved-2-of-5 (ITF) bar code is a GS1 standard that has been widely applied within the Consumer Package Goods (CPG) industry to identify case GTINs. However, the ITF standard is limited, as it is unable to provide any additional data.

Use of GS1-128 is well established throughout Europe as well as the North American General Merchandise & Apparel industries where it is primarily used to support the movement of shipping containers. By comparison, use of GS1-128 bar coding within the North American grocery retail and foodservice sectors is at an early stage.



**5. Are suppliers of raw materials to manufacturers part of the date coding protocol?**

No, raw material/ingredient (upstream) suppliers are not currently part of the protocol. The protocol may be expanded in the future to include upstream supply chain partners.

**6. What is the state of readiness for scanning bar codes on cases within the grocery and foodservice industry?**

Some major Canadian retailers have indicated that they are on track to scan inbound cases into their distribution centers in 2012.

Other retailers have indicated that they will adopt bar code scanning at a later date and will use the protocol (including the use of the GS1-128 bar code) as the basis for those implementations. Until then, they will use the human-readable date defined in the protocol.

**8. Is production date required?**

No, production date is optional and can be used at the discretion of the manufacturer. This information is not used by the retailers. A best before or expiration date must still be provided.

**Technical Questions****16. Is there a standard for the sequence of the Application Identifier (AI) data?**

There is no standard sequence order because the information encoded will populate the fields relative to the AI. A common practice is to use the fixed length AIs before using the variable length fields.

**Implementation****26. Are there additional costs to provide date information in GS1-128 format? Do retailers and distributors face new costs?**

Yes. Both manufacturers and retailers/distributors must make the investment to adopt GS1-128 compliant labels.

For manufacturers, this requires the need to capture and express GTIN and date information on case labels. This is of particular significance when the manufacturer produces case product distributed across multiple countries.

Similarly, retailers and distributors must retool inbound and outbound distribution practices to include GS1-128 compliant scanning technology.

All supply chain parties recognize that these investments position the Canadian grocery and foodservice industries to implement new supply chain efficiencies that go beyond stock rotation. This is foundational to future supply chain visibility and efficiency.

**30. What are some of the potential (future) supply chain applications where the GS1-128 standard will be use?**

The ability to exchange dynamic product and shipment information will be central to the introduction of new and more efficient supply chain processes within the CPG industry. These process changes stand to benefit both manufacturers and distributors. Existing practices which rely exclusively on exchange of human-readable information will not be adequate.

A common standard enabling automatic data capture and identification will ensure that new supply chain processes can be scaled quickly and affordably. The GS1-128 bar code standard is well suited to serve multiple use cases and across multiple industry verticals. The following use cases serve as examples. They are broadly categorized within 3 major areas of industry focus.

**Food and Safety & Quality**

From a traceability perspective the effective supply chain requires visibility to product and production (batch) details and movement (shipping) information. For goods such as perishables and pharmaceuticals, traceability will necessitate the exchange of additional details, such as production date, best before date and potentially country of origin and country of processing.

In the U.S., the produce, meat & poultry and seafood industries have already taken action to identify the minimum product and shipping information needed to meet industry and regulatory needs. GS1-128 bar codes on all shipping cases will play a prominent role in the exchange of this information between supply chain partners.



- Label compliant with U.S. Produce Traceability Initiative
- Label communicates GTIN and batch/lot number



- Label compliant with US Meat & Poultry Traceability Initiative.

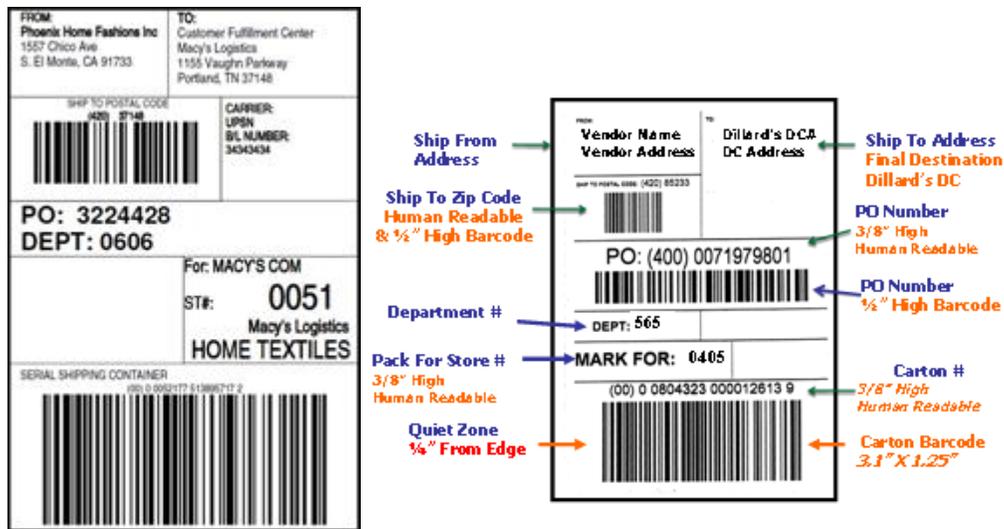
For Canada, the minimum requirements for whole-chain and multi-sector traceability are expressed in the Can-Trace standards. These standards fully align with GS1 and include the use of GS1-128 bar codes.

Efficient receiving and cross-docking

The General Merchandise & Apparel industry has pioneered the retail application of Electronic Data Interchange (EDI) Advance Ship Notification (ASN) to expedite the receiving and flow-through of product destined to other locations. Within GM & Apparel, this is a mature business practice.

Use of the ASN provides the ability for shippers and receivers to share a common understanding of goods in transit, thus enabling the early identification of problem shipments and to capture essential information about inbound product. When ASN information includes the identification and contents of distinct logistics units [using the serial shipping container code (SSCC)], it becomes possible for the manufacturer to pack goods in a manner that the receiver can recognize and immediately re-distribute (cross-dock) to the intended selling location. Cross-docking requires that the receiver possess the ability to identify inbound cases and pallets automatically during the receiving process. This is accomplished by scanning the shipper's SSCC numbers encoded on each case or pallet. This step is not practical in a manual environment.

GS1-128 bar codes provide the means by which each SSCC can be read and used as a reference to ASN details.



**Sample carton labels required by Macy's and Dillards**

Sustainability

Trading partners will increasingly need to exchange near real-time information in support of re-engineered (and sustainable) business practices. Information about the production, storage and movement of goods will include dynamic case and pallet level information that will be needed by trading partners to support downstream supply chain initiatives.

Examples include:

- Product batch/lot identification (GTIN + batch) will serve a common reference to production details (e.g. ingredients, sources of supply, manufacturing location)
- Container weight and dimensions will enable optimization of logistics resources
- Route details (parties, locations) will confirm the flow of goods (both forward & reverse)
- Sell-Buy dates will enable decision-making focused on minimal waste.

<b>ABC Farm Food</b>			
<b>Customer</b>	<b>Tesco Stores Ltd</b>		
<b>Destination</b>	<b>Hinckley</b>		
<b>Delivery Day</b>	<b>Tuesday</b>		
<b>Delivery Date</b>	<b>14/08/2007</b>		
<b>Ship via</b>	<b>Cool chain</b>		
<b>Window</b>	<b>2</b>	<b>Temp</b>	<b>+3</b>
<b>Products</b>	<b>4</b>	<b>Qty</b>	<b>54</b>
<b>Pallet No</b>	<b>2 of 5</b>		
<b>SSCC Code</b>	<b>006141411234567890</b>		
 (00)006141411234567890			

Tesco sample pallet label for fresh product

GS1-128 bar codes will enable supply all chain partners to easily capture the data needed in support of real-time decision-making.

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