GS1 standards enabling traceability in the food supply chain

**Foundational: Collection of master data such as product information and location identification of trading partners in the supply chain**

Other transactional and events-based traceability data

<table>
<thead>
<tr>
<th>Information Flow</th>
<th>Transactional</th>
<th>Event-based</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTIN + Lot (raw materials)</td>
<td>GTIN + Lot (final product)</td>
<td>SSCE</td>
</tr>
<tr>
<td>Date + time</td>
<td>Date + time</td>
<td>Date + time</td>
</tr>
<tr>
<td>GLN of farm</td>
<td>GLN of plant</td>
<td>GLN of shipping area</td>
</tr>
<tr>
<td>Produced (biz step)</td>
<td>Packed</td>
<td>Delivered</td>
</tr>
</tbody>
</table>

### Grower/Supplier
- GTINs + batch/lot are used to identify produce in cases/bulk.
- SSCCs are used for products distributed from the farms with batch/lot information.
- Each physical location is identified with a GLN.

### Manufacturer
- Internal traceability is maintained in the key processes: receiving, transformation of raw materials to semi-finished or finished goods, storage and distribution.
- GTINs and production data (batch/lot & expiry date) are printed on products to be despatched.
- Links between goods received and despatch of final product are always maintained through the GTINs and batch/lot numbers.

### Warehouse/Distribution Centre
- Internal traceability is maintained in the key processes: receiving, cross-docking, storage and distribution.
- GTINs + batch/lot or expiry date is used to assure accuracy of picked products when aggregated and disaggregated. These cases are linked and tracked with pallet using the SSCC.
- Despatch Advice containing GTINS, SSCC and GLNs is sent to customers.

### Retailer
- Retailers provide product information to their customers at POS.
- Master data and event data (for traceability purposes) can be provided to consumers on product labels or through scanning of barcodes.

---

Note: All GS1 keys are available in a barcode format. All GS1 key numbers highlighted above are for illustration purposes only and should not be used within an actual operation.