

GE Healthcare Comments on the European Commission's Concept Paper: Delegated Act on the Detailed Rules for a Unique Identifier for Medicinal Products for Human Use and its Verification (Sanco.ddg1.d.3(2011)1342823)

Date: 24 April 2012

GE Healthcare welcomes the opportunity to offer comments on the European Commission's Concept Paper 'Delegated Act on the Detailed Rules for a Unique Identifier for Medicinal Products for Human Use, and its Verification' dated 18 November 2011. Our comments on each consultation item are detailed below.

- 1. Consultation item no. 1: Please comment on points 1 and 2 (policy options no. 1/1 and no. 1/2). Where do you see the benefits and disadvantages of each policy option?**
 - ***Policy option no. 1/1: Leaving the choice of the technical specification to the individual manufacturer.*** This policy would improve flexibility for the manufacturers and likely reduce costs to the manufacturer by allowing them to choose what they consider to be minimally necessary; however, lack of standardization in the technical specifications would likely result in difficulty in verification of authenticity by the parties needing to perform this activity.
 - ***Policy option no. 1/2: Harmonization through regulation.*** This policy would greatly simplify the ability to verify authenticity because the carriers and key characteristics of encoded information (including unique identifier) would be required to be in a standardized format. GE Healthcare recommends the harmonization through the adoption of GS1 global standards; specifically for unique identifier, recommended is SGTIN (GS1 Global Trade Item Number and serial number encoded in GS1 Datamatrix carrier). However, that being said, we prefer that manufacturers be free to choose the method which would be used for tamper-evidence.

- 2. Consultation item no. 2: Where do you see the advantages and disadvantages of the approach set out in point 2.1.1? Please comment.**
 - The use of a manufacturer product code in the electronically readable carrier (e.g. barcode) is an essential component in the assignment of a unique identifier.
 - GE Healthcare feels that it is very important that GS1 standards be used to identify the manufacturer product code, in the form of a GS1 Global Trade Item Number (GTIN). Failure to use this global standard could result in the possible use of proprietary manufacturer product coding that might be inadvertently duplicated between multiple manufacturers. Properly registered GS1 GTINs cannot be duplicated and would provide failsafe control. In those countries where a national health reimbursement number is required, there are a number of options available that would comply with GS1 global standards:
 - Direct cross reference between the reimbursement number and the corresponding GTIN in a GS1 GTIN registry

24 April 2012

- Addition of a GS1 standardized National Health Reimbursement Number (NHRN), with an associated application identifier, that can be encoded within the same carrier (datamatrix or barcode) along with the GTIN
- Agreement with GS1 to incorporate the national health reimbursement number into the structure of a GS1 registered GTIN, effectively creating a National Trade Identification Number (NTIN) that will still meet GS1 global standards
- A GTIN-14 structure (a GS1 Global Trade Item Number in a 14-digit format) can provide a defined standard format for identifying not only the basic trade item, but also the pack level for the item (e.g. bottle, case, or shipper)
- At a minimum, the delegated acts should allow for the option to use GS1 standard coding conventions
- By GS1 standard rules, the combination of a GTIN in the same carrier as a standard serial number would provide a unique identification number – a Serialized Global Trade Item Number or SGTIN.

3. Consultation item no. 3: Where do you see the advantages and disadvantages of the approach set out in points (a) and (b) of point 2.1.2? Please comment.

- Incorporation of batch number and Expiration date into the machine-readable carrier (e.g. barcode) would improve inventory handling by wholesalers, pharmacists, and hospitals.
- The addition of these element strings in the carrier would also facilitate the rapid, and accurate, recording of patient critical information when accessed electronically for Electronic Medical Record (EMR) systems. EMR systems can often automatically check to help prevent the inadvertent use of expired pharmaceutical products during patient treatment.
- Batch number driven recalls, and investigation of medical adverse events, could be facilitated through the inclusion of batch numbering in electronic product coding.

4. Consultation item no. 4: Which of the two options set out under point (c) of point 2.1.2 is in your view preferable? Where do you see advantages and disadvantages? Please comment.

- The GS1 global standards system provides for the ability to associate attributes to GTIN through the use of GS1 registries. These registries can be accessed through Global Data Synchronization Networks (GDSN). National Health Reimbursement Numbers (NHRN) can be listed as attributes to registered GTINs and easily identified through the relationship within the registry. Therefore, it should not be necessary to require national reimbursement numbers to be included as element strings within encoded data carriers (barcodes). Using this strategy, NHRNs are not necessarily replaced, but rather they are easily cross referenced through the globally available GS1 registry or GDSN.
- It is apparent that some EC member states may insist that NHRNs be included in encoded data carrier on product labeling. GE Healthcare recommends that the European Commission discourage, or even disallow, this practice in light of the capabilities of GDSN as spelled out in

the first bullet point above. However, GS1 is in the process of creating a global standard that will facilitate the integration of a NHRN into the standardized product coding. It is understood that the proposed mechanism will provide for a standard GS1 Application Identifier (AI) to be assigned to NHRNs that will enable the inclusion of NHRNs into GS1 standard electronic product codes. A final caution on a requirement to include both GTIN and NHRN in the electronic carrier: on small labels the amount of space, available to print all of the combined data (even in datamatrix code), may prove to be insufficient.

5. Consultation item no.5: Please comment on the three concepts described under point 2.2. Where do you see the benefits and disadvantages of each of the three concepts? What are the costs for each concept? Please quantify your reply, wherever possible, by listing for example: costs for reading devices for the different carriers; costs for adapting packaging lines of medicines packaged for the EU market.

- The linear barcode is a widely accepted carrier in the healthcare industry. It is relatively inexpensive to produce once systems are in place for properly coding product labeling (including initial redesign of label artwork and addition of serialization technology to packaging lines). However, a significant negative consideration for linear barcodes is that they normally require a prohibitively large amount of physical space on product labeling when the encoded data includes multiple elements (not just product code or GTIN). With the consideration for standard coding to include GTIN, expiry, lot number, and serial number, the length of the linear barcode gets too large to print on standard product labeling.
- The 2D-barcode or, specifically, GS1-Datamatrix code is rapidly becoming the defacto standard for electronic product coding in the healthcare industry. GS1-Datamatrix can be used to encode a significantly greater amount of data while maintaining a relatively small footprint (when compared to linear barcode). The design of the datamatrix encoding system, inherently contributes to a remarkable robust nature for the printed barcode, in that there is built in redundancy within the barcode (whole segments of a datamatrix code can be damaged and the code will still be accurately readable). Electronic scanners designed to read datamatrix codes can additionally read linear barcodes, increasing the flexibility of use for trading partners that possess them. And like linear barcodes, the datamatrix is relatively inexpensive to produce once systems are in place for properly coding product labeling (including initial redesign of label artwork and addition of serialization technology to packaging lines). It would be recommended that the human readable information for the serial number be optional, or even prohibited, as an extra safety issue. If the datamatrix code cannot be read, then the product should be suspect in that case and should not be used.
- Radio-frequency identification (RFID) presents a number of challenges. Besides a relative significant cost for adding RFID encoders and readers to manufacturing packaging lines, the long term cost for RFID lies with the addition of RFID tags to product labeling – adding a considerable cost to the piece labeling. Preliminary testing in the industry has shown that RFID carriers not robust/reliable and would require some type of barcode as a backup technology in case of

individual tag failure. It is generally considered unlikely to be used on primary product containers therefore, where trading partners and end customers desire electronic product coding at this level of packaging it would likely mean that these users would need to have the capability of reading both RFID and barcodes (2 separate scanning devices). Lastly, perhaps the greatest cost for incorporating RFID carriers onto pharmaceutical product labeling is related to the evaluation of how RFID technology may impact the stability and product quality of some classes of medicine products (especially biologicals).

6. Consultation item no. 6: Regarding point 1 (policy option no.2/1), are there other points of dispensation to be considered? How can these be addressed in this policy option?

- The policy option no. 2/1 is generally referred to as “end point verification” (as compared to “track and trace”). With an end point verification solution, randomization of serial numbers becomes essential.

7. Consultation item no. 7: Please comment on the three policy options set out in points 1 to 3. Where do you see the benefits and disadvantages? Please comment on the costs of each of these policy options. Quantify your response, wherever possible. This applies in particular to the: number of wholesale distribution plants; costs for adapting such plants; duration of scanning of the serialization number; number of pharmacies, including hospital pharmacies; number of medicinal products dispensed by pharmacies and a hospital pharmacy.

- As a manufacturer, GE Healthcare cannot specifically answer this question with regards to the aspects of wholesaler and pharmacy operations. End point authentication is sufficient from the suppliers’ viewpoint.

8. Consultation item no. 8: Please comment on the three policy options set out in points 1 to 3. Where do you see the benefits and disadvantages? Please comment on the costs of each of these policy options. Please quantify your reply, wherever possible. This applies in particular to the estimated one-off costs and running costs for a repositories system. Where possible, please provide information on past experiences with a repositories system at individual company level and at national level (taking into account the experiences of Member States and companies).

- Policy option no. 3/1 (stakeholder governance): Although data exchange standards through EPCIS have been developed that could enable manufacturers and distributors to adequately share serialization data, this option may be difficult for smaller manufacturers and distributors to compete. It is likely that 3rd parties would develop applications that would be available for independent trading partners to achieve compliance as a response to this option. However, it might be possible that this loose model for governance could allow for diversion or counterfeit product introduction through nefarious systems.

- Policy option no. 3/2 (EU governance): Would provide a single point contact for both upload of serialization data by manufacturers and for authentication checking – a positive attribute. Would likely be a complex system and would require massive capacity and redundancy for robustness.
- Policy option no. 3/3 (national governance): Would require manufacturers to upload serialization data to multiple databases, increasing complexity at the point of serialization registration. There would be complexity due to the need to interconnect databases for intran-Union trade.
- The model proposed by EFPIA seems appropriate as a mix of central European hub with decentralized interfaces for national or regional connection.

9. Consultation item no.9: Please comment on point 4.1. Are there other items of information which should be taken into consideration when addressing the issue of commercially sensitive information in the delegated act?

- Confidentiality of key competitive information must be protected. This includes the number of packs manufactured, the point of dispensation of a pack, and the point of delivery of a pack.

10. Consultation item no.10: Please comment on points 4.2 and 4.3. What aspects should be taken into consideration in the delegated act?

- Regarding point 4.2, personal data would not be stored in any repositories system. The data stored in these systems would be restricted to GTIN and serial number (and possibly expiry and lot number). Personal information would not be associated with medicinal products until dispensed by pharmacy operations or within a hospital/clinical setting, perhaps using an electronic medical record (EMR) system. At that time, product would not be tracked through the referenced repositories system, but instead through prescriptive scripts or secure EMR systems.
- Control of re-packagers regarding their ability to register serialized data for medicines will be essential to prevent counterfeiters from using a re-packaging strategy to circumvent controls established by the Directive and the Delegated Acts. Replacing safety features with equivalent features during a repackaging operation must be strictly defined and controlled in order to extend protective measures to this additional level of product handling and labeling.

11. Consultation item no. 11: Which approach seems the most plausible from your view? Can you think of arguments other than those set out above? Can you think of other identification criteria to be considered?

- Regarding the identification of medicinal products to be listed on the ‘black list’ or the ‘white list,’ it is recommended that identification be made by name of the active pharmaceutical ingredient. Using the generic, rather than the branded name, of medicinal products should reduce some of the difficulty of differing names for identical products.

12. Consultation item no. 12: Please comment on the quantified approach set out above.

- GE Healthcare agrees with the proposed scheme to classify medicines to the ‘white list’ or ‘black list.’
- That said, it is recommended that radiopharmaceutical products be listed on the ‘white list.’

- GE Healthcare fully supports efforts to combat counterfeit medicines and the prevention of their penetration in the distribution network and has a strategy for the serialization of medicinal products for the purpose of ensuring the capable traceability of same to support these efforts.
- However, the medicinal products that would be covered in GE Healthcare's strategy for this work (serialization for the purpose of traceability) do not include marketed radiopharmaceuticals (radioactive pharmaceuticals, precursors and generators). Radiopharmaceuticals may only be dispatched to authorized individuals who are licensed to receive and use such products. Manufacturers are required to check that customers are properly licensed before radiopharmaceuticals are dispatched. Therefore strict transport and shipment controls are already in place to address security of shipment. In addition, radiopharmaceuticals have very short shelf lives because of the decay of radioactivity, and rapid shipment to the end user is necessary.
- It is therefore requested that radiopharmaceuticals be considered this class of products belonging to the 'white list' and that radiopharmaceuticals be excluded from the need for additional "safety" features and any additional traceability through the supply chain.
- An exemption from these types of controls has already been agreed by the European Commission via the Falsified Medicines Directive 2011/62/EU published in the EU Official Journal on 01 July 2011. New text inserted as article 54(o) in the Directive exempts radiopharmaceuticals from having to display safety features:
 - "(o) for medicinal products other than radiopharmaceuticals referred to in Article 54a(1), safety features enabling wholesale distributors and persons authorised or entitled to supply medicinal products to the public to:
 - verify the authenticity of the medicinal product, and
 - identify individual packs,
 - as well as a device allowing verification of whether the outer packaging has been tampered with."
- Other global government entities, including, France (AFSSAPS) in 2010, and the California (USA) Board of Pharmacies (related to the California e-Pedigree requirements to be effective in 2015) have also exempted radiopharmaceuticals from the requirement for an additional safety feature and traceability.