Feedback on Interim report 1

Preface

Overall the interim report is well written and picks up on the many concerns from the previous report. There are some technical and functional weaknesses in the report that can be overcome by consultation with various parties such as GS1 on unique identifiers, data carriers and how traceability works today within Europe. With regard to EPCIS, I have sent the name of the key contact person who can help in the functional and technical design dialogue around data sharing, interoperability and centralized versus decentralized data. Further, the usage of the 6 views model, may help structure some of the dialogue later when engaging with key stakeholders. Similarly, expertise and expert opinions could be done by the 6 views model also.

1. REF: P9: Paper Stamps

   The opening paragraph correctly states the previous options were based on a paper stamp but incorrectly suggests a paper stamp is compliant with TPD which states the security feature should be irremovable. Stamps are applied, therefore by definition they are ‘removable’ with various techniques despite anti-tear and other built-in security features marketed. Additionally, the report could mention incidents of counterfeit tax stamps to ensure a risk assessment is made (also valid for all options).

   This paragraph correctly notes the omission of emerging digital security features of which an encrypted and secure data carrier could be viewed as a security feature. This is an important and likely critical consideration for the next stage. Suggest to clarify the definition of ‘security features’ to include or exclude data carriers which could be printed on the product.

   Ultimately the pace of technology and industry standards advancement will continue to be a burden to legislators if the legislation is too prescriptive. This is a vital consideration where policy can/should specify ‘what + when + why’ but not necessarily ‘how-to’ although this is trickier in highly legislated sectors such as pharma and tobacco.

2. REF: P10: Open Standards

   Fully support the suggestion that the T&T system for tobacco products should support open standards (typically GS1 & ISO) and not facilitate monopolistic business situations or competitive advantages across any of the system components.

   It is vitally important that the commission clarifies the “unique serialized identifier” for the T&T system. Ideally this should be based on open standards for product identification (ISO
15459) and not to be confused with a proprietary identifier that is used to identify a physical ‘tax stamp product’ itself and is being marketed as the product identifier (there are 2 products here, the tax stamp and the commodity). This is a vital point of clarity.

3. REF: P10: Data Storage
Regarding data storage, this is a less sensitive area for a monopoly and a competitive EU HQ’d operator with all forms of data storage (physical/software) within EU jurisdictions would likely not be viewed as negative if the selection process is transparent and the solution is optimized with the highest levels of security compliance. A key question for the EU is legal custody and control where the data is hacked and competitive information and financials exposed.
4. **REF: P11: Table 1**
   Option C1 is not valid as the point-of-sale (POS) 1D data carrier will need to be on the product until such time as all EU POS systems can utilize 2D data carriers. Again, the data carrier for product identification – normally the GS1 Global Trade Item Number or GTIN – is used and in regulated environments such as pharma, the data-to-be-carried appends from the GTIN as follows:

   GTIN + serial + expiry + lot = unique identifier (2D data matrix)

   Current tobacco practices utilize 1D + 2D dotcode where the embedded data in the dotcode represents serial +. Importantly, dotcode is an AIM standard and is in process to be ratified as a GS1 standard in late 2016. GS1 does not have a high-speed data carrier and dotcode fits a critical gap for industries such as beer, beverages, possibly pharma and others who require in-line code printing at speeds in excess of 400-500 per minute. Dotcode can be applied at rates of 1200/minute versus the datamatrix at 500-600 (info verified with technical expert at HP labs).

   **Caution:** mandating a 2D data matrix at the pack level may have a significant impact on tobacco production speeds, output volumes and cause significant business performance issues likely resulting in legal liability challenges. For data matrix to comply with pharmaceutical legislation, the cost per production line was estimated at USD 250,000 (source: various conferences)

5. **REF: P15: Bullet point 2 top of page, Machine + Human readable**
   The reference to the “majority of respondents prefer a system operating with both machine and human readable, allowing for the consumers to also verify the authenticity of the tobacco packs bought”. I struggle with this summary unless legislation requires that consumers should authenticate and the EU provides awareness and education I would avoid this type of summary wording. Furthermore, price is likely the main reason a consumer will buy illicit tobacco due to the massive variances across member states, and there is likely minimum to poor evidence that consumer actually authenticate tobacco products. The commission should not get caught up in solution provider hype about the benefits of their systems when likely unused for many of the purposes marketed.
6. **REF: P21: Last section “comments specific to each option”**
The last line in this section makes a questionable comparison with the pharma industry.

7. **REF: P23: 4th paragraph**
   “However, to serve as the unique identifier, the tax stamp needs to be placed in an area where it can be easily scanned.....”. As mentioned during the workshop, a tax stamp is a physical product with its own unique identification. This should not be confused with the physical tobacco product’s unique identification. Both are created by different legal entities for different purposes, a tax stamp is a legal document which has its own business and legal needs for tracking, tracing, recall and anti-counterfeit purposes. The assignment practices of a tax stamp identifier is currently proprietary in nature and its own track and trace starts in a separate legal entity and well before the tobacco products are produced.

   In a recall situation, and where legal liability is tied to the product, the ‘legal’ ownership of the identifier – thus the product – is therefore the solution provider (or government) based on current practices and standards.

   Furthermore, there is no existing open standard which clarifies when an identifier for 1 legal product can be attached to another legal product and assume it’s complete identify. This is a major concern which defeats 40+ years of industry standards development at GS1 and ISO 15459-0/8.

8. **REF: P23 Section 4.1.2.1**
   Figure 7 should include the following:

   Data Carriers : AIM: Dotcode
   Identifiers: : ISO: 15459-1/8

   Table line 3 has a reference error visible

9. **REF: P24 Section 4.1.2.2**
   This section is weak but likely the most significant aspect of the legislation

10. **REF: P27 Section 4.1.3**
    Typo on line 2 “TDP”

11. **REF: P28-29 Section 4.1.3**
    Option 1 critical legal point where it states “Industry-operated solution in conflict......requiring the system to be under the control of the competent authority”
    These are 2 separate issues in my mind. It could be operated by industry but still under the control of the competent authority – I believe this happens today where some governments issue the tax stamps (Germany ?).
Option 2 legal points are likely understated.
Option 3a: see option 1 above
Option 4: legal points are likely understated

12. REF: P36-37 Section 4.1.5
Suggest to remove reference to Codentify and make reference to ‘current industry solution for serialization’.

Also refers to “Since the generation of codes can be manipulated, it hampers any control that is performed onwards”. Is there irrefutable evidence?.

The section confuses ‘operated by’ and ‘under control of’ as conflicting when it could also be complimentary and legally compliant.

The section does not comment sufficiently on the feasibility of successful and timely implementation. As mentioned during the workshop, any solution can be viewed through 6 lenses: business view (why), functional view, technical view, implementation view, standards view, policy view.

13. REF: P38 Section 4.2
In 4.2 option 1 notes “....... similar to a modern tax stamp”. Suggest to remove reference to ‘modern tax stamp’ as it’s a very competitive field and features change on a frequent basis. Suggest to stick to legislative language on functionality and requirements to fulfil their needs for volumetric controls.

Note:
The data matrix and dot code should also be considered as a data carrier with security features

14. REF: P39-40 Section 4.2.1.1
Point 1: Agree, in general, keeping the current systems in place with modifications to comply with TPD is likely the best option considering the implementation timelines.

Point 2: Agree with this, plus the wording could suggest that either physical or digital tax stamps could suffice. I believe that tax stamps as we know them today will be obsoleted.

Point 3: Agree
Point 4: Agree
Point 5: Agree
Point 6: Agree
15. REF: P40 Section 4.2.1.2
The security feature should not necessarily mean by default a tax stamp. It could be a 2D data matrix or dot code with security including covert, overt and forensic features.

Note:
GS1 USA is working with a solution provider to place multiple invisible 1D data carriers on food and consumer goods. Point-of-sale solutions can scan the invisible data carriers increasing efficiency at POS and adding a security feature.

16. REF: P41 Section 4.2.1.4
As mentioned previously, caution should be taken where the identifier for a tax stamp (as a traceable item) is placed on another traceable item and assumes its identity using proprietary identification. This is one of the single biggest flaws with the current T&T systems and has legal implications for product ownerships, traceability, recall etc.

17. REF: P42 Section 4.2.2
Physical tax stamps are not by default compliant with TPD item iv as they are technically removable (and clonable). The same should be tested for digital tax stamps to verify if they can be removed with nail varnish remover or other easily accessible cleaning liquids. This happens today with out of date foods where the printed expiry or best-before dates are removed and replaced with new date codes using commonly available technologies. The availability of ‘common’ technologies are an important aspect in determining the risk factor.

18. REF: P45 Section 4.2.3.1
I agree with this section and it is one of the most important in the report.

19. REF: P46 Section 4.2.4
Very important reference that the unique serialized identifier can in itself function as the security feature. As in above point, this is another crucial aspect of the report.

Further, this section makes a valid statement that countries who operate with paper based tax stamps today still have illicit trade. The delta between the current situation and the expected results needs further validation with Member States (MS).

There is a valid concern raised that MS should determine the security features but this section needs more analysis and inputs to flush it out. For example, is the tax stamp operation owned, operated or controlled by the MS, what is the likelihood that the MS would change/adapt their national systems? are there plans or roadmaps to move towards other forms of volumetric controls such as operated in the beer industry?
20. REF: P50-52 Section 5.1.2.2
The overview of the data carriers is not complete and missing key information. Application speed is one, whether they are GS1 or ISO or both is another. Another key point to preface the section is the structure of the GTIN where the initial number includes the country code of the registered brand and is part of the ‘prefix’ which is a globally unique identifier assigned to the brand owner. The remaining numbers are assigned as a ‘product class’ identifier. So the GTIN is Prefix (country+company) + Item ID and globally unique at the ‘class level’ meaning all cans of soda in a pack have the same GTIN and the lot or batch # printed on the soda cans of bottles differentiates them when on a shelf.

Note 1:
The ‘prefix’ is critical and is used for the GLN and SSCC (serialized shipping container code). This is where the usage of voluntary, industry standards such as GS1 significantly differentiates over proprietary codes and enables interoperability. The prefix is also linked to another key public system called GEPIR (www.gepir.org) where market enforcement can scan a product or do a look up to see who the registered owner of the unique identifier is and which product it is allocated to. This then becomes another unintended security feature. One case I heard of is where a southern EU surveillance agency utilized GEPIR and reached the key contact for Procter & Gamble only to learn that the cigarettes under surveillance was using a P&G GTIN intended for a candy product.

Note 2:
Increasingly soda and beverage companies are applying other security features and codes (inside bottle caps, under the can, hidden features in label etc) on their products including a second data carrier (QR) to satisfy consumer access to more transparent and trusted data about the product and the company. This is in full swing in the USA and will expand to other countries over time. The initiative is led by Grocery Manufacturers Association (GMA) and is called Smartlabel.
http://www.gmaonline.org/issuesspolicy/healthnutrition/smartlabeltm-consumer-information-transparency-initiative/

Report should consider adding this overview chart or it’s data for completeness.
21. REF: P53 Section 5.1.2.4
This sections wording on technical description needs to be improved. For example, the section header should be changed to “Radio Frequency ID tags”. Similarly, in the text it should refer to radio frequency instead of radio waves and it should highlight that the tags referenced are ‘passive’ tags (versus active tags which have a battery or semi-active).

It should also reference that passive RFID tags can be combined on (behind) a GS1 standard label at the carton and pallet level.

22. REF: P53 Section 5.1.2.5
This is well referenced with the GS1 system and the descriptions here need to be improved. As mentioned in the workshop, the ‘data-to-be-carried’ is the first step, then the data carrier is chosen based on space considerations etc.