

European Commission Report – Interim Report I

Expert Feedback on Report and its Presentation -

Implementation analysis regarding the technical specifications and other key elements for a future EU system for traceability and security features in the field of tobacco products. – Work Package 1

This Report provides feedback on the Interim Report I on the Implementation Study for the EU Tobacco Traceability and Security Project (Implementation Study) (IS) and its aims and goals – on traceability, security features and its financial and economic impact on the industry. Here are my observations and reflections from the Expert Workshop (14.12.16) that considered the various sections of the Report I and its presentation to a panel of Experts.

The IS Report outlines and documents the range of models and policy options of the Inception Impact Assessment. It provides a system specification decision framework/ matrix (five models /compartments) and the policy options within each model and this provides a framework which assists the selection of key decision alternatives and a basis on which they may be selected. Within each model, the identification of each of the policy options are presented in a clear manner. Within the decision framework each of the five model policy options are presented (page 12 of IS Interim Report (IS) December 2016). Some deserve further robust review and revision to ensure consistency and logical flow to demonstrate a clear audit path thus determining the costs of various options in each model and subsequently the models in the decision framework. The nature and significance of the assumptions made, often has an influential and significance impact on the financial and economic outcomes.

Consideration of the Governance Model was a mix of meeting the requirements of key stakeholders balanced by the range of costs involved in providing a successful model section. As all the costs and benefits of each governance model option are the same (Presentation PowerPoint slide/s 106 – [PP slide x]), there is a need to provide a subjective outcome based on qualitative factors as to which options to select in this model. Other experts had a clearer view on what would be the most acceptable and effective model based on their own expert technical factors.

The Data Storage Model considers, debates and reflects on how a centralised model may provide a clear method to obtain a suitable IT system, a vehicle for consolidating track and trace (TT) and security data storage. Concerns were voiced regarding the

potential risk and monopoly concerns of some options that may impact on the industry. Here the balance between stakeholders – the industry, EU ‘regulator’ and other players and the ease of individual system options to be acceptable or tolerated by all needs to be accommodated. In addition, the IT system needs to be effective in each national jurisdiction.

As in many stakeholder environments, the influence of stakeholder power is related to the persuasiveness of their argument and a drive toward preferred solution or feasible solutions that at best, meet most key user needs and can be ‘tolerated’ by any dissenting parties.

In the interim report draft II, there is much detail on the technical elements of the provision, but there are some big assumptions made. Only on enquiry, challenge and detailed reading are the micro details further understood. Some errors in transposition did compound the problem. I would hope any revision would address such errors, identify assumptions and the linkages between systems specifications. In presentation, the clear logic and outcomes should reflect and summarise the detail, but this is not currently as clear as it might be.

Another issue is one of calibration, be it of different metrics or scale of metrication. This is very apparent in (PP slide 56-62), when moving from different units and metrics. In slide 62, the four models are shown by euro currency cost and scaled by bar chart. But the bars are not reflective of scale to the whole or relative difference, which distorts meaning of the visualisation. Certainly in the cost /benefits (PP slide 107) model 1 and 4 provide most value. However, on what basis are the decentralised options given a weighting of .25 or 25% impact, which makes a significant difference in the outcome. The basis for this assumption is not entirely well documented, so why 25% and what is the source/authentication of this and how robust is this assumption?

The Allowed Carrier Model generated a similar debate. The subjects of stakeholder interests, costings and its assumptions on which to base the outcomes ensued. The same comment will be made in each section on calibration, but particularly in the end decision analysis, where the range is from the micro level 0.00xx to the macro level of 4.13 billion, the changes of bases in similar slides made understanding challenging. Also the use of decimal point and comma and their placing in the number from across different numeric cultures is very confusing. A consistent code would help. Perhaps the EU has standards or guide on this? This would add clarity. Although there are difference between the 5 allowed carriers, the incremental difference is quite small, the qualitative issues of risk, control and potential adverse market conditions /monopoly play a key role here. So not a big financial difference (PP slide 74) exists.

So I see these qualitative and technical factors being a key determinant in options selection.

In the Allowed Delay Model of different reporting event periods, the debate highlighted that variable delays have a significance impact on the operational management and control of regulatory bodies in being able to inspect and monitor the potential illicit trade activities. This is an important practical feature of the operational, regulation and inspection regime and its effectiveness. It may be a key qualitative driver on the options decision. Again, all the previous caveats apply with the costs and numeration of the systems valid in the exposition of various options. Being non-technical I need some guidance and illustration of how these elements translate into costs, so I can follow and understand enough to ask insightful questions. I would expect in a financial audit – ‘audit paths’. This I am assured is not uncommon in IT audits, so I expect the same logic and replication of such methodology here. In (PP slide 85), there is minimal difference in the model decision outcomes on cost, so why would you not want a near real time system? Or are there some costs relevant outside of our perspective and maybe borne by other stakeholders? Not entirely clear but the industry stakeholders may be influenced by such considerations and the model options cost impact.

The issue of the Security Features Model did figure much in the report and this content provided me with an excellent insight in the methods and their relative utility. There is much consideration the stakeholders, manufacturers, their wholesalers and the distributors and the implications of each security feature, which is related in much of the report, is commendable. The financial analysis of the security model and its cost dimensions due to the technical factors of security are complex. They need clarity and better accuracy in subsequent expositions and presentation in order to provide audit paths. There are cost differences within each option and yet the level of security is a key cost and hence qualitative factors may be pivotal in the trade-off decision.

In the IS section 4.1.4, the financial analysis focusses on the four traceability solution options. It identifies some key concepts here that are important in the outcomes that influence the final decisions. It does differentiate between CAPEX and OPEX, which is an excellent start. I highlight this.

This work would benefit from consideration of the following ideas:

Perhaps the time dimension here is important, as some CAPEX will have to be undertaken regardless of these new ‘TT features’. Industry CAPEX may already have the required feature or it may need replacing with newer models. Complete replacement may not be necessary only incremental cost i.e. lesser CAPEX cost. The

time dimension is important here be it; the time value of money, financial charges in the variability of costs or the long term use /life of assets and the resulting financial values. OPEX may vary downward due to many other factors but in particular learning curve efficiencies involved due to scale, scope and productivity gains. This may be difficult to quantify, but the manufacturer would have some insight here, but may not share!

There are two large benefit areas; public health savings and increased financial tax revenue. This is very clear and focused on the positives and their basis. Possibly other benefits may be considered, but they may divert clarity of benefit exposition.

In the IS page 36, the estimate of the size of market and the assumptions that 1.32 % of market will be affected by this legislation, with 0.79% switching to legal and 0.53% abandoning the habit as a basis for IS in work package 2. This is a major driver in decision outcome of this analysis. Thereafter there are other big macro assumptions on figure, level and % proportion of relationships that influence the options' selection and the outcomes decisions.

The key assumptions that influence the relationships of the study and decision outcomes of a financial and economic nature are identified here:-

Δ Size of illicit trade (IS page 37) at 8.25% of total trade- where other reference points may indicate this as a quite low assumption compared with upward estimates of 10% -13%. The basis of such estimates and assumptions are at best guestimates from other references points; Euro monitor Project Sun and the KPMG sources. These have different levels of robustness and therefore are difficult to judge, but these base assumptions make big differences to the outcome. Often much more than the cost differential in each model options' incremental and absolute cost bases. Higher estimates of this illicit trade would increase the impact. Assumptions at 8.25% is quite conservative, while I applaud this conservatism, but it warrants further consideration, if upward estimates are used in scenarios and sensitivity analysis.

Δ Sub-sectors proportion of Illicit trade - The impact of the decision outcome of the proportionate size in the three sub sectors of contraband, counterfeit and illicit whites are estimated to be 30%, 10%, and 10%. Any sensitivity on and from this base has a significance impact on the outcomes.

The concept of elasticity is concerned with measuring the responsiveness or sensitivity of demand to a change in any variable in the demand function (Nellis and Parker – a standard UK MBA economics textbook). Price and income are of the main direct consideration here, although cross elasticities also exist. So with price elasticity of demand; for example if price (reduces) changes by -10 % and demand (increase) by +20% :-

$$(+20\%) / (-10\%) = - 2.0$$

Δ Change in the level of price elasticity assumptions. So in the report study, it is the price impact on demand through the initiative that will generate the downward movement in demand or the responsiveness of the initiative. However, the elasticity or responsiveness will be negative and varies depend on the sector of the market from ~ - 0.4, - 0.2, and - 0.8. Such differences in making assumptions make significant impact on outcomes. The report uses -0.4, a low conservative estimate. Using the work of Begg et al (2005) they provide a number of empirical estimates of price elasticity of demand in the UK, including that of alcohol at -0.8. Sadly tobacco using the information at my disposal were not included, but alcohol may be a good proxy as a product with a similar profile and attributes

Δ The percentage of the illicit trade that switch to legal products will be 60% and 40% will stop or reduce. Again such assumptions have significant impact on outcomes.

These four big assumptions (the Δ's) make a big impact on the economic and financial outcomes of the IS report. The consideration of a sensitivity analysis of each Δ assumption in a decision –tree type of analysis would aid the financial and economic impact of the potential benefit from this initiative and should figure prominently in reports. Thus when implemented a post event audit of effectiveness may be undertaken.

In the presentation of the report the issues and assumptions took the form of a business case (PP slides 96-99), it provided a 'holistic view' to the financial aspect of the solution decision outcomes. In PP slide 98, a mini-max form of the benefits and costs were formulated under different model and option solution outcomes, in line with 'efficiency desired for the system' criteria.

In slide 103, the proportions of the Illicit trade have changed from previous assumptions, to a significant extent. In slide 104, it moves to its assumptions using a figure of 2.01% (which is a new figure in this report and not 1.32 as assumed) leading to a decision outcome. Such new assumptions have an effect on all elements of the study. The decision framework provides a means to evaluate the nature of the proposed models and their options in the pursuit of an acceptable system specification. In determination of the least cost approach to option selection in each models and in some model options, it makes assumptions on the revenue dimension

(slide 106-109). It culminates in moving to slide 112, which provides the final solution suggestion for the selected models and their options. This has a focus on cost and benefits and may not fully integrate approval level of the stakeholders on a qualitative basis.

So in conclusion, the final slide of the presentation slides provide the ultimate outcome of the presentation team. In coming to this final system specification conclusion, I would suggest the presentation team needs to reflect upon and review the key assumptions, their relationship and logic to ensure the robustness of their IT system specification. This needs to integrate both the technical qualitative contributions of my colleague 'experts' views, while at the same time the context of the economic and financial issues. Both have a significant impact on the decision framework, its processes and the effectiveness of its outcomes.

In summary in considering the eventual and ultimate IT system specification and in the context of the five models and their options in the decision framework (slide 112) in the IS report and its presentation slides, the following key observations are made:-

- The calibration and expression of numerical data should be better displayed
- There is a need to better link together the individual micro cost items that sum to macro level cost total by key drivers levels, as long as such 'audit path' provides clarity in each system model specification in the IS report and at the presentation.
- Some big assumptions are made that make significant impact on the outcome in each model and in the macro decision making level. These are; size of total market, the proportion illicit trade, proportion of its three sub sectors, their responsiveness to the initiative and the suggested level of elasticity and % of switching. The range of potential outcomes by different scenarios and sensitivity analysis could be displayed by use of a decision tree or decision matrix.
- There is a need to identify and consider the quantitative cost /benefit level and how this is accommodated by qualitative of subjective factors may be given numerical value is a challenging quest. But one that is need to be considered when making macro level system selection decisions e.g. model option costs compared to qualitative stakeholder/s interests.
- Using the decision framework in all cases and even with minimum revenue and maximum cost, the implementation of the initiative creates a positive value i.e. a positive difference between its cost (-) and its benefit (+) and it should be undertaken on this criteria.
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