Why Codentify Can Never Work as a Secure Track and Trace Solution Under the WHO FCTC Protocol and EU Tobacco Products Directive

Purpose of this positioning statement

As a body of leading experts in the field of product/document authentication and secure track and trace, the International Tax Stamp Association (ITSA) is concerned that the tobacco industry is promulgating worldwide government adoption of self-operated digital solutions for tobacco traceability. These solutions are seriously flawed and, as such, could never comply with international regulations such as the WHO FCTC Protocol to Eliminate Illicit Trade in Tobacco Products, and the EU Tobacco Products Directive (TPD), both of which require the use of secure track and trace solutions to combat illicit trade, and both of which rule out self-control.

ITSA firmly believes that those authorities responsible for implementing the secure track and trace requirements of the Protocol and TPD should be presented with a full and fair picture of all options currently under consideration.

The tobacco industry has the benefit of extensive lobbying resources that potentially give it a louder voice than independent providers with regard to promulgating its preferred solutions, and the purpose of this statement is to help counterbalance that voice.

But first, a brief history and description of the main industry-operated solution for track and trace – the *Codentify* ® solution:

Codentify is a serialised coding system, based on alphanumeric strings which are directly printed on tobacco packaging.

Each Codentify code is a unique, unpredictable set of 12 letters and numbers, which are machine-generated and printed at the tobacco factory. Factory level encryption keys, stored on

1

company (or third party) computer servers, allow the production of a pre-defined quantity of Codentify codes.

Codentify was originally developed by Philip Morris International (PMI) in 2005, as one of its obligations under an anti-illicit trade agreement with the European Union (which called for PMI products to be marked with traceable serial codes).

In 2010, PMI licensed the system, at no cost, to its three main competitors – British American Tobacco (BAT), Imperial Tobacco Group and Japan Tobacco International (JTI) – who agreed to use the system on all of their products to ensure the adoption of a single industry standard, based on Codentify. In 2011, the four companies formed the Digital Coding and Tracking Association (DCTA), based in Zurich, to promote the system to governments and independent agencies.

In June 2016, the DCTA announced that it had transferred Codentify to a third party company: a newly formed Swiss operation called Inexto, which was an affiliate of the French group Impala. Although DCTA declared Inexto to be "fully independent from any tobacco company", industry critics (including the WHO FCTC Secretariat) accused the sale as being a ploy to make Codentify acceptable to world regulatory authorities.

So what is the problem with Codentify? Well, there are two fundamental and inherent problems that ultimately have the effect of disqualifying the use of Codentify as a secure track and trace solution under the FCTC Protocol and EU TPD.

The problem of control

The first problem is one of control, as demonstrated by the following key points:

- Article 8 of the Protocol makes it clear that the required track and trace solution must be under the control of the government and that duties may not be performed or delegated to the tobacco industry. These provisions mirror the basic principle of Article 5-3 of the FCTC which states that the tobacco industry can be involved in tobacco control policies only to the extent strictly necessary.

- The industry originally invented Codentify in response to obligations imposed on it by the EU. It was slow to deploy the system and did so selectively and without consistency, demonstrating a fundamental lack of will to put in place an effective system, and consistently exaggerating the extent of implementation in its public presentations.

There is no evidence to suggest that the industry wishes to see effective independent controls in place.

- Codentify is not an overall sector solution but a 'company by company' solution. It is not available to smaller players equally and is also not suitable for other tobacco products and low-volume imports (how can an importer apply a Codentify code post-manufacturing?). This reinforces oligopoly in the sector which is already highly concentrated.

- Any governance model for a secure track and trace system designed to control a particular industry should not be based on trusting that industry, since the underlying conflict of interests mean the industry will likely find ways to circumvent those controls (this has particularly been the case for the tobacco industry).

- Allowing the tobacco industry to generate a unique identifier such as Codentify has been likened to allowing them to build a "Trojan horse" or "black box" that would be able to manipulate any "trust-based" audit controls that may be in place, and possibly mask illicit practices such as performing extra production shifts to oversupply certain markets, using duplications of genuine codes.

- Even if the code could be generated under the control of the competent authorities by an independent third party, there remains another serious issue: that under the existing Codentify model, the code, once created, is transferred to the tobacco manufacturers, who can still in some way control – and certainly print – the code, currently without any external controls.

- The tobacco industry will argue that the Codentify solution no longer belongs to it and that ownership is now in the hands of an independent third party, ie. Inexto. Therefore, problem solved. However, control does not necessarily require ownership. It is worth noting that the IP for Codentify was transferred from PMI to Inexto for a token 1 Swiss Franc payment and that the senior staff managing the PMI Codentify programme became Board members of Inexto.

- Furthermore, in the opinion of the WHO FCTC Secretariat and other industry stakeholders, a third party cannot be considered completely independent of the tobacco industry if it has a pre-existing business relationship with that industry. And this is the case with Inexto, which has a business model based on almost complete dependence on the four members of the DCTA, and which claims existing Codentify

3

International Tax Stamp Association 10 Windmill Business Village, Brooklands Close, Sunbury-on-Thames, TW16, 7DY, UK
Tel: +44 (0)1932 785 680 Fax: +44 (0)1932 780 790 Email: nicola@reconnaissance-intl.com www.tax-stamps.org

International Tax Stamp Association Registered in England No. 9924987

implementation as its reference. Together, DCTA member companies produce over 75% of the world's tobacco products.

The problem of security

A second fundamental drawback with the Codentify system is one of security. As briefly alluded to above the codes can be easily duplicated or 'cloned' (a fact that was even admitted in the patent), and passed off as originals on a counterfeit or genuine pack, with nobody any the wiser. This is because they lack the physical high-security features (such as those found on tax stamps) required to distinguish them from genuine codes. Instead, the Codentify system uses relatively unsecured commercially available equipment on sites where operators may have a vested interest in misusing it.

The importance of the physical/digital combination is widely covered in published standards relating to authentication solutions and unique identification. For instance ISO 16678 (*Guidelines for interoperable object identification and related authentication systems to deter counterfeiting and illicit trade*) states that "in order to mitigate the risk of duplicated UID (unique identifier) codes, an authentication element should be used".

It is this combination of material and digital features that produces a high-security solution, and this is something that tax stamps can provide and that ITSA is strongly advocating.

So if not Codentify…?

ITSA's recommendation with regard to a solution for secure track and trace combines a serialised unique identifier with material-based security features. It consists of integrating the identifier into a tax stamp provided by a party that is independent to the tobacco industry – such as a government security printer.

Over 140 billion tobacco and alcohol stamps, in the form of affixed labels, are issued every year by over 150 provincial and national revenue agencies around the world. Included in this number are most of the EU member states (23 out of 28), which have been using tobacco stamps for some time now.

This means that many manufacturers are already equipped with tax stamp applicators on their production lines and the continued use of this equipment for Protocol and/or TPD compliance purposes would be neither disruptive nor costly to manufacturers.

Unlike the Codentify system, tax stamp technologies can be used by both small and large producers, as well as importers, thereby allowing for a level playing field and avoiding unfair advantage to a minority of large actors in the tobacco market.

Furthermore, many tax stamps already carry encrypted unique identifiers – expressed as 2D barcodes – with the potential to comply with the tracking and tracing requirements of the Protocol and TPD. The identifiers are often incorporated within a layered security architecture on the stamps, which combines overt and covert features in line with the principles of high security.

Finally, the fact that tobacco stamps around the world have a similar physical size allows for the implementation of a common and interoperable scheme that respects existing or incoming ISO standards, while being in synergy with various local regulations.

Conclusion

ITSA firmly believes that only a combination of authentication and track and trace technologies, composed of physical and digital features, and operated by an independent third party, can effectively meet the requirements of both the EU Tobacco Products Directive and WHO FCTC Protocol.

Since the Codentify solution clearly does not meet either of these requirements, we can only conclude that such a solution can never legitimately be considered as a possible, or effective option under these regulations.

Issued 3 May 2017
By the International Tax Stamp Association

Contact:

Juan Carlos Yañez Arenas
Chairman ITSA
Contact: Juan.ITSA@tax-stamps.org

Nicola Sudan
General Secretary ITSA
Contact: Nicola.ITSA@tax-stamps.org